A Review of the Outpatient HIV/AIDS Benefit Package (OHAT) of the Philippine Health Insurance Corporation: A Financial and Patient-centered Perspective

Introduction: The Philippines has seen an increasing trend in the number of newly diagnosed cases of Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS). One response of the government to the growing epidemic was the introduction of the Outpatient HIV/AIDS Treatment (OHAT) package by the Philippine Health Insurance Corporation, the national social health insurance provider, in 2010. The package covers medicines, laboratory examinations, and professional fees. The study aimed to evaluate the OHAT package in terms of satisfaction, financial risk protection, and to determine if OHAT is meeting the needs of persons living with HIV (PLHIV) in the Philippines.

Methods: The study was a cross-sectional study of 359 patients and 20 OHAT treatment hubs. The patient survey was a structured one-on-one interview which included questions regarding their OHAT experience, satisfaction, and out-of-pocket (OOP) expenses. A self-administered facility costing survey was done in facilities to review actual costs of medicines and services. Key informant interviews with treatment hub health professionals were also done to determine the packages’ impact on facility operations, service delivery and patient care.

Results: Majority (86%) of patients report being satisfied with OHAT because it has helped in reducing out-of-pocket expenditure. The maximum support value of the package, or the proportion of maximum reimbursable amount under the benefit package over the total cost of health services, was 267%, meaning that the package is more than enough to cover services directly related to HIV treatment. However, costs of opportunistic infection (OI) treatment are not covered by the package, and majority of those dissatisfied cite that these costs are the reason. Median OOP is at PHP4,700 (USD 92) but can reach as high as PHP 392,000 (USD 7,740) because of OI treatment. Privacy issues were also noted as a cause of dissatisfaction. For example, claim filing for the formal membership type requires employer signature. Due to fear of stigma, some members create a second insurance account or shift to individual membership payment thus driving up OOP costs. Lastly, package coverage among hubs across different regions was seen as inconsistent due to unclear policy guidelines and price discrepancies.

Conclusions: The OHAT package has increased access to services and medications for HIV/AIDS patients in the Philippines. Despite the increasing percentage of package utilization, there is still room for improvement of the package specifically with regards to addressing privacy needs, non-uniform package inclusions and extending coverage to treatment of OIs.
Oral Abstracts

Edmund Kanmiki, Regional Instituted for Population Studies, University of Ghana


Co-authors: Edmund Wedam Kanmiki-Regional Institited for Population Studies, University of Ghana; Bawah Ayaga-Regional Instituted for Population Studies, University of Ghana; James Akazili-Navrongo Health Research Center; John Koku Awoonor-Williams-Policy, Planning, Monitoring and Evaluation Division, Ghana Health Service; Kassem Kassak-Faculty of Health Sciences, American University of Beirut

Background: Ghana implemented a nationwide health insurance scheme in 2005 as part of efforts to ensure access to affordable and equitable healthcare without paying user fees at the point of service delivery. However, active enrollment has remained low even over a decade of implementing this scheme. This study contributes to providing evidence for understanding the factors accounting for low active enrollment onto this scheme by examining the possibility that occasional unawareness of insurance status could be a contributor to low active enrollment.

Methods: Using cross-sectional data from 7,693 reproductive-aged women from one of Ghana’s poorest and remote regions, we examine the prevalence and predictors of “unawareness” of health insurance status using descriptive statistics, chi-square test of association and regression analysis.

Results: Of the 7,693 respondents, 4,900 who felt they were actively enrolled had their insurance cards available for inspection, 33.5% of these had invalid cards indicating an unawareness of card validity. Factors that significantly predict unawareness of card validity are occupation, district of residence and socio-economic status. Farmers were the most likely to be unaware of their card validity status compared with all other occupations. Residents in some five out of seven districts were less likely to be unaware of their insurance card validity. There was a consistent increase in the likelihood of unawareness with decreasing socioeconomic status.

Conclusion: This study has demonstrated that occasional unawareness of card validity is an important contributor to low active enrollment onto Ghana’s national health insurance scheme. Educational campaigns aimed at improving active health insurance membership should include massages that are tailored to populations such as farmers and low socioeconomic groups. The “unawareness” disparities within districts in the studied region merit further investigation.
Quynh Le, Menzies Institute for Medical Research, University of Tasmania

The evolution of social health insurance in Vietnam and its role towards achieving universal health coverage

Co-authors: Quynh Ngoc Le-Menzies Institute for Medical Research, University of Tasmania; Amanda Neil-Menzies Institute for Medical Research, University of Tasmania; Leigh Blizzard-Menzies Institute for Medical Research, University of Tasmania; Lei Si-Menzies Institute for Medical Research, University of Tasmania

Background

Universal health coverage (UHC) is a target of many nations including Vietnam. It is assessed by three interrelated dimensions: (i) population coverage; (ii) the service (benefit) coverage; (iii) and financial protection against out-of-pocket payments and catastrophic expenditure. Vietnam aims to achieve UHC through social health insurance (SHI), as introduced in 1992. This study aims to examine the development of SHI in Vietnam from 1992 to 2016 and its role as a financial mechanism towards the goal of achieving UHC.

Methods: We undertook a review and policy analysis of Vietnamese government and World Bank’s materials. Stages of development of SHI were identified on the basis of changes in its functions as a public financing mechanism. Movement towards UHC was assessed according to the three dimensions thereof.

Results: SHI has evolved through five stages of development aimed at increasing coverage and financial protection. Coverage has widened from a compulsory scheme for civil workers and pensioners and a voluntary scheme for others, to a scheme that targets the entire population with 5 sub-groups and 25 different categories. Premiums for vulnerable groups including the poor, near poor, children under-6 and people with lost working capacity are fully or partially subsidized by the government. SHI coverage has increased from 5% (1993) to 81% (2016). Out-of-pocket payments (OOPs) as assessed by the World Bank have reduced from 65% (1998) to 37% (2014). Since Stage 1, the benefit package included inpatient and outpatient services, consultation fees, pathology, medications and consumables. Other inclusions: an approved drugs list since Stage II, now encompassing 1064 medications, including some not recommended by the World Health Organization; pregnancy check-ups (Stage x) and transportation for vulnerable groups (Stage y). Recently, there were signs of dysfunction of SHI implementation due to the tension between stakeholders.

Discussion: Through five stages of development, Vietnam has implemented a SHI system. However, UHC has not yet been achieved with 19% of the population uninsured, and high OOPs. The benefit package is considered to be generous. It is recommended that to pursue UHC, Vietnam should focus on improving population coverage rather than further expanding the benefit package. Options could include greater subsidization of the informal sector, innovation of family enrolment, more stringent retention mechanisms, and establishing an electronic identity system. Establishment of an independent “referee” organization to review claims and undertake health technology assessments should assist the sustainability and functioning of social health insurance in Vietnam.
Who enrolls in voluntary micro health insurance schemes in low resource settings: experience from a rural area in Bangladesh?

Co-authors: Shehrin shaila mahmood-icddrb; SMA Hanifi-icddrb; Mohammad Nahid Mia-Unicef; Asiful Haidar Chowdhury-icddr,b; Mohammad Iqbal-icddr,b; Abbas Bhuiya-Partners in Population and Development

Background: Micro health insurance (MHI) has proved to be a potential health financing tool for many developing countries. Bangladesh also included MHI in its current health financing strategy which is aimed at achieving universal health coverage. However, low uptake, low renewal and high dropouts have historically challenged financial sustainability of these schemes. The current study aims to identify factors that influence people from low resource settings to enroll in such schemes.

Methods: Data for the study came from a survey carried out during May-June 2016 among 2,000 households from the scheme coverage area located in Chakaria, a sub-district under Cox’s Bazar district of Bangladesh. The Outreville’s insurance demand framework was used to identify enrolment influencing factors. Multivariate logistic regression analysis was carried out to ascertain the influence of each of these factors on enrolment decision.

Results: Enrolment influencing factors were identified in four dimensions: economic, socio-cultural, demographic and structural. Households with main income earner having 10+ years of schooling (odds 1.9 compared to illiterate), having financial literacy (odds 1.5 compared to financially illiterate) and being a public/private service holder (odds 1.6 compared to menial labor) were more likely to enroll compared to their counterparts. Membership in development programmes of NGOs also influenced enrolment decision significantly (odds 1.3). Presence of chronic illness in household encouraged enrolment (odds 1.5). Households living closer to health centres were more likely to enroll (odds 2.1) compared to those living further away.

Conclusion: The findings can contribute significantly in designing health insurance schemes that leaves no one behind by taking into account people’s preferences. This would have greater potential in attracting a larger client pool leading to additional revenue generation and effecting risk pooling. Learnings from the current study have significant policy implication in terms of developing an effective health financing mechanism in low resource settings.
How does Health Insurance for the Poor Promote Equity? Evidence from Impoverished Households in India

Co-authors: Manasee Mishra- IIHMR University, India; Arijita Dutta-University of Calcutta, India; Arnab Mandal- IIHMR University, India; Jayeeta Dasgupta-Independent Consultant

Background: India is a predominantly rural country, but its healthcare facilities are concentrated in urban areas. Out of pocket expenditure on health is high. The Rashtriya Swasthya Bima Yojana (RSBY) is a government funded health insurance scheme for India’s poor. Started in 2008, it allows for cashless treatment in the event of hospitalization of members of the households enrolled under it. This paper uses the ‘equity lens’ to examine the functioning of the scheme - the extent to which it promotes access to healthcare for members within a household, and across households. It also examines if the scheme has been able to overcome the structural inequities characterising India’s health systems.

Methods: The paper is based on a sample survey of 449 poor households located in rural areas of five backward districts of a middle income state in India. Households enrolled under the RSBY scheme as well as those not enrolled were included in the sample. Structured interview schedules were used. These were supplemented by ethnographic fieldwork in the local communities. Available secondary information on the RSBY scheme was analysed. Propensity Score Matching (PSM) technique has been used to cull out the impact of RSBY scheme on hospitalization in the enrolled households.

Results: Enrolment under the RSBY scheme was high (91%). But, the RSBY cards were often not renewed due to low awareness. Households with a valid RSBY card had significantly higher rates of hospitalization compared to the control group (households without cards or lapsed cards). Marginal household members (e.g. daughters, siblings of the household head, disabled) were likely to access services under the RSBY scheme. Levels of accessing services were similar for members with primary or secondary schooling, and different social groups. Study participants expressed preference for hospitals that could be easily accessed. Yet, empanelled hospitals were disproportionately located in urban areas. The ratio of poor population per empanelled hospital was more adverse in the more backward districts.

Conclusions: The RSBY scheme holds the promise of leaving no one behind since it improves access of socially disadvantaged members and groups. However, it cannot override the urban bias in India’s health systems. Low awareness levels limit its effectiveness. The findings gain significance as India rolls out the world’s largest government funded health insurance programme. Much as household equity may be promoted through health insurance schemes for the poor, yet universal access to healthcare would remain unfulfilled if health systems are inherently inequitable.
Oral Abstracts

Lauren Suchman, University of California, San Francisco

Seeking Care in the Context of Social Health Insurance in Kenya and Ghana

Co-authors: Lauren Suchman-University of California, San Francisco; Joseph Adu-Marie Stopes International, Ghana; Rita Mwachandi-Population Services Kenya; Catherine Verde Hashim-Marie Stopes International

Background

Social health insurance (SHI) is a key mechanism for achieving universal health coverage by reducing costs and increasing accessibility for low-income populations. This paper examines how SHI affects patient decision-making regarding when and where to seek care. Using client exit interviews, we examine whether patients covered by SHI felt that insurance coverage made healthcare more accessible and whether they reported seeking formal care more frequently than they would have without the coverage. We also analyze the extent to which provider choice was affected by SHI accreditation status.

Methods

This paper draws from a dataset of 106 clinic exit interviews conducted with patients in both Ghana, a country with a well-established SHI system, and Kenya, a country where outpatient SHI has only recently been extended to the broad population. Data were collected as part of the qualitative evaluation for the African Health Markets for Equity (AHME) program; an initiative that aims to increase access to quality private providers for low-income clients in Kenya and Ghana. Semi-structured interviews were conducted with clients, both SHI- and non-SHI covered, exiting private clinics in both countries in 2013 and 2017.

Results

Clients interviewed in Ghana were more likely to seek out SHI-accredited providers than their counterparts in Kenya. Further, some clients in Kenya reported that they had SHI coverage and paid for it monthly, but did not use the coverage when they visited a clinic. This disconnect aligns with our finding that Kenyan clients generally knew less about health insurance and how to use it than their counterparts in Ghana. In both countries, clients thought that having SHI coverage increased their access to private providers, who they preferred over public providers for the caring, respectful way they treat patients. Clients also indicated that they sought care more frequently with SHI coverage because it was more affordable. However, clients in both countries were sometimes deterred from using their coverage because providers still levied out-of-pocket charges for specialty treatments and drugs.

Discussion / Conclusions

Our findings suggest that SHI does increase access to a wider variety of providers for clients in both Ghana and Kenya. However, both clients and providers would benefit from education on how insurance coverage works, how to use it, and what is included in the SHI package. This is particularly true in Kenya, where SHI outpatient coverage was newer and clients knew less about it.
Dahai Yue, University of California, Los Angeles

Racial/Ethnic Differential Effects of Medicaid Expansion on Health Care Access in the United States

Co-authors: Dahai Yue-University of California, Los Angeles; Petra Rasmussen-University of California, Los Angeles; Ninez Ponce-University of California, Los Angeles

Background. The Patient Protection and Affordable Care Act (ACA) was signed into law in 2010 and is the most comprehensive health system legislation in the United States since the creation of Medicare and Medicaid in 1965. One of the biggest changes included in the ACA involves the expansion of Medicaid. Beginning in 2014, the ACA required states to expand the eligibility of their Medicaid programs to cover all legal residents with incomes below 138 percent of the federal poverty level. Prior to the implementation of this policy, however, in June 2012, the Supreme Court ruled that the mandatory characteristic of Medicaid expansion was unconstitutional, making Medicaid expansion voluntary on the part of states. This study aims to assess racial/ethnic differential impacts of the ACA’s Medicaid expansion on low-income, nonelderly adults’ access to primary care.


Study Design. Quasi-experimental design with difference-in-differences analyses. Outcomes included health insurance coverage, having personal doctor(s), being unable to see doctors because of cost, and receiving a flu shot. We tested racial/ethnic differential impacts using the “Seemingly unrelated estimation” method. Multiple imputations and survey weights were used.

Data Collection/Extraction Methods. Low-income, nonelderly adults were identified based on age, household income, and family size.

Principal Findings. Among the low-income, nonelderly adults, Among the low-income, nonelderly adult population, Medicaid expansion was associated with a 7.10 percentage-point increase in health insurance coverage, a 6.63 percentage-point increase in the probability of having personal doctors, and a 2.72 percentage-point reduction in the probability of being unable to see doctors because of cost. These estimates were statistically significant after controlling for covariates. Hispanics got the fewest benefits; Medicaid expansion was associated with a 12.22 percentage-point increase in the insurance coverage gap between Hispanics and non-Hispanic whites, which is statistically significant. The racial/ethnic disparity in having personal doctors narrowed for non-Hispanic black and non-Hispanic others, although not statistically significant.

Conclusion. Medicaid expansion improved access to primary care, but it had differential effects among racial/ethnic groups resulting in mixed effects on disparities. Further research is necessary to develop tailored policy tools for racial/ethnic groups.
Katerina Abiertas, Rural Health Unit Motiong

Is Universal Health Care possible in Geographically Isolated and Disadvantaged Areas in the Philippines?

Co-authors: Katerina Nono Abiertas - Rural Health Unit Motiong

Access to health facilities and services in islands or Geographically Isolated Disadvantaged Areas (GIDA) is a big challenge in implementing Universal Health Care in the Philippines. Limited public transportation linking coastal communities and health facilities contribute much to the delays in seeking medical care and getting to the health centers especially at night or wee hours, where deliveries happen. Because of this, mothers with complications and/or sick newborns die unnecessarily. Zumarraga is a 5th class fishing municipality in Eastern Visayas, comprised of 25 barangays covering 38.55 sq. km of total land area with a total population of 16,295. Tertiary health facilities are in cities requiring land and sea travels up to 4 hours. To be able to refer a patient with no own motorboat or no budget to hire boats, many are disturbed each time due to lack of boat specifically stationed at health center and no existing system in place to ensure that immediate assistance for fuel is accessible. This inspired us to establish a functional and sustainable health referral system, through provision of service boats to health facilities and its supporting mechanisms for sustainability as a priority strategy in implementing UHC in the island. Service boats were used to visit barangays to deliver vaccination, health education and pre-natal check-ups. Furthermore, boats were also used to transfer patients or pregnant from BHS to RHU or to hospitals. Boats were assigned to different barangay health stations. Rural health midwives managed the operations of the boats while contracted boatmen took care of the needs. Because of the project, 94% of pregnant delivers in the facility. Philippine Health Insurance Corporation pays the health facilities $200 where the members and dependents will deliver their newborns. From a zero income, Zumarraga now earns US$60,000.00 annually. This additional revenue enabled the Health Facility to provide essential medicines, increase working staff, provide staff incentives, support other health services and maintain the boats. Having low maintenance, fuel-efficient, cost-effective service boats at the Barangay Health Stations level manned by a skilled boatman, maintained using PhilHealth Revenues did unprecedented impact not only to health referral system but also to health service delivery, health workforce performance, economic status of boatmen ultimately towards improved health outcomes and making UHC a bit closer to reality even in the islands.
Efectos de los programas sociales en la salud de la población pobre: evidencias a partir de las evaluaciones de impacto a programas sociales en Perú

Co-authors: Denice Cavero-Arguedas-Ministerio de Economía y Finanzas; Viviana Cruzado de la Vega-Ministerio de Economía y Finanzas; Gabriela Cuadra-Carrasco-Ministerio de Economía y Finanzas; Alfonso Gutierrez-Aguado-Ministerio de Economía y Finanzas

Antecedentes: En el Perú, se implementó el Programa Juntos en 2005 y en octubre de 2011 se creó el Ministerio de Desarrollo e Inclusión Social (MIDIS) con el objeto de liderar la agenda de inclusión social, a partir de la estrategia nacional “Incluir para crecer”. Dicha estrategia se encuentra basada en un enfoque del ciclo de vida y es implementada a través de diferentes programas que atienden a la población en condición de pobreza y exclusión en distintos rangos de edad. Estos son el Servicio de Acompañamiento a Familias (SAF) del Programa Nacional Cuna Más (PNCM), el Programa Nacional de Apoyo Directo a los Más Pobres (JUNTOS) y el Programa Nacional de Asistencia Solidaria Pensión 65 dirigido a los adultos mayores.

Objetivo: Describir las experiencias y reportar los efectos de las evaluaciones de impacto de los Programas Sociales sobre sus principales resultados y sobre indicadores de salud.

Metodología: evaluaciones de impacto al SAF del PNCM a partir de un diseño experimental, la evaluación de impacto a Pensión 65 a partir de un diseño de regresión discontinua y la evaluación de impacto a Juntos, que empleó una metodología de diferencias en diferencias a partir de una muestra panel de hogares. En los dos primeros, las mediciones basales y de seguimiento se realizaron en 2012 y 2015. En el caso de Juntos, dichas mediciones se hicieron en 2011 y 2016.

Resultados: Los resultados muestran que el SAF generó mejoras en el desarrollo cognitivo y de lenguaje en los niños mas no en las prácticas de cuidado infantil de las madres ni en el estado nutricional de los niños. JUNTOS logró incrementos en el gasto per cápita, gasto en alimentos, disminución de la severidad de pobreza y mejoras en el logro educativo. Sin embargo, no se encontraron resultados significativos en la mayoría de indicadores de salud prenatal ni estado nutricional infantil. Pensión 65 mejoró la salud emocional del adulto mayor (depresión, autovaloración), pero no se evidenció aumentos en el uso de servicios de salud por parte de los adultos mayores ni mejoras en su salud física.

Conclusiones: Se recomienda que dichos programas fortalezcan sus diseños y acciones de articulación con el Ministerio de Salud y entre diferentes niveles de Gobierno, cuando corresponda, a fin de mejorar la oferta y contenidos de las prácticas saludables y optimizar la prestación de los servicios de salud.
Perceptions of the poor on pro-poor health financing reforms in Kenya: an exploration of intersections of gender, disability and poverty in influencing equitable access

Co-authors: Evelyn Kagure Kabia - KEMRI Wellcome Trust Research Programme; Rahab Waithira Mbaa - KEMRI Wellcome Trust Research Programme; Kelly Wangui Muraya - KEMRI Wellcome Trust Research Programme; Rosemary Morgan - John Hopkins Bloomberg School of Public Health; Sassy Molyneux - KEMRI Wellcome Trust Research Programme; Edwine Wafula Barasa - KEMRI Wellcome Trust Research Programme

Background: Glaring inequities in access to healthcare services exist among the poor in Kenya despite the existence of health financing reforms that target them. These reforms include: free maternity services (FMS), user fee removal in public primary healthcare facilities, and a health insurance subsidy programme (HISP). We examined perceptions of the poor in Kenya with regards to health financing reforms and explored how their socioeconomic status interacts with gender and disability to influence equitable access.

Methods: We conducted a qualitative cross-sectional study in two purposefully selected counties (rural and urban) and collected data through focus group discussions (n=8) and in-depth interviews (n=30) with HISP beneficiaries and people in the lowest wealth quintiles. We analyzed the data through a thematic approach.

Results: Despite being members of pro-poor health financing schemes (FMS and HISP) designed to benefit them, poor disabled women experienced unique barriers when accessing healthcare services. This included: discrimination through denial of transport to the health facilities due to difficulties when boarding and the burden of transporting mobility aids. Disability was also associated with greater restrictions when accessing care, often this required a caregiver to accompany the patient leading to higher transport costs which were unaffordable. Health facilities were not structured to adequately meet the needs of disabled people since sign language interpreters and guides were rarely available which led to delayed or lack of care. Poor disabled women also felt disempowered due to their disability, which made them unable to raise complaints when they were not satisfied with the quality of care. Lastly, women's roles, such as household provision and caregiving to children forced some respondents to forgo seeking care in order to earn a livelihood.

Discussion/Conclusion: Gender, disability and poverty interact to aggravate inequitable access to care for poor disabled women who belong to pro-poor health financing schemes in Kenya. Interventions that could improve their access to equitable care include: providing transport vouchers and ensuring that public transport is disability-friendly, sensitizing healthcare workers on the need to be responsive to the needs of people with disabilities, introducing support structures for the disabled in health facilities, such as sign-language translators, guides and wheelchair ramps, and strengthening accountability mechanisms, including client feedback, ensuring that poor disabled women are included and empowered to participate in public participation mechanisms. Until such interventions are implemented, pro-poor health financing reforms will continue to exclude some of the most marginalized.
Towards achieving the health-related SDGs: the role of unconditional cash transfers in Africa

Co-authors: Jacob Novignon-Kwame Nkrumah University of Science and Technology

Improving health care access and outcomes continue to dominate global development agenda. In the SDGs, various targets have been set to ensure significant progress by the year 2030. This is particularly relevant in Africa where several countries lag behind in health outcomes. In recent years many governments in the region have turned to cash transfer programmes with the aim of improving poverty, food security, education and health outcomes. However, while unconditional cash transfers have demonstrated widespread, positive impacts on consumption, food security, productive activities, and schooling, the evidence to date on health seeking behaviors and morbidity in the context of unconditional cash transfers in Africa is more limited.

Against this backdrop, we investigate the impact of unconditional cash transfers on morbidity and health seeking behavior using data from experimental and quasi-experimental study designs in Kenya, Malawi, Zambia and Zimbabwe. Programme impacts were estimated using Difference-in-Differences (DiD) estimation technique with longitudinal data.

The results indicate favourable programme impacts on selected health indicators (incidence of illness) and health seeking behaviours. There was also protective impact on health expenditure. The findings were, however not consistent across countries. We also found that, in some countries, programme impact worked through supply side factors, including improved health care quality.

The findings suggest that while unconditional cash transfers could improve health and health seeking, simultaneous improvements in supply side infrastructure, or facilitation of linkages between existing facilities and cash transfer households, is likely needed for more widespread impacts on morbidity and health seeking to materialize. This also calls for multisectoral engagements in developing effective social protection programmes. This will be a step in the right direction towards achieving the health-related SDGs.
Oral Abstracts

Maria Paola Bertone, ReBUILD & Queen Margaret University, Edinburgh (UK)

The bumpy trajectory of performance-based financing in Sierra Leone: unpacking the role of external actors

Co-authors: Maria Paola Bertone-ReBUILD & Queen Margaret University, Edinburgh (UK); Haja Wurie-ReBUILD & College of Medicine and Allied Health Science (COMAHS), Freetown (Sierra Leone); Sophie Witter-ReBUILD & Queen Margaret University, Edinburgh (UK)

Background: Performance-based financing is increasingly implemented in low-income countries, as a way to reform health systems, incentivise health workers and promote strategic purchasing. While most research focused on assessing its effectiveness, a few studies have documented the political dynamics of PBF introduction and highlighted the strong influence of donors and implementers. However, research so far has stopped short of unpacking how the external influence is exerted. To address this gap, this study explores the policy and decision-making processes around PBF in Sierra Leone in the post-conflict and post-Ebola periods. Sierra Leone presents a particularly interesting case because of the “start-stop-start again” trajectory of PBF.

Methods: The study is based on a document review and 25 key informant interviews at central and district level, and with international actors. Data collected focus on the processes that led to the implementation, discontinuation and re-introduction of PBF in a retrospective way (2011-2017). Documents and interviews are analysed following a political economy framework and making use of concepts drawn from interpretive policy analysis.

Findings: Our analysis describes the almost decade-long processes of negotiation and re-negotiation of PBF in Sierra Leone, highlighting the role of different players, their ideas, capacity and power relations, and the shifting narratives around PBF. It is shown that external actors driving the debate make use of ‘frames’, both actual (i.e., defining the timing and pace of the discussions, the funding available, etc.) and metaphorical (i.e., how PBF is interpreted, defined and understood) to fit in and influence the debate, and ensure support for their views. This is facilitated by the lack of capacity of government staff and of other external actors in the fragile setting. Other strategies, such as ‘venue shopping’ are employed (deliberately or not), though they have unexpected consequences in a volatile context such as Sierra Leone.

Conclusions: Our findings show the importance of better understanding of agenda setting and decision-making processes. While the retrospective view has an analytical advantage, it is important that the lessons learned are given careful attention in a prospective way to guide practice. Coordination and alignment between and among actors (government at different levels and multiple donors) is certainly no simple task. However, adopting broad, shared frames to ensure a common understanding of technical concepts is useful to build consensus and ensure ownership and long-term political sustainability of (health financing and other) reforms.
A situational analysis of the rehabilitation sector in Cambodia: how to improve government expenditures ‘efficiency and accessibility for persons with disabilities?’

Co-authors: Anna Boisgillot - CERDI, Université Clermont-Auvergne

Background

Few economic studies of the health system focused on the rehabilitation sector in developing countries, while integrated services are at the core of the universal health coverage. Cambodia is committed to offer access to all people to rehabilitation, but a majority of them still faced financial difficulties to access to these services, including persons with disabilities. This paper analyses how the health system through its social protection scheme may protect vulnerable population from financial hardship due to rehabilitation treatment.

Methods

We collected data in Cambodia through interviews with government, international institutions, health workers and clients. A cross-sectional survey has been undertaken in eleven rehabilitation facilities across Cambodia. This study involves both quantitative and qualitative methods, and includes a desk review of existing literature, a survey using a semi-standardized questionnaire with persons with disabilities, and interviews of key informants. MS-Excel and Stata version 14 (StataCorp, Texas, United States) have been used for data management, data exploration and analysis.

Results

Main findings include: (i) several social and health protection schemes exist but there is a large fragmentation of mechanisms with a low coverage of the informal sector; (ii) a poor governance of the rehabilitation sector; (iii) a lack of attractiveness of public and non-for profit sectors as compared to the private sector; (iv) health expenditures are estimated to be catastrophic if they are equal or above $302.17 at national level. Physiotherapy services at public hospitals generally do not represent catastrophic expenditure for persons with disabilities, but may do so for some conditions such as cerebral palsy. While services are currently provided free at the rehabilitation centers, prosthetics and orthotics devices may represent catastrophic expenditure if full fees are charged in future.

Discussion/Conclusion

Many opportunities exist for the government to improve accessibility to quantitative and high quality of rehabilitation services in Cambodia, actions should be undertaken by the government based on existing evidence.
Systematic Approach to Guide the Lancet Commission on Syria: The Case of Healthcare Workers in Conflict Setting

Co-authors: Lama Bou-Karroum-American University of Beirut; Elie A. Akl-American University of Beirut; Fadi El-Jardali-American University of Beirut; Racha Fadlallah-American University of Beirut

Background: The violent conflict in Syria has caused the largest humanitarian crisis of our time. To raise the profile of the Syrian crisis in global health and mobilize a stronger international response, the Lancet and the American University of Beirut (AUB) launched the 'Lancet Commission on Syria: Health in Conflict'. The Commission invited the Center for Systematic Reviews on Health Policy and Systems Research (SPARK) and the Knowledge to Policy (K2P) Center at AUB to support and contribute to its work.

Method: We proposed a systematic approach to help guide the work of the Commission. The approach encompasses four steps: (a) selection of priorities; (b) scoping reviews; (c) evidence synthesis; and (d) knowledge translation (KT). In this presentation, we will discuss the approach and reflect on the process, challenges, and timelines.

Results: Step 1: a meeting with key stakeholders and experts was held in December 2016 to select priority themes pertaining to the Syrian crisis. One of the selected themes for a policy paper was 'Healthcare workers in conflict settings.' Step 2: we conducted within 2 weeks a rapid scoping review on this theme, which supported the drafting of a related policy paper later published in the Lancet. Step 3: our scoping review generated an evidence gap map that we used to select the topic of violence against healthcare workers as the focus for a full systematic review for our team. Step 4: our team is discussing with the Commission the KT plan to promote uptake of findings into policies and actions.

Conclusion: The proposed approach has proved feasibility and acceptability so far, but not without challenges. If this experience is successful, other Lancet Commissions could use the approach that spans from priority-setting to evidence synthesis to KT for impacting policy and action.
Adapting acute malnutrition treatment protocols in fragile and conflict-affected settings to reach every child

Co-authors: Sarah L. Dalglish-Johns Hopkins School of Public Health; Naoko Kozuki-International Rescue Committee

Background. An estimated 34 million children suffer from moderate acute malnutrition (MAM) and 16 million from severe acute malnutrition (SAM) respectively, with roughly 2.5 million at risk of death from SAM. Following international guidelines, SAM is treated with ready-to-use therapeutic food (RUTF) in outpatient settings, guided by UNICEF, whereas MAM is treated with different products in Supplementary Feeding Programs (SFP), guided by the World Food Programme (WFP). These parallel systems mean resources are not optimized, technical guidance is not harmonized, and treatments are not always available in the same location, often resulting in case dropouts.

Methods. We investigate the attitudes and actions of nutrition stakeholders with respect to proposed adaptations to these protocols, including combining MAM and SAM treatment, in the context of four fragile and conflict-affected settings (Niger, Nigeria, Somalia and South Sudan). We rely on document review of national-level policies, strategies, and gray literature, as well as in-depth interviews with nutrition stakeholders (N=40-60) in governmental and non-governmental roles who have participated in discussions on adapted or combined protocols for acute malnutrition treatment. Data analysis is based on process tracing separately within the four cases, with further thematic analysis of coded interview data and findings from the document review to compare and contrast key themes and synthesize them across cases.

Results. Results will examine the attitudes of stakeholders with respect to combining acute malnutrition treatment protocols and highlight existing barriers and facilitators to protocol adaptation, as well as the roles of key stakeholders in uptake of adapted protocols in food crisis-affected contexts. This policy analysis will provide insight into how stakeholders’ balance practical, scientific, and ethical concerns when it comes to the goal of ensuring adequate care and treatment for malnourished children, and how they conceptualize tradeoffs between competing concerns in difficult humanitarian situations.

Discussion. Our findings will contribute to the literatures on policymakers’ hierarchy of priorities during policy-making processes, as well as the interface between global and national actors, institutions, and paradigms. We will contextualize the implications of our findings with respect to policymakers’ views on whether to adapt malnutrition treatment protocols, aiming to shed light on how to increase coverage and access to treatment in humanitarian settings from a programmatic, policy, and structural standpoint.
Effectiveness of mobile clinics in delivering Primary Health Care (PHC) in Conflict Affected Rural South Sudan - an Operational Research

Co-authors: Mercy Laker - CARE South Sudan; Emmanuel Soma - CARE, South Sudan

Background; Less than 44% of the South Sudanese population has access to Primary Health Care (PHC). In Imatong State conflict resulted in further displacement of the 90% rural communities to remote mountains. Up to 51% of children in Imatong state suffer from malaria, 13% of whom go without any treatment. Only 4% of national revenue goes to health sector hence 80% of PHC is provided by NGOs. Security incidents on Health aid workers (31% attributed to state security forces) often affects access. PHC activities are coordinated by the Humanitarian Clusters led by United Nations. CARE with funding from OFDA responded in 3 counties of Imatong state. The goal was to provide integrated emergency lifesaving treatment to 18,000 individuals including 8640 malaria cases.

Methods: Mobile Clinics integrating Health, gender/protection and nutrition interventions were used. A Services Availability and Readiness Assessment (SARA) was conducted to identify gaps. One multidisciplinary mobile team (including nutrition officer, clinical officer, certified midwife/nurse, protection officer, community health officer, and data clerk) was allocated to each of the three counties. Each team visit two sites per county per month. The clinic sites were constructed using grass and wattle. The Mobile teams conducted general consultations for common illnesses with specific focus on malaria for boys, girls, women and men. Malaria tests were conducted using Rapid Diagnostics Test Kits; first line treatment was coartem while second line treatment was Quinine. A roster jointly developed with the Local Health Department enable each mobile team to visit mobile sites biweekly for at least five days per visit. Up to 150 Home Health Promoters conducted follow up and mosquito net distribution at community.

Results: CARE spent first 4 months negotiating access with static partners. By January 2018 after six months of implementation the project had conducted 1,670 malaria consultations including 16 cases of complicated malaria out for 3,700 total consultations. None of the children found with malaria died. Despite the SARA report, CARE did not obtain supplies from the UN because ‘operational presence’ map reports universal PHC coverage

Conclusion: Although mobile clinics have saved lives even in conflicts, its not fully exploited due to self-imposed barriers. Tools developed supposedly to prevent duplication are instead abused by humanitarians to conceal service gaps to donors or promore self interests. Consequently, funding meant for PHC funding is continuously reprogrammed to other sectors while thousands of South Sudanese are left behind to die of preventable diseases.
Stepping away from fragility towards resilience: Tracking those left behind by health services in South Sudan

Co-authors: Richard Lako-Ministry of Health of South Sudan; Joseph Valadez-Liverpool School of Tropical Medicine; Baburam Devkota-Liverpool School of Tropical Medicine; Caroline Jeffery-Liverpool School of Tropical Medicine; William Vargas-Liverpool School of Tropical Medicine; Sima Berendes-Liverpool School of Tropical Medicine

Background:
The recent new focus on conflict, fragility and health-system resilience requires reliable and current data on how fragile and conflict-affected states have progressed towards achieving health-related targets. However, data from insecure nations are often scarce. South Sudan ranks 1st on the Fragile States Index and had little information about its health system. We conducted two national household surveys (n=20,494 interviews) to assess South Sudan’s progress towards achieving health-related targets between 2011 (year of independence) and 2015 (millennium development goal (MDG) target year). A third data point the Ministry of Health is planned for April 2018.

Methods:
Using a stratified random sample, we measured national and sub-national coverage of health services with indicators relating to MDG-4 (reduce child mortality), 5 (improve maternal health), and 6 (combat HIV/AIDS, malaria and other diseases), and other international targets. We used a two-sample two-sided Z-test of proportions to test for significant changes between 2011 and 2015. We stratified the results by the 10 South Sudan states.

Results:
Despite economic and conflict-related shocks, health service coverage increased significantly for most indicators, including: institutional delivery (10.5%, p<0.001), measles immunization (11.2%, p<0.001), malaria prophylaxis (8.6%, p<0.001), malaria treatment (15.8%, p<0.001), diarrhoea treatment (17.7%, p<0.001), and HIV-testing (7.3%, p<0.001). Coverage varied considerably at sub-national levels, but overall remained low, for example, only 14% of mothers received malaria prophylaxis during pregnancy, 27% delivered at a health facility, 21% of children received all basic vaccinations, 9% of women knew two ways to prevent sexual HIV transmission, and 7% of non-pregnant women used modern contraception.

Discussion
Our results show that improvements in health service coverage are possible in a fragile country despite economic and political-military shocks. We discuss these counterintuitive results providing valuable baseline information for the new Sustainable Development Goals era in a fragile nation. However, we also show that although coverage for some indicators has increased, it is not a uniform increase across the states. The reasons underlying this variation are not clear, and require further research. Given continued instability and acute funding gaps, a carefully balanced humanitarian and development response is urgently needed to consolidate positive trends and support South Sudan on its challenging path from fragility, resilience. The Director General for Policy, Research and Evaluation of the Ministry of Health of the Republic of South Sudan will lead the Q&A portion of this presentation.
The Impacts of Conflict on Access to Health Care: Missing Generation and Disability in Cambodia

Co-authors: Bandeth Ros-Cambodia Development Resource Institute; Sreytouch Vong-World Bank; Nicole Vidal-Queen Margaret University; Barbara McPake-Nossal Institute for Global Health; Suzanne Fustukian-Queen Margaret University

Background: Cambodia experienced almost three decades of civil wars before peace was achieved in 1998. The conflict in Cambodia had impacts on the country’s demography: deaths, disability and displacement, resulting in a ‘demographic scar’ and a missing generation (Neupert and Prum, 2005). This study seeks to understand the vulnerabilities associated with the demographic scar in relation to social protection and access to health care in Cambodia.

Methods: This study used the qualitative life history in-depth interviews with 15 elderly respondents (aged 50 or above) in two health Operational Districts in Takeo province. The 15 elderly people were selected from households with demographic scar such as, households who had lost particular key family members such as the breadwinner during conflicts and/or households whose members had experienced or currently experience conflict related illnesses or disabilities. The study used thematic analysis following political timelines to analyse the data.

Results: The findings of this study suggest that emerging vulnerabilities related to access to health care were found in three forms. Firstly, the death of a breadwinner or loss of key family members due to conflict left the remaining family members with difficulties in accessing health care appropriate to their condition. Some people had to turn to extended family or relatives to assist in finding appropriate health care. Others tried to find a job in natural resource-rich, yet disease-prone areas where access to health care was limited. Secondly, for families who experienced conflict-related disability, their extent of vulnerability in accessing health care was determined by financial situation, opportunities to earn income to support family spending for health care and mental health. Lastly, vulnerability from both death and disability of breadwinners had affected particularly the younger generation in the family who had had to work hard to compensate the absence of breadwinners from an early age, sometimes resulting in ill health. In this context, the role of social health protection policies that were implemented from 2000 was found important to help protect this younger generation from catastrophic health expenditure.

Discussion/conclusions: The study showed several vulnerabilities through which demographic impacts of conflicts affect people’s access to health care services. Social health protection schemes that have been implemented relatively recently have provided support to the younger generation from demographically-scarred families. Further support, particularly focused on mental health services for elderly people and disabled veterans who were the direct victims of conflict are needed.
Adopting a district-wide systemic approach to strengthening maternal and newborn health services in post-disaster context: Experiences from Nepal

Background: The earthquake in April 2015 rendered 71% of birthing facilities unsafe in Nepal. Ramechapp and Dolakha, two of the worst-affected, are hilly, hard-to-access districts inhabited by poor tribal populations. The Nepal Health Transition and Recovery Programme (HTRP) supported these districts to re-establish quality Maternal and Newborn Health (MNH) services in line with Government of Nepal’s motto of “building back better”.

Methods: HTRP supported temporary emergency services as an immediate post-earthquake response. As the situation stabilised, the programme adopted a district-wide approach to strengthening MNH services through 3 inter-related activities in these districts:

1. Improving service readiness and human resource skills at birthing centres by training staff and management committees to undertake facility-level self-assessments and planning and action cycles; and on-site clinical mentoring of nurses and midwives; Establishing Comprehensive Emergency Obstetric and Newborn Care (CEmONC) services by upgrading 2 Primary Health Centres (PHCs), and enabling continuity of signal functions and quality of care through clinical mentoring and management support; Supporting inter-facility referrals (birthing centres to CEmONC sites) through improved service readiness, communication and free transport for obstetric complications.

Programmatic reviews were undertaken to assess the contributions of these activities to the district-wide MNH service strengthening.

Results: Institutional deliveries and contraceptive uptake among new users increased in these two districts. Within six months, service readiness at birthing centres improved significantly across 12 (of 13) domains included in self-assessments. Mean scores for each domain improved by between 4 to 58% points over this period. Knowledge, clinical assessment and decision-making skills on childbirth and obstetric complications among the health-workers who were mentored increased by between 2 to 29% points across the 8 domains assessed. Major improvements were in skills on vacuum delivery, newborn resuscitation, pre-eclampsia management and hypovolemic shock.

Establishing CEmONC services at new sites enabled better access by bringing services closer to the women, further facilitated by the inter-facility referrals. The upgraded PHCs demonstrated a readiness for all CEmONC signal functions within 6 months. Service data showed that 1,472 women accessed birthing centres for childbirth, and 15% were referred to the CEmONC sites for obstetric complications in one year. Qualitative interviews of providers revealed that 56% of referrals were considered as appropriate.

Conclusion: HTRP experiences show that multi-pronged district-wide approach instead of a facility-focused one helps rehabilitate and build back services better. This is particularly important for pregnant women in marginalised and remote communities, who face multiple barriers during humanitarian crises.
Community involvement in the co-management of primary health care for universal health coverage: the Peruvian experience with CLAS

Co-authors: Laura Catherine Altobelli-Universidad Peruana Cayetano Heredia; José Gabriel Cabrejos-Belgian Technical Cooperation

Peru is among the few countries in the world that has a governmental health program for primary health care (PHC) services with legalized, regulated, and institutionalized community participation. The Shared Administration Program was established in 1994 with a Supreme Decree signed by the President and Minister of Health. Since 2007, the program is now established by a congressional law (D.L. No 29124) which confers responsibilities for decision-making on management of public resources for administration of PHC services. Citizen participation is regulated by this law and through a co-management agreement signed between the CLAS Association (Local Health Administration Community), the subnational health authority (Regional Health Directorate) and the district municipality (local government). CLAS is a private non-profit civil association that is created specifically for this purpose according to Law No 29124, that has members elected from communities in the jurisdiction of a health facility as well as other members designated by the health facility the municipality, and the regional government. Public funds for PHC are transferred to a private back account that is collaboratively managed by the CLAS Association and the CLAS Manager (the chief physician or nurse of the health facility). The CLAS Board of Directors collaborates with the CLAS Manager on day-to-day decisions and administration of financial and human resources of the health facility.

Beginning in 1994 with 19 rural PHC facilities administered by CLAS, the Shared Administration Program scaled-up organically due to high community demand to cover 2138 PHC facilities (32% of the total in Peru) by the year 2002. Empirical studies, many conducted by this author, have shown that PHC services administered by CLAS have achieved greater coverage of maternal and child health services, greater access to medicines, and greater equity as compared to PHC services administered by traditional public sector law. There is also evidence of greater impact on reduction of chronic child malnutrition comparing rural areas with CLAS-administered health facilities versus similar areas with PHC services administered under public law. The building of leadership and citizenship in the population are other positive effects of CLAS.

The paper will present how CLAS operate, the achievements and impact of CLAS-run PHC services with comparisons to traditional public services, the process by which CLAS has developed over time, tendencies in political support and potential barriers to development of CLAS, and lessons and future perspectives of this innovative model of PHC management with citizen participation.
Role of the community in the prevention and management of type 2 diabetes in socioeconomically disadvantaged areas in Stockholm

Co-authors: Juliet Aweko-Karolinska Institutet; Furat Al-Murani-Karolinska Institutet; Meena Daivadanam-Uppsala University; Irma Nordin-Uppsala University; Peter Delobelle-University of Western Cape, University of Cape town; Francis Xavier Kasujja-Makerere University college of health sciences, school of public health; Claes Göran Östenson-Karolinska University Hospital; Stefan Swartling Peterson-Uppsala University; Helle Mölsted Alvesson-Karolinska Institutet

Background: Community collaboration is suggested as an important strategy for successful delivery of healthcare services to meet the increasing needs of the changing population. However little is known about the factors that influence community participation in the prevention and management of Non-communicable diseases. Moreover, the conceptualization and experience of community differs from one setting to another. This study aimed at describing the meaning of community among people with diverse cultural backgrounds, their role and collaboration with local stakeholders in the prevention and management of type 2 diabetes (T2D) in socioeconomically disadvantaged areas in Stockholm.

Methods: An explorative qualitative design using multiple data collection methods, including observations of the community activities, informal interviews with community members particularly of non-European background, individual interviews with community group leaders and members of local authorities and NGOs and group discussions with healthcare providers and managers from primary care centers within the selected areas. Community members were interviewed about their views regarding the meaning of community, their role and collaboration with the healthcare system and local authorities. Members of local authorities, healthcare providers and managers were interviewed about their role and collaboration with the community in the prevention and management of T2D. Data was analysed using content analysis with the help of Nvivo software.

Results: Community was defined by formal and informal networks exclusive to specific ethnicities and gender and unrecognized by local authorities. Sharing a common understanding, close proximity, caring for one another and sharing similar values were identified as core elements of community. Both the community members, local authorities and healthcare providers are interested in promoting health and management of T2D. Stakeholders perceived their role as; to empower the community to prevent and manage T2D through, education and provision of culturally appropriate health information using culturally-targeted educational material. Stakeholders have a narrow focus on health promotion and limited engagement and collaboration with community.

Discussion / conclusions: Community is perceived as; sharing a common understanding and similar values, close proximity and caring for one another. It is clustered into ethnic and gender specific networks with weak ties to the health system and local authorities. Despite the interest from stakeholders to empower the community to promote health and manage T2D, there are no clear strategies for community engagement. Innovative ways that link community to the health systems such as integration of community actors to healthcare workforce are required for provision of culturally appropriate health care.
Kéfilath Bello, Centre de Recherche en Reproduction Humaine et en Démographie

Mirroring the future! Using social-media for inclusive and strategic health communication and health promotion activities in French-speaking countries in West-Africa

Co-authors: Kéfilath Olatoyossi Akanké Bello-Centre de Recherche en Reproduction Humaine et en Démographie; Jean-Paul Dossou-Centre de Recherche en Reproduction Humaine et en Démographie; Mina Tamba Millimouno-Centre de Recherche Maferinyah; Basile Keugoung-Community of Practice Health Service Delivery; Bruno Meessen-Institute of Tromical Medicine

In Africa, there is a growing penetration of internet and social media. The latter are a battlefield between rumors versus evidence-based messages. This is also true in public health. There are few reliable and interactive social media platform for health promotion for French-speaking Africans.

Our objective is to report the case of the Facebook page “Saga Santé”. This initiative aims at providing a reliable, inclusive and facilitated platform to French-speaking Africans to learn and discuss on various health issues. We assessed its functionality (audience reach and engagement) and documented the best practices and challenges.

We used a case study design with mixed methods. We triangulated data from several sources. Descriptive analysis of data generated by Facebook insights, from February 6, 2016 to August 8, 2017, was performed using Microsoft Excel. Facebook insights and content analysis of comments of the posts allowed identifying the factors impacting posts performance. An online survey among the audience (February-March 2018) completed the analysis by collecting the perceived usefulness and willingness to take action based on posts from the page.

At August 08, 2017, Saga Santé had 24398 members. 72% were between 18 and 34 years old. There were 225 posts (3 per week). The median reach of the posts was 1466 people. A median of 74 people engaged (comment, like or share) with each post. Although this is relatively modest, many posts reach thousands of people (up to 448571). Moreover, there was a good level of audience interaction: 73% of the posts were both shared and commented. This gives the opportunity to users, especially the youth, to express their view (even negative) and inform/influence their peers. In many comments users discuss and call out to friends. Early insights from the online survey (n=37) also demonstrate this motivation to influence peers. 78.4% of respondents reported that Saga Santé was useful for them and 97.3% are willing to join if Saga Santé launches clubs.

We found several best practices. Cartoons are very popular. Videos and links consistently perform well. Facebook ads helped to quickly recruit members. The challenges include the need of skilled and dedicated workforce, difficulties for finding appropriate health-related material and assessing the impact on behaviors changing.

In conclusion, social media can effectively be used for health promotion in francophone Africa. Our findings will contribute to a better design and implementation of social media health promotion interventions in Africa
Nassor Mohamed, John Snow Inc

**Strengthening community involvement to improve comprehensive council health plans in Kagera Region, Tanzania**

Co-authors: Nassor Salim Mohamed-John Snow Inc; Green Sadru Mwansisya-John Snow Inc

Decentralization of public health planning is proposed to facilitate public participation in health issues. Health Sector Reform in Tanzania emphasis on the participation of lower level health facilities and community in health planning process. This involved establishment of Council Health Service Boards (CHSBs) and Health Facilities Governing Committees (HFGCs) to enhance, among other things, good governance and community ownership in the public health care system at local levels.

Community members are expected to play an important role in developing local health plans through the established HFGCs. However, largely, such plans are prepared at the council level by Council Health Management Team (CHMT). In practice, the bottom-up planning has been difficult because communities do not have the opportunity or required capacity.

Although the Government of Tanzania has made great efforts to reform the health care system by developing comprehensive policies and guidelines, there are still challenges in terms of accountability, community voice, information reporting, and feedback. Many HFGCs do not exist in some councils, and where they exist, they are just symbolic as they do not fully fulfill their roles and responsibilities.

Despite the various efforts aiming at ensuring that communities participate in deciding about their affairs including health issues, operationalization of such efforts is poor. Thus, the Maternal and Child Survival Program (MCSP) conducted an analysis to identify strengths, weaknesses, and gaps in the Comprehensive Council Health Plan (CCHP) process, using immunization planning for a technical content example in Kagera region.

Lack of awareness on the CCHP among HFGC members, poor communication and information sharing between CHMT and HFGC, unspeltulated roles and responsibilities of HFGC, lack of management capacity among HFGC members, and lack of financial resources for implementing HFGC activities was found to be the factors hampering the participation of the HFGC in performing their roles of facilitating the Health Facility Management Teams in planning and managing health initiatives in areas under their jurisdiction.

Generally, the lessons learned on the CCHP development process concludes that HFGCs are potentially instrumental organs to participate in the development and implementation of facility plans and CCHP. The identified challenges facing HFGCs in the development and implementation of the CCHP calls for key decision-makers both at all levels to revisit the CCHP preparation and implementation by ensuring that local governance structures have adequate resources as well as autonomy to participate in planning and managing CCHP in general and health facility plans in particular.
Kizito Mukhwana, CARE Kenya/Options Kenya

Engaging Communities through Community Scorecards to Improve Social Accountability and Health Service Delivery: Lessons learned from MANI Project, Bungoma County, Kenya.

Co-authors: Kizito Wasike Mukhwana-CARE Kenya/Options Kenya; Gladys Ngeno-Options Kenya; Phidelis Nasimiyu-Options Kenya

Background: Kenya’s Constitution demands transparent, accountable and inclusive governance, making citizen participation a key principle, particularly at county level. However, opportunities for communities to make their needs visible and hold service providers and duty bearers to account are limited, particularly among the most vulnerable groups. The MANI Project in Bungoma County has used Community Scorecards (CSC) as an engagement and social accountability tool through which community members’ needs (the demand-side) are articulated whilst also engaging and giving voice to supply-side stakeholders.

Methods: The CSC intervention targeted 35 health facilities and engaged representatives from local civil society groups including Community Health Volunteers (CHVs), Women Groups, Teen Mothers’ Groups, and PLHIV support groups. The CSC process provided a framework for discussion and negotiation between community members, service providers, and County officials, and enabled development of specific, measurable and time bound actions to address identified concerns. The CSC consisted of five phases: planning and preparation, conducting the scorecard with the community and then with service providers, interface meeting and action planning, and action plan implementation and monitoring. The project conducted 35 repeat CSC cycles at the same facilities and catchment areas between March 2016 and March 2017.

Results and discussions: The CSC process revealed the communities’ needs to health managers and improved quality of public services (focusing on those specific aspects of greatest importance to local people). It also strengthened citizen voice and community empowerment. Twenty five percent of facilities reported an improved relationship between service users and service providers. The community reported improved staff attitudes, behavior, and better attendance. Procedures at facilities became more organized, open and equitable. Service providers reported improved time management and punctuality due to clear allocation of responsibilities (47% to 61%). Availability of essential drugs, laboratory reagents and medical equipment improved from 40% to 59%. Better health education programmes for the community and Continuous Medical Education for staff were achieved (from 35% to 64%). The Community Scorecard process was also widely accepted by health managers across all Sub Counties.

Conclusion: The CSC process informed and empowered targeted communities to demand, access and utilize quality health services while also better enabling health workers to be able to provide these through their own efforts but also due to health managers’ support. Sustained use of the CSC methodology is critical to enhancing citizens’ voice but also their engagement in health care systems, and enhancing provision of quality health services.
Mounir Lado, IMA World Health

**Bringing Health Services to Communities through the Boma (village) Health Initiative: Lessons Learned from 2017 in Implementing South Sudan’s New Community Health Approach**

Co-authors: Mounir Lado-IMA World Health; Sean R. Murphy-IMA World Health; Kara Eberle-IMA World Health; Anthony Laki-IMA World Health; Richard Laku-IMA World Health; Susan Duberstein-IMA World Health

**Purpose**

Only 40% of South Sudan’s 12.3 million people are within reach of health facilities and have consistent access to primary health care services. South Sudan’s Rapid Results Health Project (RRHP) is leading support to the MoH in the Greater Jonglei region to roll-out the Boma Health Initiative (BHI) to expand access to health promotional services in every village (boma) in South Sudan.

**Focus**

We will describe lessons learned from RRHP in rolling-out a major community health strategy in South Sudan, the world’s newest nation with a growing health system challenged by poor infrastructure and political insecurity. Considerable achievements have been made since the launch of the BHI in Greater Jonglei in October 2017. As of December 2017, 190 trained Boma Health Team member (voluntary home health promoters), including 48 women, are active in three counties. Oversight mechanisms, the Boma Health Committees (BHCs) have been trained and established. Challenges with literacy levels as well as training materials in local dialects have been addressed. Strategies ensuring buy-in from community leaders and government officials have contributed to rapid adoption within communities. Gender and social inclusion criteria are also being used to ensure equitable representation in the BHTs and the BHCs.

**Significance**

The BHI is South Sudan’s MoH’s first strategy designed to build community health structures, drawing from community members themselves to increase access to health promotion, disease prevention and community case management services in every boma (village) in South Sudan. Lessons learned from the BHI roll-out can be applied to similar contexts also seeking to build sustainable and community led structures to increase access to health services.

**Target Audience**

Practitioners implementing community health strategies, ministries of health, and donors
Responsive health systems for community based health initiatives: A case study tackling Onchocerciasis in Cameroon

Co-authors: Theobald Mue Nji-University of Buea; Samuel Wanji-University of Buea; Kim Ozano-Liverpool School of Tropical Medicine; Louise Hamill-Liverpool School of Tropical Medicine

Background

Tackling Neglected Tropical Diseases has been referred to as a litmus test for universal health coverage as all members of communities must be accessed by the health system. NTDs affect the poorest populations in many hard to reach communities and requires collaboration between all levels of the health system and with communities. CDDs are volunteers positioned as this critical interface. A key process of drug distribution is sensitisation of community members, designed to increase community ownership, acceptance and adherence to drugs. This requires trust in the health system so that CDDs, together with community leaders, religious institutions and others have opportunities for shared governance and accountability. This research presents the successes and challenges associated with sensitizing and mobilizing twenty communities for a 5-week test and treat strategy against onchocerciasis.

Method

The COUNTDOWN consortium implemented a test and treat strategy against onchocerciasis using doxycycline in the Meme River basin in Cameroon. The testing process involved skin snipping, blood test, examination for nodules and skin assessment. The sensitisation and mobilization processes applied in this study differed from the usual health systems approach in that they were longer, more considered and served a smaller population. Observations and field diaries capturing these processes were collected. Semi-structured interviews with community members and CDDs were also undertaken.

Results

Adherence to doxycycline was higher than achieved in previous drug distribution campaigns. However, some community members refused to be tested or treated. The research identified factors influencing this decision, including; previous individual or communal experiences; CDDs capacity to communicate and manage fears around testing and treatment; individual fears of unaffordable healthcare; traditional beliefs about taking skin from the body. Without recognition and consideration of the motivation driving individuals and communities to participate, vulnerable members of communities could be missed. For example, those who fear potential healthcare costs and young women who fear tests like skin snips. Lessons learned here can be adapted and applied by other community based health initiatives in Cameroon and elsewhere.

Conclusions

Sensitization and mobilization techniques designed by the health system that support CDDs and are responsive to community fears and stigmas are key to effective engagement and mobilization of communities. CDDs have access to local knowledge but there must be a platform for them to influence mobilization strategies developed by the rest of the health system. By better understanding communities, health systems can support community-led and participatory governance to achieve immediate health outcomes.
Bridget Pratt, University of Melbourne

**Sharing power with the disadvantaged and marginalised in health systems research priority-setting: An ethical framework**

**Co-authors:** Bridget Pratt-University of Melbourne

**Background:** Helping improve health systems for disadvantaged and marginalised groups is an important value motivating the conduct of health systems research (HSR) in low and middle-income countries. Engagement of communities (research users and beneficiaries) has been identified as a key means for setting research priorities of relevance and sustainable benefit to disadvantaged and marginalised groups. Yet without attention to power and difference, community members’ engagement can lead to presence without voice and voice without influence. HSR priority-setting processes must be designed to share power with the disadvantaged and marginalised in order to ensure that their voices and knowledge are included.

**Methods:** A reflective equilibrium methodological approach was used. By analysing six key bodies of literature, the paper first identifies the different components of engagement—who initiates, for what purpose, who participates, and how they participate—and the dimensions of power relevant to each of them. For each component of engagement, the ethical considerations relating to those dimensions of power are characterised for the HSR priority-setting context. These initial conceptual findings—components of engagement, dimensions of power, and ethical considerations—were then tested against the knowledge and experiences of community engagement practice. 29 in-depth, semi-structured interviews and one focus group were undertaken with: researchers who work with disadvantaged populations using community based methods, ethicists, community engagement practitioners, and staff of community-based organisations who have been partners in health research projects. Interviewees were based in high-income and LMICs.

**Results:** Thematic analysis of the qualitative data identified contextual factors that facilitate and obstruct power sharing with communities during research priority-setting. It also identified key sites of power that are inherent during and after research priority-setting and ways of sharing power with disadvantaged and marginalised groups at each of them. These were then compared to those identified by the initial conceptual work, and additional elements of engagement, sites of power, and ethical considerations were identified. Based on these findings, an ethical framework comprised of a series of questions reflecting the ethical considerations relating to each identified site of power has been developed for use by health systems researchers and community partners when designing community engagement processes for research projects.

**Conclusions:** Attending to questions raised by the ethical framework in practice will help facilitate power sharing during HSR priority-setting and help generate HSR collaboratives with priorities that encompass and more accurately reflect the health needs of disadvantaged and marginalised groups.
Oral Abstracts

Tania Alfaro, Escuela de Salud Pública Salvador Allende, Facultad de Medicina, Universidad de Chile

Citizen participation and co-management for health in Chile

Co-authors: Patricia Frenz-Escuela de Salud Pública Salvador Allende, Facultad de Medicina, Universidad de Chile; Tania Alfaro-Escuela de Salud Pública Salvador Allende, Facultad de Medicina, Universidad de Chile; Marinella Mazzei-Escuela de Salud Pública Salvador Allende, Facultad de Medicina, Universidad de Chile; Ximena Sgombich-Grupo Nous

Background: In Chile, citizen participation is mandated by law at all levels of its decentralised public health system, as part of the biopsychosocial model and supported by Ministry of Health incentives. The aim of this case study was to explore participatory practices at different levels of the health system in Chile, within an international project "Shaping Health: Exchanging on social power in health", led by Training and Research Support Centre (TARSC) and supported by the Robert Wood Johnson Foundation Global Ideas Fund. Method: We documented and extracted lessons, through a literature review, key informant interviews, photographs and videos, from six experiences (Adelaida in Biobío, Psircutopia in Ovalle, Santiago Sano, CESFAM Madre Teresa de Calcuta, CESFAM Juan Pablo II and Grupo Llareta in Santiago), which were identified by experts as being illustrative of practices, progress and challenges of citizen participation in health in the country. Results: The experiences included empowered formal citizen councils building a disability network, initiatives to engage socially vulnerable youth in performance art, a sexuality manual organized by an adolescent committee, development of a citizen participation plan with community representatives in a low social cohesion neighbourhood, activities for exercise of health rights by immigrants, and autonomous community-led work on social determinants of health. Conclusions/discussion: Participation is a pillar of Chile’s path to universal health coverage, which has centered on establishing enforceable health care guarantees and involving the community in action on social determinants of health, within a broader agenda of participation in government decision-making, democracy and rights. Key insights from the documented experiences include the importance of: 1) defining the social roles, objectives and results of participatory practice; 2) implementation of a territorial approach, engaging people and communities where they live, study and work, particularly socially vulnerable groups who are not accessing health and social services, for transforming environments and the health system; and 3) valuing different types of knowledge and building horizontal spaces for joint learning and action among health, the community and other sectors. This case study provides concrete examples of how national policies and a more comprehensive primary care model have played a role in implementing a mainly top-down approach to participation. It also highlights the critical perspective of civil society institutions dedicated to popular education approaches and more autonomous community initiatives, including Grupo Llareta, for building more authentic, empowering participatory processes.
An Invitation to Participation: Possibilities and Constraints of Institutionalised Community Participation at Primary Health Care Level in the Western Cape, South Africa

Co-authors: Hanne Jensen Haricharan-University of Cape Town

Background:

The Alma Ata Declaration promotes community participation in Primary Health Care. Literature suggest that community participation can contribute to more responsive and accountable health systems. Institutionalised community participation is a feature of many health systems, including the South African. In the Western Cape Province, legislation on health committees at Primary Health Care facilities was promulgated in 2016. Health committees can be considered ‘invited spaces’, defined as spaces where governments invite citizens to participate. Attention to who invites, the terms of the invitation and how the invitation is experienced by those entering the invited space are important to consider.

Methods:

A multiple qualitative case study explored how health committee members understood and experienced the terms of the invitation in the Western Cape Health Facility Boards and Committees Act and the consultative public participation preceding its promulgation.

Results:

Health committees felt that they were not capacitated to participate in the public participation process prior to the promulgation of the Act. Further, very few comments raised during consultations resulted in changes in the legislation. Despite this, health committees viewed the Act as a step in formalizing participation and providing them with a mandate. However, they had concerns about the Act’s content. Firstly, they argued that community representatives should be elected rather than appointed by the Minister as this would ensure that they were accountable to the communities they represent. Secondly, the Act provides minimal influence in decision-making with limited roles in accountability, oversight and governance. Influence on the wider health system are constraint by weak upstream linkages. The paper argues, that the consultative process and the content of the Act together created an invited space that was experienced as ambiguous. While health committees engaged in the invited space, they simultaneously considered creating alternative ‘claimed’ forms of participation.

Discussion:

Institutionalised community participation can be viewed as a potential mechanism to ensure a more responsive and accountable health system. This study has outlined how the design of the invited space determines the potential for participation, in this case through creating a space with limited influence in decision-making and a space where politicians control who participates. Under these circumstances, community members view invited participation with ambivalence. This leads them to consider creating ‘claimed’ spaces for participation. Greater attention should be given to creating designs and conditions for invited participation that ensure that participation contributes to health system strengthening by strengthening community input and influence.
Oral Abstracts

Barbara Kaim, Training and Research Support Centre, Zimbabwe

A critical reflection on using Photovoice as a vehicle for strengthening the negotiating power of Health Centre Committees in east and southern Africa


In recent years, Photovoice has gained increasing attention as a participatory action research strategy that has the potential to change the power dynamics between an articulate, organised citizenry and bureaucratic decision makers. At the same time, implementation of this method has been criticised for falsely raising community hopes to change public policy and reduce inequalities in access to decision-making processes and public resources for health.

Since 2016, Training and Research Support Centre (TARSC) Zimbabwe and partners, under the auspices of the Regional Network on Equity in Health in east and southern Africa (EQUINET), has been coordinating a programme with 9 Health Centre Committees in Zimbabwe, Zambia and South Africa, aimed at exploring the use of Photovoice to support their negotiating power, especially in influencing planning and budgeting processes at facility and district levels. EQUINET research shows that HCCs have the potential to represent the interests of communities at higher levels within health systems but effective implementation is dependent on whether HCCs have the authority, resources and skills on how to use community evidence to influence actions undertaken within existing decision-making structures. Consequently, HCCs often respond to externally defined programme priorities, rather than implementing health facility and community actions based on bottom-up participatory processes.

HCC members agreed to focus on improving access to clean water and sanitation in their communities. They took photographs and used them as evidence in community and decision-making structures (WhatsApp group discussions with local authorities, on community information boards, during stakeholder and community meetings, in town halls), both within the health sector and other related sectors. Participatory pre and post-test questionnaires measured impact on HCCs’ recognition and authority, and what change unfolded in improving the social determinants of health in their communities, especially in budgeting and planning.

Findings show that use of an innovative, visual and participatory tool can strengthen HCCs ability to influence local authorities to take action in improving the health of communities. It has also improved HCC relations with the wider community, and helped increase community ownership in defining and acting on their problems and solutions. There is some evidence that Photovoice can impact on planning and budgeting processes, but only under certain conditions. Presentation at the symposium will share findings from this research in more depth and critically reflect on the extent participatory tools such as Photovoice can effectively lever the power of HCCs on behalf of the communities they represent.
Martina Lembani, University of the Western Cape

Innovative strategies for community participation in improving maternal health service provision in rural Eastern Cape health facilities, South Africa

Co-authors: Thubelihle Mathole-University of the Western Cape; Martina Lembani-University of the Western Cape; Ben Gaunt-Zithulele Hospital, OR Tambo District, Eastern Cape, RSA; David Sanders-University of the Western Cape

Background

Strengthening community participation was one of the key principles of the primary health care approach to achieving the goal of health for all at the Alma Ata declaration. The Eastern Cape Province, South Africa is acknowledged to have a good policy on community participation in health service provision by involving clinic health committees, hospital boards and community health workers (CHWs). However, sound implementation of this policy is limited to few health facilities. This paper describes some of the innovative strategies used by those few health facilities to enhance community participation in maternal health services in rural Eastern Cape.

Method

A descriptive qualitative study was conducted to understand the strategies used by three purposively selected well performing health facilities (1 hospital and 2 Community health centers) in enhancing community participation within their catchment areas in providing maternal health services. We conducted 16 individual in-depth interviews and 3 focus group discussions with key stakeholders at health facility and community levels to assess the involvement of the hospital board, clinic health committees, community health workers (CHWs) and the participation of community members in the provision of maternal health services. The information was audio recorded with permission from participants and field notes also were taken during interviews. In addition, the researchers conducted document reviews of clinic health committee meeting minutes, CHWs reports and attended some hospital board meetings. Data were transcribed from the notes and audio tapes and inductively analyzed using thematic analysis methods.

Results

Participation of the hospital board, health committees, CHWs was found to be high in these three selected facilities. The innovative strategies used to enhance community participation include raising funds to run health committees (transport for meetings); active involvement of traditional leaders and business owners; involving hospital board members in community meetings to source relevant information on maternal health to be discuss at the hospital board level; employing a responsive feedback mechanism (complaint/complement box); building trusting relationships among stakeholders to increase transparency and accountability; and using non-governmental organisations specializing in other health programmes to support community health workers in the area of maternal health.

Conclusion

This study demonstrates how the use of innovative strategies involving local resources and collaborative efforts can enhance successful implementation of hospital boards, health committees and CHW policies in resource constrained environments in low-middle income countries such as South Africa to enhance community participation for improved maternal health outcomes.
Oral Abstracts

Petrus Steyn, Department of Reproductive Health and Research, World Health Organization (WHO), Geneva, Switzerland

Developing a participatory approach (methodology) for engaging community and health system for increasing met needs for family planning

Co-authors: Petrus Steyn-Department of Reproductive Health and Research, World Health Organization (WHO), Geneva, Switzerland; Joanna Cordero-Department of Reproductive Health and Research, World Health Organization (WHO), Geneva, Switzerland; Peter Gichangi-International Centre for Reproductive Health - Kenya (ICRH-K), Mombasa, Kenya; Theresa Nkole-University Teaching Hospital (UTH), Lusaka, Zambia; Jennifer Smit-MatCH Research Unit (MRU), Department of Obstetrics and Gynaecology, Faculty of Health Sciences, University of the Witwatersrand, Durban, South Africa

Background: Community participation is a key component in frameworks for improving quality of health services, including family planning/contraceptive (FP/C) provision. However, several barriers to successful implementation in health programmes exist. Evidence has shown that the relationship between the community and health system can affect the outcome of programmes. The unequal power relations or lack of buy-in from the health sector can lead to programmes failing. The UPTAKE Project aimed to increase met needs for FP/C through a participatory approach involving both community and health system. To ensure that collaboration takes place, a systematic Approach was developed.

Methods: The Approach was developed during the formative phase conducted in South Africa, Zambia and Kenya through an iterative process. It was informed by evidence from existing literature on participatory approaches. It was refined through the integration of input from stakeholder groups through qualitative research, as well as mapping of existing structures, services and policies and was tested through community dialogues.

Results: Four key components of the Approach were identified. (1) Programme initiation should involve key stakeholders from both the community and health system. Evidence suggests that programmes are more likely to succeed if an enabling environment already exists, including the existence of FP/C policies and legal frameworks supporting human rights principles and participation. (2) Participant recruitment is key. Considerations need to be made to ensure that the needs of the community are represented, including those of the vulnerable and marginalized. The health system should be represented by both providers with knowledge and direct experience of services and those with decision-making power. Other stakeholders from the community who act as gatekeepers should be engaged. (3) Multi-sectorial participation requires complex levels of interaction, however creating platforms for dialogue can yield better understanding, increased trust and effective participation. The proposed Approach will use community dialogue combined with Theory of Change (ToC) as a participatory tool. Key issues, including skilled facilitators, establishing ground rules, timekeeping, and using ToC to facilitate goal identification and dialogue, should be taken into account. (4) To ensure sustainability, a participatory evaluation should be included where direct beneficiaries of the programme are involved in evaluating performance. Results should be shared regularly with stakeholder groups to gain credibility and ensure accountability.

Discussion: Community dialogue to address unmet FP/C needs, if developed systematically, is culturally and operationally feasible. Using a ToC to structure and create dialogue focuses the discussion and encourages collaboration and equal partnership.
Equity monitoring in a post-disaster context in Nepal: building local ownership, listening to community voices and service provider challenges

Co-authors: Deborah Thomas-Nepal Health Sector Support Programme; Sitaram Prasai-Nepal Health Sector Support Programme; Rekha Rana-Nepal Health Sector Support Programme; Mohammad Daud-Ministry of Health, Nepal

Background: The 2015 earthquakes caused over 9,000 deaths in Nepal and extensive destruction of infrastructure. Working with the Ministry of Health, the DFID supported Transition and Recovery Programme developed a participatory process to monitor the delivery of health services and equity gaps in three highly affected districts as a means to improve accountability and service delivery. Equity Monitoring (EM) was led by district health managers who contracted a local NGO to collect data and provide rapid information to district authorities so that they could address gaps through government, NGO and development partner resources.

Methods: In each district, Village Development Committees (VDCs) (sub-districts) were classified as ‘highly affected’, ‘geographically remote’ and ‘accessible’ and a purposive sample was selected. Data collection included focus group discussions with community people, semi-structured interviews with health providers and local leaders and assessment of the functionality of health facilities. The NGO facilitated an interaction meeting with local health providers, health facility committee members, political parties, community leaders and community people to share findings and develop a VDC action plan. Data from the HMIS was extracted for triangulation. District officials and NGOs assessed EM and how it had influenced resource allocations.

Results: Equity monitoring was valued by district managers because it provided a nuanced local picture of how well health services were functioning, including remote VDCs that district officials find difficult to get to, identified critical supply side gaps and community perceptions of health services by a third party. District managers responded quickly by supplying drugs and redeploying health staff where gaps were found. The process encouraged practical and local responses at VDC level with communities and providers working together on solutions. An integrated district action plan was developed by the government to address gaps beyond the capacity of VDCs.

Pre-existing disadvantages in access to services (remoteness, poverty, social exclusion) shaped how communities benefited from recovery resources except when emergency clinics were located in remote areas and overcame geographical and cost barriers.

The EM methodology itself was found overly complex for local NGOs with limited capacity, and needs simplifying for future use.

Conclusion: EM has shown how participatory monitoring in a post-disaster context supported health managers in decision making, reduced blind spots from relying on HMIS data and improved social accountability. EM mobilised communities and health providers to work together on solutions to gaps in health services amplified by the disaster.
Myrna van Pinxteren, University of Cape Town

‘Masisebenzeni sane’ (Let’s work together): Opportunities and challenges to incorporate grassroots activism to strengthen the health (information) systems

Co-authors: Myrna van Pinxteren - University of Cape Town; Christopher J. Collin - University of Cape Town; Mandla Majola - University of Cape Town

BACKGROUND South Africa has an overburdened and fragmented public health system. To address the challenges and improve health for all, community actors are indispensable to different parts of the health system, including health information systems (HIS). The i-ALARM project (Using Information to Align services and Link and Retain Men in the HIV-cascade) developed a health information (HI) intervention in Gugulethu, a township in South Africa. The i-ALARM study aims to increase HIV-data sharing at different levels of the health system to better link patients to HIV-care. Details on the intervention design and initial results of our work with the health system is reported in a separate abstract. This submission reports on i-ALARM’s close collaboration with the Movement for Change and Social Justice (MCSJ), a grassroots advocacy movement that is represented by different NGOs in the community. This research illustrates how a health advocacy group like MCSJ can meaningfully contribute to the development of the health (information) system by bridging the gap between health systems actors and the larger community.

METHODS This study is based on empirical data from an ethnographic case study which was conducted in 2016 and 2017 as part of the larger i-ALARM study. Data was collected from field-notes, semi-structured interviews, participant observation and workshops. Participants for this case study included community actors, health care workers and health managers.

RESULTS Since the establishment of MCSJ in 2016, the activism group was able to improve communication and collaboration between NGOs, health services and the community. MCSJ has effectively addressed larger health system issues such as shortage of ARVs and health staff through forming alliances between community stakeholders, clinics and the i-ALARM team. Finally, MCSJ has identified numerous health (information) systems issues for the i-ALARM research agenda, as well as mobilized local communities to actively address and problematize ongoing health services issues and provide targeted health education in Gugulethu.

CONCLUSIONS The findings of this anthropological case study show the importance of engaging community stakeholders in larger health information strengthening interventions such as i-ALARM. Participation of grassroots advocacy groups such as MCSJ allows for open conversations to discuss ongoing issues related to larger health information systems with important community stakeholders. Connecting community stakeholders and health services through regular meetings and grassroots activism furthermore improves relationship building, mutual understanding of health data issues and sparks new collaborations and projects.
Fostering community participation to improve service quality and health worker satisfaction and motivation in the Democratic Republic of Congo

Co-authors: Janna Marie Wisniewski-Tulane University School of Public Health and Tropical Medicine; Paul-Samson Lusamba-Dikassa-Kinshasa School of Public Health and Tulane University; David Hotchkiss-Tulane University School of Public Health and Tropical Medicine

The community health system in the Democratic Republic of Congo suffers from chronic low levels of health service quality. Contributing to these quality concerns, the community health workforce exhibits very low levels of job satisfaction and motivation, in part due to difficult working conditions and the underpayment of salaries. This study examines the impact of a community scorecard approach on service quality and health worker satisfaction and motivation in three regions of the Democratic Republic of Congo. The principle underlying the community scorecard strategy is that communities that are engaged with a mechanism to hold health facilities accountable will be better positioned to ensure that quality and responsive services are being offered. It is also hypothesized that increases in community support and improvements in service quality will in turn improve the satisfaction and motivation of the health workforce. This study uses survey data collected in health facilities in 2014 before the community scorecard initiative began and again in 2017, as well as qualitative data collected six months and twelve months after the start of the intervention. Findings indicate that communities participating in the scorecard intervention have embraced the idea of ownership of their health facilities and are lobbying health workers for changes to operating procedures and the patient experience. Quality measures at participating health facilities have improved over the course of the intervention. Health workers reported feeling more supported in their jobs and expressed appreciation for communities taking ownership of their health services and assisting them in lobbying the government to meet their needs. Increasing community participation and empowerment is a means by which to achieve community and system level improvements where formal governance structures are weak. This study offers evidence related to the effectiveness of one such initiative to not only raise service quality levels but also to improve the satisfaction and motivation of health workers. Findings may be of interest to those focused on improving community health services both for patients and the health workforce in low-resourced settings.
Experience in engaging private service providers in health insurance for attaining universal health coverage in Nepal

Co-authors: Bikesh Bajacharya - Thammasat University

Background

In 2016, the Government of Nepal introduced voluntary and contributory health insurance for Nepalese that provide affordable financial protection against risks of health-related costs. The Health Insurance Board (HIB) was formed as a purchaser for health services from 138 public service providers and 30 private providers on behalf of population enrolled. So far, health insurance is rolled out in 27 out of 77 districts in Nepal.

Objective

This paper aims to study the experience in engaging private service providers in delivering enlisted health services under the health insurance in Nepal.

Methodology

The study has analyzed both qualitative and quantitative data. The quantitative data is extracted from Insurance Management Information System of the HIB and qualitative data is based on discussions from 330 participants of 15 districts who attended review meetings held in October 2017.

Results

585,394 populations are enrolled in health insurance. Two third of population are enrolled in districts with only public service providers and remaining one third are enrolled in districts having both service providers. 40% members utilized services from private hospitals whereas 60% population utilized services from public service providers.

The coverage in health insurance is high in districts with existence of private service providers. 80% members are highly satisfied with health services provided by private hospitals compared to 38% in public hospitals. The members complained that there is lack of health services in public service providers due to high absenteeism of health workers, lack of enlisted medicines, delays in procedure and misbehaviour by health workers. Less drop out in renewal of health insurance policy was observed in districts having private service providers.

The HIB, through health insurance contributed in improving quality of services delivered by public and private service providers, as there is medical audit of every claim made by service provider. The HIB pays both public and private service providers a uniform cost for services provided. This has contributed to regulate the private providers in charging haphazard charge in services.

Conclusion

The engagement of private service providers has enhanced availability of health services, increased access to quality health services and higher patient satisfaction among health insurance members though enrollment and utilization of services is high in public service providers. In addition, health insurance has structured private service providers in regulating service cost and following standard treatment protocols.
Oral Abstracts

Arin Dutta, Palladium

Private health sector market in a social health insurance scheme – how policies harness or restrict growth and competition in Indonesia

Co-authors: Sayaka Koseki-Palladium; Kate Britton-Palladium; Rebecca Ross-Palladium; Yunita Nugrahani-Palladium; Arin Dutta-Palladium

Background: For the government of Indonesia to achieve 95% coverage of its national health insurance scheme—JKN—by 2019, a partnership with the private sector is essential. JKN has increased the insured patient population; concurrently, the government is driving to lower the cost of care, creating a difficult competitive market. Three years into the program, the USAID-funded Health Policy Plus project analyzed whether JKN incentivized the private health sector to offer a broader package of essential services, especially to the poorer/more rural populations, and improved quality.

Methods: This mixed method study used data collected through a facility-based survey and key informant interviews. The survey sampled 73 private hospitals stratified by geography, class, ownership, and JKN acceptance status. We used descriptive and statistical analyses to assess JKN’s effect on private hospital capacity, utilization, and finances. Semi-structured interviews were conducted with decision-makers from 25 companies in service delivery, pharmaceutical, medical devices, and private health insurance sub-sectors.

Results: The survey demonstrated that financial performance improved more in JKN-accepting to non-accepting hospitals (67% and 33%, respectively). Yet, key informants were concerned about low reimbursement costs. Cost pressures were more evident in the pharmaceutical sector, where year-to-year sales volume growth increased from 3% to 5% between 2013 and 2015, but annual sales revenue decreased from 13% to 7%.

JKN did not incentivize to provide a better package of care as both hospital types were equally likely to report increases in the number of nurses and specialists employed, and to offer basic maternal and newborn health, HIV care and treatment, and TB services. Key informants indicated that current policy limiting cost-share with patients or top-up private insurance to purchase branded pharmaceuticals and hospital services reduced incentives for the private sector to invest in quality.

Discussions & Conclusion: Indonesia illustrates how the private sector’s role can shift as a large social health insurance scheme takes hold. While JKN has activated the private health market, in most of the country, a monopsony market has developed. Cost reduction is critical to contain premium rate growth. Yet, without incentives for the private sector to invest in service offerings and quality, the value created by the program is limited, ultimately reducing health and financial benefits to the population. Having complementary options such as top-up insurance should be considered to maintain balance of cost, access, and quality in a mixed health system.
Background: In 1997, in the aftermath of 36 years of civil war, Guatemala took the bold step of contracting out primary health care services to non-governmental organizations. The initiative rapidly expanded coverage to millions of poor and rural Guatemalans, many of them indigenous, whose communities had long been overlooked by the under-funded public health system. As countries chart the path to universal coverage, contracting out services has become a popular albeit polemical option for expanding access. One of the largest and longest-running examples of this approach, Guatemala’s “Extension of Coverage Program” provides an opportunity to assess the impact of contracting out on a large scale.

Methods: Using country-level panel data from 1984 to 2014, we apply the synthetic control method (SCM) developed by Abadie and Gardeazabal (2003) to assess the impact of Guatemala’s reforms on health outcomes including infant mortality, under-five mortality, and adult mortality. Thirty-one countries from the Latin American and Caribbean region served as the control pool. The synthetic control method is an innovative approach to measuring the impact of policies or events that affect an aggregate unit. Identifying the effect of reforms that affect only one unit and lack suitable controls is a common challenge in causal inference. The SCM approach overcomes this by constructing a synthetic unit matching the treated unit on pre-treatment covariates, including outcomes. By achieving balance in the pre-reform period, the causal impact of a reform may be identified through a comparison of the treated unit’s post-reform outcomes to the outcomes of the synthetic control unit.

Results: Preliminary analyses indicate that Guatemala’s reform did not significantly reduce mortality, as compared to its counterfactual in the absence of reform. Despite achieving balance on pre-treatment indicators, the “synthetic” Guatemala outperformed Guatemala in reducing infant and under-five mortality.

Discussion: The results suggest that contracting out is not a panacea for an under-financed health system. However, macro-level results should be considered with previous micro-level evidence that the reforms did improve access to health services, particularly among vulnerable populations. Ultimately, these results highlight the importance of supportive policy and financing for the success of contracting out reforms. Further, by identifying countries similar to Guatemala in the pre-reform period, the SCM approach points to potential case study comparisons. Such research can offer insight into the institutional constraints, political economy challenges, and social determinants of health that have stunted Guatemala’s progress in mortality reduction.
Is private sector the answer to achieving effective coverage and financial protection under publicly funded health insurance?: Evidence from Chhattisgarh, India

Co-authors: Sulakshana Nandi-Public Health Resource Network and University of the Western Cape; Helen Schneider-School of Public Health, UWC/MRC Health Services to Systems Unit, University of the Western Cape; Priyanka Dixit-School of Health Systems Studies (SHSS), Tata Institute of Social Sciences (TISS)

Background
The healthcare provision mechanisms used by publicly funded health insurance schemes and the differential effects of public and private sectors, have been relatively less researched. In Chhattisgarh state of India, public and private sectors are empanelled to provide hospital services under the state funded Universal Health Insurance Scheme, in a context of extensive gender, social, economic and geographical inequities. This study examined enrolment, private and public sector utilization and out of pocket (OOP) expenditure under the scheme in the state.

Methods
The Chhattisgarh State Central sample (n = 6026 members) of the National Sample Survey (71st Round) on Health 2014, was extracted and analyzed. Both descriptive and multivariate analyses of enrolment, hospitalization, and out of pocket (OOP) expenditure were conducted, taking into account gender, socio-economic status, residence, facility type and ailment. Catastrophic health expenditure (>10% monthly household consumption expenditure) was calculated.

Findings
Insurance coverage was 38.8%. The rates of hospitalization among the insured (33/1000) were slightly higher than among the uninsured (29/1000). Among those insured and hospitalised, one-third (32.8%) of the hospitalisations were in the private sector, compared to a bit more than half (53.4%) among those with no insurance. Scheduled Tribes, women, rural residents and poorer groups were more likely to go to the public sector for hospitalisation. The insured were less likely to incur out of pocket (OOP) expenditure, however, 95.1% of insured in private sector and 66.0% of insured in public sector, incurred OOP expenses. “Cashless” hospitalisations were more common in public facilities. The median OOP payment in the private sector (Rs. 10,000) was eight times more than in the public sector (Rs. 1,200). Of households having at least one hospitalisation episode, 35.5% experienced catastrophic health expenditures.

Discussion and Conclusion
Financial protection is highlighted as the mainstay of government health insurance schemes. The study shows that a large proportion of the insured had to incur out of pocket expenditure for hospitalisation and the private sector was more expensive for them. A third of the households with hospitalised members, experienced catastrophic health expenditure. The public sector catered to the more vulnerable groups and the insured made greater use of it whether due to choice or availability.

The differences in utilization and OOP expenditure in public and private sectors under the state insurance scheme highlight the necessity for further examination in order to inform strategies that make best use of scarce public resources for achieving Universal Health Coverage.
A reproductive health voucher scheme can support the public health system and reach the most vulnerable in conflict setting: lessons from Yemen

Co-authors: Alice Sabino-Options Consultancy Services; Majed Alsharjabi-Options Consultancy Services, Yemen; Ashraf Badr-Yamaan Foundation, Yemen

From 2000, the health system in Yemen has decentralised. Governorate (GHO) and District (DHO) health offices are responsible for service provision while the Ministry of Public Health and Population (MOPHP) has a stewardship and governance role. The system is financed mainly through out-of-pocket and the already scarce public funding, covering drugs and salaries, has further declined since the beginning of the conflict in 2014. Rural communities face multiple barriers to access quality services, from high service and travel costs together with insecurity. Private midwives are often the only provider within rural communities and some Districts do not have functioning emergency obstetric care facilities.

Since 2013, the voucher programme allows poor married women living in rural areas in two Governorates to receive free safe motherhood (SMH) and family planning (FP) services in contracted public and private facilities. Vouchers are distributed door to door in communities selected through geographical targeting. The SMH voucher includes transportation to and from the facility, antenatal, postnatal and delivery care. The programme works within the health system. It collaborates and funds GHO and DHOs to assess quality of care in contracted facilities and conduct supervisions. It contracts mainly public facilities, with the exception of private providers at community level to ensure broad coverage. Women exchange the voucher for free services, and providers receive reimbursements which enable them to reinvest part of the revenues to improve quality of care and expand services available.

In 2013-2016, the programme reached 120,369 women across 11 Districts, and ensured funding flow to over 200 providers who assisted over 24,000 deliveries. In its second phase (2017-2020), it targets 123,000 women in 18 Districts. As a result of the conflict, the government stopped paying staff salaries and providing drugs, leaving facilities with no other source of funding than user charges. Without the voucher subsidy, poor and rural women would not access care, facing higher risks of mortality and morbidity. Facilities contracted by the programme have been able to provide lifesaving services free of charge to voucher clients and remain operational by using the voucher revenues to rehabilitate infrastructure, purchase drugs and reimburse staff.

In fragile settings services are often provided outside the public system, which further weakens it. The voucher maintained funding flows to public facilities, enabling the public sector to sustain service coverage. We argue that vouchers can be system strengthening solutions in fragile setting and used to ease the post-emergency transition.
Background: A Community Delivery Center (CDC) – a public private partnership between a non-government Organization and government, is a basic unit for obstetric care in hard-to-reach tiger forest Sundarbans region in Eastern India to provide safe delivery. This initiative intends to achieve third Sustainable Development Goal (SDG) of ensuring healthy life and promoting well-being. In LMICs like India where maternal deaths still account for the highest share of DALYs, such innovative service delivery model stands for seventeenth SDG of revitalizing the partnership for sustainable development. Given geographical inaccessibility and sub-optimal presence of public facilities in the forested area, this implementation research along with one implementer as its research partner explores the role of CDCs by examining facilitating and hindering factors outlining the differential utilization from providers’ and communities’ perspectives in the Indian Sundarbans.

Methods: Using qualitative Participatory Action Research methods, including Most Significant Change (MSC) and Pair-wise ranking and scoring (PWRS), this research sought to capture changes in the health seeking behavior for safe delivery and priorities in choosing health facilities, both among beneficiaries, non beneficiaries and service providers. A total 36 PWRS and 62 MSC activities have been done using maximum variation principle where the data were analyzed using software NVivo10.

Results: The majority of respondents ranked CDC as their first priority for safe delivery followed by higher tier government facilities; private for-profit facilities ranked far below due to their high cost. Deliveries by untrained private providers, such as informal providers or untrained birth attendants, are the bottom two choices for delivery. MSC stories resulted in four domains of change— service, managerial, human resources and other external factors. From the beneficiaries’ side, facilitating factors to facility use included good physician and staff behavior, availability of free medicines and ambulance services; while barriers to facility use included delay in timely referral. Absence of cesarean facilities and system factors such as delay in fund disbursement, renewal of contracts, and retention of human resource were challenges from the providers’ side.

Conclusions: Under challenging geographical constraints, CDC certainly brings the basic obstetric care to the doorsteps of mothers from Indian Sundarbans. However, uncertainties of delayed fund disbursement and contract renewal posit an indecisive environment among the private service providers. Addressing the barriers and facilitating the positive factors can act as a catalyst for strengthening of CDCs towards Sustainable Development Goal by promoting healthy well-being of child and mother in Indian Sundarbans.
Belinda Ford, The George Institute for Global Health; Western Sydney Local Health District

Does integrated hospital and community care improve patient access and reduce the costs of care for glaucoma?

Co-authors: Belinda Ford-The George Institute for Global Health; Western Sydney Local Health District; Gerald Liew-Westmead Institute for Medical Research; Western Sydney Local Health District; Andrew JR White-Westmead Institute for Medical Research; Western Sydney Local Health District; Lisa Keay-The George Institute for Global Health; Blake Angell-The George Institute for Global Health

Background:
Glaucoma, a chronic eye disease which can progress to permanent vision loss, requires regular monitoring and medical/surgical treatment. In Australia public hospital ophthalmology departments are often overburdened. To overcome this, the Community Eye Care (C-EYE-C) model at Westmead hospital (Australia) leverages partnerships with community-based optometrists to provide standardised assessments for low-risk patients. Results are later transferred electronically to a hospital ophthalmologist to confirm patient diagnosis and management. This aim of this study was to determine whether C-EYE-C improves service efficiency and better utilises health care resources.

Methods:
A temporal ecological evaluation was used to compare the service efficiency and costs of two different models of care i) hospital clinic and ii) C-EYE-C. For each model of care, the medical records for consecutive low-risk glaucoma patients, newly referred to the hospital, were reviewed and data captured on patient attendance, wait-time, diagnosis and management. A cost analysis determined the costs for each model from a health system perspective. Hospital financial records were used to estimate costs for staffing, equipment, infrastructure, and supplies per patient visit. The C-EYE-C clinic cost was estimated using industry salaries and commercial estimates to match components of the hospital costing. Agreement between the real-time optometrist diagnosis and management recommendation and that of the ophthalmologist after batch-review was calculated using a weighted kappa statistic.

Results:
Between Oct 2013 & Oct 2017, Westmead Hospital received 491 new low-risk referrals for glaucoma. Referrals were booked at the hospital clinic until March 2016 (n=183), after which referrals were booked at the off-site C-EYE-C clinic (n=308). Compared to the hospital model, C-EYE-C patients had a higher attendance rate (85% vs 72%, p=0.005); and shorter median wait-time from referral to first appointment (89 days vs 385.5 days, p&lt;0.001). Following C-EYE-C assessment, 57% did not need hospital follow up; and 39% were also reviewed at the hospital clinic. The average cost per patient was $171 for the hospital model , and $105.40 for C-EYE-C model. The agreement between C-EYE-C optometrists and telehealth ophthalmology assessment was 70.6% (k=0.69, CI 0.61-0.76) for diagnosis, and 79.4% (k=0.66, CI 0.57-0.74) for management.

Discussion:
By partnering with private optometrists, the C-EYE-C model reduced wait-times by 9.8 months and demonstrated a 38% reduction in health system costs, compared to hospital care. C-EYE-C optometrist real-time assessments reached a high clinical standard comparable to ophthalmologists. Upscale of the C-EYE-C model should be considered to further improve eye service capacity.
Oral Abstracts

Anne Laterra, CARE USA

**Filling the human resource gap through public-private partnership: Can private, community-based skilled birth attendants improve maternal health service utilization and health outcomes in Sunamganj, Bangladesh?**

Co-authors: Anne Laterra-CARE USA; Rina Rani Paul-CARE Bangladesh; Bidhan Krishna Sarker-International Centre for Diarrhoeal Disease Research, Bangladesh; Faisal Ahmed-International Centre for Diarrhoeal Disease Research, Bangladesh; Jahangir Hossain-International Centre for Diarrhoeal Disease Research, Bangladesh

**Background**

The global shortage of providers is a critical barrier to the delivery of the health services needed to reach universal health coverage and achieve the SDGs. In Sunamganj there are fewer than four skilled providers per 10,000 population and just 27% of births are assisted by a skilled attendant. Women are forced to seek health care from non-qualified providers in the informal sector, resulting in high out-of-pocket costs for health. Clients face no other option than to receive poor quality services from unskilled providers at high costs. In search of an innovative solution to this challenge, CARE formed a public-private partnership with the Government of Bangladesh to design and implement the Private Community Health Worker Initiative. We will share details of this model that combines clinical and social entrepreneurship capacity building with robust monitoring, supervision and support from the public sector, and report on changes in service utilization and health outcomes from baseline to three years post-baseline.

**Methods**

This analysis presents the results of a pre-post cross sectional design. A baseline survey (n=1800) was conducted using a multistage cluster sampling approach. Three years post-baseline a second cross-sectional survey (n=1755) was conducted across the same project area. To describe demographic characteristics of the study participants descriptive statistical techniques were used as appropriate. Logistic and multiple logistic regression, controlling for a comprehensive set of covariates, were used to assess odds ratios for key maternal health behaviors and outcomes.

**Results**

Comparing data collected at baseline and three years’ post-baseline, birth planning and the use of key maternal health services improved. There was a dramatic increase in the proportion of respondents reporting skilled attendance (aOR: 1.74, p=.009). These changes seemed to be driven by increases in the proportion of births attended by doctors, nurse, midwives, and indeed P-CSBAs. At follow-up women reported significantly fewer complications during the prenatal (aOR: .30, p<.001), labor and delivery (aOR: 0.41, p<.0001) and postnatal periods (aOR: 0.32, p<.0001).

**Conclusion**

Our findings contribute to the larger body of evidence suggesting that private-sector approaches, when coupled with robust efforts to strengthen and collaborate with the public sector, can work successfully to deliver services in underserved communities. The success of this model lends credence to the growing appreciation that reaching our development targets will require governments to work in partnership with private sector actors, and highlights the scaling potential of private-public partnerships as we drive towards universal health coverage.
A Shot in the Dark? Can Public-Private Partnerships in Immunization Work in Low and Middle-Income Countries?

Co-authors: Ann Levin-Abt Associates; Spy Munthali-University of Malawi; Venance Vodungbo-Abt Associates; Natia Rukhadze-ACT-Global; Kuhu Maitra-Abt Associates; Logan Brenzel-Bill and Melinda Gates Foundation

Background: Little is known about the role of private sector providers in provision of immunization and how they are supporting universal health coverage. To fill this gap, we conducted a three-country study on the role of private sector providers in immunization in low and middle-income countries – Benin, Malawi, and Georgia. The purpose of the study was threefold: 1) estimate the proportion of vaccinations taking place through the private sector; 2) estimate private expenditures for vaccination; and; 3) determine whether the private sector and Ministry of Health are interacting to improve immunization program effectiveness and efficiency.

Methods: In each country, we surveyed fifty private sector providers and conducted 300 client exit interviews. We analyzed the data on characteristics of private sector immunization services, collaboration with governments, and service quality, and calculated shares of total vaccinations and private expenditures.

Results: The three countries had different models of private service delivery for provision of vaccination. In Malawi, some 44% of private facilities, predominantly faith-based organization, were providing vaccination and administer 27% of total vaccinations. In Benin, eighteen percent of private facilities provided vaccinations, accounting for 7% of total EPI program vaccinations. In Georgia, all of the sample facilities were privately-managed and 100% of private vaccinations were conducted at these facilities. In all three countries, the government supplied vaccines and other support to the private facilities. The percentage of private expenditure on vaccination was estimated to be less than 1% of national health expenditures in all three countries.

Discussion/Conclusion: The private sector is playing an important role in low- and middle-income countries to improve access to vaccination and supports governments to move towards universal health coverage. However, governments’ ability to regulate immunization services and promote quality and affordable services in the private sector remain a challenge.
Oral Abstracts

Matiko Machagge, JSI Research & Training Institute, Inc.

What should you deliver by unmanned aerial systems? The role of geography, product, and UAS type in prioritizing deliveries by UAS

Co-authors: Matiko Machagge-JSI Research & Training Institute, Inc.; Yasmin Chandani-JSI Research & Training Institute, Inc.; Sid Rupani-LLamasoft, Inc.; Chris Wright-John Snow, Inc.; Kameko Nichols-Nichols Group

Background

The use of unmanned aerial vehicles (UAVs) and systems (UASs) in transporting health commodities is generating interest as an addition to transportation modes given their ability to traverse difficult terrains and improve the speed of delivering life-saving commodities.

While this distribution mechanism offers an opportunity, little documentation exists on the optimal products that should be prioritized for UAS distribution, given product characteristics and current technologies.

Countries and stakeholders will benefit from analysis that facilitates informed decisions on determining which products should be prioritized for delivery using this alternative distribution system and which UAS characteristics to prioritize.

Intervention Description

The team undertook a cost-effectiveness analysis to compare transport options for delivery categories using UAS vs. well-managed modes of last-mile delivery such as 4x4’s and motorcycles. The analysis took into account geography, UAS characteristics, and product characteristics and demand patterns. The team analyzed 12 months of health-facility data from three country datasets in sub-Saharan Africa to identify five use cases that would allow us to define the cargo characteristics and examine cost-effectiveness for the following product types: a) safe blood for transfusion; b) long-tail products (small quantity, unpredictable demand products); c) program and essential medicines; d) vaccines; and e) diagnostic specimens.

Results

Overall our findings show that the number of flights per year drives UAS cost-effectiveness and increasing flight numbers is dependent on facility density within the UAS range area. With the exception of safe blood for transfusion, the results demonstrate that using UAS for single-product category deliveries is not optimal from a cost-effectiveness perspective, and layering multiple use-cases will increase UAS cost-effectiveness by increasing the number of flights the UAV will be used for. Even projecting rapid cost and performance improvements, most UASs are 3+ years away from being transport-cost competitive with motorcycles.

Discussions/implications

The case for UASs must be examined within the context of the total system costs, other supply chain objectives, and broader health benefits. Every potential use case must be considered individually factoring in geography, UAS characteristics, and product and demand characteristics. However, the following sets of factors are broadly indicative of potential value-adding use case for UAS: High density of health facilities (within range of UAS). Difficult to access by road (large proportion of year). High financial value, scarce, or high health value (e.g. life-saving) products. Unpredictable demand (at level of individual facility) products. Expensive, short shelf-life, or difficult to store at last-mile products.
Challenges to implementation of prevention of vertical HIV Transmission in Kalimantan, Indonesia

Co-authors: Agnes Bhakti Pratiwi - Centre for Health Financing Policy and Health Insurance Management, Faculty of Medicine, Universitas Gadjah Mada, Yogyakarta, Indonesia; Muhammad Syamsu Hidayat - Centre for Health Financing Policy and Health Insurance Management, Faculty of Medicine, Universitas Gadjah Mada, Yogyakarta, Indonesia; Tri Astuti Sugiyatmi - Tarakan District Health Office, Tarakan, Indonesia

Background: According to the Indonesian Ministry of Health, more than 30% of people living with HIV are women. In the newly formed province, North Kalimantan, an increasing number of newly reported cases in Tarakan municipality are among women who acquired HIV sexually. Although government programs to prevent vertical transmission of HIV exists, low utilization and lost to follow up in the program cascade, indicates that it is suboptimal. This study explores the barriers and facilitators to implementation of HIV counseling and testing for pregnant women in Tarakan.

Methods: We conducted six focus group discussions and seventeen in-depth interviews between March and October 2017 to collect the data. The participants consisted of stakeholders and implementers in the prevention of mother-to-child-transmission (PMTCT) program, including health care workers in public and private health care facilities, District Health Office staff, management in the private hospital, HIV counseling and testing team in the public hospital, and women living with HIV. We applied coding and thematic approach to analyse the transcripts. Investigator triangulation was conducted to ensure validity of the analyses.

Results: There is a gap in implementation of PMTCT in public and private health care facilities, while HIV counseling and testing is available in public primary health care facilities, they are not available in the private. Pregnant women choosing to visit the private healthcare providers for antenatal care have missed the opportunity to get HIV counseling and testing during their pregnancy. In addition, interacting factors are affecting the individual decision in utilising PMTCT services, namely fear that their confidential data will be shared, stigma and discrimination from health care workers, time and transportation constrain.

Conclusions: In order to increase the coverage of counseling and testing and to avoid missed opportunities for pregnant women, private health care sectors need to be engaged in the implementation of this program. Regulation, facilities, and trained staff in the private healthcare sector should be initiated to increase the coverage of HIV counselling and testing as part of the PMTCT cascade. This would provide the opportunity to save more mothers living with HIV and their children.
Systemic barriers to collaboration: an analysis of collaboration between private and public health sector in a south Indian district

Co-authors: Vijayashree Holalkere Yellappa-ICMR

Background: In India, private providers (PPs) play an important role in the provision of healthcare. Since 2002, National TB Programme (NTP) engages with PPs through Public Private Partnership (PPP). Despite the promise shown, uptake of PPPS by PPs is poor. This study explores the barriers to collaboration.

Methods: We employed mixed methods design. Quantitative approach was used to assess the extent and nature of PPs’ participation in NTP, followed by qualitative data enquiry through focus group discussion with NTP field staff and in-depth interviews with PPs (n=38), TB patients (n=32), NTP STAFF (N=8). Purposive sampling was used.

Results: None of the PPs in the district had formally signed-up for any PPPS. However, informal engagement existed in the form of adhoc referrals of patients to NTP. There was lack of clear purpose, leadership and commitment in the public sector to engage PPs. Both had different requirements for collaboration, coupled with mistrust. PPs faced several constraints in Government (Govt.) health facilities to collaborate with NTP; lack of feedback; fear of losing credibility, when PP’s diagnosis was not honored by Govt. providers; lack of counselling and comprehensive care; high turnaround time for lab test and poor quality of X-ray; poor competency of Govt. providers leading to misdiagnosis of TB; unavailability of specialists; frequent transfer of Govt. providers hampering the relationship and interface between NTP and PPs are paramedical staff, which is not acceptable to PPs. NTP staff was overburdened with routine work, perceived PPP as an extra activity

Discussion: Public health service delivery should prioritise establishing trust with PPs and provide timely feedback to PPs to nurture the relationship. Involvement of local medical officers in terms of commitment, adopting good communication strategy is the need of the hour. Collaboration should focus on process, not solely on outcomes.
Oral Abstracts

Mishal Khan, London School of Hygiene and Tropical Medicine

Power, influence and antimicrobial resistance policy-making in Pakistan

Co-authors: Anna Durrance-Bagale-London School of Hygiene and Tropical Medicine; Mishal Khan-London School of Hygiene and Tropical Medicine; Zia Sultana-Aga Khan University, Karachi; Rumina Hassan-Aga Khan University, Karachi; Johanna Hanefeld-London School of Hygiene and Tropical Medicine

Background:

Antimicrobial resistance (AMR) is a pressing public health problem requiring solutions spanning the human, animal and environmental sectors. It is well recognised that inappropriate use of antibiotics is a key driver of AMR. Pakistan has been amongst the first of the low and middle-income countries (LMICs) to embrace the challenge posed by AMR, including volunteering early for a joint external evaluation (JEE) of its compliance with international health regulations, and is currently navigating complexities of policy setting and implementation. Our research aimed to identify actor power in policy processes relating to use of antibiotics in Pakistan, and to understand the sources of this power.

Methods: We conducted interviews with 48 elite policymakers, including senior doctors, vets, government officials (human and animal sector), politicians, the pharmaceutical industry (domestic and international), and non-profit organisations, using a snowballing process and ‘thinking aloud’ exercise. Interviews were conducted at national and regional levels in Pakistan throughout 2017. We conducted a network analysis to investigate connections between policymakers, and a thematic analysis to understand sources of actor power and their influence on the policy process.

Results: Interviewees perceived three distinct groups to be most powerful: politicians, the pharmaceutical industry, and the poultry industry. Relations among these groups are complex, with many interviewees mentioning vested interests of politicians affecting potential policies that could be introduced to address the behaviour of the other groups. Power and influence were associated with an individual’s personal connections to powerful politicians, rather than their role or professional position. Intersecting this complex web of personal relationships, the power of the pharmaceutical industry over the medical profession was cited frequently as a driver of AMR in Pakistan. Doctors were perceived to be under the influence of pharmaceutical companies in promoting the use of unnecessary antibiotics for financial gain. In addition, networks between the poultry industry - which was reported to be well organised with a strong governing and lobbying body - and politicians was identified as an obstacle to reducing antibiotic use in food production.

Discussion:

Reducing inappropriate use antibiotics in Pakistan is complicated by hidden vested interests, particularly around links between doctors, politicians and the pharmaceutical and poultry industries. Our study, which should be replicated in other settings, indicates that implementation of new policies to mitigate AMR in LMICs will require navigation of connections and motivations of powerful policy actors.
Pamela Chandiwana, Biomedical Research and Training Institute

The political economy of results-based financing: examining the experience of the health system in Zimbabwe

Co-authors: Pamela Chandiwana-Biomedical Research and Training Institute; Sophie Witter-Queen Margaret University, Edinburgh; Mildred Pepukai-Biomedical Research and Training Institute

Background

Results based financing (RBF) has proliferated in low and middle-income settings, and particularly in fragile and post-crisis/conflict contexts, in the past fifteen years. There is a small but growing body of evidence of its effectiveness and an increasing attention to understanding its mechanisms of change and impact on health systems, but very little attention paid to the political economy of its adoption, adaption and implementation, in part because most stakeholders have vested interests. This study begins to fill this gap by examining the experience of Zimbabwe, which since 2011 has adopted and scaled up a national RBF programme.

Methods

The research is based on a document review and 30 key informant interviews conducted at national, provincial and district levels, including development partners, government officials, implementers and local authorities. The interviews were conducted in February 2018 and both documents and interviews were analysed using a political economy framework.

Results

The study highlights the importance of how policies are framed in relation to local priorities, as well as divergent narratives on initial acceptability of RBF. The history of the economic crisis played a dominant role in the policy’s adoption, with resource gaps a key driver, alongside donor distrust of government systems. The health system did however retain a legacy of effectiveness which allowed for negotiation around how RBF was operationalized in Zimbabwe. The RBF approach has taken root, shifting institutional relationships particularly in terms of facility autonomy, but has been modified to respect existing health system structures. It remains vulnerable as it continues to be largely externally financed.

Conclusions

The case study illustrates the importance of understanding the incentives, institutional positions and ideology that affect the uptake and adaptation of health policies such as RBF, and how these are in turn influenced by the implementation of these polices. Zimbabwe exhibits features of fragility but also strong residual capacity and resilience. This makes the story of RBF in Zimbabwe important to understand and share to improve the dynamics and practices of RBF introduction and implementation, for governments and development partners alike.
Ashlee Christoffersen, University of Edinburgh

Influencing intersectionally? Equality coalitions, health bodies and the public sector equality duty

Co-authors: Ashlee Christoffersen-University of Edinburgh

Background

‘Intersectionality’ is the understanding of the relationships between and interactions of different inequalities, and the ways in which they mutually constitute one another. Intersectionality has transformative potential to understanding health determinants (Hankivsky and Christoffersen 2008).

Although to date internationally the extent to which an intersectional approach has been taken up by policy makers is limited, the literature has pointed to countries of the UK as attempting a take up of intersectionality in public policy (e.g. Hankivsky and Christoffersen 2011). This has been facilitated by the joining up of disparate anti-discrimination legislation into one Equality Act (2010), creating policy opportunities for exploration of the interactions between inequalities, and potential for intersectionality’s application.

The Act places proactive obligations to eliminate discrimination and harassment, advance equality of opportunity and promote good relations for people with nine ‘protected characteristics’ on more than 40,000 public bodies, including a range of bodies constituting the public health sector, through the public sector equality duty (PSED). Regulations to support the duty include requirements to set equality objectives (England), or equality outcomes (Scotland).

Method

This paper is based on empirical research with networks and coalitions of equality seeking organisations (networks of racial justice, feminist, disability rights, LGBT rights organisations, etc.) that seek to influence the equality outcomes and objectives of health bodies, and other public bodies which impact health, at local level. Specifically, I have conducted case studies employing interviews, focus groups, participant observation and documentary analysis. I will present comparative findings of how networks seek to employ an intersectional approach to influencing equality outcomes and objectives, and the extent to which this influence has been realised in the content of published outcomes/objectives.

Results/discussion

I have found that both in spite and because of the Equality Act, the policy context poses challenges to attempts by networks to operationalise intersectionality. Nevertheless, networks show innovative and promising approaches at including perspectives of multiply marginalised and diverse groups in policy processes.

Moreover, the findings shed important light on the inadequacy of current standard consultation mechanisms for multiply marginalised groups to influence health equality policy; and the ways in which intersectionality can be deployed superficially and as a cost saving measure in an era of austerity, leaving its potential unrealised.
Augustina Koduah, School of Pharmacy, University of Ghana College of Health Sciences

Use of evidence, contestation and negotiations in the review of national Standard Treatment Guidelines and Essential Medicines List: experience from Ghana

Co-authors: Augustina Koduah-School of Pharmacy, University of Ghana College of Health Sciences; Martha Gyansa-Lutterodt-Ministry of Health, Ghana; Brian Adu-Asare-Ministry of Health, Ghana; Edith Gavor-Ministry of Health, Ghana; Francis Ofei-School of Medical Sciences, University of Cape Coast

Background

Availability and use of national treatment guidelines and essential medicines list promote responsible use of medicines, harmony in treatment, procurement and reimbursement. Access to medicine and use of evidence based treatment options are pivotal to efforts towards universal health coverage. Ghana’s Standard Treatment Guideline (STG) and Essential Medicines List (EML) are policy tools with systematically developed statements to assist providers and patients make decisions about appropriate selection and use of medicine. STG and EML are used to (1) diagnose and guide medicines prescribing and therapeutic management of diseases (2) decide on essential medicines list per level of care and its management (3) guide treatment costing and national health insurance (NHI) reimbursement. This paper examines the decision-making processes and the actors involved in reviewing Ghana's STG and EML; and provide lessons and learning for other lower middle income countries (LMIC).

Methods

Our data comes from a qualitative case study based on retrospective recollection of the decision-making processes and actors involved in reviewing Ghana’s STG and EML. Our study draws from four concepts framework which is agenda setting, symbols manipulation, constituency preservation and coalition building to understand the various decisions, contestations, negotiations and different approaches used in the review processes.

Results and Discussion

Periodic review of the STG and EML is on the Ministry of Health’s agenda. Ghana National Drugs Programme, a forty member review committee and chair, donors, academicians, service providers, professional bodies, and civil society groups all influenced how the 2017 STG and EML content and review process evolved. Various actors with varied power sources were engaged in ways that consolidated their influence on the review process as they preserved their constituency interest with lobbying and use of evidence from research and practice. Multi-stakeholder engagements were held to resolve contested issues such as treatment options, medicines and their levels of care and reimbursability by the NHI and build consensus all in the interest of patients and access to health care at all levels.

Conclusion

Stakeholders within health systems space have varied interest and power to influence what gets on to national treatment guidelines and essential medicines list. Ghana’s experience in managing contestations, using of evidence from research and practice and engaging wide stakeholders can serve as lessons for other LMIC. As STG and EML review processes are relevant across other LMIC and similar scenarios may be encountered, we hope this paper contributes to learning beyond Ghana.
Chinyere Okeke, Institute of Public health, University of Nigeria

Role of policy actors and contextual factors in policy agenda setting, formulation and implementation: A free maternal and child health pilot program in Nigeria

Co-authors: Chinyere Cecilia Okeke-Institute of Public health, University of Nigeria; Benjamin Sunday Uzochukwu-Institute of Public Health, University of Nigeria

Background
Why some health initiatives receive priority attention by political leaders and are implemented in a country where others receive little attention is a question to be analysed. Therefore, agenda setting and selecting of alternatives are critical processes of policy development and can give insights into how and why policies are made. Analysing the power of policy actors has potentials of improving our understanding of implementation of the program. This paper aims to advance understanding of health policy agenda setting, formulation and implementation in Nigeria, a low middle-income country, by exploring how and why the free maternal and child health pilot program policy agenda in the health sector came about, was implemented and dropped, instead of trying to scale it up. Methods

A mixed method analysis of policy processes was used. Data collection methods involved reviews of documents, in-depth interviews and focused group discussion. Data was analysed drawing on a combination of policy analysis theories and the four categories of Jeremy Shiffman's framework: the strength of the actors involved, the power of the ideas they use to portray the issue, the nature of the political contexts in which they operate, and characteristics of the issue.

Results
Contextual factors, acting in an interrelating manner, shaped how policy actors acted and closely linked policy content to the intended agenda. Contextual factors that served as bases for the policymaking process were: recovery of funds from dept relief, political ideology of the head of states, bad health indices, coalition of some CSOs, change in government (some governors), lack of payment of agreed counterpart funds, international agendas, lack of proper supervision of the program, corruption on part of public office holders. The president first set the agenda for free maternal and child health in 2014. This policy trajectory was not sustained by subsequent policy actors because contextual factors and policy actors did not play in favour of this issue. Poor supervision of the project and lack of refund of fee-for-service for NHIS referred cases made beneficiaries loose trust in the program. Donors withdrew their support for the program, hence there was no means of sustainability for the program talk more of scaling it up.

Conclusion
Influencers of policy agenda setting must recognise that the process is complex and intertwined with a mix of political, finance-based and donor-driven processes. Therefore, attention needs to be paid to context and policy actors in any strategy.
What, why and how do health systems learn from one another? Insights from eight low and middle income country case studies

Sophie Witter, Queen Margaret University

Co-authors: Sophie Witter-Queen Margaret University; Ian Anderson-Australian National University, Canberra; Peter Annear-Nossal Institute for Global Health, University of Melbourne; Abiodun Awosusi-Oxford Policy Management; Nitin Bhandari-Oxford Policy Management; Nouria Brikci-Oxford Policy Management; Blandine Binachon-Oxford Policy Management; Tata Chanturidze-Oxford Policy Management; Katherine Gilbert-Nossal Institute for Global Health, University of Melbourne; Charity Jensen-Oxford Policy Management; Tomas Lievens-Oxford Policy Management; Snehashish Raichowdhury-Oxford Policy Management; Alex Jones-Oxford Policy Management

Background

All health systems struggle to meet health needs within constrained resources. This is especially true for low income countries. It is critical that they are able to learn from wider international lessons and insights in order to improve their performance. This study examines demand for international evidence, how it is (or is not) met and what barriers are perceived to exist. It draws on eight case studies from Africa, Asia, Europe and Oceania.

Methods

Case studies were selected from countries that were categorized as low income in 2000 and performed well in meeting MDG targets by 2015, and which represented a range of regions and also Anglophone and francophone contexts. The counties selected were: Bangladesh, Burkina Faso, Cambodia, Ethiopia, Georgia, Nepal, Rwanda, and Solomon Islands. One or two recent health system reforms were selected in each case to provide concrete examples for interrogation of whether and how international evidence had been used to guide the conceptualization, formation and contextualization, internalization, operationalization and evaluation of national policies, as well as how national policy experiences had been shared with others. 148 key informants were interviewed in 2017, using a semi-structured tool focused on different stages of the policy cycle. Interviewees were selected for their engagement in the policy process and represented political, technical, development partner, non-governmental, academic and civil society constituencies. Analysis took place initially by case study and then across the eight cases.

Results

The policies adopted demonstrated a range of influences in relation to conceptualisation, from externally imposed to co-produced and finally home-grown solutions. Uptake of policy was strongly driven in most settings by local political economic considerations. Policy development post-adoption demonstrated some strong internal review, monitoring and sharing processes but there is a more contested view of the role of evaluation. Many of the mechanisms which supported learning were facilitated by direct personal relationships with local development partner staff. Barriers and facilitators included a range of supply and demand factors. Those relating to incentives and capacity for evidence use appeared most powerful.

Conclusions

The findings emphasise the agency of local players and the importance of developing national and sub-national institutions for gathering, filtering and sharing evidence. Developing demand for and capacity to use evidence appears more important than augmenting supply, although specific gaps were identified. The findings also highlight the importance of the local political economy in setting parameters within which evidence is considered.
Oral Abstracts

Jean-Patrick Alfred, Ministere de la Sante Publique et de la Population

La Santé pour tous: Ce que nous disent les données des ménages sur l’équité et la protection des risques financiers pour la santé en Haïti

Co-authors: Jean-Patrick Alfred-Ministere de la Sante Publique et de la Population; Eleonora Cavagnero-Banque Mondiale; Nicolas Collin-Banque Mondiale; Marion Cros-Banque Mondiale; Tania Mathurin-Banque Mondiale; Mirja Sjoblom-Banque Mondiale

Contexte:

La couverture de santé universelle (CSU) est un élément clé de la politique de santé d’Haïti. Bien que les résultats de santé se soient améliorés au cours des dix dernières années, d’importantes inégalités demeurent. Certains de ses indicateurs sont parmi les plus faibles d’Amérique Latine et sa couverture de services de santé est plus basse que beaucoup de pays à faible revenu. Le développement d’une politique donnant accès aux soins à tous les haïtiens requiert l’identification des barrières à cet accès, ainsi que des caractéristiques des non-utilisateurs.

Méthodes


Résultats

L’AIB indique que seules les cliniques mobiles et les interventions des agents de santé communautaire bénéficient aux populations pauvres. Bien que typiquement en zones rurales, les dispensaires ne profitent pas aux plus pauvres.

La principale cause de la faible utilisation des services est qu’ils sont peu abordables. En 2013, 24 pourcents des ménages déclaraient ne pas consulter bien qu’étant malades. Parmi ceux-ci, 49 pourcents déclaraient qu’ils n’avaient pas consulté parce que le prix était trop élevé. Pour le quintile de richesse le plus bas, cette proportion atteignait 66 pourcents.

L’utilisation des services varie par niveau d’éducation, de richesse et par département. Les ménages du quintile le plus riche utilisaient 2,3 fois plus les services de santé que ceux du quintile le moins riche. Ces derniers font face à moins de DCS que ceux du quintile le plus riche puisqu’ils renoncent aux soins.

Discussion/Conclusion

Cet article présente de nouveaux éléments et opportunités pour qu’Haïti atteigne la CSU. Haïti a besoin de : 1) prioriser des politiques bénéficiant aux populations pauvres, y compris la mise à disposition d’un paquet essentiel de services au niveau primaire, 2) renforcer les programmes bénéficiant aux pauvres tels que les cliniques mobiles, et 3) cibler les populations rurales. Ceci devrait être complété par des stratégies d’exemptions ou de réduction de frais pour les pauvres mais cela exige une forte coordination entre les prestataires publics, privés et les ONG.
Oral Abstracts

Afsan Bhadelia, Harvard T.H. Chan School of Public Health

Progressive universalism for health: A qualitative study capturing voices of indigenous and transgender communities in Kerala, India

Co-authors: Afsan Bhadelia-Harvard T.H. Chan School of Public Health

Background: The foundational principle of progressive universalism is that the poor must, at minimum, gain as much as individuals who are better off at each stage of the path towards universal health coverage. However, many are left behind. This is especially the case for indigenous populations and the lesbian, gay, bisexual, and transgender (LGBT) communities who are isolated from society due to stigma and discrimination, and who also face extreme poverty. Adivasi (or “tribals”) account for nearly 9% of India’s population and there are over a half million transgender people in India. Their voices and values are seldom considered in health reform. This study seeks to address the gap in knowledge on these neglected populations.

Methods: A qualitative study was conducted in three districts of Kerala, India. Seven focus group discussions (FGDs) (n = 47) with indigenous community members in gram panchayats (village councils), kudumbashrees (community-based neighborhood groups focused on women’s empowerment and poverty reduction, led by the Local Self-Government structure) and a tribal-led non-governmental organization were undertaken. Further, in-depth interviews (IDIs) (n = 2) with transgender community members were conducted. Both FGDs and IDIs focused on understanding societal values and moral considerations that should underpin health policy decisions based on perceptions and needs of indigenous and transgender populations. All FGDs and IDIs were audio recorded, transcribed, and translated by the research team. Analytic memos were written throughout the research process. Coding and thematic analysis applied inductive and deductive approaches.

Results: Thematic domains emerge at the individual and institutional levels. Trust and fairness in interpersonal relations emerge at the individual level, while integrity of and assurance provided by the health system emerge at the institutional level. Two additional domains pertaining to both individual and systems factors are information and appropriateness. The content areas identified highlight the importance of respect and consideration in interactions between indigenous and transgender patients and health professionals and, for transgender people, significance of gender self-identification. This has key implications for healthcare delivery.

Discussion/Conclusions: Core values held by vulnerable groups in relation to healthcare should be included in the development of priority-setting instruments and in health policy-making processes. Moreover, improving information symmetry and situational appropriateness are necessary to advance health equity. Without a more inclusive approach to assessing what the worst-off members of society require to achieve at least what the better off are gaining, a progressive path to universal healthcare cannot be realized.
Munmun Dhalaria, Independent Documentary Filmmaker

This multimedia video highlights the healthcare crisis faced by indigenous women of Southern India in accessing basic maternal healthcare services.

Co-authors: Munmun Dhalaria-Independent Documentary Filmmaker

Film Synopsis:

In 2014, The Malki Initiative started a conversation on maternal healthcare for the tribal mothers of Chamarajanagar, Karnataka. A participatory action research was conducted, which brought together VGKK, community representatives, the district health team and public health researchers.

This film tells the story of a healthcare crisis prevalent in indigenous women of the Soliga community in Southern Karnataka, India. Madevi, a Soliga woman leader and community coordinator for this research, highlights the problems faced by many pregnant mothers. Tara, binds together all these narratives as she navigates through various government health systems during her own pregnancy. Together, these two women represent two generations of Soliga mothers, facing very similar problems in accessing maternal healthcare, but hoping for a better future for themselves and their daughters.

8 minute film - Forgotten Wombs- highlighting the crisis:
https://vimeo.com/177016610

Trailer and Facebook page for longer film ‘A mother’s dream’:

Project related publication: http://www.tandfonline.com/doi/full/10.3402/gha.v9.34406
Community participation leading maternal health research in rural Nepal

Co-authors: Sunisha Neupane - University of Montreal

Background: There has been a tremendous decrease in maternal mortality in Nepal, however, rural areas and certain ethnicities continue to experience disproportionately high maternal mortality rates. This study aims to gain an understanding of maternal health care needs such as access to care and assisted deliveries, in rural Nepal from the perspective of community members and examine if those needs are being met.

Methods: This is a formative research with a participatory approach conducted in western Nepal. Two community members were selected as research assistants. Semi-structured interviews were conducted with the women of reproductive age (n=22), the community healthcare workers (n=8) and the health centre managers (n=3). Thirty focus group discussions were conducted separately with women, health care providers, and caretakers (husbands, mother in laws, father in laws). Participants varied from 8 to 16. They were asked what they thought was necessary for their community to improve the health of pregnant women. Data were categorized and inductive thematic analysis was done manually in the community to share preliminary results. The preliminary results were presented at two participatory workshops and further discussion was held with wider community and political leaders. During the workshops, community members participated in further analyzing the preliminary results and identified a few root causes of maternal health problems in their region. Further analysis and validation were done using NVivo.

Results: Although women in Nepal are provided with monetary incentives and encouraged to give birth at a health centre, home births with limited or no assistance are still practiced. Difficult terrain, limited opening hours of the health centres, and delays in seeking health care were discussed as main reasons for home births. Results from the semi-structured interviews demonstrate that women are faced with situations where getting to the health centre on time is simply impossible. In such cases, trained community midwives (Sudhenis) who can assist deliveries at home are demanded.

Discussion: Institutional delivery became a priority in Nepal in 1991. Slowly maternal mortality reduced nationally, leading to an end of the traditional community midwives program (Sudheni). By 1997 no more Sudhenis were trained. In order to increase the utilization of institutional facilities monetary incentives were offered. Despite progress, still, not all women can get to a health centre. This study demonstrates that it is crucial to include community members’ views for equitable health policy and a people-centered health system responsive to the needs of all of its population.
Lingling Zhang, Clemson University

**Characteristics, Evolutions, and Prospects of Ageing and Elder Care in Rural China: A Literature Review**

Co-authors: Lingling Zhang-Clemson University; Juan Zhou-University of International Business and Economics

The traditional Chinese family elder care model has been affected by several socio-environmental changes. The younger labor force migrated from rural to urban areas resulting in different needs for rural elder care. The predicament forced new care models to emerge. Over the past decade, new approaches, including mutual elder supporting, strong government support of professional services, and mutual responsible elder care have been developed in China to tackle the practical difficulty of rural elder care. However, there is a lack of comprehensive assessment of these new efforts for improving elder care in rural China and relevant policy implications. To address this gap in published literature, a systematic literature review was conducted to summarize both the traditional and newer elder care practices in rural China and organize them into eight models based on characteristics of the services, costs, and conditions. The characteristics, evolutions, challenges and future prospects of these models were also discussed.

Traditional elder care models in rural China experienced novel challenges due to the ageing population and rapid socioeconomic changes in recent years. Although emerging models are in response to the increased demand, they are facing new challenges at the same time. While the new trend clearly indicates that there has been an adaptation from traditional models to address the emerging needs of rural elder population, this review particularly identifies the existing models that represent innovative responses and present new ideas for challenges that continue to grow in China’s aging process.

As the relative sphere of an older person shrinks in terms of mobility, social interaction and societal engagement, it is important to provide care that addresses the physical and emotional health needs that are specific to their developmental stage. While the external socio-environmental issues are the pragmatic drivers of change, the primary societal expectation of respect and care for elders need to be preserved at a cost that the country and its citizens can embrace. Challenges often lead to innovation solutions, and China has the opportunity to showcase to the world the new models to support quality elder care.
Oral Abstracts

Prudence Ditlopo, Centre for Health Policy, University of the Witwatersrand

The Resilient Nurse – What Motivates Professional Nurses to Stay in their Jobs and in Underserved Areas? Findings from a Longitudinal Study in South Africa

Co-authors: Prudence Nana Ditlopo-Centre for Health Policy, University of the Witwatersrand; Duane Blaauw-Centre for Health Policy, University of the Witwatersrand; Mylene Lagarde-London School of Economics and Political Science, University of London; Rebecca Wolfe-London School of Hygiene and Tropical Medicine, University of London; Sephy Valuks-London School of Hygiene and Tropical Medicine, University of London

Background: South Africa, like many other low- and middle-income countries, face challenges of recruiting and retaining nurses in rural and underserved areas. Health systems in these settings are characterised by staff shortages, heavy workloads and adverse working environments such as a lack of basic utilities and poor infrastructure. Despite these conditions, many nurses continue to display resilience by remaining committed to their organisations and showing motivation to work. However, limited information is available that explain the factors influencing nurses resilience to remain in their current jobs and in rural and underserved areas.

Methods: This video is part of a longitudinal study monitoring the employment decisions of a cohort of 377 professional nurses from Gauteng (urban) and North West (rural) provinces in South Africa. The study has been tracking nurses for the past 10 years to better understand their job choices specifically with regards to where they choose to work after training and why they choose certain jobs over others. In the video, nurses from the study share their personal stories of challenges they face in their daily work, how they deal with chronic everyday stressors and their reasons for remaining in their jobs. The video also includes interviews with two researchers and a policy maker, who reflect on the study findings and how they could be used to inform future policy and practice.

Results: The video demonstrates that there is evidence of resilience amongst the cohort nurses, with an overwhelming majority of them remaining in the public sector and rural areas despite adverse working conditions. It was also shown that nurses who are born in rural areas and who are trained in rural areas were more likely to work in rural areas. Nurses used individual agency to improve the delivery of health services. Nurse’s resilience was influenced and promoted by:

opportunities for training; appreciation by community; professional commitment; increased decision-making space; loyalty; personal values; supportive supervision ; and job flexibility

Discussion and Conclusions: While a number of nurses remain in the public sector and in rural areas, it is not sustainable to rely on their goodwill and commitment. The challenges they face in their daily work need to be addressed through training programmes and retention strategies.
Strategic planning of human resources for health to address the challenges of Thailand’s Universal Health Coverage under the epidemiological transition: A system dynamics approach

Co-authors: Borwornsom Leerapan-Mahidol University; Pard Teekasap-Thai-Nichi Institute of Technology; Aronrag Cooper Meeyai-Mahidol University; Nipaporn Urwannachotima-Chulalongkorn University; Wararat Jaichuen-International Health Policy Program, Thailand (IHPP); Kwanpracha Chiangchaiallthai-International Health Policy Program, Thailand (IHPP); Khunjira Udomaksorn-Prince of Songkla University; Thinakorn Noree-International Health Policy Program, Thailand (IHPP); Krisada Sawaengdee-International Health Policy Program, Thailand (IHPP)

Introduction: Application of system thinking to Thailand’s strategic planning of human resources for health (HRH) represents an innovative approach to healthcare reforms in lower- and middle-income countries. The increased prevalence of non-communicable diseases, an aging population, and insufficient facilities for chronic and elderly care have limited the effectiveness of Thailand’s first decade of Universal Health Coverage. We report on developing a whole-systems perspective of problems related to HRH in Thailand in the next 20 years, what causes them, and how potential systems interventions can be identified and tested.

Methods: System dynamics (SD) modeling was utilized as a method for analyzing this complex problem. Group Model Building (GMB) sessions were conducted in 2017, involving 110 participants who are policymakers, healthcare administrators, and practitioners from multi-sectors in Thai health systems. Using scripts from system dynamics literature, we facilitated the stakeholders to build a causal model of the mismatch between demands and supplies of HRH in Thailand, which progressed from connecting relevant concepts to constructing qualitative causal loop diagrams (CLDs) and quantitative stock and flow diagrams (SFDs). The models were presented to high-level executives in the Ministry of Public Health for eliciting comments and feedbacks.

Results: Four mutual goals of planning were agreed, including a sufficient number of HRH, a reduction of unmet health needs, a respectable population health status, and appropriate healthcare expenditures. The GMB process created a CLD that represents stakeholders’ perceptions of the causes of mismatches between demands and supplies of HRH in Thailand over the past years, which can be broken down into four balancing loops of hospital care, non-hospital care, self-care, and population health, and three reinforcing loops of healthcare infrastructure, non-hospital care workforce, and hospital care workforce.

Discussion: A system dynamics approach provides a basis for multi-sectoral planning with an in-depth understanding of complexities in health systems. Even the quantity of HRH in Thailand has been significantly increasing over time, the current hospital-centered health systems has created a vicious cycle of constantly increasing demands for hospital care, and hence a constantly shortage of healthcare providers. Developing non-hospital care, particularly primary care, intermediate care, long-term care, palliative and end-of-life care, as well as population health practices that can raise population’s health literacy, should be more emphasized. Building upon this mutual understanding, the dynamic simulation modeling can be constructed to create “what-if scenarios” that helps policy decision-making by comparing positive and negative consequences among policy options.
Mary Nyikuri, Strathmore University

“I train and mentor, they take them”: Nurses’ perspectives on quality of inpatient care for sick newborns across sectors in Nairobi, Kenya

Co-authors: Mary Nyikuri-Strathmore University; Pratap Kumar-Strathmore University; Caroline Jones-KEMRI_Wellcome Trust; Mike English-KEMRI-Wellcome Trust

Background

Nurses are key to providing quality care for sick hospitalised newborns, but in many low-resource settings human resource shortages often severely constrain neonatal in-patient care provision. The structural contexts in which neonatal nurses work define what care can be provided and how such care is organised and delivered; circumscribing nursing practice and potentially influencing their perceptions about what constitutes ‘quality care’ and their views on the quality of care that they provide. Understanding nurses’ perspectives on ‘quality care’ is central to understanding how nurses provide care in the context of such constraints, and their willingness to engage with current and future quality improvement strategies. The objective of this study was to explore variations in perceptions of quality among nurses providing care for hospitalised sick newborns across a range of structural contexts, in the public, private and faith based sectors, in Nairobi, Kenya.

Methods: Between January 2017 and March 2018, we conducted 150 hours of non-participant observations, undertook 30 in-depth interviews with nurses providing care and reviewed quality manuals and admission registers in the newborn units in one public, one private and one mission hospital, providing 24-hour neonatal inpatient care in Nairobi city county, Kenya. Most interviews were conducted in English with five being conducted in Kiswahili. The interviews were transcribed verbatim and analysed using a thematic framework approach.

Results: Across all three sectors, nurses perceived that experience in working with sick newborns was central to providing quality in-patient neonatal care. Neonatal nursing was viewed as a very specific skill and passing on that skill through the processes of induction and mentoring of new nurses was viewed as vital to ensuring continuity in quality. While the private and mission hospitals recognised and facilitated these processes, challenges were met in the public hospital. Attempts to train and mentor new nurses on the ward were frustrated by larger hospital deployment and rotation processes where nurses were frequently moved to other areas, affecting work morale.

Discussion / conclusions. The newborn unit of each hospital functions within a unique context shaping care processes and contributing to care quality. Nurses’ motivation to provide quality care in these emotionally challenging environments depends on the preparation mentoring and support that nurses have in caring for sick newborns. The lack of recognition in the public sector of the value of this specialised neonatal nursing role has implications for nurse motivation and the quality of neonatal care provision.
Attracting health workers to rural community health organizations in Shandong Province, China: Insights from a discrete choice experiment

Co-authors: Kuimeng Song-Shandong Academy of Medical Science; Zhiyan Han-Shandong Academy of Medical Science; Yan Song-Shandong Academy of Medical Science

Background: Rural community health organizations (CHOs) in China have difficulty recruiting enough qualified health workers. The shortage and poor competency of health workers in rural CHOs have become a bottleneck for the development of China's primary care system. Attracting qualified health workers to work in rural CHOs should be important concerns for policymakers. The aim of this study is to find out the most cost-effective policy option to attract health workers to work in rural CHOs in Shandong Province, China. Considering China's health care reforms, the findings of this study will inform policymakers about prior interventions to strengthen the human resources of primary care provision in China.

Methods: A discrete choice experiment (DCE) was used to analyse the job preferences of 375 health workers working in rural CHOs in Shandong. Six job attributes and their rational levels were chosen based on literature reviews and in-depth interviews. Orthogonal experimental design was used to generate the choice sets for the DCE questionnaire. The probability of health workers who would accept a job in rural CHOs under different schemes were predicted and the cost of these schemes compared to the baseline were also estimated. Cost-effective analysis was done finally to get the optimal policy option to attract health workers to work in rural CHOs.

Results: Health workers in rural CHOs considered monetary factors and non-monetary factors when choosing a job. Though income was important, health workers in rural CHOs had strongest preferences for respect from the community, sufficient welfare benefits and opportunities for career development. Increasing income was the most effective intervention to attract health workers to work in rural CHOs, followed by improving welfare benefits and opportunities for career development. Results from the cost-effective analysis showed that the optimal policy option to attract health workers to work in rural CHOs in Shandong was “increasing income by 10%” rather than “increasing income by 20%”.

Conclusions: To attract skilled health workers to work in rural CHOs in Shandong Province, policymakers need to improve rural health workers’ income, welfare benefits and opportunities for career development to fulfill their basic needs. Although increasing income seems to be the most effective intervention to attract health workers to work in rural CHOs, the results indicate that it is not the more the better. Once costs are considered, increasing rural health workers’ current income by 10% is the most cost-effective policy option.
A Health Workforce Tailored to the Needs of Health Insurance Schemes In Low and-Middle Income Countries: Strategies and Lessons from Five African Countries.

Co-authors: Angela N Kisakye-Makerere University School of Public Health,Kampala Uganda ; Suzanne N Kiwanuka -Makerere University School of Public Health, Kampala Uganda ; Robert Kaba Alhassan-Noguchi Memorial Institute for Medical, University of Ghana Legon ; Marie Chantal Ingabire -University of Rwanda ; Getnet Alemu -Addis Ababa University, Addis Ababa; Freddie Ssengooba-Makerere University School of Public Health, Kampala Uganda

Background: Health financing and universal health coverage (UHC) currently dominate policy debates worldwide. Literature shows that preparing a health workforce is critical for the success of an insurance scheme. However, despite the importance of health insurance, countries still face challenges anticipating the changes required for the workforce for health insurance schemes. Practical lessons and strategies around health insurance workforce preparation have not been well captured in literature.

The study collated lessons from five African countries Ghana, DRC, Rwanda, Tanzania, and Ethiopia which have implemented various models of health insurance for 3-20 years in order to synthesis evidence on human resource specific strategies for policy makers, health managers and insurance providers intending to initiate health insurance schemes.

Methods: Across the five countries, In-depth interviews were conducted with 3 different categories of participants (21 policy makers, 17 insurance providers, and 23 service providers). We also conducted country specific case studies around the themes of human resource planning, management and development and analyzed using a thematic framework approach.

Key lessons: We found that when planning a workforce for health insurance, scheme initiators need to ensure that key administrative competencies are available as a basis for establishing the capacity to cope with additional processes related to the scheme in question. We found that countries bridged the skills gap by developing and making available training manuals for different cadres recruited under the scheme to enable them perform efficiently. Starting with the available staff was reported to constrain health facilities that had fewer staff who were expected to do all the additional administrative roles on top of providing health services.

We found that development of the workforce requires scheme initiators to come up with capacity building strategies for instance Continuous Professional Developments and continuous medical education of the health workforce that is recruited on the scheme so that health workers with the right skills are placed in the different health insurance roles.

Conclusion: Countries have to adjust their human resource for health insurance. An assumption that the same workforce are adequate is a gross under estimation of the work burden and the increased administrative requirements that arise with a health insurance scheme.
Universal health coverage financed by income tax revenues, and inequalities reduction in Côte d'Ivoire

Co-authors: Olivier Zohoré KOUDOU-University Félix Houphouët Boigny of Abidjan - Côte d'Ivoire; Marie-Andrée Akissi KADJO-University Félix Houphouët Boigny of Abidjan - Côte d'Ivoire; Baudelaire Ange BATE-University Félix Houphouët Boigny of Abidjan - Côte d'Ivoire

Background: In most developing countries, the goal of universal health coverage (UHC) is not easy to reach due to the fact that large, resource-poor populations have limited access to health services. Given that resource-poor people cannot afford out-of-pocket health expenditures, or can pay for them only by sacrificing other priorities, a health financing system under which people are required to pay for use directly is one of the major barriers to reaching UHC. Although cost sharing is necessary to prevent the overutilization of health services arising from the potential problem of moral hazard, universal coverage is more likely to be reached when the out-of-pocket ratio for direct payment is sufficiently low.

Objective: Our paper studies the impact of tax-financed universal health coverage schemes on macroeconomic aspects of labor supply, asset holding, inequality, and welfare, while taking into account features common to developing economies, such as informal employment and tax avoidance, by constructing a dynamic stochastic general equilibrium model with heterogeneous agents. Agents have different education levels, employment statuses, and idiosyncratic shocks. This paper tries to fill the research gap by exploring the following questions. First, what is the impact on individuals in terms of their optimal decisions for labor supply and asset holdings? Second, what are the impacts on inequality and social welfare? Third, what are the different impacts at both the aggregate and disaggregate levels?

Methods: To quantitatively answer these questions, the paper adopts a modern dynamic stochastic general equilibrium framework, which is being increasingly used for the study of social security and public finance. Broadly, the paper aims to provide a rigid framework for evaluating such socioeconomic policies that can help policy makers to understand the impacts across different social groups, as well as the aggregated outcomes.

Result/conclusion: Given three tax financing options, calibration results based on the Ivorian economy suggest that the financing options matter for outcomes both at the aggregate and disaggregate levels. Universal health coverage, financed by labor income tax revenue, could reduce inequality due to its large redistributive role. Social welfare cannot be improved when labor decisions are endogenous and distortions are higher than the redistributive gains for all tax financing options. In the absence of labor supply choice, mild welfare gains are found. In a broader sense, the paper aims to provide a frame for policy evaluation of socioeconomic policies from both macro and micro perspectives, taking different social groups into consideration.
Assessing the impact of Indonesia's National Health Insurance on health care utilization & expenditures

Co-authors: Tiara Marthias-Department of Public Health, Fac. of Medicine, Universitas Gadjah Mada & Nossal Institute for Global Health, University of Melbourne; Natalie Carvalho-Center of Health Policy, School of Population and Global Health, University of Melbourne; Michael Palmer-Nossal Institute for Global Health, School of Population and Global Health, University of Melbourne; Barbara McPake-Nossal Institute for Global Health, School of Population and Global Health, University of Melbourne

Background: In January 2014, Indonesia started the largest single-pool national health insurance as part of its Universal Health Coverage program, which aims to cover all Indonesian population by 2019. The insurance program prioritizes coverage for poor and near-poor populations, with the objective of improving health care utilization and reducing out-of-pocket payments. Little is currently understood about the impact of Indonesia's new national health insurance program on dual universal coverage goals, and how the impact of the program varies across the population. In this study we investigate the impact of the program on health care utilization including reproductive and maternal care services which are identified in several national Sustainable Development Goals.

Methods: Using three waves of the longitudinal Indonesian Family Life Survey (2000, 2007 and 2014) and a difference-in-difference approach, this study assesses early impact of the insurance program on multiple care services including reproductive and maternal health care utilization and out of pocket spending. To the extent that significant inequalities exist in health care utilization outcomes across geographic regions and socio-economic characteristics of the population, the study will examine the heterogeneity of insurance effects across the population (poor versus non-poor, informal versus informal sector workers) and geographic regions.

Results: Our results show evidence supporting the association between the levels of health care utilization, financial protection and respondents’ socioeconomic status as well as the availability and access to health facilities. Further, we found differences in health care utilization levels and OOP between population living in areas with strong supply characteristics and those living in limited-resource setting, particularly for poor and near-poor patients. Despite the increase in coverage of the national health insurance program, supply-side readiness and geographical accessibility (as measured by the density of health care worker, types of services provided by and the distance to the health facility) largely explain the inequalities arising from the effort to attain UHC in Indonesia.

Discussion/Conclusions: Our analysis results of heterogeneous impact indicates that supply-side determinants have a strong contribution on the equality in health care utilization and financial protection, particularly among the poor and near-poor population. This calls for stronger regulation on geographic distribution of health care workers and facilities. As the population from low socioeconomic status and those living in remote areas gained lower benefits compared to their better-off counterparts, Indonesia needs more targeted public health efforts including area specific health programs or additional financial protection.
Oral Abstracts

Angela Perez Gomez, Cuenta de Alto Costo

Cuenta de Alto Costo: una estrategia para alcanzar la equidad en la salud a través de un sistema de salud sostenible

Co-authors: Angela Viviana Perez Gomez -Cuenta de Alto Costo ; Lizbeth Acuña-Cuenta de Alto Costo ; Paula Ramirez-Cuenta de Alto Costo ; Luis Soler-Cuenta de Alto Costo

Antecedentes Existen múltiples factores que profundizan las brechas y las inequidades en los servicios de salud, uno de ellos es el alto costo que tiene la atención de algunas patologías. Este factor afecta la equidad en la prestación de los servicios de salud para las personas que sufren estas condiciones, derivado de la forma de asignación de recursos, la forma en que se reciben los servicios de salud y los mecanismos de pago de los servicios de salud. En este contexto que se crea la Cuenta de Alto Costo (CAC), que es un organismo técnico no gubernamental del Sistema de Salud de Colombia, y opera como un fondo autogestionado que contribuye a establecer el sistema de salud, garantizando la solidaridad y desestimulando la selección y discriminación de la población, mediante un ajuste de riesgo de la prima básica en función de los casos de alto costo.

Métodos La CAC desarrolla metodologías de análisis descriptivo y analítico a través de la construcción de registros poblacionales para enfermedades de alto costo (Cáncer, Hemofilia, Enfermedad Renal Crónica ERC, Artritis Reumatoidea), adicionalmente se desarrollan mecanismos de ajuste por riesgo, con el fin de aplicar el mecanismo financiero de redistribución de riesgo, establecido por los Ministerios de Salud y Hacienda para procurar equilibrio y sostenibilidad del Sistema de salud.

Resultados La CAC incorpora el análisis y ajuste de riesgo de 16 condiciones de salud que a saber son: Cáncer de mama, colon y recto, cérvix, gástrico, cáncer de próstata, pulmón, Leucemia en adultos, leucemia en niños, linfoma en adultos, Artritis reumatoidea, hemofilia, HTA, DM, ERC, VIH y Hepatitis C. Los análisis periódicos han demostrado una mejora significativa en el acceso efectivo a los servicios de salud para las personas con estos diagnósticos, así como en la calidad y la integralidad en la atención.

Discusión Los sistemas de salud deben ser sostenibles, pero esta sostenibilidad debe articularse con la calidad en la prestación y la equidad en el acceso a los mismos. Es en este marco, que la CAC, permite la generación de conocimiento para el sistema de salud, lo que permite identificar brechas en calidad de la prestación, así como promover la gestión integral del riesgo desde la perspectiva técnica y científica, así como desde la perspectiva del financiamiento y la distribución de recursos, lo que permite que los individuos reciban atención en salud de acuerdo a sus necesidades, independiente de su capacidad de pago.
Alexander Laar, REJ INSTITUTE, P. O. Box TL 1139, Tamale, Ghana

Understanding health facility factors that facilitate or impede male involvement in maternity care in Ghana. Perspectives of health workers.

Co-authors: Alexander Suuk Laar-REJ INSTITUTE, P. O. Box TL 1139, Tamale, Ghana; Godwin Adzakpah-Saint Dominic Hospital, P. O. Box 59, Akwatia, Ghana

Abstract

Background: In settings where men play key role in decision making in the household, some women’s access to and utilization of health service is influenced by their partners. Male involvement in maternity care is one key strategy that can be used to improve maternal and newborn outcomes in Ghana. The aim of this study was to explore health workers perception of the level of male involvement in maternity care and to determine factors that facilitate or impede their involvement.

Method: A qualitative study was conducted in an urban hospital in Kwaebibirem district in Eastern Region of Ghana. In-depth interviews were the methods used for data collection. The 15 participants’ responses generated themes on facilitators and barriers to male involvement in health facility maternity care. The interviews were tape recorded and data analyzed using thematic and content analysis approach.

Results: The findings of this study revealed that overall, health workers were optimistic that involving male partners and prospective fathers in maternity care services will help in the promotion of better health outcomes of both the mother and the newborn. Other benefits by them include: supporting female partners to take right decisions at the right time with regards to adherence to diet, nutrition and breastfeeding advice, reduction in anxiety and depression, psychologically psyching and reducing pain during pregnancy, birth and postnatal period. That yet in practice, few males accompanied their partners for maternity care services despite its benefits. These findings suggest that males’ involvement in maternal health in Ghana is influenced by unfriendly health facility environment, negative health staff attitude and restricted male access at the health facilities especially to the labour room as the prevailing barriers..

Conclusions: In addressing men’s involvement in maternity care, it is important to consider how to frame their contact with the health system so that it will encourage their future and continued involvement.

Key words: Ghana, Health providers, Health facility, Maternity care, Male involvement, Health System.
Constance Newman, IntraHealth International

**Preventing sexual harassment in health systems that deliver for all**

Co-authors: Constance Newman-IntraHealth International; Alice Nayebare-IntraHealth International/Uganda; Samson Olum-Uganda Ministry of Health; Allan Agaba-IntraHealth International/Uganda

**Purpose:** Preventing and responding to sexual harassment to end health system dysfunctions through gender-transformative policy adoption and implementation.

**Focus:** A 2016 Uganda Ministry of Health (MOH) formative assessment found endemic sexual harassment in public health workplaces, a system dysfunction that abridges health workers’ opportunities for decent work, undermines supervision systems, and contributes to absenteeism and attrition. It also violates clients’ rights to safety and security and degrades service quality. This presentation describes multi-sectoral research knowledge translation processes involved in adopting and implementing existing law and policy to end harassment in health workplaces.

**Content:** The MOH convened a multi-sectoral stakeholder committee to draft Sexual Harassment Policy Implementation Guidelines (SHIGs) to drive sectoral prevention and response. Following ongoing internal and external dissemination and advocacy, the MOH Top Management Committee, chaired by the Minister of Health, approved and passed into force the SHIGs for immediate use and implementation in early 2018. Results of the formative assessment were discussed by the multisectoral committee in a validation/visioning meeting to identify issues, develop a vision to guide health sector interventions and institutional roles, and augment interventions in the draft SHIGs. The multi-sectoral committee co-designed prevention and response systems targeting changes in organizational structure and culture to support the SHIGs: 1) Training to challenge gender dynamics of minimizing/trivializing/rationalizing sexual harassment and silence surrounding sexual harassment, and to prepare implementers to play their roles in prevention and response; 2) Communicating organizational expectations for professional conduct and mechanisms for formal and informal reporting; 3) Social and behavior change materials (posters and booklet on sexual harassment, legal rights, pro-social bystander behavior); and 4) Working with health professional councils (HPCs) to revise and apply professional codes of conduct, ensure members’ adherence to SHIGs, and train HPC managers to identify and penalize sexual harassment. Together, these interventions create multiple entry points to end silence and impunity and disrupt negative, harassing workplace behaviors, and to create new positive organizational norms. The MOH will pilot the SHIGs and other interventions in a sample of districts, and follow up to assess implementation and changes in behavior, culture and norms with the intent to scale up. **Significance:** Systems innovations based on translation of research evidence, multi-sectoral co-creation of a desired future, policy adoption, and implementation to end health system dysfunctions like sexual harassment, can deliver for all in health systems.

**Target Audience:** Health systems leaders and practitioners in both public and private sectors.
Leaving no woman behind: The influence of gender on the career progression, perspectives and experiences of South African middle managers

Co-authors: Maylene Shung-King-Health Policy and Systems Division, University of Cape Town; Veloshnee Govender-Alliance for Health Policy and Systems; Lucy Gilson-Health Policy and Systems Division, University of Cape Town; London School of Hygiene and Tropical Medicine

Background

The importance of strong and transformative leadership is recognised as essential to the building of resilient and responsive health systems. In this regard, SDG 5 prioritises a current gap, by calling for women’s full and effective participation and equal opportunities for leadership, including in the health system. In South Africa, predemocracy repressive race-based policies, coupled with strong patriarchy, led to women and especially black women, being ‘left behind’ in terms of career development and progression into senior health leadership positions.

Methods

Given limited prior inquiry into this subject, we conducted a qualitative exploratory study on the influence of gender on career progression and leadership perceptions and experiences of middle-managers in South Africa in five geographical districts, located in two provinces. We explored through in-depth interviews, including life histories, career pathway mapping and critical incident analysis. The study sample selection was purposive and included 14 female and 5 male middle-managers in district and provincial health departments.

Findings

Our findings suggest that women considerably lag behind their male counterparts in advancing into management- and senior positions. We also found that race strongly intersected with gender in the lived experiences and career pathways of black female managers and in part for some black male managers. Professional hierarchy further compounded the influence of gender and race for black women managers, as doctors, who were frequently male, advanced more rapidly into management and senior management positions, than their female counterparts. Although not widespread, other minority groups, such as male managers in predominantly female departments, also experienced prejudice and marginalisation.

Affirmative employment policies, introduced in the new democratic dispensation, addressed this discriminatory legacy and contributed to a number of women being the ‘first’ to occupy senior management positions. In one of the provinces, these pioneering female managers assumed role-modelling and mentoring roles and built strong networks of support for emerging managers. This was aided by an enabling, value-based, organisational culture.

Conclusion:

This study has implications for institutionalising personal and organisational development that recognise and appropriately advances women managers, paying attention to the intersections of gender, race and professional hierarchy. It is important in the context of national and global goals, in particular SDG 5, that women and in particular black women, are prioritised for training and capacity development and ensuring that transformative health system policies and practices recognise and adapt, supporting the multiple social and work roles that managers, in particular women, play.
Oral Abstracts

Paula Valentine, Save the Children

**Understanding how change is created through participatory women’s groups in Kenya**

Co-authors: Paula Valentine - Save the Children

Currently, there is an evidence gap on the contextual factors and mechanisms that contribute to successful community systems strengthening for maternal and newborn health (MNH) outcomes. Our study focused on how the capacity of women and men was developed through women’s groups using the Participatory Learning and Action Cycle methodology to improve MNH outcomes in three sub-counties in Kenya. This theory-based, realist evaluation documented how the intervention was implemented and assessed both how and why the intervention increased household practices and care seeking for MNH within the policy context of engaging communities to achieve universal health coverage.

The impact of participatory women’s groups on maternal and neonatal mortality rates has been evidenced in randomised-controlled trials. This research aimed to address the paucity of evidence on the contextual factors, mechanisms and specific activities that are necessary for women’s groups to succeed.

Following the realist evaluation approach, specific programme theories were developed; qualitative data was collected and analysed against the theories; analysis was interpreted and theories refined. Qualitative data was collected from 138 participating and non-participating women, men, community health volunteers (CHVs), health facility staff and project staff through interviews, group discussions and stories of change.

**Key Findings**

The CHV was seen as pivotal in facilitating the groups linking them to the health facilities. The CHVs provided accessible information that helped women make changes in their lives, and acted as catalysts for women’s empowerment by instilling confidence in women to raise and solve issues relevant to themselves.

Our analysis indicated that participatory women’s groups and separate men’s MNH sessions were critical in encouraging women and men to work together, even in traditionally gender-segregated communities. They created positive change in their homes and communities by addressing MNH issues together. The groups also improved spousal relationships by creating clear channels of communication between women and men.

Our findings also showed that after having participated in the groups, more women were attending health facilities for ante-natal care, delivery, and post-natal care and more men were accompanying them. This was influenced by: increased MNH knowledge amongst women and men; more respectful staff conduct and higher quality services (due to parallel project-supported supply-side interventions and women’s groups actions); and implementation of the new free maternity policy in Kenya.

It is recommended to implement facility interventions alongside women’s and men’s groups to leverage the mutually-reinforcing relationship of demand and supply-side support, preferably within a supportive policy environment.
Taryn Vian, Boston University School of Public Health

**Using open public meetings and elections to ensure community-level political and democratic accountability for maternity waiting home performance: evidence from Zambia**

Co-authors: Taryn Vian-Boston University School of Public Health; Jeanette L Kaiser-Boston University School of Public Health; Viviane Sakanga-Right to Care Zambia; Misheck Bwalya-Right to Care Zambia; Melvin Mwansa-Right to Care Zambia; Parker Chastain-Boston University School of Public Health; Thandiwe Ngoma-Right to Care Zambia; Nancy A Scott-Boston University School of Public Health

**Background:** Community-led governance for maternity waiting homes can strengthen health systems for maternal care, and ensure that leaders are accountable to the populations they serve. A key aspect of democratic accountability is holding public meetings and electing board members. After opening 10 maternity waiting homes in rural Zambia, we assisted the governance committees to plan and execute annual meetings to present financial and performance results and, where needed, to elect new board members. This study examines the barriers and facilitators to community-led open meetings and election processes to promote good community-led governance.

**Methods:** We used a qualitative, cross-case analysis design to understand factors which affect democratic accountability for maternity waiting homes through open public meetings and elections. Two members of our research team visited all 10 sites to help committee members prepare for the annual public meeting. They also attended the meetings as observers and took detailed notes. The cross-case analysis applies Brinkerhoff and Bossert’s shared accountability health governance model to identify the types, purposes and targets of accountability and responsible actors, the strength of accountability chains, and the capacity of actors to support accountability.

**Results:** Democratic accountability fell into three categories: strong (3 sites), developing (3 sites), and weak (4 sites). Strong sites were characterized by committees demonstrating advanced preparation of financial and performance reports, and consulting with stakeholders in advance of the meeting. Sites with weakly functioning democratic accountability were unprepared for the strong demands of traditional leadership (headmen) and health facility staff complaints. Elections to replace committee members were driven as much by a desire to share the income-generating project revenue as from concern about service delivery performance.

**Discussion/Conclusions:** The annual meeting and election process revealed challenges in how to adapt democratic accountability principles in this context. Despite receiving training, community-level governance committees lacked understanding of the strategic purpose of open public meetings and elections, and how these relate to democratic accountability. They were therefore not motivated to engage in tactics to increase answerability and to manage stakeholders effectively. In some cases, elections were perceived as a spoil-sharing system to enable committee members to benefit from income-generating activities that were meant to benefit the maternity waiting homes. Conventional training and information sharing on roles and responsibilities may not be enough to build capacity for accountable governance behaviors. Simulation exercises and other experiential-learning methods may be more effective.
Isabel Luis Gonzalvez, Instituto Finlay de Vacunas

**Actualización del modelo, político y socioeconómico cubano y la atribución de responsabilidades en el cuidado de la salud. Visión de actores y planificación por escenarios.**

Co-authors: Isabel Pilar Luis Gonzalvez-Instituto Finlay de Vacunas; Adolfo Alvarez Perez-Instituto Nacional de Higiene, Epidemiología y Microbiología de Cuba; Yusdany Torres-Centro Municipal de Higiene, Epidemiología y Microbiología

INTRODUCCIÓN: La actualización del Modelo Económico y Social Cubano puesto en marcha desde el año 2011, impone el surgimiento de nuevos actores sociales con una nueva distribución de roles. Además, este proceso pretende perfeccionar la participación democrática a todos los niveles asegurando el adecuado equilibrio entre las responsabilidades que competen al Estado, el Gobierno y las correspondientes a los individuos, la comunidad, y la familia. La salud es una de las políticas sociales que se encuentra en estos momentos en un proceso de transformaciones necesarias. Resulta necesario por tanto redefinir el marco de responsabilidad sociales e individuales relacionadas con el derecho a la salud en Cuba en este nuevo contexto. Esta investigación se concentrará en el estudio de las responsabilidades individuales (responsabilidad personal o autorresponsabilidad con la salud) relacionadas con el derecho a la salud en el horizonte temporal 2017 – 2030. MÉTODO: representantes de cinco actores sociales (salud, académicos, gobierno, ONG y ciudadanía) fueron consultados mediante técnicas individuales y grupales. Se realizó análisis de contenido y se utilizaron herramientas de la prospectiva (Mimicmac, Mactor, Morphol, Smic Prob Expert, Multipol,) para realizar el análisis estructural del problema, describir el juego de actores, construir escenarios futuros y formular propuestas de estrategias acordes a los escenarios previstos. RESULTADOS: Se elaboró y validó una definición de responsabilidad personal con la salud sustentada por un marco teórico-conceptual que explica su relación con otras categorías centrales de la salud pública como el derecho a la salud, la participación comunitaria, la intersectorialidad y la gobernanza para la salud. Se evaluaron los niveles de autorresponsabilidad en una población y su relación con variables demográficas, socioeconómicas, de percepción de riesgo, de alfabetización en salud entre otras. Se identificaron variables claves relacionadas con los niveles de autorresponsabilidad con la salud en la población cubana. Se consensuaron objetivos y estrategias para su fomento. Se identificaron los actores implicados y sus posibles alianzas o puntos de conflictos. Se realizó una propuesta de plan de acción estratégico para el fomento de la autorresponsabilidad con la salud de la población cubana en el horizonte 2017 – 2030. CONCLUSIONES: El uso de herramientas prospectivas aplicadas al tema estudiado constituye un acercamiento metodológico innovador en Cuba que contribuye a visualizar y resolver las falencias teóricas en torno al tema, fomenta el dialogo, la toma de conciencia y el consenso entre los diferentes actores sociales involucrados en el diseño e implementación de políticas públicas.
Susannah Mayhew, London School of Hygiene & Tropical Medicine

**Governing health systems response to emergencies: community connections and disconnections in managing Sierra Leone’s Ebola crisis**

Co-authors: Susannah Harding Mayhew-London School of Hygiene & Tropical Medicine; Johanna Hanefeld-London School of Hygiene & Tropical Medicine; Lawrence Sao Babaw0-Njala University, Sierra Leone; Ahmed Vandi-Njala University, Sierra Leone; Tommy Matthew Hanson-Njala University, Sierra Leone; Melissa Parker-London School of Hygiene & Tropical Medicine; Paul Richards-Wageningan University, Netherlands; Dina Balabanova-London School of Hygiene & Tropical Medicine

Background: The response to the Ebola epidemic in Sierra Leone has posed difficult questions about what kind of responses are helpful in situations when sudden shocks appear to overwhelm already fragile health systems and deplete limited resources, and how you govern such responses. There is an increasing effort to link the response to epidemics and shocks to health system strengthening, but this is still understood in a narrow manner, as ‘building disaster management capacity’ rather than any explicit commitment to building resilient health systems. Moreover the critical connections (and tensions) between affected communities and the plethora of international and national actors remains neglected in governance studies. This paper investigates the nature of and connections between international, national and local responses to the Ebola epidemic in Sierra Leone and identifies lessons for how international and national emergency response mechanisms can better utilize community governance structures and contribute to building stronger health systems as a result.

Methods: Our overarching approach is multidisciplinary and we combine ethnographic approaches with health systems and policy research techniques. Specific methods include scoping reviews, policy document analysis, key informant interviews, network analysis, ethnographic fieldwork and causal pathway tracing.

Results: Findings suggest local responses to the Ebola epidemic were being enacted before the international response occurred and before coordinated national processes were established. The parallel non-health governance systems of local Paramount Chiefs were critical to implementing effective local responses. There are examples of where the formal health structures were inadequately prepared or motivated and local governance structures took over to quarantine villages and prevent spread. Nevertheless, the actions of district health management teams, and individuals within them, were also pivotal in helping communities respond quickly even where formal health systems governance was patchy and confused. There was widespread disconnect between international/national militarised action and local efforts, with damage to the health system ensuing and poor legacy of longer-term strengthening despite massive resources coming into the country during the epidemic itself.

Conclusion: The complexity of governing epidemic responses is compounded by the actions of global actors who control macro-governance structures with little understanding of the complex local governance systems on the ground. Future epidemic responses must find ways to quickly establish connections with local governance structures in order to be effective and contribute to long-term strengthening of health systems and their governance.
Stephanie Topp, James Cook University

“We are everything to everyone”: factors influencing accountability relationships of Aboriginal and Torres Strait Islander Health Workers (AHWs) in the Australian health system

Co-authors: Stephanie M Topp-James Cook University; Alex Edelman-James Cook University; Sean Taylor-Torres and Cape Hospital and Health Service, Queensland Health

Background: Health policy in Australia positions Aboriginal and Torres Strait Islander Health Workers (AHWs) as central to improving health of Indigenous people, with high expectations of their contribution to ‘closing the gap’ between Indigenous and non-Indigenous health outcomes. Understanding how the governance of AHWs and their accountability relationships influence their ability to address such health inequities has policy, programme and ethical significance. This study aimed to identify gaps in published evidence and understanding about AHWs’ experiences of accountability in the Australian health system.

Methods: We conducted an adapted qualitative systematic review to map evidence on accountability relations in the published literature. Criteria for inclusion focussed on empirical studies with appropriate ethical approvals, or first-person accounts, describing AHWs’ experiences of working in government or Aboriginal community-controlled services anywhere in Australia, with no time limit. Findings were organised according to van Belle and Mayhew’s four dimensions of accountability – social, political, provider, organisational.

Results: Twenty-seven studies published across several decades (1995 - 2017) and representing experiences from extremely varied geographic and service contexts in Australia (e.g. remote area clinic; regional centres; urban hospital) were included. We found no studies with a primary focus on AHW governance or AHWs’ accountability relationships although selected articles did provide some insight into these issues. In the social dimension, AHWs’ connection, belonging, and concomitant sense of obligation to their communities was clearly reflected in the importance placed on cultural brokerage and advocacy functions as part of their work. However, AHWs in many studies described the difficulty of straddling cultural obligations (e.g. related to gender, age and kinship) alongside expectations of non-Indigenous colleagues and supervisors whose work practices were underpinned by ‘Western’ models of clinical governance and management. Lack of clarity around AHWs’ responsibilities, stemming from weakly constituted career structures were linked in a number of cases to system-wide misunderstanding of AHWs’ broader role – particularly the cultural components – and was described as a barrier to AHWs working to their full capacity for the benefit of patients, their communities and their own professional satisfaction

Conclusions: This review found evidence of complexity in AHWs accountability relationships, and indications that this affects both individual and team performance. However, theoretically informed and systematic investigation of accountability relationships and related issues including power dynamics that underpin AHW governance and performance in diverse settings is generally lacking and more work to document and assess their impact is urgently required.
Red Mesoamericana de Salud de los Migrantes: Mejorando la coordinación entre países para no dejar a nadie atrás


Introducción

De los 244 millones de migrantes internacionales registrados en el año 2015, el 26% se encontraba en la Región de las Américas[1]. La ruta México-Estados Unidos es el principal corredor migratorio del mundo y el territorio comprendido entre Colombia, los países Centroamericanos y México es un espacio importante de origen, tránsito, destino y retorno de migrantes a nivel global.

La migración es un tema prioritario de la agenda de desarrollo social de los países de Mesoamérica. No obstante, no existe un abordaje común del tema. En septiembre de 2016 los Estados Miembros de la OPS/OMS aprobaron la Resolución CD55.R13 “Salud de los migrantes”, que insta a liderar iniciativas que mejoren los marcos normativos y jurídicos para promover el acceso de los migrantes a servicios de salud integrales y de calidad y a impulsar propuestas coordinadas en temas de salud en áreas fronterizas.

En abril de 2017 los Ministros de Salud de Mesoamérica se reunieron con el fin de identificar áreas de cooperación para mejorar el acceso de los migrantes a los servicios de salud y asegurar su inclusión en los sistemas de salud de cada país conforme a sus respectivos marcos jurídicos, contexto y capacidad instalada. Al finalizar la reunión firmaron la Declaración de Mesoamérica sobre Salud y Migración que establece ocho compromisos, entre ellos crear una red de expertos para intercambiar experiencias y buenas prácticas. La Red Mesoamericana de Salud y Migración se creó en octubre de 2017.

El objetivo de este artículo es presentar la Red Mesoamericana de Salud y Migración e identificar su relevancia y utilidad para mejorar el acceso de las personas migrantes a los servicios de salud.

Métodos

Análisis de datos de fuentes primarias y secundarias.

Resultados

Los países mesoamericanos implementan diversas acciones para proveer atención de salud a las personas migrantes, pero lo hacen de manera descoordinada, episódica y mediante servicios puntuales. Ello les impide hacer seguimiento de los casos y dificulta visualizar el impacto de las intervenciones.

Conclusiones

La creación de la Red Mesoamericana en Salud y Migración responde a la necesidad de contar con una plataforma que permita a los países coordinar esfuerzos y responder mejor a las necesidades de salud de los migrantes. La Red es percibida como un elemento central para brindar servicios de salud en el continuo de la atención, garantizando el derecho a la salud de los migrantes.

Health justice for all: The development of alternative health system capabilities in the conflict-affected context of Shan State, Myanmar

Co-authors: Sharon Bell-Massey University

The United Nations (UN) regards conflict as the leading risk to development progress so it is vital to determine how this impacts on the achievement of the Sustainable Development Goals (SDGs) in conflict-affected contexts. Understanding how to strengthen health systems is key to achieving SDG 3 – ‘to ensure healthy lives and promote well-being for all at all ages’, and consequently, health justice for conflict-affected communities. Shan State, Myanmar is one such context, facing a critical shortage in its health workforce, considered one of the building blocks of an effective health system. The purpose of this paper is to examine how the approaches taken by an international non-governmental organisation (INGO) support the development of alternative health system capabilities through a health workforce training programme. A global development agenda of state- and peace-building has meant that INGOs have been criticised for undermining state legitimacy. Meanwhile, non-state armed groups (NSAGs) in areas like Shan State, Myanmar, have established alternative regimes which seek self-determination as well as attempting to provide for the social and economic wellbeing of their people. However, little is known about how a partnership between an INGO and a NSAG contributes toward alternative health system development. The paper focuses on the qualitative case study of such a partnership in Shan State, Myanmar. It draws on fieldwork conducted in a community on the Shan State-Thailand border in 2015 and 2016. A capabilities approach is used to examine the effectiveness of the partnership in advancing the goal of “leaving no one behind: health systems that deliver for all”. It argues that a positive partnership between the INGO and the NSAG has proven an effective intervention to strengthen the workforce capabilities of the alternative health system, providing increased access to healthcare. This innovative practice in health system development has led to promising improvements in health outcomes in conflict-affected communities. The paper also discusses the limitations of the partnership, and the constraints caused by a reduction in international donor funding in Myanmar for alternative responses to development issues. For Myanmar to achieve health justice and SDG 3, supporting health system development that focuses on improving health outcomes needs to be a priority for the international community. The target audience for this paper is those researching health systems in conflict-affected contexts and INGO practitioners engaged in health workforce development.
Catherine Hébert, University of Montreal, Montreal, Canada

Lack of access to health care for children born in Canada to migrant parents without medical insurance in Quebec (Canada)

Co-authors: Catherine Hébert - University of Montreal, Montreal, Canada; Valéry Ridde - IRD (French Institute For Research on sustainable Development); Christian Dagenais - University of Montreal, Montreal, Canada

Following our research on the health and access to health care of migrants without medical insurance in Quebec (Canada), we made two 5-minutes videos in order to give migrants a voice to present the reality of Montreal and to fight against preconceived ideas about this population. The objective is to give more humanism to this population victim of discriminatory health policies. Indeed, our population survey (n=447) and within the Doctors of the World (DoW) clinic (n=387) show a poorer physical and mental health status for this group compared to other immigrants. It faces many barriers to access to care (financial, discrimination, fear, etc.) and many people have to give up care. Based on our research findings, the videos present the situation of two families whose children were born in Canada but, given their parents' status, they do not have access to the public health care system. The first family comes from Nigeria and the second from Ivory Coast. The films are in French with English subtitles. Conceived as a collection of life stories, these two short films reveal the wider context of this population, to promote a better understanding of their situation by the general public and to contribute to changes in professional practices. The short films will be used by NGOs (including DoW and the Chagnon Foundation) and by researchers in training and awareness-raising activities for health professionals, doctors and students. We also wish to provide accurate and realistic information on the decisions that will be taken by health authorities. To date, no video has been produced in Canada that combines research findings with the life experiences of this population.
Yuan Huang, Sichuan University/London School of Hygiene and Tropical Medicine (joint post-doctoral programme)

Ethnic inequality in maternal health care access in western rural China: evidence from three in-depth case studies

Co-authors: Yuan Huang-Sichuan University/London School of Hygiene and Tropical Medicine (joint post-doctoral programme); Melisa Martinez-Alvarez-London School of Hygiene and Tropical Medicine; Min Yang-Sichuan University; Juying Zhang-Sichuan University; Hai Fang-Peking University; David Shallcross-London School of Hygiene and Tropical Medicine; Josephine Borghi-London School of Hygiene and Tropical Medicine; Kara Hanson-London School of Hygiene and Tropical Medicine; Carine Ronsmans-London School of Hygiene and Tropical Medicine

Background

China has made considerable efforts to improve maternal health outcomes. However, previous studies have shown ethnic minority women had lower levels of utilisation of antenatal and hospital delivery care than majority Han women in Western China. This study aimed to identify the specific challenges faced by minority Yi women to access maternal care, by comparing their experiences of health care with their Han counterparts.

Methods

Three rural counties were purposively selected from remote and resource-limited regions in Sichuan Province in Western China: a high-performer, a mid-performer and a low-performer in terms of utilisation of hospital delivery service. The high-performer was a Han county (100%), the mid-performer had a mixed ethnicity population of Han (49%) and Yi (51%), and the low-performer was a predominantly Yi county (89%). We conducted 110 individual interviews and focus group discussions at the county, township and village levels with new mothers, healthcare workers and government officials. Access barriers were identified using thematic analysis.

Results

Both Han and Yi women reported that physical accessibility and financial affordability were important barriers to access maternal health care in all three counties. Although health system respondents attributed lower levels of health service use to beliefs and fears among Yi ethnicity, women reported quality of care as the more important factor. Poorly staffed and equipped facilities led both Han and Yi women to express a profound lack of confidence in routine antenatal care and complication management provided at primary care level. But compared with Han women who made great efforts to get services from a health facility at higher level (through borrowing money and arriving at a secondary/tertiary hospital in advance), Yi women were more likely to stay at home. Yi women also complained of difficulties in communication when accessing health care, especially in the low performing county, in part due to language barriers and social class discrimination (illiteracy and dirty clothes). Some of them were afraid of the kind of care they would receive. This was not the case for Han women.

Conclusion

Whilst the Chinese government has implemented a range of measures to tackle financial and geographic barriers, further efforts to improve quality of care are needed, in particular staff numbers and attitudes towards ethnic minority and poorer populations. In addition, health promotion campaigns are also needed to ensure Yi women are aware of the benefits of hospital delivery and increase their willingness to travel.
Iratxe Pérez Urdiales, Universidad del País Vasco (UPV/EHU)

Sub-Saharan African women’s experiences on (lack of) access to appropriate care in the public healthcare system in the Basque Country (Spain)

Co-authors: Iratxe Pérez Urdiales-Universidad del País Vasco (UPV/EHU); Isabel Goicolea-Umeå University; Amaia Irazusta-Universidad del País Vasco (UPV/EHU); Miguel San Sebastián-Umeå University; Ida Linander-Umeå University

Background: In the context of the Basque Country (Spain), immigrant women from Sub-Saharan Africa have been identified as facing the largest barriers to access the public healthcare services. Linguistic and cultural barriers and societal prejudices have been pointed out as potential explanations for their poorer access, but there is scarce research considering their voices. The aim of the study was to analyse Sub-Saharan African immigrant women’s experiences of access to appropriate care in the public healthcare system in the Basque Country (Spain).

Methodology: Qualitative study based on 14 individual interviews with women from eight Sub-Saharan African countries living in the Basque Country and who have used the public healthcare services at least once. Data was analysed first following a deductive thematic analysis, guided by Steven Lukes’ theory of power in social relationships. Second, data in the themes were reorganized in an abductive way to ensure capturing participants’ voices.

Results: Four themes emerged from the data: First, Better safe than sorry - Fearing access to the healthcare system is related to the social factors determining the unwillingness of immigrant women to approach the public healthcare services. Second, Gatekeeping healthcare services: application of discriminatory norms describes how administrative staff act as gatekeeper applying the norms that regulate the access of immigrants to the public healthcare system and how fulfilling those legal requirements is difficult for immigrants. Third, Stigma on immigrants: a barrier to receive appropriate care and attention refers to the lack of appropriateness of received services at the healthcare system, when covering the needs of the immigrant patient. Finally, Individual efforts to counterbalance access barriers describes how some individual healthcare providers, NGOs and immigrants’ social network counteract the barriers of the healthcare system facilitating immigrants’ access and a culturally safe attention.

Conclusions: The results of this study show how women perceived that social vulnerabilities such as being undocumented or suffering from gender based violence, as well as legal requirements hindered and prevented the access of immigrant women to public healthcare services. The institutional practices of the healthcare system were not adjusted to the attention of immigrants, and the social stereotypes about immigrants negatively influenced the care they received. While systemic barriers to appropriate access were discussed, individual character facilitators were reported to try to counteract them.
Sumegha Asthana, Jawaharlal Nehru University

**Health systems strengthening- a review of the concept**

Co-authors: Sumegha Asthana-Jawaharlal Nehru University

**Background:** Health systems strengthening (HSS) has gained the top position in the health development agendas. Though the usage of the term HSS has become very common, there is no common definition or understanding of the concept among various health actors. Strengthening health systems is the most crucial step for improving the health of the people, but the existing confusion has been accused of creating confusion at country level regarding which conceptual model to refer for designing HSS strategies.

**Methodology:**

**Aim:** This paper aims to contribute in bringing clarity on the concept. Such clarity will help the national actors in formulating and evaluating their HSS strategies.

**Objective:** To review the usage of the term ‘HSS’ in various contexts and consolidate the attempts of arriving at a common classification and definition of the concept.

**Framework:** The method of review has been informed by Walker and Avant, 2005 framework for concept analysis. A critical review of the available literature was conducted on the concept. The literature was searched for definition of health systems strengthening and health systems strengthening frameworks. A thorough search was conducted in the major databases like Pubmed, WHO and World Bank data bases and Science direct.

**Analysis:** The literature was analysed and structured on the lines of use of the term HSS, approaches suggested for HSS, defining HSS, constituents of HSS, confusions around defining HSS, causes of these confusions and attempts on arriving at a common understanding of HSS.

**Discussion:** The available literature highlighted that the term HSS has been used as a concept, strategy or operation and a goal. It implies different meanings in different contexts. It has also been used interchangeably with terms like ‘improving performance’, ‘improving efficiency’, ‘improvements in health systems’, ‘permanent improvements in health systems’ etc. Most of the discussions on HSS especially in the last decade had reduced HSS to a domain of global health actors and institution. The understanding of HSS and the ideas and strategies of HSS developed by the national actors lacks its due consideration. The developments in thinking of HSS have evolved in accordance with the dominant health system and development paradigms and also in response to the varied political, social and economic context in which health systems had developed. The debates on definition, scope, constituents, and boundaries of HSS can be put to rest by considering HSS as a broad continuum of various strengthening activities.
Global policy discourse meets local health systems realities: Resilience, Nepal and the 2015 earthquakes

Co-authors: Julie Balen-The University of Sheffield; Simon Rushton-The University of Sheffield; Bhimsen Devkota-Tribhuvan University, Nepal

‘Resilience’ has become a major preoccupation in health systems strengthening and in disaster risk management policy, as well as in international development policy more broadly. It runs throughout the Sustainable Development Goals, appearing 14 times (Labonté 2016: 679). However, as a concept, resilience is notoriously vague in its meaning (Alexander 2013). Aside from its conceptual imprecision, resilience as a policy discourse has been widely criticised. This work examined how these critiques play out when resilience as a policy programme meets local realities, with data collected from Nepal in March and April 2016 – one year after the earthquake.

We found extensive (and often very moving) evidence of the ways in which people and the community as a whole coped in the immediate aftermath of the earthquake. Such coping is not, however, the same as resilience. Especially in the early days, much of this coping was the result of ad hoc initiatives by the community itself and by other agencies, with chance also playing a significant part. We did not find high expectations of government support. At the policy level the focus was overwhelmingly on the survival of physical infrastructure (health posts, hospitals and so on) rather than the ability to staff and operate them.

We found a significant gap between resilience policy at the national and district level, and the needs and desires of local communities. This work illustrates the general critique of resilience policy’s top-down nature, pointing to a ‘disconnect’ between national policy and local experience, as well as the need for greater community involvement in disaster response and preparedness.
PHC or UHC: Prospects for health equitable health systems reform under persisting neoliberal austerity

Background: Neoliberal economic policies have predominated globally over the past 40 years, with disequalizing economic impacts within and between countries. Although now facing considerable critique from within institutions that had initially promoted them, the austerity measures imposed after the 2008 Global Financial Crisis continue to impede progress on health systems reforms consistent with government commitments made under the post-2015 Sustainable Development Goals. Concerns persist over the focus on Universal Health Coverage to replicate the selective approaches to primary health care that weakened the full adoption of the Alma Ata Declaration on Primary Health Care and its comprehensive vision. Subsequent advances in the consolidation of knowledge of the importance of social determinants of health and the potential role of the international human rights framework in promoting more health equitable health systems reform collide with neoliberal orthodoxy and the austerity policy agenda.

Methods: The presentation will draw from a number of recent studies, including a synthesis analysis of research projects from a four-year (2007-2011) Revitalizing Health for All international research program (20 research teams located in 15 low- and middle-income countries); a five-year study (2009-2014) of comprehensive PHC in seven services in Australia; a recent paper analyzing three waves of neoliberal global expansion and their effects on social determinants of health pathways; and a synthesis commentary on the current status of, and health risks associated with, the global austerity policy agenda.

Results: Evidence of comprehensiveness was found in many of the Revitalizing Health for All cases, but was weakened in political and economic contexts where neoliberal economic policies were dominant. Many of the tenets of neoliberal theory (e.g. market fundamentalism, open economies, sovereign individuals, welfare minimalism, and ‘responsibilization’) undermined the comprehensiveness of Australian PHC reforms, apart from instances of strong Indigenous (Aboriginal) governance structures. The roll-out and roll-back of neoliberal economics globally has been accompanied by increased income inequalities, regressive taxation measures, labour market precarization, and sluggish economic growth. These macro-trends, in turn, foment the persistence of fiscal austerity measures.

Conclusion: The new SDGs and the WHO commitment to UHC (criticisms of its partiality notwithstanding) imply substantive engagement with the structural causes of socioeconomic and health inequities. A political economy supportive of health equitable health system reform demands a rejection of neoliberal economics and practices, strengthened labour rights, substantive reforms of national taxation systems, and concerted efforts to create global tax/transfer mechanisms.
Oral Abstracts

Rebecca Wolfe, London School of Hygiene & Tropical Medicine

Animation: What is everyday health system resilience?

Co-authors: Rebecca Wolfe-London School of Hygiene & Tropical Medicine; Lucy Gilson-University of Cape Town; Edwine Barasa-KEMRI-Wellcome Trust; Leanne Brady-University of Cape Town; Nonhlanhla Nxumalo-University of the Witwatersrand; Susan Cleary-University of Cape Town; Jane Goudge-University of the Witwatersrand; Sassy Molyneux-KEMRI-Wellcome Trust; Benjamin Tsola-KEMRI-Wellcome Trust; Uta Lehmann-University of the Western Cape

In the Sustainable Development Goals era, health system resilience is critical to achieving health equity and social exclusion. All health systems, whether in low, middle or high-income countries, face multiple, routine challenges and strains that demand everyday resilience to ensure a continuous delivery of health services to all.

Resilience is not simply a buzzword in health policy debates, but a necessary health system characteristic. It is shown by systems that are able to adapt and transform in response to chronic stress and external shocks, not just ‘bounce back’ from them. District health managers and other actors who oversee the running of health centres and hospitals or coordinate networks of primary health services, play a critical role in nurturing this everyday resilience.

This 7-minute animation aims to explain the concept of everyday resilience in a clear and innovative way, using visual aids to describe complex ideas to non-specialist audiences. It is based on research conducted in Kenya and South Africa, where researchers have worked alongside managers and front-line health workers over a long period of time to better understand what everyday health system resilience is and how it can be nurtured.

The animation maps out:

- The routine challenges that district health managers and other front-line health workers face including policy instability, payment delays, and abrupt and imposed policy directives.

- Additional challenges faced in contexts where health system have devolved, such as in Kenya and South Africa.

- Examples of absorptive, adaptive and transformative strategies that managers have used to respond to challenges.

- Different types of organisational capacities that generate everyday resilience including the importance of leadership that empowers people to solve problems and make decisions, and of relationships and social networks within the system and communities that they serve.

- Implications of the research for policy and practice including the need to support new forms of collaboration between health managers and researchers.
Oral Abstracts

Majdi Ashour, UNRWA and University of Edinburgh

Changes in out-of-pocket payments and health-seeking behaviours in the Gaza Strip: Results from a Mixed Methods Research.

Co-authors: Majdi M K Ashour - UNRWA and University of Edinburgh

Background:

People living in the Gaza Strip have experienced a protracted political conflict and extreme socioeconomic adversity since 1948. Economic conditions have deteriorated markedly since the onset of the Palestinian Intifada in 1987 and have been exacerbated by the economic siege after 2006. The health system in the Gaza Strip has faced additional challenges. The aim of this study was to assess how Palestinian households in the Gaza Strip experienced health care services during this period of political turmoil, socioeconomic adversity, and challenges to health services.

Methods

Mixed methods research (MMR) was used. The quantitative part of the MMR involved the analysis of data from ten rounds of the Palestinian Expenditure and Consumption Survey from 1996 to 2011 to examine changes in the Catastrophic Health Expenditure (CHE) across the years among different groups of households. The qualitative component of MMR consisted of life histories reported via 28 semi-structured in-depth interviews with heads of households aged 46 years or older to capture changes over time in their experience with health services. The interviews were analysed using thematic narrative and time-metric analysis. The results of the Palestinian Expenditure and Consumption Survey and the interviews were triangulated.

Findings

The occurrence of CHE was almost stable and relatively low. Vulnerable groups tended to become less exposed to CHE, especially after the major deterioration of the economic situation in the Gaza Strip after 2006. The ability to pay for health care, the nature of health conditions of the households, and the accessibility and entitlement to certain health services determined their choice of health providers and influenced their health-seeking behaviours. Additionally, households had used a wide range of coping mechanisms, including self-medications, decreasing the use of private health services, and relying on social capital. Interview respondents noticed the expansion of both public and private health services, but they, especially the poor, expressed their dissatisfaction with public services. The low financial cost of using public services is coupled with other costs such as increased waiting times, perceptions of indignity, and perceived low quality of services.

Interpretations

The findings are interpreted within the political history of the Gaza Strip and its health-care system during the last three decades. The reduced occurrence of health-care-related financial catastrophe and impoverishment in the more vulnerable groups in the Gaza Strip could point to high level of households and health-system adaptation, which should be investigated carefully.
Introduction: Maternal and Child Health (MCH) is a priority in Nigeria. Although mortality rates declined in the MDG years; Nigeria did not meet targets 4 and 5. Access to services remains one of key challenges. Abundant literature exists on supply and demand side barriers to providing and accessing proven effective interventions. However, little literature exists on how security within health facilities affects provision and use of services, especially by vulnerable pregnant women from socio-economically disadvantaged backgrounds.

The Nigerian government, addressed this through a flagship programme which aimed to mitigate both demand- and supply-side barriers to MCH services for the underserved population. During 2012-2015, the programme trained and deployed midwives and community health workers (CHWs) in primary healthcare facilities; upgraded infrastructure (including perimeter fencing in some facilities); provided supplies and financial incentives to pregnant women to access and utilize services. A novel group of CHWs; village health workers, were also trained and deployed to mobilise pregnant women and assist them to access services.

Methodology: This on-going study employs a phased mixed-methods Realist Evaluation approach to assess how and under what circumstances programme worked to achieve outcomes in Anambra state, southeast Nigeria. We conducted 32 in-depth interviews with facility managers and health workers, 12 focus groups with services users, analysed facility data and conducted facility exit survey. Specific programme theories, showing causal pathways of change, have been continuously validated and refined throughout data collection and analysis.

Results: The programme upgraded facilities and with help of the community attempted to keep facilities secure, for example through erecting perimeter fences and deployment of watchmen. However, most health workers felt insecure at night, due to lack of security guards. As a result most health workers who were all female did not feel confident to provide services at night. Similarly, pregnant women and their family members were reluctant to access facilities at night especially in isolated areas. The sense of lack of security had detrimental implications for achieving programme outcomes, one of which was to increase facility deliveries by skilled birth attendants.

Conclusion: Poor security contributed to lack of feeling of safety by this vulnerable population group and this directly influenced utilization of MCH services in an otherwise well-funded and equipped programme. Given that significant proportion of deliveries fall during night time, ensuring adequate security at night will contribute to round-the-clock MCH care and therefore can help address the needs of most vulnerable populations.
Oral Abstracts

Abdulbaki Mahmoud, Syria Relief and Development

The challenges of transitioning humanitarian health services to health systems: experiences from northern Syria

Co-authors: Abdulbaki Mahmoud-Syria Relief and Development; David Harold Collins-Management Sciences for Health; Daniel Albrecht-World Health Organization; Tasnim Atatrah-World Health Organization

The purpose of this presentation is to highlight the challenges and solutions of transitioning from humanitarian health assistance to viable health systems strengthening and development approaches. In emergency settings, the focus of governments, humanitarian organizations, and donors is to save lives and reduce suffering. Where governments are weak, it is common for health services to be provided by non-governmental organizations (NGOs), often funded by different donors and often uncoordinated. This sometimes results in gaps and overlaps in coverage, different packages of services, and inefficient utilization of limited resources.

In northern Syria, the World Health Organization (WHO) is assisting a group of 6 NGOs to convert 10 facilities and mobile clinics that cover one town and surrounding villages into a service network that will lay the groundwork for the future health system when the political and security situation is stable. The catchment population of the area is 263,510 and the total number of services provided in 2017 was 424,564, an average of 2.1 services per capita. None of the facilities were providing the full package of services; for example, only 3 provided nutrition services and only 3 provided immunization services. The estimated annualized cost of the services provided for the network was US$1.0 million for staff and operating costs, and US$2.9 million for medicines and supplies. Scaling up the number of services to meet all the needs of the population at the main health centre would cost US$31.23 per capita, triple the amount of US$10.84 actually spent. Challenges to implementing the full package of services include funding limitations, donor restrictions, shortages of trained providers and inefficient procurement. The innovative approach used to develop the network included methods for assessing and improving efficiency, quality, patient referral pathways as well as the estimation of resources needed through the costing study.

The presentation will describe the approach used to create the network and the monitoring and evaluation system being used to measure the results. Data on the impact of the transition on service availability, utilization and quality are being collected and will be ready for presentation at the symposium.

The information provided will be helpful to other fragile states who need to make the transition from humanitarian aid to a health system. The target audience is members of governments, donor organizations and health care providers engaged in providing humanitarian health services in countries in crisis.
Rebuilding Health Post-Conflict: Case Studies, Reflections, and a Revised Framework

Co-authors: Spencer Rutherford-American University of Beirut; Shadi Saleh-American University of Beirut

War and conflict negatively impact all facets of a health system; services cease to function, resources become depleted, and any semblance of governance is lost. Following cessation of conflict, the rebuilding process includes a wide array of international and local actors. During this period, stakeholders must contend with various trade-offs, including balancing sustainable outcomes with immediate health needs, introducing health reform measures while also increasing local capacity, and reconciling external assistance with national legitimacy. Compounding these factors are additional challenges, including coordination amongst stakeholders, the re-occurrence of conflict, and ulterior motives from donors and governments, to name a few. Due to these complexities, the current literature on post-conflict health system development generally examines just one facet of the health system, and only at one point in time. The health system as a whole, and its development across a longer timeline, is rarely attended to. Given these considerations, this research evaluated health system development in three post-conflict environments over a 12-year timeline. Applying and adapting a framework from Waters, Garrett, and Burnham (2007), health policies and inputs from the post-conflict periods of Afghanistan, Cambodia, and Mozambique are assessed against health outputs and other measures. From these findings, a revised framework was developed for post-conflict health systems development. These findings are significant for this sub-theme in that it addresses how multi-sectorial action on health systems can be achieved during post-conflict. Past-approaches are analyzed, and different policy approaches are assessed to determine best-practice methods for collaboration amongst stakeholders during post-conflict health system development. This research highlights the difficulties in implementing SDGs during post-conflict (; 3, ; 9, ; 16), and further explores the tensions between ensuring health (; 3) rapidly, with concerns such as sustainable employment (; 8) and development (; 9), reducing pre-existing inequalities within countries (; 10), and building inclusive institutions (; 16). This presentation relevant for those working in the field of post-conflict development, particularly in regards to policy and infrastructure development.
Inequities of health workforce distribution in Ghana: understanding the dynamics of power and politics in posting and transfers

Co-authors: Roger Ayimbillah Atinga - University of Ghana Business School; Samuel Kaba Akoriyea - Ghana Health Service, Institutional Care Division; Philip Baba Adongo - University of Ghana School of Public Health; Gilbert Abotisem Abiiro - University for Development Studies, Wa, Ghana

Background: Equitable distribution of skilled health workforce for improved outcomes in all populations is an integral part of universal health coverage efforts. Yet, in low- and middle-income countries, maldistribution of health workforce persists and the reasons underlying the phenomenon have not been explicitly explored. This paper analysed how maldistribution of health workforce is shaped by the interplay of politics and power among actors located at multiple points of the health system hierarchy in Ghana.

Methods: We reviewed health sector human resource strategies and policies implemented between 2007 and 2017 to achieve equitable distribution of doctors, nurses and pharmacies. Additionally, we collected qualitative data from purposively sampled district and regional health managers (19), and health facility managers (6) from the three northern regions that face chronic skilled health workforce deficits. Thematic analysis followed deductive and inductive coding procedure guided by the instruments of political imperatives and VeneKlasen and Miller (2002) classification of power as ‘power within’, ‘power to’, ‘power over’ and ‘power with’.

Results: About 95% of the total number of doctors and pharmacies, and about 70% of nurses annually decline postings and transfers to the three regions. In 2017 all newly trained doctors posted to one of the regions declined and worked their way to other environments. Power and politics were often used as instruments of negotiation for refusing posting and transfers to the regions. Political actors intervened at multiple stages of posting and transfers, using their legitimate and authoritative power to negotiate reposting or reverse transfers of their political clients who preferred locations other than the three northern regions. Care delivery was frequently interrupted as the few health workers accepting posting or transfers to the regions, worked their way for reposting through political bigwigs trying to consolidate their power. Actors high up the vertical chain of the health sector hierarchy equally used their authoritative power within, and control over, district and facility health managers to circumvent rules, by, for example, giving directives for health professionals to be reposted to locations of their preferences. District and facility health managers worked with limited decision space and simply complied with orders for posting, reposting and transfers without complaints in order to keep their jobs.

Conclusion: Policies to bond health professionals with regions, provide sanctions against refusal of postings and transfers, and remove political and power dynamics in health professionals’ distributions are urgently needed.
Duane Blaauw, University of the Witwatersrand  

**Pro-social preferences and the job location intentions of different health professional graduates in the WISDOM cohort study in South Africa**

Co-authors: Duane Blaauw-University of the Witwatersrand; Laetitia Rispel-University of the Witwatersrand; Prudence Ditlopo-University of the Witwatersrand; Janine White-University of the Witwatersrand

**Background**

A significant proportion of people demonstrate pro-social behaviour in being motivated by the welfare of others rather than pure self-interest. Pro-social preferences have been shown to influence selection into jobs in the public sector and under-served areas. Health workers as a group are expected to demonstrate significant altruistic behaviour although there is limited empirical research on the pro-social preferences of health professionals. This study compares the altruism and public sector motivation (PSM) of different health professional students, and investigates the association between their pro-social preferences and the intention to work in rural areas.

**Methods**

We use baseline data from the WISDOM study, a prospective longitudinal cohort study monitoring the job choices of health professional graduates of the University of the Witwatersrand in South Africa. Final year students from eight professional groups (clinical associates, dentists, doctors, nurses, occupational therapists, oral hygienists, pharmacists and physiotherapists) completed an electronic self-administered questionnaire (SAQ). In addition to demographic characteristics, the SAQ included validated questions to evaluate attitudes to working in rural areas, public service motivation, and future job location intentions. An experimental economic game, the dictator game, was used to measure altruism. Multiple regression analysis in STATA v14 was used to evaluate associations between study variables.

**Results**

Altruism, public service motivation, and job location intentions differed significantly between the different professional groups. Dentists and nurses were the most altruistic towards patients while clinical associates and pharmacists were least generous. Medical students and occupational therapists had significantly lower scores for attraction to public service in the PSM analyses. Only 11.1% of health professional students indicated an intention to work in a rural area after community service, with nurses, occupational therapists and physiotherapists being least likely to express such an intention. The multiple regression analysis also indicated that students born in rural areas and those with higher PSM were more likely to want to work in rural areas, whereas those that agreed that their choice of profession was motivated by the opportunity to earn money were significantly less likely to do so. Altruism towards patients was not significantly associated with rural job choices in this analysis.

**Conclusions**

These findings contribute to the empirical literature on the pro-social preferences of health professionals and have important policy implications for the recruitment, selection and training of health professional students in South Africa. Future follow-up of the WISDOM cohort will confirm if stated intentions relate to actual job choices.
RENU KHANNA, SAHAJ and COMMONHEALTH

TRADITIONAL BIRTH ATTENDANTS AND THEIR CHANGING ROLES IN THE CONTEXT OF SDGS: Hoyanis in Tribal Areas of Gujarat, India

Co-authors: RENU KHANNA-SAHAJ and COMMONHEALTH; NEETA HARDIKAR-ANANDI; PRADEEPA DUBE-ANANDI

Purpose. This 23 minute film illustrates the important role that trained local women, many who were Traditional Birth Attendants (TBAs), play in supporting access to health care of communities. TBAs even today continue to be women’s only resort during pregnancies and childbirth, in many remote areas across several parts of the world. An important implication for Universal Health Care is that such local health resources, especially in remote and underserviced areas, should be valued and capacitated for furthering marginalised communities’ access to health services. On the contrary, in many contexts TBAs are blamed by local health systems when they attend or facilitate home births, because of the policy prescriptions that equate all facility based childbirths with “safe births”.

Content. This film is woven around life stories of four women who were originally TBAs but have since evolved into multipurpose health workers, held in high respect and trusted by women and families. Hoyanis, as these TBAs are called in parts of eastern Gujarat like Dahod and Panchmahal, are the only medical assistance a pregnant woman can get in the area. Almost two decades have gone by since the Indian government decided to encourage institutional deliveries under the National Rural Health Mission (NRHM) through incentive schemes, like the Janani Suraksha Yojana. In the process, the government also stopped training and remunerating traditional birth attendants. However, in most of the villages in the districts Dahod and Panchmahal – mostly inhabited by tribals – hardly any alternative mechanisms of medical assistance have developed over the years. In such contexts, the TBAs facilitate access to maternity services including Emergency Obstetric Care. In addition, they facilitate access to other reproductive health services, Nutrition, DOTs, support the Female Health Worker and the Medical Officer of the government health centre. The film shows their commitment and dedication to the cause of promoting health of people in their villages.

Significance. As mentioned above, in the context of the SDGs and specifically Targets 3.1 (reduction of MMR to 70 per 10000 live births) and 3.7 (universal access to sexual and reproductive health services), TBAs should be recognised as a valuable health human resource and part of the health system. Investments should be made to build their capacities in a sustained way, so that they can achieve their potential in caring for the most vulnerable members of their communities.
Emmanuel Omony, Agago District Local Government

**Use of Automated Attendance Analysis for tracking the causes of health worker absenteeism at district Level: the experience of Agago district, northern Uganda.**

Co-authors: Emmanuel Otto Omony-Agago District Local Government; Charles Oyo-Agago District Local Government; Hellen Drajea-Agago District Local Government; Peter Alani-Unites States Agency for International Development

**Introduction:** Agago district in northern Uganda was established in July 2010. Over 20 years armed conflict resulted in marked disruption of the health system; ineffective functionality of leadership and governance structures at community, health facility and district levels to monitor health services; challenges in attracting and retaining health workers partly due to poor infrastructure, insufficient equipment, inadequate social amenities and poor pay resulting in poor health worker-population ratio compared to other regions of the country. As part of efforts to maximize the productivity of the few health workers, the district health office in partnership with USAID/SHRH project sought to find out the causes of health worker absenteeism through use of automated tracking tool starting in January 2017 and find remedies to the vice.

**Methodology:** Inception meeting with District Health Team (DHT) and health facility in charges held and health workers trained on Human Resources for Health (HRH) performance management including use of automated attendance analysis to track staff attendance. The tool clearly defined the terms; present, off duty, official leave, official request and absenteeism. Monthly staff attendance data is submitted on the 7th of every new month together with other health facility reports, and electronically entered in software at district level and analyzed. Support supervision and feedback is provided to health facilities every three months.

**Results:** 38 health facilities in charges were trained in HRH management. Tracking tool/ attendance registers were printed and disseminated to all facilities, 2 computers were procured at district level and the Human Resources Information System software installed. Data from February to December 2017 was entered and analyzed. 4 quarterly supervisory visits from the DHT to the health facilities were conducted. The overall reporting using the tool was 48%, of this; present was 55%, off duty 25%, official leave 7%, official request 6%, mainly at the district health office and absenteeism 7%, mainly at the health center level III. Overall out of station was 45%.

**Conclusion:** Authorized absenteeism (leave) is mostly by district health managers who by being absent cannot supervise the lower level health workers, coordinate leave and trainings to ensure high levels staff attendance to duty. The low reporting is a way of condoning the absenteeism and delay in reporting undermines monthly tracking of attendance. There is need for the health managers at all levels to embrace the tool and use the analysis to institute remedies against absenteeism.
An updated systematic review of the effectiveness of strategies to improve health worker practices in low- and middle-income countries

Co-authors: Alexander K. Rowe-U.S. Centers for Disease Control and Prevention; Samantha Y. Rowe-U.S. Centers for Disease Control and Prevention; David H. Peters-Johns Hopkins Bloomberg School of Public Health; Kathleen A. Holloway-World Health Organization, Southeast Asia Regional Office; International Institute of Health Management Research, Jaipur; and University of Sussex; John Chalker-Management Sciences for Health; Dennis Ross-Degnan-Harvard Medical School, and Harvard Pilgrim Health Care Institute

Background: Health workers (HWs) play essential roles in delivering health care. In low- and middle-income countries (LMICs), however, HW performance is often inadequate.

Methods: To characterize the effectiveness of strategies to improve HW performance in LMICs, we updated a comprehensive systematic review (the Health Care Provider Performance Review [HCPPR]) by searching 47 electronic databases for published studies and 52 document inventories for unpublished studies in late-2015/early-2016. Eligible study designs were controlled trials and interrupted time series. We present results on improving HW practice outcomes expressed as percentages (e.g., percent of patients treated correctly). We only included strategy-versus-control-arm comparisons. Effect sizes were calculated as absolute percentage-point (%-point) changes. The summary measure for each study comparison was the median effect size (MES) for all primary HW practice outcomes. Strategy effectiveness was described with weighted medians of MES.

Results: For the original review and the update, we screened 209,887 citations, and 2261 reports met our inclusion criteria. Altogether 282 studies were eligible for the analysis of HW practices. We identified 99 strategies, usually with multiple intervention components, and most tested by only one study. The median of all effect sizes was an improvement of 10.6 %-points (interquartile range [IQR]: 2.5, 22.5). For facility-based HWs, small effects were found for only implementing a mobile health (mHealth) strategy (median MES: 2.4 %-points; IQR: -1.4, 12.0) or only providing printed information for HWs (2.9 %-points; IQR: -2.3, 4.1). Modest effects were found for training only (10.3 %-points; IQR: 4.6, 20.7) or supervision only (11.8 %-points; IQR: 3.5, 24.9). Effects were generally larger for group problem solving only (23.5 %-points; IQR: 8.2, 43.1) and the combination of training with supervision (16.0 %-points; IQR: 4.5, 27.7) or group problem solving (58.8 %-points; IQR: 43.7, 70.8). Several multi-faceted strategies had large effects, but multi-faceted strategies were not always more effective than simpler ones. For lay or community health workers, the effect of training only was modest (9.6 %-points; IQR: 7.8, 12.2). Strategies with larger effect sizes included community support plus HW training (38.2 %-points, based on 2 studies). Contextual and methodological heterogeneity made comparisons difficult, and most strategies had low quality evidence.

Conclusions: The impact of strategies to improve HW practices varied substantially, although some approaches were more consistently effective. Standardization of methods would facilitate efforts to synthesize the evidence. The HCPPRapos;s breadth makes its results valuable to decision-makers for selecting strategies to improve HW performance in LMICs.
Gabala Franco, Health Child

**Positioning client’s voice at the centre, unlocking patients experience to drive health system improvement agendas, success story of Health Child**

Co-authors: Gabala Franco-Health Child

Uganda has made progress in recent decades however, the country still ranks among the top 10 countries in the world with high maternal, newborn and child mortality rates (SOWM, 2015), 336 women in every 100000 live births die due to preventable pregnancy related causes, U5MR 64/1000, IMR 43/1000 and NMR 27/1000live birth(UDHS2016). Despite of the growing global focus on reaching the last mile that necessitates prioritization of community engagement in strategies and goal setting as a vehicle for accelerating progress, priority populations continue to be excluded from discussions and decisions around factors that most improve their health. Ministry of health is implementing most of the existing evidence-based interventions but uptake of even the available services remains low. Health Child a Uganda health focused NGO 2016-2017 undertook a client satisfaction survey intended to generate evidence for improving communication, service delivery approaches and institutionalization of involvement of client’s. Client’s perception and satisfaction was sought along seven dimensions of care: availability, access, quality, cost, information, complaints or compliments and humanity of care.

The survey targeted pregnant women. Systematic review of records particularly the ANC register was done to estimate the facility clientele size. Purposive random sampling method was used to arrive at the survey sample, 1 in every 5 clients was considered, Exit interviews were staged during ART, ANC, FP clinic days. 65 health facilities and 5699 respondents were studied. data was collected at baseline and endline

Satisfaction with availability was rated 24% baseline 62% end, access 70% baseline 74% end, quality 19% baseline 44% end, cost 84% baseline 86% end, information 25% baseline 68% end, complaints or compliments 21% baseline 72% end, humanity of care 11% baseline 68% end. Beyond the above parameters, Average ANC 4th visit in the cohort measured against the previous most recent pregnancy (baseline) was 46% but rose to 76% during the study period, facility delivery 51% baseline 84% end and PNC within 48% hours 22% baseline 78% end.

Health system improvement is not just about the infrastructure, health work force, medicine; supplies or equipments. Client’s involvement helps to form a uniform view of the state of affair and build consensus on the improvement roadmap thus fostering accountability, buy-in and use. It’s however critical that leveraging and institutionalization of the said synergies, requires a well documented and costed framework for capturing and utilization of client’s inputs.
Financial sustainability of maternity waiting homes: evaluation of a four-pronged strategy in rural Zambia

Co-authors: Nancy A Scott-Boston University School of Public Health; Jeanette L Kaiser-Boston University School of Public Health; Bwalya Mwansa-Right to Care Zambia; Viviane Sakanga-Right to Care Zambia; Melvin Mwansa-Right to Care Zambia; Thandiwe Ngoma-Right to Care Zambia; David Kalaba-Right to Care Zambia; Parker Chastain-Boston University School of Public Health; Davidson H Hamer-Boston University School of Public Health; Peter C Rockers-Boston University School of Public Health; Taryn Vian-Boston University School of Public Health

Background: Maternity waiting homes (MWH) are designed to increase access to skilled delivery care and to improve maternal and neonatal health outcomes. Costs associated with MWH operations raise concerns about financial sustainability, particularly in resource-constrained environments. We implemented a four-pronged financial sustainability strategy at 10 MWHs in rural Zambia. Informed by community input and the Conceptual Framework for Sustainability of Public Health Programs, the strategy includes: 1) internal sources of revenue from government and traditional leadership; 2) external sources from revenue-generating social enterprises (goat rearing, hammer mill or shop); 3) in-kind community-donated labor and materials; and 4) financial literacy training of MWH staff on social enterprise business planning, bookkeeping, and cost projections. This study explores the effectiveness and contributions of each prong to financial sustainability.

Methods: We used a mixed-methods approach. We collected monthly expenditure and revenue data from internal, external and in-kind sources over 18 months. Quantitative pre-post training tests were administered to assess financial preparedness of MWH staff (n=58); monthly direct observation was used to monitor financial management skills retention. We conducted in-depth interviews (n=166) semi-annually with MWH, health facility, and government staff. The last round of interviews will occur mid-2018. Lastly, we triangulated data to understand the degree of integration of MWHs into the health system, contribution of each prong, and potential for financial sustainability. Preliminary results are presented.

Results: We found evidence of strong commitment to MWHs from government and traditional leadership. Health facilities provide cleaning materials and supplies to MWHs, and refer to MWHs as extensions of the facility, not a separate entity. Traditional leadership in all sites garnered community contributions (maize or money in varying quantities) and some have committed to future annual contributions. The social enterprises are generating sufficient revenue to cover MWH operating costs, minimizing the burden on the government budget. All communities contributed mud bricks, sand, and labor toward the construction of the MWHs. Community contributions covered minimal construction costs but were important for morale and fostering a sense of responsibility and community-ownership of the MWH. Community-donated labor toward the cleaning and upkeep of the home has had mixed results. Financial literacy training improved knowledge, but intensive routine mentorship for MWH staff proved critical for skill retention.

Discussion/Conclusions: The multi-pronged strategy we tested appears to have contributed to the financial sustainability of MWHs in rural Zambia. Other similar health system interventions in low-resource settings may consider using the same strategy.
Naoko Kozuki, International Rescue Committee

Acceptability, feasibility, and effectiveness of low-literate community health workers delivering treatment to children with severe acute malnutrition in Aweil South County, South Sudan

Co-authors: Naoko Kozuki-International Rescue Committee; Elburg van Boetzelaer-International Rescue Committee, South Sudan; Casie Tesfai-International Rescue Committee; Annie Zhou-International Rescue Committee

Background: 16 million children under-five are affected by severe acute malnutrition (SAM), with 1.8 million in famine- and/or drought-affected areas in 2017. High opportunity costs and distance are often cited as barriers for treatment access. Community health worker (CHW) delivery of acute malnutrition treatment has been piloted before to mitigate these issues, but not with low-literate cadres in humanitarian contexts.

Methods: A mixed-methods study was conducted to assess the acceptability, feasibility, and effectiveness of the low-literate CHW treatment delivery model. Using human-centered design, low literacy-adapted diagnostic and monitoring tools and a simplified treatment protocol were developed with CHWs in four countries. 57 CHWs in Aweil South County, South Sudan, were then trained on the simplified protocol and tools. Those who met a predetermined performance standard on a post-training assessment were deployed to treat uncomplicated SAM in their communities. As a prospective cohort study, 308 SAM children were enrolled, asked to return for weekly treatment, and tracked. CHW performance assessments were conducted during biweekly supervisory visits by research staff. Treatment outcome, number of weeks to outcome, and CHW performance scores were summarized, and regression models were run to identify child and CHW characteristics associated with recovery. Semi-structured interviews and focus group discussions were administered to assess perspectives from stakeholders (e.g. caregivers, CHWs, community leaders) on the treatment delivery model.

Results: 91% of CHWs passed the performance standard after training, 49% with perfect scores. The recovery rate from severe to moderate acute malnutrition (MAM) was 91% and from SAM to full recovery (MUAC &gt;=12.5cm) was 75%. The median weeks to recovery were five and eight weeks respectively. Children enrolled by CHWs were admitted with lower MUAC compared to children in Outpatient Therapeutic Programs, yet the former children had better continuity of care and shorter time to recovery. Caregivers expressed relief toward shorter travel and waiting times with CHW treatment, allowing them to conduct other activities during the day. Only older child age and child having received malnutrition treatment in last four months were associated with higher recovery rate.

Discussion/Conclusion: Low-literate CHWs showed high adherence to treatment protocol, and the recovery rate for the treated SAM children met the Sphere humanitarian minimum standards of 75%. This shows promise that deploying low-literate CHWs to treat SAM may lead to timely case finding and better health outcomes, particularly in areas with high SAM prevalence and low access to care. This service delivery model will require further exploration for scale-up.
Ekechi Okereke, Population Council Nigeria

**Addressing maternal and newborn mortality within the Nigerian healthcare system using community midwifery – Insights from a qualitative study.**

Co-authors: Ekechi Okereke-Population Council Nigeria; Bello Mohammed-World Health Organization (WHO) Nigeria

Background – Rural communities in Nigeria account for high maternal and newborn mortality rates in the country. Thus, the need for innovative models of service delivery, possibly with greater community engagement, as a strategy for addressing the existing maternal and newborn health challenge. Introducing and strengthening the community midwifery approach within the Nigerian primary healthcare system is a clear policy option. While community midwifery exists within the health system of some developed countries e.g. Australia, its potential has not been explored in the health systems of developing countries where it is likely to have a significant impact on maternal and newborn health outcomes. This study sought to assess the feasibility of using community midwifery to address maternal and newborn mortality within the Nigerian health system.

Methods – This study was undertaken in two HRH project focal States (Bauchi and Cross-River States) in Nigeria, utilizing a qualitative research design. In-depth interviews were conducted with forty-four purposively selected key informants. The qualitative data was transcribed, coded and thematically analyzed using an appropriate conceptual framework.

Findings – Some study participants were strong proponents of greater engagement with the community in healthcare service delivery and suggested the involvement of local communities in the selection of community members interested in a career as a community midwife, training such individuals and enrolling them as government employees within health training institutions as trainee community midwives. Further suggestions include ensuring community midwives return to their communities to reside in and provide maternal and newborn healthcare services upon completion of their studies. Some respondents felt that applying community midwifery at primary health care level will revitalize the health facilities, increase access to healthcare services by expanding effective delivery of maternal and newborn health services, particularly in rural communities. However, others felt that applying community midwifery at the primary healthcare level may lead to duplication of duties among the health worker cadres, possibly creating disharmony. Healthcare stakeholders in Bauchi State were however more inclined to support community midwifery as a policy option in contrast to stakeholders in Cross River State.

Conclusion – Applying community midwifery within the Nigerian health system has the potential to significantly impact on maternal and newborn health outcomes especially within rural communities. In Nigeria, Bauchi State recently adopted community midwifery into its healthcare delivery system, thereby generating a lot of interest about its impact on health outcomes within the State.
Oral Abstracts

Abimbola Olaniran, Liverpool School of Tropical Medicine

Community health workers providing maternal and newborn health care: a qualitative study of the policies and practice in Africa and Asia

Co-authors: Abimbola Ayodele Olaniran-Liverpool School of Tropical Medicine; Helen Smith-Liverpool School of Tropical Medicine; Sarah Bar Zeev-Liverpool School of Tropical Medicine; Nynke van den Broek-Liverpool School of Tropical Medicine

Introduction: Lessons learnt from the Millennium Development Goals era illustrate the impact of health workers’ shortage on the achievement of health-related development goals, especially goals relating to Maternal and Newborn Health (MNH). Evidence suggests that Community Health Workers (CHWs) can play key roles in providing MNH services. However, there is a need for better understanding of the diversity in their training duration and how this diversity influences their scope of practice in MNH care.

Methods: We conducted a qualitative multiple-case study of CHWs providing MNH services in Bangladesh, India, Kenya, Malawi and Nigeria with data drawn from a review of policy documents, 36 focus group discussions and 131 key informant interviews. Data were synthesised by thematic analysis.

Result: The study entailed a review of 24 policy documents, discussions and interviews with 40 programme staff, 35 health professionals, 162 CHWs, 124 community health committee members and 41 service recipients. CHWs with training duration shorter than 3 months were categorised as level 1 paraprofessional CHWs while CHWs with training duration longer than 3 months were categorised as level 2 paraprofessional CHWs. Irrespective of training duration, all CHWs identify pregnant women, provide health education and screen for health conditions that require a referral. Therapeutic care, skilled antenatal care, birth attendance, and provision of long-acting reversible contraceptives are within the exclusive remit of level 2 paraprofessional CHWs. In contrast, community mobilisation and patient tracking are often done by level 1 paraprofessional CHWs.

Challenges contributing to CHW policy-practice gap include pressure on CHWs to provide MNH services beyond their scope of practice during emergencies where referral is not feasible and a tendency to focus on facility-based roles at the expense of their traditional community-based roles. Some CHWs complained of a limited scope of practice due to poor supplies and occupational monopolies in which nurse-midwives prevented them from sharing certain tasks with them despite being trained to handle such tasks. They emphasised the depreciation of knowledge and skills due to a limited application.

Conclusion: CHWs are well positioned geographically and socially to deliver MNH care. There is a need to segment their scope of practice to reflect the varied durations of training. Additionally, policymakers need to address the challenges highlighted in this study to ensure that CHW policies translate to practice and respond to local health needs.
Satish Srivastava, Catholic Relief Services (CRS)

**Going Mobile for Effective Community Health System**

Co-authors: Satish Kumar Srivastava-Catholic Relief Services (CRS); Jaya Menon-Catholic Relief Services (CRS)

In India, ensuring a strong community health system is critical for achieving national targets and improved health outcomes in maternal and child health. Catholic Relief Services (CRS) partnered with state government to enhance quality in maternal and infant care by strengthening the community level of government staff known as Accredited Social Health Activists (ASHA) through the Reducing Maternal and Newborn Deaths (ReMiND) pilot project in Kaushambi district, Uttar Pradesh (UP).

The project used android mobile phones operating Dimagi’s open-source software CommCare, equipping ASHAs with multimedia job aids to support client assessment, counselling, early identification, treatment, timely referral of pregnancy, postpartum and newborn complications. Project evaluations reveal substantial improvements in coverage for home visits, frequency and quality of counselling, awareness on danger signs during pregnancy and need to access antenatal care. An independent cost effectiveness study by Postgraduate Institute of Medical Education & Research, Chandigarh found the methods used to be cost effective incurring an incremental cost of only $96 USD per Disability-Adjusted Life Years (DALY) averted.

To further strengthen supervisory support to ASHAs for effectiveness of the intervention, boost accountability, improve data usage for planning and enhancing coverage, the project employed mobile phone based supportive supervision applications for ASHA Facilitators (AFs: supervisors of ASHAs). The tool increased substantive supervisory visits, improved quality and timely reporting, promoted transparency, and enabled use of data for decision-making, collectively leading to enhanced performance of ASHAs. The piloted intervention covered 79 ASHA Facilitators supervising 1,790 ASHAs covering over 1.6 Million population. This intervention was recognized as one of the Good, Replicable Practices and Innovations in Public Healthcare Systems in India by National Health Mission, Government of India in 2017. The National Health Mission, UP is taking it to scale to cover, 523 ASHA Facilitators, 10385 ASHAs, covering 17.7 million population across 5 districts.

The project learnings demonstrate, how integrated Information, Communication and Technology (ICT) solutions can strengthen community health systems effectively. Mobile technology, has potential for enhancing capacities, thus empowering and managing large workforce like ASHAs, a total of 140,000 alone in the state of UP, to effectively deliver key maternal and child health services even to 200 million population, in highly populated state like Uttar Pradesh.
Ethiopia’s Health Extension Programme: Implications of mobile technology for strengthening community health systems

Co-authors: Rosalind Joanna Steege-Liverpool School of Tropical Medicine; Aschenaki Zerihun Kea-REACH Ethiopia; Miriam Taegtmeyer -Liverpool School of Tropical Medicine; Daniel Gemechu Datiko-REACH Ethiopia; Sally Theobald-Liverpool School of Tropical Medicine

Ethiopia’s health extension programme is a well-regarded community health model. Female community health workers, called health extension workers (HEWs) are the backbone of the programme, building community health systems through linking communities and health systems. Mobile health technology (m-health) is one tool with potential to support health system strengthening at the community level and beyond. We piloted an m-health intervention with HEWs in Southern Ethiopia to improve reporting for the priority areas of maternal health and Tuberculosis. We set out to understand whether the technology supported this cadre and to elucidate any unintended consequences of the technology.

We employed qualitative methods to understand the experiences of the HEWs following the introduction of m-health technology, using a gender lens. We conducted nineteen in-depth interviews and eight focus group discussions with HEWs, HEW supervisors and community leaders purposively selected from four districts with variation in geographic location and performance. Interviews were recorded, transcribed and translated. Iterative thematic analyses were used to synthesise findings.

HEWs negotiate a complex range of relationships and power dynamics and mobile technology impacts these relationships at various levels. At the organisational level tensions emerged between HEWs – although mobiles were meant to be shared at health posts, the reality was that the senior HEW took possession of the mobile and had more opportunity to upgrade her skills; relationships with supervisors were improved – supervisors felt more accountable to communities, data quality increased and they worked together to help overcome issues of signal failure. At the community level the introduction of the mobile phone brought increased respect from community members, but with that, more expectation. At the individual level HEWs felt they had an opportunity to gain new skills, increasing their confidence but structural barriers prevented gender transformation of this cadre who have limited opportunities for career progression. Additionally, as paper-based reporting was still a necessity some HEWs felt their work burden had increased. The cost of airtime and replacement phones in the case of loss or theft also placed unjust financial burdens on this cadre with limited socio-economic means.

HEWs face large workloads and we need to ensure that technology supports them in responding to community health needs, rather than brings new burdens. Understanding how new technologies play out for HEWs within the health system is critical to support empowerment goals for this all-female cadre and promote successful scale-up of technologies that can strengthen health information systems.
Evolution of village-based health systems in Ethiopia: lessons for progressing towards SDGs in low and middle income countries?

Background: Although the Ethiopian Health Extension Workers and Health Development Army (community volunteers) have attracted much interest, little is known about what made these initiatives possible and how these evolved over time.

Objective: To explore the development of the community health system in Ethiopia through a historical lens, drawing on path-dependency theory, identifying critical decisions that shaped the current programmes.

Methods: A systematic review using PUBMED, Ethiopian repositories, EMBASE, ProQuest dissertations and theses and Google Scholar, with hand search of national and university libraries to describe evolution of the programmes over 5 decades, identifying triggers for change and their influence on subsequent policy. Relevant information was extracted and analysed narratively.

Results: The quest to develop health services at village level started in the 1950s, with construction of health facilities and training of male village health workers. Peripheral health stations were built by villagers and served as satellites for health centres. Challenges included high expectations of communities for injectable medicaments/clinical service, weak supervision, and supply problems with sanitary and clinical equipment. This initial attempt was discontinued but resurrected with the PHC movement. As a signatory to the Alma Ata declaration, in 1978 Ethiopia crafted a health plan involving community health agents (CHAs) on a greater scale than before. They were joined by traditional birth attendants (TBAs), with the target of one CHA trained TBA per 200 households. However, this initiative failed, with of lack of engagement with communities on selection of CHAs and TBAs, inadequate technical supervision, insufficient remuneration and continued education, lack of sustained community support, and inadequate inter-sectoral collaboration. The changed political situation in 1991 devolved management to regions and introduced concrete guidelines on establishment of community health systems: the Accelerated Expansion of Primary Health Care Services. The target was to train and deploy more than 24,000 health extension workers (HEWs) with over 13,000 health posts built over 5 years to implement the health extension program in all 15,000 kebeles in the country. This institutionalized the village health system with health extension workers (salaried community health workers) at the village health post. Currently there are 38,000 HEWs and 16,440 health posts. Since 2010/11 volunteer community workers (the Women Health Development Army) have started supporting HEWs, building on a history of health volunteerism.

Conclusion: Implementation of community health services in Ethiopia has survived many setbacks. A careful historical examination coupled with attention to local context can inform contemporary policies.
Intégration des soins de santé mentale en appui au système de santé au Rwanda

Contexte
La majorité des personnes souffrant de problèmes de santé mentale vivent dans les pays en développement où jusqu’à 90% de ces personnes ne bénéficient pas de soins adéquats. Parmi les raisons le sous-financement, le stigma, l’absence de politiques adéquates et les défis posés par l’intégration des soins de santé mentale.

Au Rwanda la santé mentale est considérée comme un domaine d’intervention prioritaire. Les nouveaux défis apparus dans la période post-génocide de 1994 ont conduit au développement d’une politique nationale de santé mentale visant à fournir des soins de santé mentale globaux et intégrés, au plus proche de la communauté.

But, Méthodes
Présenter les bonnes pratiques ayant facilité la décentralisation et l’intégration des soins de santé mentale dans les soins primaires, les progrès, les leçons apprises et les défis. Il s’agit aussi de montrer comment les stratégies engagées sont envisagées dans la perspective de renforcement du système de santé et de la durabilité.

Les principales mesures engagées comprenaient la formation des infirmiers(ères) et des médecins généralistes à faire face aux troubles mentaux communs; recruter des infirmiers(ères) psychiatriques et des psychologues dans les hôpitaux de district pour fournir des soins de santé mentale ; assurer la supervision et assurer la disponibilité de médicaments psychotropes essentiels dans les soins primaires; intégrer les indicateurs de santé mentale dans les systèmes de suivi et d’évaluation du système de santé ainsi que l’introduction des soins de santé mentale dans le système de couverture santé universelle

Les résultats
Les services de santé mentale sont décentralisés et effectifs à travers le pays. Chaque hôpital de district renferme une unité de santé mentale qui fournit un paquet complet de soins de santé mentale. Des infirmiers(ères) généralistes travaillant dans des centres de santé et des agents de santé communautaires ont été formés pour assurer une composante intégrée de soins de santé mentale dans les centres de santé et au niveau communautaire. Les éléments suivants ont contribué positivement à la décentralisation et à l’intégration de la santé mentale dans les soins primaires: une politique nationale de santé mentale et un plan stratégique; la création d’une division de la santé mentale au sein du Ministère de la santé pour diriger l’intégration; l’intégration des soins de santé mentale dans le système de couverture santé universelle.

Conclusion
La formation et l’implication des professionnels de santé généralistes et des non professionnels permettent d’augmenter l’accessibilité et de renforcer le système de santé et la durabilité
Co-production of a recovery tool for people with psycho-social disability in India informed using participatory action research – a qualitative study of process and product

Co-authors: Kaaren Mathias-Emmanuel Hospital Association; Pooja Pillai-Emmanuel Hospital Association; Rakhal Gaitonde-Department of Global health and epidemiology, Universitet Umea; Kakul Shelly-Emmanuel Hospital Association; Sumeet Jain-University of Edinburgh

Background

Mental ill health is recognised as a leading cause of disability and has seen increased allocations of resources and services globally. There is growing call for solutions supporting global mental health and related recovery frameworks to be locally relevant and built on knowledge and skills of people with mental health problems, particularly in low and middle income countries. Set in Dehradun district, North India this study aimed to describe firstly, the process of co-production of a visual tool to support recovery for people affected by psycho-social disability; secondly, the key outputs developed; thirdly, critical reflection on the process and outputs.

Methods

Data collection and analysis used participatory action research with team of action researchers and an eight-member experts by experience (EBE) group of community members. Domains were generated through workshops, participatory methods and in-depth interviews and were analysed using a validated co-productive six step process.

Findings

The team generated eight domains for recovery under three meta-domains of normalcy, belonging and contributing and the ensuing recovery tool titled swasthya labh saadhan (recovery tool for health) developed pictures of activities for each domain. Three key ways that a PPSD and their household engages with the domains emerged as recovery being achieved through activity, recovery is supported by the physical environment and is supported by economic and social resources.

Discussion

The process was less participatory and emancipatory than hoped due to emerging skills by researcher and EBE groups, insufficient concurrent critical reflection on power relationships and imposed timelines. Findings underline the important contribution of an EBE group demonstrating their sophisticated and locally valid constructions of recovery and the need for honest and critically reflective process in all co-productive initiatives. This study generated local conversations around recovery that helped knowledge flow from bottom-to-top and proposes that the grass-root experiences of participants in a disadvantaged environment are needed for meaningful policy which must address social as well as medical responses.

Conclusions

Mental health programmes should prioritise involving people with lived experience of mental health difficulties in designing mental health programmes and policies, and use a critically reflective process to ensure that it is participatory. Training lay and professional health workers to work in co-productive and participatory ways will enhance trust with communities, and provide avenues to improve mental health care delivery.

Please note that we are happy to present this paper in either multi-media format or in an oral presentation.
Is people-centred mental health care acceptable and feasible in low-resource settings: a case study of Timor-Leste

Co-authors: Teresa Hall-Melbourne School of Population and Global Health, University of Melbourne; Ritsuko Kakuma-London School of Hygiene and Tropical Medicine; Michelle Kermode-Melbourne School of Population and Global Health, University of Melbourne; Lisa Palmer-School of Geography, University of Melbourne; Harry Minas-Melbourne School of Population and Global Health, University of Melbourne

Background/Aim: Internationally, there is a shift towards people-centred health care. In people-centred health care (PCHC), health service users, families and communities are active participants in designing, planning, delivering, monitoring and evaluating the health system – “nothing about us without us” (1, 2). People with mental illness remain one of the most socially-disadvantaged and least-serviced groups of health service users in all countries (3, 4). The challenge of constructing people-centred mental health care systems in low- and middle-income countries (LMICs) is exemplified in Timor-Leste, a post-conflict country in South-East Asia, where mental health remains a low priority in a landscape of communicable disease-related mortality and morbidity, human resource shortages in general health, and low public expenditure for basic infrastructure. In this context, this study explored how acceptable (cultural context) and feasible (LMIC constraints) it is for Timor-Leste to strive to develop a people-centred mental health system.

Methods: Seventy-three individual (n = 60) and group (n = 13) qualitative interviews were conducted with 82 actors in contact with the national, district and sub-district levels of the mental health system in Timor-Leste. The following five groups were sampled over an eleven-month period: (1) people with mental illness and their families; (2) mental health or social support service providers; (3) government decision makers; (4) civil society; and (5) other community members or organisations such as multilateral organisations and international development partners. Framework analysis was used to analyse individual interviews and social network analysis was used to measure intersectoral collaboration.

Results/Discussion: Preliminary results suggest that treatment for mental illness in Timor-Leste is largely biomedical and the side effects of the old age psychiatric medications available in the country (i.e drowsiness, motor deficits, memory loss) complicate social participation. Collectivist cultural norms mean that the unit of decision making is the family not the individual. Consequently, the idea that people with mental illness would be involved in decision making at a high level was unacceptable to most participants. Nonetheless, the strong focus on human rights within civil society in Timor-Leste, particularly by organisations within the disability sector, can be seen to set the mindset for participatory action by the beneficiaries of social policy. In addition, the health and social sectors have established intersectoral mechanisms for providing mental health care. As such, Timor-Leste provides important learnings for the concept of people-centred in other LMICs in terms of participatory health governance, treatment decision making processes and intersectoral collaboration.
Bronwyn Myers, South African Medical Research Council

**Mental health counselling in primary care facilities within a low- and middle-income country: A qualitative comparative analysis of implementation capability**

Co-authors: Bronwyn Myers-South African Medical Research Council; Crick Lund-University of Cape Town; Erica Breuer-University of Cape Town; Carrie Brooke-Sumner-South African Medical Research Council; Tracey Naledi-Western Cape Department of Health; Dan Stein-University of Cape Town; Katherine Sorsdahl-University of Cape Town

**Background:** Integration of counselling into primary health care (PHC) facilities may reduce the mental health treatment gap in low- and middle-income countries (LMIC) but PHC facilities’ readiness to implement counselling is unknown. This study is among the first to examine factors associated with capability for implementing mental health counselling in a LMIC. **Methods:** We used qualitative comparative analysis (QCA), a method for quantitatively analysing qualitative data, to identify pathways for enhancing mental health implementation capability in PHC facilities in the Western Cape, South Africa. Three observers conducted 286 hours of observation at 26 PHC facilities. The facility environment, provider-provider interactions, provider-patient interactions, service organisation, and resources were observed. Facilities were categorised according to the extent of implementation capability they portrayed (defined as level of support required to be able to implement counselling). Data were analysed qualitatively to identify potential explanatory variables for implementation capability. QCA was used to identify necessary and sufficient conditions for good implementation capability.

**Results:** There was considerable variation in the mental health implementation capability of these facilities. QCA showed that the availability of person-centred care (consistency 0.96, coverage 0.84), a therapeutic environment (consistency 0.94, coverage 0.79), and sufficient human resources (consistency 0.91, coverage 0.76) were necessary conditions for good implementation capability. Three pathways sufficient to support counselling implementation were identified. Each pathway included the availability of confidential space (infrastructure) in combination with one or more aspects of a functioning facility (good management, organised services or patient information resources).

**Conclusions:** This study is among the first to use QCA to examine the mental health implementation capability of PHC facilities in a LMIC. Findings underscore the importance of assessing implementation capability prior to counselling implementation. This study suggests that multi-modal interventions that ensure person-centred care, a therapeutic environment, and adequate human resources in combination with appropriate infrastructure and functioning facilities could enhance mental health implementation capability. Interventions that focus solely on human or infrastructural resource barriers without addressing these other elements are unlikely to be successful.
Gina Teddy, Ghana Institute of Management and Public Administration

Promoting Quality Access to Mental Health Care Services using community structures such as Traditional Mental Health Centers in Ghana

Co-authors: Gina Teddy-Ghana Institute of Management and Public Administration; Wendy Abbey-Human Rights Advocacy Centre, Accra; George Owoo-Human Rights Advocacy Centre

Ghana like many developing countries is recognized for making significant strides at the end of the Millennium Development Goals. Yet, very little was achieved in mental health, improved access and quality of care leading to inequity, inaccessibility and social exclusion for those in desperate need of mental health services. It is estimated that 2.8 million people live with mental disability in Ghana, yet less than 2% access mental health services. The systematic challenges in providing mental health services cuts across the country leading to treatment gap of about 98%.

The Traditional Mental Health Centres (TMHC) are community systems that complements formal mental health services. Yet, there is a general lack of awareness and understanding of the practices, services, management, regulations, rights and responsibilities of TMHCs in Ghana. This study explores the role of TMHCs in providing mental health services, quality of care, while generating an understanding of their practices, regulations and adherence to quality standards.

Using an exploratory approach, this study is being conducted across all regions in Ghana using both qualitative and quantitative methods to solicit for primary and secondary information from communities and TMHCs while advocating on mental health improvements at the community levels.

The study revealed extraordinary barriers to accessing mental health services in Ghana leading to inequality and social exclusion of people living mental disability from basic health services attributed to lack of services and socio-cultural factors. Preliminary findings revealed the significant role of TMHCs in complementing formal mental health services in Ghana. TMHCs deals with the perceived spiritual and physical causation of mental disability led by the prayer camps, traditional healers, herbalists and spiritual treatments centres. Yet, there was little or no regulations for their functions, practices, services and quality of care leading to widespread convictions of abuses and mistreatment of people with mental disability seeking the services of TMHCs.

This study concludes by advocating for a multi-sectoral approach by communities, researchers, NGOs and the Mental Health Authority to standardize, regulate, develop and improve the work of TMHCs in Ghana. We emphasis improving access and quality of care to make TMHCs responsive in providing dignifying mental health services to clients. Policy lesson from this study will inform knowledge, practices, regulation and policies guiding the practices of TMHCs across communities in Ghana to create a vibrant community health system.
Oral Abstracts

Michalina Drejza, World Health Organization, Department of Reproductive Health and Research

**Conceptualizing user-initiated interventions for sexual and reproductive health: rights to increase health coverage**

Co-authors: Michalina Anna Drejza-World Health Organization, Department of Reproductive Health and Research; Manjulaa Narasimhan-World Health Organization, Department of Reproductive Health and Research

User-initiated interventions (UII) are health interventions that are accessible to users and provide choice and opportunities for clients to control aspects of their health and health care. UII covers diagnostics, screening, prevention and illness management tools and interventions. In sexual and reproductive health, these include, but are not limited to: self-injection of contraceptives, self-testing for pregnancy and Sexually Transmitted Infections (STIs), self-medication for abortion and HIV and self-monitoring for fertility and menstrual cycle observation. UII requires that people are empowered – through education and support – to take and enact decisions in relation to their sexuality, reproduction and overall health and well-being. Approaches that facilitate user autonomy and peer support have the potential to advance sexual and reproductive health and rights (SRHR) through strategies that promote participation of individuals in their health care and recognising the strengths of individuals as active agents in their health, and not merely passive recipients of healthcare services.

However there is a need to better understand the quality of care, interventions and products as well as accountability of the health sector regarding user-initiated interventions for sexual and reproductive health and rights. This is particularly important when it comes to vulnerable, marginalized and socio-economically underprivileged populations given that evidence has shown they have the poorest health outcomes globally. It is therefore essential to explore through an intersectional lens the key principles that can create new ways of service delivery, financing and governance models for vulnerable populations.

Through a broad, consultative process, the UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme on Human Reproduction (HRP) have developed a conceptual overarching framework on ethical, human rights, legal and social accountability considerations regarding UII for SRHR. This framework is supported by evidence based examples of best practices that improve health and well-being, and can support countries to facilitate person-centered care through a life-course approach.
Leaving no one behind: health systems exclusion of women with obstetric fistula in Kenya a threat to the SDG 3 attainment

Co-authors: Anne Majuma Khisa - African Population and Health Research Centre

Background: Obstetric fistula is an illness that causes physical and mental illness and social isolation to the women who endure it. The resultant ostracism exclude women from economic development, including disrupted education and lack of economic activities which require both public participation and physical strength. Thus, a woman with obstetric fistula is left behind on many fronts; first in the social sphere, second in attaining optimal health and wellbeing and third in economic empowerment, all which are key areas in the SDGs. Based on qualitative research data from a PhD research project, the overarching question answered in this paper is: what is the healing process of women with obstetric fistula and related health system gaps?

Methods: Grounded theory methodology was used to follow up 121 patients from three hospitals over a 19-month period to establish individual, health system and contextual factors that aided or hindered their healing and reintegration to society.

Results & Discussion: The greatest contributor to fistula patients being left behind is a health system that makes it impossible for women to be included in development. First by lack of emergency and essential obstetric care contributes to women developing obstetric fistula illness during childbirth. Second, the existent health system is unable to cater for the treatment needs of women who suffer from obstetric fistula, thus, their illness takes on a chronic disease trajectory with multiple but unsuccessful attempts at treatment. In addition, after surgery, their treatment needs are not met holistically, leaving them to live as though they still suffer the illness. Because of the gendered nature of this women’s reproductive health condition, women suffering from fistula are neglected, marginalised and excluded from the right to well-being, both in obtaining expert care and in the financing of their care. The current care gap filled by NGOs is not enough and more needs to be done to afford women with fistula universal healthcare, including quality maternity care to prevent fistula and treatment for those who have the disease. I present a conceptual model of reintegrating fistula patients.

Conclusion: There is need for better engagement between health service delivery systems and the women suffering fistula beyond the current patchwork dysfunctional system between NGOs, public and private sectors. A re-examination of the health system to cater for the needs of fistula patients is urgently needed.

Keywords: Obstetric fistula, Africa, Health systems, SDG
Oral Abstracts

Muriel Mac-Seing, CRCHUM, IRSPUM and University of Montreal

Invisible populations still left behind: A systematic review on legislation, policy and utilisation of sexual and reproductive health services by vulnerable populations in sub-Saharan Africa

Co-authors: Muriel Mac-Seing-CRCHUM, IRSPUM and University of Montreal; Charity Omenka-CRCHUM and University of Montreal; Kate Zinszer-IRSPUM and University of Montreal; Christina Zarowsky-CRCHUM and University of Montreal

Background: The Sustainable Development Goals (SDG) unanimously adopted in 2015 by the international community aims at “leaving no one behind” by including all populations in development processes, irrespective of sex, age, disability, geographic location, education, wealth, etc. In particular, the SDG 3 on Health promotes universal health coverage in sexual and reproductive health in regions where disparities among populations are still high. To contribute to future interventions, we examined the relationships between pro-equity legislation and policy, and the utilisation of sexual and reproductive health services by vulnerable populations in sub-Saharan Africa.

Methods: We searched CINAHL, EBM Cochrane, Embase, Global Health, Medline, Scopus, Web of Science, Popline and Proquest Dissertations and Theses Global for relevant original qualitative, quantitative and mixed methods studies according to a priori criteria, conducted and published in English and French between 1994 and 2017. Analysis is ongoing.

Results: Among 4,759 initial citations, 49 references were selected, of which three, nine and 37 are mixed methods, qualitative and quantitative studies, respectively. Most research examined user fee exemption policies in maternal health services, while others explored the effects of abortion laws on the uptake of induced abortion and family planning in various sub-Saharan African countries. A few studies examined the utilisation of HIV related services. Initial results suggest that all wealth quintile groups are benefiting from these measures, however there is a gradient of inequities based on place of residence (urban/rural), education, religion, ethnicity and region. In several studies, the poorest benefited the least from the implementation of pro-equity legislation and policy on sexual and reproductive health. Other studies reported budgetary constraints and operational dysfunctions in health systems as potential factors for various degrees of speed and quality in implementation of legislation and policy.

Discussion/conclusion: In spite of the well-intentioned policy and legislative pieces which promote sexual and reproductive health rights and services among vulnerable populations, certain marginalised groups are still excluded and discriminated against. Sub-Saharan Africa is home to the majority of people living with HIV and people with disabilities. Yet their absence in these initial findings is striking. The study of the intersection of law, policy and health services utilisation must go beyond removing structural and financial barriers, and urgently address both social health determinants at population level and health system factors concomitantly, for optimal and effective implementation of sexual and reproductive health legislation and policy for all.
Oral Abstracts

Takondwa Mwase, Abt Associates Inc

Understanding inequities and their determinants in a quest for Universal Maternal Health Coverage in sub-Saharan Africa: The case of Burkina Faso

Co-authors: Takondwa Lucious Mwase-Abt Associates Inc; Stephan Brenner-Heidelberg university; Jacob Mazalale-University of Malawi; Julia Lohmann-Heidelberg University; Saidou Hamadou-World Bank; Serge Somda-Centre MURAZ ; Valery Ridde-University of Montreal Hospital Research Centre; Manuela De Allegri-Heidelberg University

Background: The poor and marginalized segments of society often display the worst health status due to limited access to health enhancing interventions. As such, in order to enhance the health status of entire populations, inequities in access to health care services need to be addressed as an inherent element of any effort targeting achievement of Universal Health Coverage. In line with this observation and the need to generate evidence on the equity status quo in sub-Saharan Africa, we assessed the magnitude of the inequities and their determinants in coverage of maternal health services in Burkina Faso.

Methods: We assessed coverage for three basic maternal care services (at least four antenatal care visits, facility-based delivery, and at least one postnatal care visit) using data from a cross-sectional household survey including a total of 6,655 women who had completed a pregnancy in the 24 months before the survey date. We assessed equity along the dimensions of household wealth, literacy and distance to the health facility, using both simple comparative measures and concentration indices. We also ran hierarchical random effects regression to confirm the presence or absence of inequities due to household wealth, literacy and distance, while controlling for potential confounders.

Results: We found inequities along the dimensions of household wealth, literacy and distance. Service coverage was higher among the least poor, those who were literate, and those living near to a health facility. We found a significant positive association between household wealth and all the three outcome variables, and a positive association between literacy and facility-based delivery. We found a negative association between living farther away from the catchment facility and all the three outcome variables.

Conclusion: Existing inequities in maternal health services in Burkina Faso are likely going to jeopardize the achievement of Universal Health Coverage. It is important that policy makers continue to strengthen and monitor the implementation of strategies that promote proportionate universalism, bottom-up, co-design approaches such as community-based participatory research and forge multi-sectoral approach in dealing with social determinants of inequities in maternal health services utilization.
Lorretta Favour Ntoimo, Federal University Oye-Ekiti, Nigeria & Women’s Health and Action Research Centre, Benin City, Nigeria

**Why Women do not use Primary Health Centres for Skilled Pregnancy Care in Rural Nigeria: Evidence from a Mixed Method Study**

Co-authors: Lorretta Favour Chizomam Ntoimo-Federal University Oye-Ekiti, Nigeria & Women’s Health and Action Research Centre, Benin City, Nigeria; Friday E. Okonofua-Women's Health and Action Research Centre, Benin City, Nigeria; Seun S. Anjorin-Women's Health and Action Research Centre, Benin City, Nigeria; Wilson Imongan-Women's Health and Action Research Centre, Benin City, Nigeria; Sanni Yaya-University of Ottawa, Canada

**Background**

While Primary Health Care (PHC) has been designed to provide universal access to skilled pregnancy care for the prevention of maternal deaths in Nigeria, available evidence suggests that women in rural communities often do not use PHCs for skilled care. The objective of this study was to investigate the reasons why women do not use PHCs, in order to elicit evidence for interventions to increase women’s access to skilled pregnancy care provided in primary health centres.

**Methods**

The data for this paper was obtained from a mixed method baseline research conducted in two rural Local Government Areas (LGAs) in Edo State, South-South Nigeria. Data were collected through 20 focus group discussions (FGDs) with men and women, and household survey with 1408 women of reproductive age. The group discussions were tape recorded, transcribed, coded with Atlas.ti and content-analyzed for themes. The quantitative data were analyzed with univariate, bivariate and multivariate statistics.

**Results**

Results showed that fewer than 47% of pregnant women delivered in PHCs, while 25% delivered at home, even when PHC facilities were available. Results of logistic regression revealed that level of autonomy; education, religion, and parity were significant predictors of utilization of PHC for maternal healthcare. Three broad categories of reasons for non-use of PHCs were identified from the FGDs: 1) accessibility factors – poor roads, difficulty with transportation, and long distances to PHC facilities; 2) perceptions relating to poor quality of care in PHCs, including inadequate drugs and consumables, abusive care by health providers, providers not in sufficient numbers and not always available in the facilities, long waiting times, and inappropriate referrals; and 3) high costs of services, which include the inability to pay for services even when costs are not excessive, and the introduction of informal payments by staff.

**Conclusion**

The results of this study have implications for health systems reforms for the prevention of maternal mortality in Nigeria. We conclude that addressing these factors through adequate staffing, training of staff in PHCs, innovative community-driven methods of transportation to PHCs, local contributory fund, and community health education are critical in efforts to improve women’s access to skilled pregnancy care and the number of maternal deaths in the country.
“It is just me”: Involvement of mothers in the care of sick newborns in neonatal units in Nairobi, Kenya.

Co-authors: Dorothy Oluoch-KEMRI-Wellcome Trust Research Programme; Lisa Hinton-Department of primary health care, Health Experiences Research Group, University of Oxford; Grace Irimu-University of Nairobi; Truphena Onyango-KEMRI-Wellcome Trust Research Programme; Mike English-Nuffield Department of Clinical Medicine, Centre for Tropical Medicine, University of Oxford. KEMRI-Wellcome Trust Research Programme.; Caroline Jones-Nuffield Department of Clinical Medicine, Centre for Tropical Medicine, University of Oxford. KEMRI-Wellcome Trust Research Programme.

Background: Over recent years there has been increasing interest in Family Centred Care (FCC) as a strategy for improving care in hospital neonatal units in High Income Countries (HICs). FCC aims to involve families in care decisions and enhance maternal-infant bonding and attachment, a process beneficial for the mother-infant dyad. Few studies have been undertaken in neonatal care units in Low and Middle-income countries (LMICs) and the current involvement of mothers in caring for their hospitalised sick newborns is poorly understood. The objective of this study was to explore the involvement and experiences of mothers in the care of hospitalised sick newborns in Kenya in order to identify potential avenues for improving care provision.

Methods: Over six months from April-October 2017, we conducted 385 hours of non-participant observations in the inpatient newborn units of one mission and one public hospital in Nairobi; undertook 26 discharge in-depth interviews with mothers and conducted 7 narrative interviews with mothers 2-6 weeks post discharge. Interviews were conducted in both English and in Kiswahili. The interviews were transcribed verbatim and analysed using a grounded approach.

Results: In both hospitals, mothers played an important role in providing ‘nursing’ care (including feeding and bathing) for their sick newborns but were rarely included in medical decision-making. The mothers in the public hospital became involved in the process of providing care almost immediately at admission with very little instruction or supervision from healthcare providers. In the mission hospital, involvement of mothers in care was delayed and followed a more formal process, with greater supervision by healthcare providers. In the public hospital, mothers drew support for their roles mainly from other mothers while in the mission hospital, the mothers received support primarily from healthcare providers.

Discussion/Conclusion: FCC is being adopted as a strategy for improving neonatal care in HICs. In Kenya there is no FCC strategy, but the practical reality is that mothers provide a huge amount of care for their sick babies with little guidance or supervision from healthcare providers. This together with poor communication with clinical staff and little involvement in clinical decision-making creates significant worry for mothers, particularly in the early stages of admission. However, it enhances a sense of self-efficacy at the point of discharge. Such insights into mothers’ experiences of the daily realities of inpatient sick newborn care can be used to inform locally appropriate strategies to improve the quality of neonatal care.
Oral Abstracts

Stella TINÉ, École de Santé Publique, Université de Montréal

Access to First-line Sexual and Reproductive Healthcare among Illegal Immigrants in High-Income Countries: A Literature Review

Co-authors: Stella TINÉ - École de Santé Publique, Université de Montréal; Christina Zarowsky - École de Santé Publique, Université de Montréal

Background: Increasingly, irregular immigration is one of the main concerns of governments in European and North American countries. Despite growing pressure from international organization for universal health coverage for all, the conditions for illegal immigrants to access health services depend on the national policy framework in each country. This study identifies and describes the existing literature on Access of Illegal Immigrants to Sexual and Reproductive Health (SRH) Services in High-Income Countries and aims to develop evidence-based policy responses to strengthen health systems, communities and legislative frameworks that support illegal immigrants.

Method: Articles documenting the access of illegal immigrants to sexual and reproductive health services within the health systems of industrialized countries in particular, the countries of the European Union, the United States and Canada were sought in the following electronic data base, PubMed, Medline, EMBASE, Global health, CINAHL, Google Scholar. On the 904 articles identified, 115 articles published in English and French, between 2007 and 2018, were selected and evaluated according to the framework of Arksey and O’Malley to explore the existing literature.

Results: In all the countries of the European Union and North America identified, sexual and reproductive health policies are not designed for all and vary depending on the context. Several countries such as Canada, the USA and England prohibit access to healthcare for illegal immigrants, including emergency care, while others such as France, Germany, Sweden and the Netherlands provide free emergency health care, as well as prenatal care for pregnant women. Germany and Sweden also offer free HIV tests services. In Sweden, ARV treatment is free for the illegal immigrants.

Conclusion: Illegal immigrants’ access to SRH is based on contextual, economic and political factors. In most industrialized countries, their access to care is determined by their ability to pay for health services. Our findings have implications for public health. It highlights the fact that global health governance system has very little influence on countries’ internal health policies. This study helps to better understand the relationship between context, the health system and the health status of undocumented migrants and could provide a glimpse of how restrictive policies could be reconsidered to integrate illegal immigrants into sexual and reproductive health policies in each country. Also, countries could learn from each others’ experiences.
Rachel Yorlets, Harvard Program in Global Surgery and Social Change

Assessing social determinants of health-seeking behavior for delivery among pregnant women in Malawi: A latent class analysis


Background In the era of the Sustainable Development Goals, reducing maternal and neonatal mortality is a priority. With one of the highest maternal mortality ratios in the world, Malawi provides a significant opportunity for improvement. One effort to improve maternal outcomes involves increasing access to high-quality health facilities for delivery. This study aimed to determine the role that quality plays in women’s choice of facility for delivery. This analysis was conducted as part of the Lancet Global Health Commission on High Quality Health Systems in the SDG Era.

Methods A revealed-preference latent class analysis was performed with data from 6625 facility births among women in Malawi from 2013 to 2014, utilizing data from the 2014 Malawi Millennium Development Goal Endline Survey and the Malawi Service Provision Assessment. Responses were weighted for national representativeness, and model structure and class number were chosen using the Bayesian information criterion.

Results Two classes of preferences exist for pregnant women in Malawi. Most of the population (65·9%, 95% CI: 65·6–66·2%) prefer closer facilities that do not charge fees. The remaining third of the population (34·1%, 33·8–34·4%) prefers central hospitals, facilities with higher basic obstetric readiness scores, and locations that are further away from their home. Women in this class are statistically significantly more likely to be older, literate, educated, and wealthier than the majority of the women.

Discussion For only one-third of pregnant Malawian women, primarily those who are in the highest wealth quintile, older, and literate, the quality of care as measured by basic obstetric readiness score, factored into their choice of facility for delivery. Most women instead prioritize closer and care without fees. Interventions designed to increase access to high-quality care in Malawi will need to take education, distance, fees, and facility type into account, as quality alone is not predictive of facility type selection in this population.
Chandrakant Lahariya, World Health Organization Country office for India, New Delhi, India

Adopt ‘institutional approach’ to optimize private sector engagement for advancing universal health coverage in India

Co-authors: Chandrakant Lahariya-World Health Organization Country office for India, New Delhi, India; A Venkat Raman-Faculty of Management Studies, University of Delhi, New Delhi, India; Hilde De Graeve-World Health Organization Country office for India, New Delhi, India

Background: Private sector provides nearly 80% of hospitalization and 60% of out-patient health services in India. However, the role and engagement proposed for the private sector in government health policies, is often limited. Though, the potential of private sector engagement (PSE) is increasingly being recognized in the context of universal health coverage, deliberations are mostly ideologically influenced because of the lack of evidence. This study was conducted to document and identify key learnings of past and current public private partnerships (PPP) initiatives at national and state levels.

Methods: An empirical study design with desk review of published and unpublished data and reports on PPP/PSE policies, legislations, guidelines, followed by field visits to 13 states and union territories in India. In addition, in-depth interviews with 50 senior level policy makers, both union and state levels were held. The desk review, field work and analysis was done between May 2016 to Jan 2017.

Results: Nearly 250 PPP/PSE, from all states and union territories (UTs) of India, were included in the analysis. Institutional mechanisms such as health sector specific PPP policy, and/or PPP units/cells in health department were reported in 8/36 states/UTs. State level PPP policy and/or legislation (for any sector, not restricted to health) were available in around half of Indian states & UTs. The lack of capacity to administer PPP/PSE arrangements was reported as the most common challenge in administration of PPP/PSE. The process for inviting tenders was time consuming and tedious. The time-span of contractual arrangements was either too short (9-11 months) or too long (7 to 10 years), making it difficult to measure effectiveness and impact of such partnerships. An explicit and long term political and administrative commitment to PPP or PSE is a challenge in most states and union territories of India. Limited expertise in designing, implementation and monitoring of the projects was found to be a major limitation. The trust deficit; of varying degree, between two sides, contributes to delayed payments or reimbursement, sometimes lasting for years, which further weakens the foundation of such partnerships.

Discussion/conclusions: PPP in the health sector in India require a shift from ‘ad-hoc’ to an ‘institutional approach’. This is possible by formulating and adopting state specific PPP policies; setting up adequate legal frameworks; developing guidelines and building technical and managerial capacity of health officials.
Freddie Ssengooba, Makerere University School of Public Health

**Governing Public-Private Partnerships to advance UHC objectives: Experiences from Government-Private Not-for-Profit contractual relationships in Uganda**

Co-authors: Freddie Ssengooba-Makerere University School of Public Health; Aloysius Ssennyonjo-Makerere University School of Public Health; Justine Namakula-Makerere University School of Public Health; Ronald Kasyaba-Uganda Catholic Medical Bureau; Sam Orach-Uganda Catholic Medical Bureau

Background: Government – Private not for Profit (PNFP) relations are vital to advance Universal Health coverage (UHC) in developing countries but face major capacity challenges such as “buy or make” decisions and capacity for relational governance systems to support mutual objectives. This study examines how Government-PNFP contractual relationships can be governed to advance UHC objectives.

Methods: This study was part of Multi-country studies commissioned by Alliance for Health Policy and Systems Research /WHO. The Case study about Uganda Catholic Medical Bureau-Government relationship to support health sector development/investment plans over time. Methods included; document review, secondary data extraction and 39 key informant interviews with actors at, district, facility and national level. The study utilized Principal-agency theory, New institutional economics and path dependence to explore evolutions and dynamics in the contractual relationships between government and PNFP over time.

Key findings: The relationship between government and PNFPs was built on pro-poor commitment of the PNFP sub-sector especially evidenced by PNFP presence in rural facilities. This led to privileged position of PNFPs in health governance structures and processes providing opportunities for PNFPs to contribute directly to policy development and implementation processes. The dilemma of performance specification and monitoring and the conflict between PNFP autonomy and co-option by Government are key issues in principal-agency relationship. Mistrust over subsidies and costs were prevalent: Government officials questioned why government should subsidize the PNFP sub-sector yet it continues to charge fees for their services, yet they receive government subsidies and substantial financial and material support from charitable organizations and external aid agencies. The basis for the actual cost of services in PNFP was not transparently determined. Weak financial management systems among PNFP facilities were considered a major challenge in the past but have now improved. The PNFPs made internal efforts to improve capacity including training the teams and streamline internal expectations of employees. The Ministry was also perceived to have weak capacity to meet its obligations in the partnership.

Conclusions: Government of Public Private Partnerships (PPPs) has political economy issues which can be complicated by information inadequacy. Trust and suspicions need to be managed by closer engagement of parties involved in the partnership. Clarification of expectations of partners as has been practiced under Results-based financing (RBF) schemes piloted across the country can enable improvement of the principal-agency relationship.
Strengthening Health Facility Regulation for Patient Safety: Front line staffs' perceptions of Kenya's regulatory reforms

Co-authors: Eric Tama - Strathmore University; Francis Wafuła - Strathmore University; Catherine Goodman - London School of Hygiene and Tropical Medicine; Irene Khayoni - Strathmore University; Gilbert Kokwaro - Strathmore University; Njeri Mwaura - The World Bank Group

Background

Health systems in low and middle income countries (LMIC) are increasingly pluralistic, involving a wide mix of public, not-for-profit and for-profit providers. Regulation should be a key foundation of the Government’s stewardship role of these heterogeneous facilities, but performance of this function is generally weak, with serious consequence for patient safety and quality of care. In an effort to improve regulation of health facilities, Kenya introduced a set of innovative regulatory interventions in public and private facilities in 3 Kenyan counties. These comprise the use of the Joint Health Inspections Checklist (JHIC), which synthesises the areas covered by all the regulatory Boards and Councils; increased inspection frequency; risk-based inspections where warnings, sanctions and time to re-inspection depend on inspection scores; and display of regulatory results on scorecards outside facilities. We set out to examine the views and perceptions of those experiencing these reforms at the frontline – the facility owners and regulatory inspectors.

Methods

The study was conducted in the 3 counties of Kakamega, Kilifi and Meru in 2018, using qualitative methods in order to get a deep understanding of the implementation experiences of frontline staff. We conducted in-depth interviews with 36 health facility owners/managers and all 12 inspectors serving these counties. The sample of health facilities were selected to provide variation in facility ownership, facility level, regulatory performance, and geographical location. Interviews were recorded, transcribed and analysed using the Framework Approach in NVIVO.

Results

We will present results on how the use of the regulatory reforms played out in practice at the frontline, and how they were perceived and experienced by inspectors and facility owners. Key areas we will explore include (i) facilitating and impeding factors to implementation; (ii) how the inspections were perceived in terms of fairness and legitimacy; (iii) how the inspection reforms have affected relationships between inspectors and facility owners; (iv) whether the reforms were perceived to have improved patient safety and quality of care; and (v) the impact of the reforms on the incentives and opportunities to engage in corrupt practices.

Discussion

We will explore the implications of the study findings for improving inspection implementation, and for scaling up these regulatory reforms nationally in Kenya. We will also consider the implications for other LMIC contexts, discussing the potential of such coordinated, risk-based inspection strategies to contribute to improving patient safety and quality of care in other settings.
Oral Abstracts

Maurice Yaogo, Association Zama Forum pour la Diffusion des Connaissances et des Expériences novatrices en Afrique (ZAMA FORUM/ADCE-Afrique), Bobo-Dioulasso, Burkina Faso

Effets inattendus du financement basé sur les résultats (FBR) dans un district rural : évaluation qualitative au Burkina Faso

Co-authors: Maurice Yaogo-Association Zama Forum pour la Diffusion des Connaissances et des Expériences novatrices en Afrique (ZAMA FORUM/ADCE-Afrique), Bobo-Dioulasso, Burkina Faso; Assita Rebecca Keita-Université Catholique de l’Afrique de l’Ouest (UCAO-UUB), Bobo-Dioulasso, Burkina Faso; Vincent Koudougou-Université Catholique de l’Afrique de l’Ouest (UCAO-UUB), Bobo-Dioulasso, Burkina Faso; Idriss Ali Gali-Gali-Association ZAMA FORUM / ADCE - Afrique, Bobo-Dioulasso, Burkina Faso; Anne-Marie Tremblay-Université de Montréal, Québec, Canada

Introduction/Contexte

Mis en œuvre au avec l’appui de la Banque Mondiale, le FBR vise à améliorer l’offre quantitative et qualitative des soins sur une base contractuelle. Après la phase pilote dans trois districts (de 2011 à 2013), l’intervention est étendue à 12 districts et 4 centres hospitaliers régionaux (décembre 2013). Cette communication propose une analyse qualitative des effets du FBR dans le cadre d’une analyse du processus d’implantation et de mise en œuvre de cette intervention dans le district rural de Diébougou (Sud-Ouest du Burkina Faso).

Méthode

La collecte des données qualitatives a été réalisée par : 1. l’observation directe dans les centres de santé et les communautés résidentes pour faire des monographies descriptives des six sites d’enquête sélectionnés à partir de critères contrastés ; 2. des entretiens semi-directifs approfondis et des discussions informelles avec différentes parties prenantes de l’intervention. L’analyse des données a été facilitée par le logiciel d’analyse qualitative QD Miner 4 Lite. Une analyse comparative (approche longitudinale et transversale) a été effectuée entre deux phases de l’évaluation globale mixte.

Résultats

Les effets positifs du FBR sont effectifs sur le personnel et les structures de santé mais des effets défavorables ont également été constatés. L’analyse du processus d’implantation et de mise en œuvre montre l’engouement initial des agents mais une préparation insuffisante, dont une formation initiale rapide « en cascade » et le démarrage des activités sans tenir compte des disparités locales (intrants, personnel, infrastructures et équipements). Ainsi, les effets du FBR sur les prestataires de soins et les structures de santé sont mitigés et son efficacité dépend de plusieurs exigences à respecter.

Discussions/Conclusion

Au-delà des perceptions des acteurs, l’évaluation qualitative aborde les changements, adaptations, effets inattendus, enjeux locaux de l’intervention et leur incidence sur le processus de mise en œuvre (Belaïd et al. 2017).
An electronic health records system that links with a health and demographic surveillance site for morbidity surveillance in rural Eastern Uganda

Co-authors: Dan Kajungu-Makerere University Centre for Health and Population Research (MUCHAP); Collins Gyezaho-Makerere University Centre for Health and Population research (MUCHAP); Edward Galiwango-Makerere University Centre for Health and Population research (MUCHAP); Tryphena Nareeba-Makerere University Centre for Health and Population research (MUCHAP); Fred Wabwire-Mangen-Makerere University Centre for Health and Population research (MUCHAP)

Background

Health and Demographic Surveillance systems (HDSSs) are useful for monitoring key health indicators in countries where civil registration of vital events is almost nonexistent. The IgangaMayuge HDSS (IMHDSS) set up an electronic health records system (EHRS) linking HDSS members’ household and individual data to their health facility data at a health center in the surveillance area. The aim is real-time monitoring of morbidity trends (disease burden), health-seeking behavior, drug utilization, ANC and maternity, vaccination, contraceptive use in this population.

Methods

The IMHDSS longitudinally monitors key life events (births, deaths, and migrations) and socioeconomic data in a population of 90,000 individuals through routine household data collection. IMHDSS established an EHRS at a health facility (over 60 patients daily) in the surveillance area. Individuals from villages are members of IMHDSS with a unique identifier which was embedded in the eHRS at the health facility. Each member was given a health card with a photo, HDSS unique ID, a barcode and biometrics (thumbprint) to enable linking their HDSS data with health facility visit data including symptoms, triage, laboratory results, diagnosis, medication, vaccinations, family planning, and ANC, maternity and postnatal.

Preliminary results

The system infrastructure in place includes local area network, portable computers (notebooks) with biometric reader and camera, the EHRS, mini server, and a solar system for electricity. Healthcare providers have been trained in basic computer skills and on the system. The facility can now track medication use minimizing wastage of medicines through self-diagnosis. Monthly reports are produced for the in-charge. Over 2,617 patient visits have been captured with half of the patients having IMHDSS ID. Most patients visiting the facility are females (65.0%) and over a half aged between 0-14 years (53.5%). The top three diagnosed conditions are Malaria, lower respiratory tract infection and peptic ulcers. Other data are vaccines, maternity, laboratory, and medicines.

Conclusion

Linking HDSS data with health facility data improves morbidity surveillance in population. This system supplements the mortality data already collected through verbal autopsy; helps in monitoring SDGs indicators measured at a health facility; we can study the determinants of health which are captured at household level only using the HDSS. Since we capture medicines use, this system enables post-marketing studies and resistance monitoring. Real-time data for morbidity surveillance, planning for health products, adherence to set guidelines, informing policy and health systems interventions is now possible.
Babacar LO, USAID. Senegal

Using evidence from District Health Information System (DHIS2) for multi-sectoral actions: Lessons from Senegal, Cote d'Ivoire and Afghanistan

Co-authors: Babacar LO-USAID, Senegal; Anwer Aqil-USAID, USA; Leontine Gnassou-MEASURE Evaluation, Cote d'Ivoire; Abdul Naser Ikram-USAID, Afghanistan

Background: The multi-sectoral actions to ensure healthy lives and promote well-being (SDG 3) requires systems thinking and coordinating structures where different stakeholders share evidence that drive informed collective actions. An integrated routine health information system (RHIS) is imperative for providing evidence for action. With the adoption of District Health Information System (DHIS-2) in sixty low and middle countries, an opportunity exists to exchange and integrate data from different sources and conduct analyses that facilitate multi-sectoral actions. This paper explores: to what extent did the adoption of DHIS2 enable health system to work with relevant sectors and contribute to SDG3? Specifically, did the DHIS2 adoption support the collection and exchange of health system functions and socio-economic data, other than disease surveillance and service utilization data? Did the analyses explore the underlying causes of health system performance and determinants of health? Lastly, what communication and organizational processes were established or strengthened for multi-sectoral policy, program and research actions? Objectives: Explore DHIS2 is ready for exchanging multi-sectoral data for analyses; Analyze underlying health system and contextual barriers for advanced analysis and multi-sectoral actions; develop recommendations. Methods: Cote d'Ivoire, Senegal and Afghanistan participated in the study. Both quantitative and qualitative data were used for answering research questions. Results: DHIS2 in these countries mainly collect disease surveillance and service utilization data. The comparative analyses of antenatal care, skilled birth attendants and DPT3 coverage showed variations over time and by regions/districts. The data from other sources such as logistics and human resource management information systems were not integrated into DHIS2, making it impossible for understanding how variations in health system functions such as availability of medicines/vaccines or health providers affected variations in service coverage. Similarly, in the absence of data from other sources on clients' socio-economic characteristics, food security and living conditions in districts, analyses were not possible to understand relative importance of these factors on target population health and to take collective multi-sectoral actions. Discussion: DHIS2 full potential for linking different databases is not realized due to data structures and organizational issues and limited capacity of the DHIS2 implementers. There were no processes established for coordination among different health offices for sharing information, analyses and collective decision-making. There was limited emphasis on the utility and incentives for establishing collaboration with other sectors. Conclusions: DHIS2 enables multi-sectoral data analyses/actions, and can only be effective if the leadership emphasizes utility of multi-sector collaboration and establishes governance structures.
Inverting the information loop: Challenges and approaches in achieving malaria elimination

Co-authors: arunima sehgal mukherjee-university of oslo, norway; sundeep sahay-university of oslo, norway

Background

India has a high malaria burden and a weak surveillance system. The 2017 World Malaria Report of the World Health Organization claims that Indian malaria surveillance mechanism detects a mere 8 per cent of cases, among the lowest in world. Despite this, India accounts for 6 per cent of all malaria cases reported globally. To address these twin and interconnected challenges, India has adopted a Malaria Elimination Framework (MEF), and the WHO report claims is on track for a 20–40 per cent reduction by 2020.

Methods

The Indian MEF emphasizes a strategy shift from preventive to curative mode. States are categorized at levels 1, 2 or 3 representing malaria burden, and a phased elimination approach is designed for each category. A key component of strategy is redesign of supporting information system, including revision of reporting formats from facility aggregate reporting to community-based line-list of cases. The second is strengthening of the data analytics focusing on key indicators. The third is to integrate information on treatment, stock, control and transmission. This MEF approach with the information system application is being pilot tested in multiple states. The introduction of the information system application serves as a tool for building capacities to implement MEF.

Results

The pilots have identified various challenges and approaches, diversity as the foremost. States and districts within states vary tremendously in terms of disease burden, infrastructure, and health systems capacity, clearly discarding "one size fits all" strategy. To address this, an approach of "flexible standards" was evolved - making national dataset as minimum denominator to report, leaving space for adding local requirements. Second aspect concerns scale, flexibility of transition between case-loads by keeping options of positive-case line-lists, treatment tracking-cases, suspect line-lists. To strengthen data analytics capacity, baseline created by importing legacy data from 2014-2017 available locally at district level till now. Analytic dashboards and visualisations have been designed for each district and sub-district malaria officer to view their data.

Conclusions

Initial results have been encouraging. This being the first experience flexible standard, creating name-based linelist and making it available at community level, could initiate a new paradigm in disease surveillance in India, which has traditionally been top-heavy and data centric. Initiating process of data locally available and easy to use graphics, has excited the health workers to see use of data. After nine-months, results will be systematically evaluated, and learnings incorporated to develop a national scaling plan.
Anthonia Njepuome, PHISICC National Coordinator

Engaging with stakeholders cannot be left to chance: a formal and informal mixed approach within a paper-based health information systems project

Co-authors: Anthonia Ngozi Njepuome-PHISICC National Coordinator; Caitlin Jarrett-Swiss Tropical and Public Health Institute; Angela Oyo-Ita-University of Calabar; Abdullahi Garba-National Primary Health Care Development Agency; Christian Auer-Swiss Tropical and Public Health Institute; Meike Zuske-Swiss Tropical and Public Health Institute; Xavier Bosch-Capblanch-Swiss Tropical and Public Health Institute

Introduction

Complex problems have no easy solutions. Improving health systems (HS) requires strong leadership and coordinated actions between parties including: health, finance and other non-health sectors; governmental, non-governmental, bilateral and multilateral agencies; policy makers, managers and providers; and researchers and users. Each stakeholder has legitimate diverse priorities and different approaches to similar problems. The challenge to exert coordinated actions may exceed the HS challenges they are meant to address. However, there is no blueprint on how to smoothly engage with this variety of stakeholders in a really effective way.

Methods

In order to engage with stakeholders to a research to improve paper-based health information systems (HIS), we devised several complementary strategies in Côte d'Ivoire, Mozambique and Nigeria: systematic policy documents reviews, stakeholders’ analyses, visual analyses of decision pathways, consensus building workshops, terms of reference for key actors, shared decision making, knowledge transparency and care for personal relations. One national coordinator in each country, monitored perceptions and followed decision pathways through frequent formal and informal exchanges. Findings were periodically reconciled and validation sought from stakeholders.

Results

Document reviews provided the landscape of the governmental health sector decision pathways in the countries. For example, in Nigeria, HIS are dealt within two entities: the National Primary Health Care Development Agency and the Federal Ministry of Health. Stakeholder suggested that the main influencers were the National Bureau of Statistics, the National Population Commission, and AFENET-NSTOP. However, in Côte d'Ivoire, the primary influencers were MEASURE, The Global Fund and the HIS unit. Discussions among stakeholders before wall-sized organisational charts revealed striking differences between theoretical and practical decision making in the three countries.

Complementary strategies provided continuous inputs about the changing policy and research environment to signal early warning signs of disagreement and to ensure that decisions were shared. These arrangements enabled, for example, the mitigation of the effects of senior staff changes in Mozambique or the identification of new policy forums relevant to the research.

Conclusion

Effective stakeholder engagement in research requires knowledge monitoring of the HS structures and context. Taking this seriously involves the design of specific, budgeted activities which should be undertaken from the very start of the research process supported by formal and informal mechanisms.
Amanda Edwards, University of Cape Town

From Knowledge to Health Policy: Exploring Knowledge Translation Mechanisms in the Western Cape Provincial Health System of South Africa

Co-authors: Amanda Edwards-University of Cape Town; Virginia Zweigenthal-Western Cape Provincial Health Department/University of Cape Town; Jill Olivier-University of Cape Town

Background: The persistent gap between Health Policy and Systems Research (HPSR), and health policymaking has led to growing interest in the field of knowledge translation (KT). However, there remains little clarity on what KT mechanisms work in translating HPSR in different contexts leading to fragmented and uncoordinated efforts in narrowing the ‘know-do’ gap, particularly in African health systems. The Western Cape provincial health system in South Africa is one middle-income setting committed to achieving the SDGs, including access to universal health coverage. In this context, the need to demonstrate greater gains for investments in HPSR is strong and growing.

Methods: This study aimed to provide a contextualised understanding of KT mechanisms used by HPSR researchers and provincial health policymakers in the Western Cape. Using mixed methodology between 2017 to early 2018, the study explored KT mechanisms, barriers, facilitators and outcomes in this context. A mapping of the literature on KT in African health systems was synthesized with a review of key policy documents and nine expert interviews with high-level HPSR researchers and provincial health policymakers. Core themes were merged with quantitative data from a random sample of provincial study protocols registered on the National Health Research Database.

Results: There are variations in the use of health-related research by provincial policymakers and diversity in the mechanisms employed for KT. Existing HPSR distinguished itself from other health-related research domains by employing highly relational forms of KT that emphasized formal and informal networks across sectoral and disciplinary boundaries. In this context, the important role of multisectoral organisations, characteristics of available research, relationships and networks appear to play a facilitating role for translating HPSR. Resource constraints, system conflicts and politics served as notable barriers.

Conclusion: These findings raise important issues for HPSR researchers and provincial policymakers seeking to ‘do’ KT in LMIC settings. Issues include recognising the role of local contexts, greater organisational embeddedness, the view of KT as an ethical imperative, and the need for a systematic approach to KT that fosters sustainable ‘learning health systems’. As rapid and effective progress towards health targets continues to challenge health systems worldwide, those who work in and with health systems should endeavour to understand the value and practical implications of multisectoral efforts required by a learning systems approach, while also exploring the ethical translation and uptake of knowledge into all levels of the health system.
Oral Abstracts

Esther Mc Sween-Cadieux, Université de Montréal

Les enjeux et défis liés aux stratégies de transfert de connaissances en santé au Burkina Faso

Co-authors: Esther Mc Sween-Cadieux-Université de Montréal ; Christian Dagenais-Université de Montréal; Valéry Ridde-Institut de Recherche pour le Développement (IRD)

Contexte : L’utilisation de la recherche est primordiale pour améliorer les politiques, les interventions et les pratiques en santé, spécialement dans les pays à faible revenu où les indicateurs de santé sont toujours inquiétants et les notions d’équité parfois négligées. Cependant, les processus qui permettent la diffusion, l’adaptation et la mise en œuvre des résultats de recherche sont complexes.

Durant les cinq dernières années au Burkina Faso, le projet de recherche Équité-Santé a développé plusieurs initiatives de transfert de connaissances (TC). L’objectif était de renforcer les liens entre les chercheurs, les décideurs, les intervenants et la communauté dans le domaine de la santé et de réduire l’écart entre les connaissances issues de la recherche et leur application. Une stratégie de courtage de connaissances a été implantée, deux ateliers de restitution ont été organisés et des notes de politiques ont été produites. Ces stratégies portaient sur plusieurs enjeux importants de santé publique ; paludisme et dengue, accidents de la route, mutuelles de santé et santé maternelle. Plusieurs acteurs en santé ont été impliqués tel que des chercheurs, des décideurs, des représentants d’organisations gouvernementales, des professionnels de santé et des représentants d’associations communautaires.

Méthodes : Cette étude vise à évaluer la pertinence, l’appréciation ainsi que l’effet de ces initiatives de TC innovantes dans le contexte. Ces stratégies de transfert de connaissances ont été évaluées à l’aide d’entretiens qualitatifs avec les différents acteurs, de questionnaires d’évaluation auto-rapportés et d’observations sur le terrain.

Résultats : Les stratégies de TC ont été appréciées par les acteurs car elles permettent l’apprentissage de nouvelles connaissances tout comme l’opportunité de réseauter et d’apprendre les uns des autres. Cependant, ces différentes expériences ont mis en lumière plusieurs enjeux ; pouvoir décisionnel des acteurs parfois limité, présence déficiente des acteurs politiques aux activités, ressources et incitatifs organisationnels souvent restreints, etc. La prise en charge du leadership pour assurer le suivi des activités, le développement des habiletés de communication des acteurs en TC et la possibilité d’offrir un accompagnement à long terme aux acteurs représentent également des défis importants.

Conclusion : Les efforts de TC doivent être répétés pour contribuer à la valorisation des connaissances issues de la recherche. Il est nécessaire que ces initiatives soient développées en collaboration, soient en cohérence avec les besoins des milieux, favorisent des activités répétées dans le temps, visent le développement des compétences et soient évaluées en temps réel pour s’adapter aux obstacles du terrain.
Kaelan Moat, McMaster Health Forum

**Moving evidence and data into action in the SDG era: A roadmap for supporting evidence-informed policymaking in an evolving field**

Co-authors: Kaelan Andrew Moat-McMaster Health Forum; John N. Lavis-McMaster Health Forum

In the last decade, significant progress has been made in the development, implementation and evaluation of approaches to support evidence-informed policymaking (EIP) to strengthen health systems in low- and middle-income countries. A recently completed systematic review of systematic efforts to support EIP identified 38 studies of platforms involved in this work (such as EVIPNet) and highlighted significant areas of progress, particularly in the formative and summative evaluation of evidence briefs, deliberate dialogues, and rapid evidence services. Additionally, the review found that there has been significant improvements in the extent to which those who support EIP understand how the political and research system contexts for these platforms and their infrastructures affect the prospects for having an impact. Despite this progress, a meeting convened in December 2017 was used to elicit the views of a diverse range of policymakers, stakeholders and researchers who are engaged in EIP efforts around the globe, and three key challenges facing the field were identified: 1) institutionalizing EIP supports so they are not marginalized when governments change (or champions leave); 2) building bridges to the many other types of groups that offer complementary comparative advantages (e.g., ‘big data’ initiatives, guideline groups, and implementation planners) so countries can benefit from synergies and not be confused about what’s needed in different stages of and types of policymaking process; and 3) extending EIP supports into priority policy areas linked to the Sustainable Development Goals (SDGs) so that approaches that have worked well in the health field can be tested and adapted in these new fields and so that new tools like Social Systems Evidence can be more effectively harnessed.

Drawing on the results of the recently completed systematic review, the insights elicited from policymakers, stakeholders and researchers during the December 2017 meeting, as well as key informant interviews with those on the cutting edge of supporting EIP globally, this presentation will provide a road map to inform the next phase of supporting EIP in low- and middle-income countries, including: 1) an overview of the progress made in the last decade (i.e., where we are); 2) the important challenges that still need to be addressed in order to build on this progress (i.e., where we need to go); and 3) emerging insights from cutting-edge initiatives that are taking positive steps towards addressing these challenges (i.e., how we’re going to get to where we need to go).
Providing policy-relevant evidence to local government decision-makers using economic evaluation and capability-adjusted life-years: a school drop-out intervention in Sweden

Co-authors: Anni-Maria Pulkki-Brannstrom-Umeå University; Lennart Nygren-Umeå University; Curt Løfgren-Umeå University; Klas-Göran Sahlen-Umeå University; Lars Lindholm-Umeå University

Background

Preventing drop-out from upper secondary education increases life expectancy by some 3 years in the Swedish context. Internationally, rigorous evaluations of drop-out interventions are scarce and dominated by cost savings calculations that are not consistent with maximising citizens’ quality of life. In this paper we conduct an economic evaluation of a hypothetical drop-out intervention in the Swedish context. We use capability-adjusted life-years (CALYs), a novel outcome measure that captures quality-of-life effects including but not limited to health.

Methods

Lifetime productivity gains and local government budget impact were estimated for a hypothetical cohort of 30 students using data from Swedish national registers assuming that the intervention prevents one drop-out per class. Life-years gained were estimated using age-, sex-, and education-specific mortality risks from Statistics Sweden. The interim CALY dimensions were taken from a Swedish pilot study and CALY weights for “lower secondary” and “upper secondary” education were estimated from a cross-sectional random sample of the Swedish population.

Results

Over three years, the incremental intervention cost including the cost of additional schooling was 947,885 SEK (or 83,062 GBP at 1GBP = 11.4SEK) per class. “Lifting” one individual from “lower secondary” to “upper secondary” leads to 2.87 additional life-years and 8.47 CALYs gained for women and 2.86 life-years and 8.12 CALYs gained for men. The productivity gains were 680,371 SEK for women and 1,139,866 SEK for men using 3% discounting. The related net incremental increase in local government (municipal) revenues was 124,649 SEK for women and 207,662 SEK for men. Elderly care costs increased by 16,481 SEK for women and 14,888 SEK for men. From a partial societal perspective, the intervention was cost-saving for men and highly cost effective for women at 98,953 SEK per life-year saved and 33,530 SEK per CALY gained. From the local government perspective, the intervention was cost effective at 99,140 SEK per CALY gained for women and 93,041 SEK per CALY gained for men.

Conclusions

Health economic evaluation methods can be successfully adapted to help local government decision-makers maximise quality of life. CALYs are a relevant outcome measure when health-related quality of life is insufficient to capture the full benefits of an intervention and when payers’ primary responsibility lies outside the health sector. Our results support the current Swedish government proposition that providing mentors to all upper secondary school students and intensive individual support to at-risk students is a highly cost effective intervention.
Trust me if you can! Realist insights on how mistrust undermines effective Public Private Engagement and strategies to address it in West-Africa

Barriers to effective Public-Private Engagement for health in West-Africa include ideological rifts, conflicting interests and limited governance capabilities. Little is known on how these elements jointly cause engagement failures. We used the implementation of the fee exemption for caesarean section policy introduced in Benin in 2009 to investigate how the engagement of private providers is organised and regulated. We adopted a Realist Evaluation approach (Pawson & Tilley, 1997) and used an embedded case study design, using qualitative and quantitative data.

The fee exemption policy only considers public and not-for-profit private actors, on the grounds that the non-profit private sector shares the value of public oriented services and can be trusted to implement the policy. However, we found that, analysing the fees at 44 health facilities, 14 private not-for-profit facilities kept charging the patients substantial additional fees on top of the €153 per caesarean section reimbursed by the government. Our analysis shows how implementation of this policy by private not-for-profit facilities depends on how top-down and bottom-up trust is facilitated.

In a context where the public administration is seen as too bureaucratic, slow and unreliable in its financial procedures, hospital managers perceive the fee exemption policy as a threat, especially if out-of-pocket payment is their main funding source. In such cases, hospital managers who have the decision space to do so are more likely to charge extra fees and prevent users to receive the full benefit from the fee exemption policy.

We found that trust between state and private-not-for-profit providers is more likely to be facilitated by (1) removing the risk for private actors of losing resources, for instance by setting up simple, reliable and transparent administrative procedures; (2) taking into account the actual cost for facilities of implementing the policy; (3) compensating short-term financial loss in case of delayed reimbursements; (4) using evidence to make explicit the challenges of each sub-sector (public or public not for profit) in implementing the policy to facilitate a richer and more inclusive policy debate; (5) making each sub-sector accountable for its commitments toward the successful implementation of the policy.

In conclusion, we found a dynamic interplay between financial interests, decision space, power and trust at the interface between the public and private-not-for-profit health sector in Benin. Since UHC requires a mobilisation of all actors, promoting trust between public and private actors will be essential to achieve universal health coverage in West-Africa.
André Janse van Rensburg, Stellenbosch University

The significance of power dynamics in shaping government and private sector mental health care engagement in constrained resource settings: Lessons from South Africa

Background: The Life Esidimeni tragedy in South Africa, where 144 people with serious mental disorders died from neglect during a government-driven deinstitutionalisation process, underlined the dire consequences of health system failures. It brought into sharp focus the contentious relationship between government and private mental health sectors and the critical role of power, both of which remain under-researched. The aim of this study was to illuminate the role of power in government and private sector mental health engagement in South Africa.

Methods: A theory-driven, multimethod study was conducted from 2016 to 2017, nestled in a pragmatic paradigm and based on four work packages: 1) a framework analysis of South African health policy; 2) a district-level social network analysis of government-private sector collaborative ties; 3) semi-structured key informant interviews thematically analysed; and 4) a “What is the Problem Represented to be” (WPR) analysis of a decade-long legal battle between a provincial government and a non-governmental organisation coalition.

Results: The policy analysis underlined government responsibility for public mental health care and provided avenues for organisational integration with the private sector. The social network analysis showed a service delivery system fractured along government and private sectors and along clinical and social care approaches. Significant power resided in government health facilities with mental health professionals. Key informant interviews further shed light on the schism between government and private mental health sectors and a mutual sense of distrust emerged regarding capacity and motives. Patients were cast as a source of capital for the private sector, in line with neoliberal rationalities. Social workers were an asset with which to bridge traditional power hierarchies. Finally, the WPR analysis revealed that engagements between government and private mental health sectors were dominated by economism as guiding ideology, by numerically rating social services and by investing in certain services to the detriment of others.

Discussion: The findings suggest that frontline engagement between government and private sector mental health care is significantly shaped by power, both in terms of where it is situated and how it is used. Several lessons were gleaned. Ambiguous understandings of mental health render it open to politics, and efforts should be made to foster a coherent, collective and context-specific understanding of mental health. Agreements between government and private sectors should be formalised, and regulation should be sharpened to avoid the exploitation of people with mental disorders. These mechanisms are significantly tied to provincial mental health stewardship, an indispensable mediator of intersectoral power.
Policy feedback effects of Thailand's Universal Health Coverage towards the role and power of private hospitals in the health system

Although Thailand’s health care is provided through a mixed but predominantly public system, the private sector's contribution in delivering the for-profit health services had increased steadily, and even more prominent when the Thai government established Universal Health Coverage (UHC) in 2001-2. This study seeks to understand how UHC Policy reshapes the subsequent political process concerning the power of private hospitals. The study is qualitative, employing documentary reviews, media analysis and semi-structured interviews with 42 key informants involved in the Thai health system. The study adopted a core idea of the Policy Feedback Theory as the analytical framework. It emphasises on how policies, once enacted, restructure politics, particularly relating to the power of groups, over time. The preliminary findings suggest that Thailand’s UHC Policy has generated both positive effects and unintended consequences towards the power of private hospitals. In the early years of UHC implementation, high participation of private hospitals in joining UHC was positively evident. It resulted in more choices for urban populations whom opt-out from public schemes to seek out-patient care from private hospitals and less burden for public hospitals. However, price control measures for private hospitals are not well regulated. Furthermore, the Thai governments have foreseen the potential of health industry as a leading revenue of the country and supported the growth of private hospitals via the Medical Hub Policy. Its effects have unintentionally made private hospitals more influential in arranging urbanised health care. The Private Hospital Association, representing about two-thirds of private hospitals across the country, has increasingly gained a dominant role in unifying private hospitals. The group can mobilise private hospitals' opinions through various decision-making bodies in response to the participation in public health schemes, the arrangements for regulation and governance, and the opportunities for trade and investment. Due to a profit loss of many private hospitals, private medicine's engagement in joining UHC has subsequently decreased over the years. The higher financial capacity of private hospitals is seen as a power to promptly absorb state health staffs who are suffering from an increased workload in public hospitals. Even though there is an approach to minimise the role of private hospitals in providing health care, its additional sources of innovation, resources and services are unneglected. It is crucially important for policymakers to balance the power of groups and to maintain the public-private partnerships, specifically to make UHC work and sustainable in the context of urban areas.
Oral Abstracts

Sara Van Belle, Institution of Tropical Medicine

Public accountability of INGOs working in sexual and reproductive health in Ghana: a realist inquiry

Co-authors: Sara Belle Van Belle - Institution of Tropical Medicine

Background: Accountability of INGOs (International Non-governmental Organisations) towards the local communities and the people they serve is now back on the global policy agenda with the recent Oxfam scandal (February 2018). INGOs have been grappling with the need for better transparency and accountability towards the people they serve. A study was undertaken to explore INGO accountability and its underlying drivers, within the context of a larger study analyzing accountability practices and relationships in sexual and reproductive health in Ghana.

Methods: 31 in-depth interviews were conducted with INGOs working in SRHR in Ghana (6 at district level, 4 at regional level, 17 at national level and 4 at the level of headquarters of the INGOs), 10 with local NGOs contracted by INGOs both at district and national level, and 26 with district actors, such as local government (11) and district health management teams (15) and health providers (12), in two districts (one rural, one urban) in Ghana. In addition, a desk review of publicly available documents of INGOs and observation of NGO service delivery sites in the two study districts were undertaken. The study was a realist research (Pawson & Tilley), using the gradual refinement of an initial middle range theory, informed by a meta-narrative (multi-disciplinary) literature review spanning different research traditions.

Results: At the time of the study, the INGOs researched had only minimal strategies in place to ensure accountability towards communities, the district health administration, local government and the beneficiaries of the services. Accountability mechanisms were mostly implemented at the site of service delivery and consisted mainly of complaint mechanisms.

Discussion: Although social accountability in maternal, neonatal and child health (MNCH) has been the subject of a number of recent interventions, research needs to urgently move beyond the intervention frame to explore mechanisms at the organisational level and at the institutional level, i.e. the relationships between different actors in the field. The author presents an organisational self-assessment tool which can be applied at different levels of an INGO.

Conclusion: Only by considering mechanisms at meso and macro level in addition to mechanisms at the level of the intervention, one has a comprehensive picture of actual accountability practices and what can be done to improve them.
Exploring the relationship between leadership, public service motivation and performance in Moroccan hospitals A multiple case study

Co-authors: Zakaria Belrhiti-Ecole Nationale de Santé Publique ; Wim van damme-Department of Public Health, Institute of Tropical Medicine, Antwerp/Vrije Universiteit brussel, Belgium; Abdelmounim Belalia-Ecole Nationale de Santé Publique; Bruno Marchal-Department of Public Health, Institute of Tropical Medicine, Antwerp, Belgium

Background

In Morocco, the decentralisation in the health sector has been accompanied by hospital reforms that aim at improving quality of care and strengthening public service management. Lack of motivation and suboptimal leadership capacities of local managers have constrained the reforms and more specifically the performance of healthcare organizations in terms of health service delivery, quality of care and scaling up of proven effective interventions (Sahel et al., 2015a, Sahel et al., 2015b). Little evidence exists on how leadership affects motivation and individual performance in the Moroccan context. We set out to fill that gap by comparing leadership in well and poorly performing hospitals. We explored whether health managers applying complex leadership practices (in contrast to just transactional or transformative leadership) can (1) increase the level of public service motivation (PSM) by increasing mission valence, clarifying goals, offering opportunities to serve the public and (2) improve task performance by distributing leadership to all levels of the organisation. We assume that specific attributes of the Moroccan health system, such as its hierarchical organisational culture, may impede the emergence of complex leadership and PSM.

Methods

We adopted a multiple embedded case study design (Yin 2016). We selected purposefully two high performing and two poorly performing hospitals using data from the national quality assurance programme "Concours Qualité". We collected data in January-February 2018. We carried out 18 individual in-depth interviews with health managers, health workers and administrators, as well as 3 focus group discussions with administrators, nurses and doctors in each hospital. The analysis went through the phases described by (Yin, 2016): compiling, disassembling, and reassembling of data in function of the theoretical propositions, interpreting, discussion, drawing conclusions. Thematic analysis was performed after data coding. N-VIVO 10 (version 11.4) software was used for analysis.

Results

Creating enabling conditions for innovation and learning, distributed leadership and high level of PSM among operational staff is a common feature within high performing hospitals whereas high reliance on procedures, hierarchy and transactional leadership is prevalent in poorly performing hospitals.

Conclusion: Our research sheds a light on the relationship between leadership and motivation by exploring an innovative perspective of complexity leadership and its linkage to public service motivation and individual performance.
Valeria Campos da Silveira, Institute of Tropical Medicine

Capacity building for health systems management: findings of a theory driven evaluation of a complex intervention in Uganda

Co-authors: Valeria Campos da Silveira-Institute of Tropical Medicine; Christine Tashobya-Makerere University School of Public Health; Everd Maniple-The Virtual University of Uganda; Bart Criel-Institute of Tropical Medicine

Background

The Fellowship Programme in Health Systems Management (FPHSM) was introduced by Makerere School of Public Health (MakSPH), the Institute of Tropical Medicine, Antwerp, and the Uganda Ministry of Health (MOH) in 2012. The aim was to support professional development of senior managers and acquisition of advanced health system management competencies, creating ‘agents of change’. It was a work-based, action-oriented two-year post-master programme. Fellows participated in one-week face-to-face sessions each trimester, and developed an action-research project in their work station supervised by a mentor. This paper presents the results of an evaluation held at the end of 2016.

Methods

We carried out a theory-driven evaluation using document analysis, in-depth interviews, case-studies, 360° assessment and observations. Participants were purposively selected and included fellows, coordinators, course designers, mentors, facilitators, and members of the Advisory Board. Thematic analysis was performed on the qualitative data.

Results

The FPHSM worked in the sense that it produced the desired results for multiple stakeholders. Participants reported improvement in professionalism and management competencies of the fellows. This was further confirmed by awards and recognition, and the ascendancy of some to higher levels of employment. Targeting the appropriate candidates through prequalification criteria and the choice of experiential learning approach contributed to the FPHSM success.

Both programme staff and mentors were perceived as role-models during teaching, self-conduct and problem-solving, favouring effective learning. Flexibility allowed adjustments during the development of the programme while its key features were kept unchanged. Conducive emplacement and conditions contributed to exchanges between staff and fellows. Steady financial and technical support were guaranteed during the training.

Fellows’ action-research projects continued to be implemented at the work-place after the end of the training, although they worked best for those who had power to make final decisions and those at policy level. Lack of recognition of the qualification by the Ministry of Public Service was noted as a threat. Frequent changes in senior managers at MakSPH and the MOH, and absence of a vibrant Public Health professional body impacted on dialogue opportunities with stakeholders for wider recognition and sustainability of the programme.

Conclusion

It’s possible to undertake such a training programme successfully and use innovative approaches to evaluation in low and middle income countries. Careful choice of facilitators and matching mentors with fellows are paramount, resulting in role-models as a learning tool. Albeit stable financial support, its source as mostly external puts in peril programme sustainability.
Leadership development to strengthen health systems in LMICs: an evaluation of a leadership development intervention with health facility managers at a District in South Africa

Co-authors: Nonhlanhla Nxumalo-Centre for Health Policy, School of Public Health, University of the Witwatersrand; Nyasha Madzudzo-Centre for Health Policy, School of Public Health, University of the Witwatersrand; Alison du Toit-Centre for Health Policy, School of Public Health, University of the Witwatersrand; Jane Goudge-Centre for Health Policy, School of Public Health, University of the Witwatersrand

Background: Low and middle income countries, particularly in Africa constantly explore ways to build resilient and responsive health systems. Strengthening leadership and management capacity for a more engaged health workforce is crucial to this objective. More so because these health systems face instability and daily stresses such as high absenteeism, patient demands, and unexpected policy changes. For a health system to withstand these stressors, managers require strong leadership and management competencies. Developing countries have responded by investing in a range of leadership and management development interventions however there is limited evidence of the extent of their influence on management and leadership practices. This paper examines the extent to which a leadership development intervention (LDI) amongst health facility managers at a district in South Africa influenced and enhanced management and leadership capacity to strengthen health worker performance for effective health service delivery.

Methods: We used a comparative case study approach through interviews, diaries, record reviews and observations at two health facilities. Interviews with district managers, facility managers (who also conducted diary entries) and frontline health workers explored: the daily stressors experienced; strategies used to manage these stressors; perceptions of frontline staff regarding the nature of leadership and management; and the extent to which the knowledge and tools from the LDI were applied in the daily management practices. To understand management and leadership practices and explore the influence of the LDI on those practices we conducted observations of staff team interactions. To further examine the latter aspect, we reviewed the rates of absenteeism at each health facility.

Results: Findings indicate that common stressors across the case studies are persistent absenteeism; frontline staff strikes; conflicts between patients and health providers; resource and material shortages; and patient complaints. Use of the skills gained during the LDI was facilitated by relationships within the facility amongst the staff and with the community, the management experience of the facility manager, the level of support from the higher levels of the system and extent of social networks. The findings illustrate that initiatives to strengthen leadership and management need to take into account the context within which they are applied and to enable flexibility and innovation in their application.

Discussion/Conclusion: The paper illustrates that leadership development strategies have the potential to develop leadership competencies; however they need to allow flexibility and innovation of application based on the context.
Dickson Okello, Health Policy and Systems Division, University of Cape Town

Who Are We? The Role of Team, Professional and Managerial Relationships in Collective Leadership Practices in District Hospitals, Cape Town, South Africa

Co-authors: Dickson Rodney Otieno Okello—Health Policy and Systems Division, University of Cape Town; Gerry McGivern—Warwick Business School, University of Warwick; Lucy Gilson—Health Policy and Systems Division, University of Cape Town

Background: Effective healthcare leadership is necessary in engaging with other stakeholders in moving towards universal health coverage (UHC) in Low-and-Middle-Countries. To achieve UHC, hospitals are important in the provision of quality people-centred healthcare. Hospitals are complex social systems where leadership is practiced by different healthcare cadres. In such environments professional, work and social identities are likely to influence how leadership is practiced. A rich evidence base, and relevant theorisation, is needed to understand the nature and consequences of leadership practices in Low-and-Middle-Countries. Yet, hospital leadership has rarely been studied in South Africa. We present findings from a study on organisational context and leadership practices in district hospitals in Cape Town.

Methods: We used qualitative research methods in two case study hospitals. We had a total of 42 in-depth interviews and two focus groups. We also attended management meetings, made observations, and reviewed documents of relevance to leadership practices within the hospitals. Our respondents included clinicians, nurses, allied health workers and administrators at various levels of management. Our analysis was both inductive and deductive to explore and explain emerging issues about collective leadership.

Results: Our study revealed that respondents emphasised their roles as clinicians and nurses first and as leaders, second; and that work team, professional and managerial identity and relationships are critical to leadership practices. Respondents linked collective leadership practices and relationships to the common goal of providing healthcare services. Senior clinicians were aware of their professional identity and had collegial relationships with junior clinicians. Professional identity and pride among clinicians allowed them to exercise their leadership in a collective manner and, they considered themselves more motivated as compared to nurses. Nurses in management positions viewed the transfer of leadership and professional skills to colleagues as an important way of sharing professional experiences. However, junior nurses viewed the professional hierarchies in nursing as giving them fewer opportunities to participate in leadership and saw this as undermining their motivation. The structuring of management into junior, middle, and senior levels depicted management identities within the hospital that created barriers to relationship building and collective leadership practices.

Conclusion: Clinicians and nurses hold dual professional identities in hospitals and this influences their leadership practices. Collective leadership practices have influences over healthcare worker motivation. To build leadership practices that are inclusive, policymakers and practitioners should aim at deliberate efforts to consider team, professional and managerial differences when designing and implementing leadership development programmes within hospitals.
Corruption at the frontline: tackling rent seeking among health workers in Bangladesh, Nigeria and Tanzania

Co-authors: Eleanor Hutchinson-London School of Hygiene and Tropical Medicine; Dina Balabanova-London School of Hygiene and Tropical Medicine; Obinna Onwujekwe-University of Nigeria Nsukka; Masuma Mamdani-Ifakara Health Institute, Tanzania; Mary Ramesh-Ifakara Health Institute, Tanzania; Peter Binyaruka-Ifakara Health Institute, Tanzania; Nahitun Naher-BRAC James P Grant School of Public Health, Bangladesh; Roksana Hoque-BRAC James P Grant School of Public Health, Bangladesh; Muhammad Shaikh Hassan-BRAC James P Grant School of Public Health, Bangladesh; Syed Masud Ahmed-BRAC James P Grant School of Public Health, Bangladesh; Martin McKee-London School of Hygiene and Tropical Medicine; Susie Mayhew-London School of Hygiene and Tropical Medicine; Hyacinth Ichoku-University of Nigeria Nsukka

Background

Corruption, bribery, theft and tax evasion cost developing countries approximately $1.26 trillion US dollars a year (UNDP 2018). It remains a pervasive challenge to equity and inclusion in public and private sectors, undermines the social contract between citizens and governments and reduces the transformative potential of public spending. In health it is likely to significantly undermine the investments made to ensure Universal Health Coverage and is impact most negatively on those who are most socially excluded.

This research project shifts the usual focus of anti-corruption research away from a conceptualization of corruption as driven by the opportunism of immoral individuals and problematic cultural norms to the systemic issues beyond the health system, the informal institutions and networks within the political economy.

Methods

We are conducting a three country, comparative study into corruption in Bangladesh, Nigeria and Tanzania using in-depth interviews (n=100) to underpin a discrete choice experiment. The qualitative data that we report on here examines the drivers of absenteeism among health workers—a critical issue identified through literature review and discussions with policy makers. The interviews are taking place among junior and senior members of staff and managers in both urban and rural areas.

Results

Research is ongoing but current findings show that absenteeism is not driven by ad hoc, opportunistic behaviour but rather by the informal institutions, economic necessity and demands of social networks. In Bangladesh, the latter shape access to training and good quality job placements in particular; and cultivating and maintaining these take financial investment and time, taking doctors and health workers away from their facilities. In all countries, absenteeism is also driven by demands of family life, the fact that poor quality housing and education in rural areas means that health workers do not live with their children and must leave their work stations if they are to fulfil family obligations. Expensive payments (formal and informal) for education coupled with poor pay drives the necessity of private practice which in turn leads to health-workers leaving early or arriving late for clinics.

Conclusions

Our research offers a fresh approach to anti-corruption strategies that breaks with previous top down often highly moralistic approaches to rule-breaking. Through looking at formal and informal structures, we research seeks to find ways to address corruption that are feasible and acknowledge the socio-economic relations that shape the behaviour of agents and the contexts in which they work.
The crowded space of local accountability for maternal, newborn and child health: a case study of two South African districts.

Co-authors: Fidele Kanyimbu Mukinda - University of the Western Cape; Hanani Tabana - University of the Western Cape; Asha George - University of the Western Cape; Helen Schneider - University of the Western Cape

Introduction: Global and national accountability for maternal, newborn and child health (MNCH) are considered key to reducing mortality and achieving the Sustainable Development Goals. Common strategies of accountability for MNCH include budget tracking, maternal and perinatal death surveillance and various forms of social accountability. Little is known, however, about how such accountability strategies are integrated into the routine functioning of local health systems and under what circumstances they trigger improved outcomes.

Methods: As part of an evaluation of a health system strengthening initiative aimed at addressing high MNCH mortality in two South African districts, we conducted an inventory of local mechanisms of accountability for MNCH and their pathways of action. Data were collected using (i) in-depth interviews involving 107 health managers from senior to frontline health; (ii) a document analysis of policy documents, reports, and other literature on accountability processes directly or indirectly related to MNCH. Data were analysed thematically and a framework for systematic exploration of the forms and functioning of local accountability for MNCH was developed.

Results and discussion: At least nine local accountability mechanisms were identified. They included several MNCH mortality surveillance and response processes, a number of generic quality audit and accreditation systems, performance management, adverse event reporting, and formal and informal community accountability structures and processes. Some were classic hierarchical mechanisms while others were horizontal and collaborative in nature; some were focused on sanction, while others took a more problem solving approach; some were individual in orientation, while others focused on teams; some prioritised measurement and others action. Talk of accountability featured prominently in interviews with district players across the board. Improved outcomes were most commonly attributed to the fostering of shared responsibility and collective accountability and to practices of reciprocal accountability, namely the matching of accountability expectations with adequate support.

Conclusion: Numerous local accountability mechanisms, acting directly and indirectly on MNCH, were identified. They included various forms (e.g. horizontal/vertical, internal/external), modes of functioning (e.g. answerability, sanction, improvement), and assumptions regarding how accountability leads to improved outcomes. Greater understanding is needed of how these mechanisms complement or contradict each other and how local accountability for MNCH is best nurtured.
Fighting health sector corruption in the south and south-east Asia: ‘carrot and stick’ or time for innovation?

Corruption in the health sector is a common concern for low and middle-income countries (LMICs) of the south and south-east Asia region. It undermines efforts for achieving universal health coverage (UHC) as it affects poor people’s ability to access quality health service by increasing the cost of care and reducing service utilization. The traditional top-down approach focusing on high-level reform through ‘carrot and stick’ combining enforcement of laws and incentives have been found largely ineffective. Realizing this, countries are testing innovative feasible bottom-up approaches to unlocking the community capability to ensure transparency, accountability and good governance, and thereby mitigate corruption.

We conducted a scoping literature review to explore the impact of different approaches across LMICs in south and south-east Asia. We adopted a systematic approach to identify, screen, select text, and undertook a content analysis using a pre-designed framework. The search protocol included published articles from PubMed, Scopus and Google Scholar and grey materials related to innovative approaches used to curb corruption covering the period of 2007 to 2017. Themes analysed included citizen participation, transparency, accountability, and governance.

The findings reveal that countries in this region particularly India, Bangladesh, Nepal, and Vietnam have tested innovative interventions some of which are proven to be effective. Use of Citizen charter in facilities (India, Bangladesh), social audit of government services (India, Nepal, Vietnam), decentralization of resources (Nepal), E-governance in procurement, recruitment, promotion and transfer (India, Bangladesh), online platform for professionals (India) have strengthened the transparency and accountability by direct intervention at root level compared to the traditional ‘long-route’ of combating corruption. Meanwhile, to generate demand for good governance, countries have used community empowerment as a powerful social accountability tool through approaches like- use of citizen report card and community scorecard (India), community of concerned citizen (India), ‘Nari Dal’ initiative (Bangladesh), active engagement of local government and use of community assets (Bangladesh). ‘Ayauskam’ project of Odissa, India helped to raise community awareness and the establishment of community-based organizations which played a watchdog role. ‘Naripokkho’s community mobilization on violence against women has led Bangladesh government to initiate support against victims.

The study concludes that community-led transparency and accountability initiatives are an effective way to empower the community to combat corruption and may be an alternative to traditional ‘carrot and stick’ approach. Some of these models need to be tested for scaling up and generate demand for good governance.
Achille Kabore, ICF/MCSP

Promising Social Accountability Approaches to Improved Health in Malawi: Evidence on What Works and What Doesn’t from Case Studies

Co-authors: Achille Kabore, COR Group; Tanvi Monga-ICF/MCSP; David Shanklin-MCSP/CORE Group

Background

There is growing recognition that social accountability is an important part of a functional health system and can enhance the relationship between governments, citizens, and communities. However, there remains gaps in evidence about which governance and social accountability approaches work, the underlying principles for success, including contextual factors, and the facilitators and barriers to implementation and outcomes.

In Malawi, effective participation and community voice in health programming remains an obstacle as communities do not have knowledge of their rights and it is unclear how much autonomy local district councils have in health budget planning and allocation and how feedback from communities is being incorporated.

Methods

The case study topics were chosen after an extensive literature review and consultation with the Malawi Social Accountability Task Force, guided by explicit case study selection criteria. The 2 case studies included in this presentation are the community score card and a national budget consultation, analysis, and advocacy approach.

An analytical framework was developed to guide the case study development. A key element of the data collection protocol was a process mapping exercise that describes the logical flow of activities from preconditions for success to its logical conclusion. This mapping begins with a desk review of available documentation of the approach, which was supplemented with key informant interviews with multiple stakeholders and the information was triangulated to identify potential discrepancies.

Results

The Community Score Card Approach is designed to strengthen local health systems, with the intent of improving overall service use, client satisfaction, health equity, and health outcomes. Evidence suggested that poor implementation of the CSC may be worse than doing nothing at all, since such failure may undermine basic relationships between communities and local public health providers and confidence in the CSC itself. During this case study, six essential steps were described.

The budget consultation, analysis, and advocacy approach has been implemented in Malawi for nearly 2 decades, however, it is unclear if it has met its intended objectives. For instance, the government of Malawi has reduced its domestic expenditures on health and is not near the Abuja Declaration commitment. This approach is unlikely to be sustainable without external resources and it could not be replicated in other country contexts without significant investment.

Conclusions

Further implementation research is needed to better articulate its key elements and/or principles as well as measurable indicators to provide the feedback needed to strengthen future social accountability programming.
Sulaiman Gbadamosi, Pathfinder International

**Strategic Approach to Engaging the Private Sector: A case study of SMGL Initiative Nigeria**

Co-authors: Sulaiman Gbadamosi-Pathfinder International; Oluwayemisi Femi-Pius-Pathfinder International; Kazeem Adisa Arogundade-Pathfinder International; Olayiwola Jaiyeola-Pathfinder International; Farouk Jega-Pathfinder International

**Background**

Cross River state in Nigeria has an estimated MMR of 2000 maternal deaths per 100,000 live births and Infant mortality rate of 120 per 1000 live births. These figures are much higher than the national averages (MMR 576 and NMR 37 respectively). MNH outcomes are therefore a major source of concern. To accelerate the reduction in maternal and neonatal morbidity and mortality, the Saving Mothers, Giving Life (SMGL) initiative, in partnership with Cross River State Government, and Pathfinder International Nigeria, is implementing a total market approach.

**Methods**

SMGL’s strategic approach is hinged on use of data for planning and action in implementing QI initiatives and a QA system while carrying out engagement with key private sector stakeholders. Other strategies and methods used for engagement of both private and public sector includes: Partnership with Professional associations and Government Agencies to implement a quality of care improvement and assurance framework, creating a referral network coordination meeting platform to improve referrals, Data Validation and review meetings and competency based trainings of HCW on key thematic areas followed by post training mentorship. These activities improve capacity, competencies and skills of frontline health workers to provide quality MNH services.

**Results**

MMR for supported facilities now stands at 247/100,000 as compared to 313 from the baseline representing a 21% decrease likewise NMR stands at 49/1000 as compared to baseline of 58 representing a 15% reduction. Percent of women who received uterotonics in the third stage of labor is presently at 99% as compared to 48% at baseline. Percent of Live births put to breast and kept warm within 30 minutes of birth in a health facility is presently 95% as compared 35.5% from the baseline. Furthermore, percent of newborns not breathing at birth successfully resuscitated is currently 98% as compared to a baseline of 79.5%.

**Discussion / conclusions.**

Despite the above results, significant challenges still subsist in engaging with the private sector. A major challenge is the informal private sector where a significant proportion (70-80%) of deliveries take place in Cross River State. The SMGL initiative is currently working to change the role of Traditional Births Attendants (TBAs) by orientating them to refer pregnant women to supported health facilities. We believe this is the key to further reduce the MMR and NMR in the state.
Joyce Maina, Population Services Kenya

**Purchasing high quality services for the poor from private health providers: the experience of an aggregator model in Kenya**

Co-authors: Joyce Wanderi Maina - Population Services Kenya; Sylvia Wamuhu Mbirwe - Population Services Kenya

**Purpose**

Share learnings and inspire discussion around an innovative approach that enhances private sector contribution towards universal health coverage wherein a social franchise agency acts as an aggregator for small private providers and serves an intermediation function, managing contracts with insurers and other public purchasers of healthcare services on behalf of its members.

**Focus/Content**

The private sector in many lower middle-income countries (LMICs) is characterized by extreme fragmentation, with numerous small-sized private providers operating clinics and offering a limited number of services at low levels of quality. This limits their ability to be accredited to health insurance and other purchasing schemes. Contracting and managing claims from numerous small private facilities poses an administrative challenge for insurance agencies and government purchasers.

Against this backdrop, Population Services Kenya is testing an aggregator model, wherein PSK has set up a network management organization (NMO) that aggregates previously stand-alone healthcare providers into a legal entity that can be contracted by insurance companies to provide services to insurance policy holders.

This presentation will explain how the model was developed and share early learnings from the field. PS Kenya collected insights from the providers and the payers to better understand the challenges faced by the two stakeholders and co-created the value propositions.

**Significance for the sub-theme area/field building dimension of relevance**

As part of their strategies for achieving UHC, governments in LMICs are embracing health insurance schemes wherein publicly-pooled funds are used to purchase services for the poor. Involving the Private providers can ease pressure on the public health system and foster greater competition. For private providers, it represents an opportunity for business growth in a hitherto untapped market. However, the highly fragmented nature of the private sector remains a critical challenge. Solving it through an aggregation model will enable public purchasing agencies to procure high quality health services for the poor from private health providers.

**Target Audience:** Government officials where health financing schemes are being used to purchase services for the poor from private providers; social franchise organizations; donors and implementing partners working on private health sector development.
Rosalind Miller, London School of Hygiene and Tropical Medicine

‘A smile is most important.' Why chains are not currently the answer to quality concerns in the Indian retail pharmacy sector.

Co-authors: Rosalind Miller-London School of Hygiene and Tropical Medicine; Eleanor Hutchinson-London School of Hygiene and Tropical Medicine; Catherine Goodman-London School of Hygiene and Tropical Medicine

Background

Pharmacy retail markets in low and middle-income countries (LMIC) have traditionally been dominated by local, independently owned pharmacies. These pharmacies are widely used by populations but their practice has been shown to be poor. Insufficient knowledge, strong profit motives, and regulatory failures go some way to explaining these shortcomings. Economic growth has spurred the entry of pharmacy chains into these retail markets in Africa, Asia and South America. Chains could be argued to improve quality in comparison to independent pharmacies, and therefore be a welcome addition to these markets from a public health perspective. There is a need to understand how these new organisational arrangements are affecting the functioning of pharmacies in practice.

Methods

Drawing on economics literature, we developed a set of hypotheses as to how chains could address the quality failures that typify LMIC retail pharmacy markets, and explored these hypotheses using a set of 38 in-depth interviews, conducted in Bengaluru, India. We looked specifically at how being organised in a chain affects several key behaviours: employment of qualified staff; the ability of government authorities to focus regulation on central management structures; the propensity for firms to self-regulate; and the impact of the potentially lower-powered incentives faced by chain employees compared to independent owners.

Results

In practice, few differences were identified between chain and independent organisations in these areas. Not all chains were operating with a qualified pharmacist (akin to independent shops). Drug control authorities did not take advantage of the existing chain architecture to enforce regulation. Chains did heavily self-regulate but their focus was on customer service, rather than aspects of quality relevant to health outcomes. Additionally, the incentives faced by chain employees were not low-powered due to rewarding sales targets and pressure to increase sales. Finally, widespread bribery in the sector was a barrier to effective drug control.

Discussion / Conclusion

We observed that chains exerted strong influence over their staff but the potential to exploit this to improve quality of care is not currently being realised. If clinical accountability within these organisations were improved and regulatory bodies made chains take responsibility for their outlets by using tough sanctions for illegal practices, chains may hold promise for quality improvement.
Oral Abstracts

Ritta Mwachandi, Population Services Kenya

**Accrediting the private sector to offer free maternity services in support of universal coverage of skilled birth attendance in Kenya**

Co-authors: Ritta Mwachandi - Population Services Kenya; Tom Ngaragari - Population Services Kenya

**Purpose**

Sharing best practices and lessons learnt from the inclusion of low-cost private health providers into the Free Maternity Services (FMS) program, Government of Kenya’s flagship scheme to fully subsidize in-facility birth for poor women.

**Focus/Content**

In 2013, the Government of Kenya launched the FMS program, offering free delivery services at public health facilities and reimbursing the facilities for the user fees that they would have charged the mother. While the scheme was successful in increasing in-facility births, it was taxing an already over-stretched public health system. Consequently, the Government expanded FMS to include private facilities in 2016.

This presentation explores the early experience of private providers participating in FMS. Through the African Health Markets for Equity program, Populations Services Kenya (PS Kenya) is supporting the FMS program in 20 out of Kenya’s 47 counties. It is working with 52 out of 373 private facilities within its Tunza social health franchise to acquire accreditation status to offer FMS and has contracted over 100 Community Health Workers (CHWs) to conduct outreach programs to educate women and encourage enrolment. Through focus group discussions with health providers, CHWs and FMS clients, PS Kenya has collected insights to better understand what is working and identify gaps that need to be addressed to ensure that the FMS through the private sector is achieving its mandate.

**Significance for the sub-theme area:**

The FMS program is designed to do away with out of pocket payments that prevent poor women from pursuing a facility birth. However, other factors such as perception of health risk, low product awareness, proximity to health facility and quality of care at facility could still contribute to low enrollment. Moreover, women are likely to shy away if they perceive the registration and onboarding process as tedious and intimidating. This presentation explores if there are other barriers beyond cost that could be a deterrent to FMS enrolment and inform roll out and scale up of universal health coverage schemes like FMS in Kenya and beyond.

**Target Audience**

Government health insurance agencies and other government purchasers, donors and implementing partners working on private health sector development.
Erika Eldrenkamp, Institute for Health Metrics and Evaluation

**Toward a measure of overall universal health coverage: tracking service coverage and catastrophic health spending in 188 countries, 1990-2017**

Co-authors: Nancy Fullman-Institute for Health Metrics and Evaluation; Erika Eldrenkamp-Institute for Health Metrics and Evaluation; Jamal Yearwood-Institute for Health Metrics and Evaluation; Julian Chalek-Institute for Health Metrics and Evaluation; Angela Chang-Institute for Health Metrics and Evaluation; Joseph L Dieleman-Institute for Health Metrics and Evaluation; Chloe Shields-Institute for Health Metrics and Evaluation; Rafael Lozano-Institute for Health Metrics and Evaluation; Christopher J L Murray-Institute for Health Metrics and Evaluation; GBD 2017 UHC Collaborators-Institute for Health Metrics and Evaluation

**Background**

Achieving universal health coverage (UHC) is viewed as vital to reaching the health-related Sustainable Development Goals (SDGs) and improving population health. Previous efforts to monitor the two tenets of UHC – access to key health services and financial risk protection against catastrophic health spending – have been limited either to one UHC component or to select countries and years, or both. With this study, we offer the measure of overall UHC, accounting for both service coverage and incidence of catastrophic health spending, in 188 countries from 1990-2017.

**Methods**

To calculate overall UHC, we first estimated UHC service coverage and catastrophic health spending incidence separately for each location-year. We measured UHC service coverage using tracer indicators that represented five key health service areas, ranging from reproductive, maternal, neonatal, and nutritional services to non-communicable diseases and related risk factors, and 24 sub-service areas. We scaled each tracer from 0 to 100, with 0 representing the worst observed performance and 100 the best across location-years. We then averaged values across all indicators to approximate UHC service coverage. We estimated catastrophic health spending, defined as 25% of total household expenditures spent on health, for the full time series using household survey data and spatiotemporal Gaussian process regression. Because catastrophic health spending is conditional upon accessing and receiving care, we computed overall UHC – the proportion of populations covered by UHC services without financial hardship – by subtracting incidence of catastrophic health spending from UHC service coverage.

**Results**

Overall UHC has improved since 1990, yet the pace of overall progress and how quickly each UHC component improved varied markedly across countries. For instance, larger gains in overall UHC were often limited by low service coverage among lower-income countries, whereas many middle- and high-income countries saw further advances constrained by minimal reductions in catastrophic health spending. In general, UHC service coverage improved more quickly than catastrophic health spending, underscoring the need to prioritize policies and resources for financial risk protection in parallel with health service expansion.

**Discussion**

This study highlights the importance of measuring UHC for all countries over time. To better inform UHC investment needs, it is critical to understand the degree to which gaps in service coverage and financial risk protection remain the primary barriers to achieving UHC. These results offer decision-makers the evidence base needed to strengthen health systems so that they can truly deliver for all.
Oral Abstracts

Emma Jolley, Sightsavers

Monitoring Universal Health Coverage: experiences of application of new approaches to collect data on access, quality and equity of care in Tanzania, Pakistan and India

Co-authors: Emma Jolley-Sightsavers; Sandeep Buttan-Sightsavers India; Thomas Engels-Sightsavers; Munazza Gillani-Sightsavers Pakistan; Muhammad Zahid Jadoon-Pakistan Institute of Community Ophthalmology; George Kabona-Iringa Regional Referral Hospital; R.N. Mohanty-Sightsavers India; Soumya Mohanty-Sightsavers India; Alemayehu Woldeyes-Sightsavers Ethiopia; Guillaume Trotignon-Sightsavers; Elena Schmidt-Sightsavers

Background: With growing recognition of Universal health coverage (UHC) as a fundamental human right, attention begins to turn to how the promise of essential quality healthcare for all can be achieved and effectively monitored. Discussions on tracer indicators to contribute to a UHC service coverage index have begun but some recent reports highlight the lack of data for disaggregating the index by dimensions of equity and call for new, more nuanced approaches to monitor coverage.

Cataract surgical coverage has been advanced as a possible tracer indicator for access to surgical care, particularly for the elderly. This paper presents results of five population-based surveys, which measured this indicator alongside two additional tools, which allowed disaggregating of data by gender, functional disability and relative wealth.

Methods: The surveys were conducted in three rural districts of India (Kalahandi, Jhabua, and Sitapur), a rural region of central Tanzania (Singida), and in urban slums in Lahore, Pakistan. All surveys targeted people aged 50+ years and used a two-stage sampling methodology with enumeration units selected by probability proportional to size and households by compact segment sampling. The sample size varied from 3,040 respondents in Lahore to 3,850 in Singida. Cataract coverage was measured through a standard clinical examination; disability was measured using the Washington Group Short Set; and relative wealth was measured using the asset–based Equity Tool validated for each setting. Data analysis was done using Stata version 15.

Results: Both access to cataract surgery and quality of care varied considerably between the settings with the highest coverage found in Lahore (84%) and the lowest in Singida (39.1%). Inequalities between men and women were found in three settings (Lahore, Singida, Kalahandi) with women being worse off irrespective of how high or low the overall coverage was. Disability-related inequalities were found in two sites (Singida, Sitapur) with people with additional (non-sight) disabilities experiencing both poorer access and poorer quality of care. Significant differences by wealth were found in two sites (Singida, Sitapur), where limited access and poor quality hit the hardest those in the poorest economic quintiles.

Discussion/Conclusion: The integration of additional tools in the standard survey methodology provided important evidence on how access to quality healthcare differs by sex, disability and wealth. The findings however suggest that the assumption that certain population subgroups experience disadvantage cannot be generalised, and it is important to understand the factors at play in any particular context.
The revised WHO focused antenatal care model: Are eight visits necessary for positive delivery outcomes in low and middle-income countries?

Co-authors: Martina Mchenga-Stellenbosch University; Ronelle Burger-PhD Supervisor-Stellenbosch University; Dieter von Fintel-PhD co-supervisor- Stellenbosch University

Abstract

Background

Many developing countries have adopted the World Health Organization’s (WHO) focused antenatal care (FANC) recommendations, in order to reduce infant mortality and improve child and maternal health. Core to this policy is a prescribed number of visits to a healthcare facility during pregnancy, as well as a specified set of medical inspections that healthcare professionals should conduct to screen mothers at risk. Initially, the proposed number of visits was set at four. In a second phase of the FANC policy, the WHO has recently recommended that this number be increased to eight. In health systems that are overburdened by high demand and scarce resources, the potential for decline in quality with rapid expansion in quantity is a pressing challenge. The objective of this study is to estimate the number of visits that reduce the risk of low birthweight in a low-income country setting without compromising service quality.

Methods

This study used data from the Malawi 2015/2016 demographic health survey. The MDHS gathers detailed health information for women of reproductive ages 15–49 on antenatal care utilization and their children. Our study implemented a non-linear spline specification, in search of turning points and thresholds in policy effectiveness. This non-linearity is important, because most studies who model visits linearly find insignificant effects for number of visits on birthweight, once controlling for gestation period. This is not the case in non-linear models. We also use an instrumental variable to account for potential endogeneity of visits.

Results

We found that the risk of low birthweight declines up until three antenatal visits by mothers. Thereafter, the marginal effects are zero or negative, depending on the specification. Number of visits does not differ by overall quality of care (measured by an index). However, we do find that in the first three visits, the provision of nutritional information to mothers is key to reducing the risk of low birthweight.

Conclusion

Having found three visits to be effective in reducing low birthweight. Low and middle-income country health systems, would benefit if the recommendation made by WHO in 2002 to reduce the number of visits to four for women with uncomplicated pregnancy would be maintained. In this case, the focus should be on improving quality of services delivered than increasing number of visits to eight as revised by WHO in 2016.
Mamothena Mothupi, University of the Western Cape

**Development of a framework for monitoring intervention coverage and social determinants of health along the maternal continuum of care using sub-country data**

Co-authors: Mamothena Carol Mothupi - University of the Western Cape; Lucia Knight - University of the Western Cape; Hanani Tabana - University of the Western Cape

**Background:** Multisectoral action is necessary to improve health outcomes and access to services in maternal health. Recommended strategies such as the continuum of care rely on both clinical intervention and action on social determinants of health for sustained impact. There is a current lack of framework or indicators for monitoring progress by integrating both the health interventions and social dimensions. We aimed to assess health system and household survey data for indicators that can be used to draw a new monitoring framework for adequate provision of the maternal continuum of care at district levels in South Africa.

**Methods:** We extracted potential data elements and indicators from the district health information system (DHIS) and the General Household Survey (GHS) of South Africa into an MS Excel Sheet. This included information about the formula, use and frequency of collection of indicators. The criteria for eliminating indicators were guided by our previous systematic review of measurement practices, as well as the current intervention framework adapted for South African by others. We then constructed a new Maternal Continuum of Care Adequacy framework which outlined coverage and quality monitoring indicators across the lifecycle, and from community (intersectoral) to health system level.

**Results:** Through the Maternal Continuum of Care Adequacy Framework we demonstrate that the DHIS can provide the majority of service coverage and linkage indicators, between the levels of care and across the lifecycle. The framework also revealed information gaps for specific interventions, such as reproductive health services at the family/community and district hospital levels. The DHIS lacked quality of care data; thus we proposed proxy indicators based on performance on multi-dimensional quality standards for clinics and hospitals in the country. The GHS had variables that could be used to derive indicators for all the relevant social determinants of health/ intersectoral factors. We found that 80% of the packages across the maternal continuum of care were covered by the GHS and DHIS collectively.

**Conclusion:** The adequacy framework demonstrates that there are indicators available for monitoring the maternal continuum of care with health system and household data. More research is needed on the possible formulation of summary metrics and validation of the proposed GHS-derived indicators. This integrated framework is a possible platform for monitoring adequate maternal continuum of care provision by districts. We made recommendations regarding improvements and collection of more indicators, and discussed issues of data quality and availability.
The sanitation wellbeing scale – a multisectoral composite measure combining outcomes within and beyond health

Co-authors: Ian Ross-London School of Hygiene and Tropical Medicine

Purpose and challenge

Sanitation interventions ensure the safe disposal of human excreta, and can involve construction, marketing or behaviour change initiatives. Such interventions have health impacts related to diarrhoea, helminth infections and more, meaning that sanitation has long been seen as one of the foundations of public health. However, sanitation also has important impacts beyond health, related to dignity, safety, security and gender equality, which are often acknowledged but not adequately measured.

To date, impact evaluations of sanitation programmes have focused predominantly on under-five diarrhoeal disease prevalence as the primary outcome. Consequently, economic evaluations using cost-effectiveness analysis have focused on calculating disability-adjusted life years in order to compare sanitation interventions to each other, but also to other interventions targeting diarrhoea (e.g. oral rehydration). Different sanitation interventions may, however, vary in performance with respect to their impacts beyond health too, such as dignity, safety etc. Comparing between interventions solely only on the basis of their health impacts means ignoring these other areas. Cost-benefit analysis does not solve the problem since the above outcomes cannot be valued in monetary terms. There is therefore a need for broader measures.

Focus

This study aimed to overcome these challenges, by combining measures within and beyond health to create a composite measure of sanitation wellbeing. This takes the form of a scale to measure the underlying concept. Qualitative research was used to identify outcomes of importance for inclusion as items in the composite measure. A quantitative household survey instrument to measure these outcomes is being developed and tested. In this presentation, findings from the qualitative research in informal settlements of Maputo, Mozambique, will be discussed. Implications of the results for the development of the quantitative instrument will be proposed. Participant feedback is sought, crucially from the perspective of other sectors beyond sanitation.

Relevance for sub-theme and target audience

The sanitation wellbeing scale aims to be a multisectoral measure that will have relevance to the health sector, the water sector, and cross-sectoral areas such as gender equality and social development. Grounded in wellbeing theory and welfare economics, the measure is based on the capability approach popularised by Amartya Sen. The ultimate objective is to develop a measure that can be used in future evaluations, in order to compare interventions in a more holistic, multisectoral way. This will be of interest to anyone wishing to evaluate programmes with multiple outcomes across different sectors, as is common in public health.
Development of Facility-Level Integration Indexes to Determine the Extent of Family Planning and Child Immunization Services Integration in Health Facilities in Urban Areas of Nigeria

Co-authors: Kate Sheahan - University of North Carolina at Chapel Hill; Jen Orgill - Franklin and Marshall College; Ilene Speizer - University of North Carolina at Chapel Hill; Antonia Bennett - University of North Carolina at Chapel Hill; Sian Curtis - University of North Carolina at Chapel Hill; Morris Weinberg - University of North Carolina at Chapel Hill

Introduction: Numerous governments, donors, and implementing organizations have identified integration of family planning into immunization services as a strategy with potential to increase postpartum contraceptive use and ultimately to reduce maternal and infant morbidity and mortality. Yet, few studies analyze the effect of integration on health outcomes or service delivery. Most studies define integration as binary - a facility is integrated or it is not- when in reality facility-level integration is multi-dimensional and varies within and across facilities. This study advances the field by developing facility-level integration indexes to determine the extent of family planning and child immunization services integration in health facilities in urban areas of Nigeria. It provides a practical guide to the development of the integration indexes.

Methods: This research leverages cross-sectional health facility (N= 400) and health provider (N=1,479) survey data collected in six urban areas of Nigeria. We use Principal Components Analysis (PCA) to develop facility-level integration indexes that reflect provider (Provider Integration Index) and facility (Physical Integration Index) capacity to offer integrated services. Index scores are continuous and range from 0 (low) to 1 (high). The index development process included selecting and transforming variables for inclusion in the PCA, constructing consolidated indexes using weights calculated from factor loading scores, applying index scores to each facility, and classifying the integration levels within facilities according to raw index scores. Robustness and internal coherence of the indexes is assessed.

Results: Mean Provider Integration Index Score is 0.54 (SD: 0.31, range: 0-1.0); mean Physical Integration Index score is 0.62 (SD: 0.27, range: 0-0.99). Twenty-three percent of facilities have low Provider Integration scores, 32% have medium, and 45% have high. Fourteen percent of facilities have low Physical Integration Index scores, 38% have medium, and 48% have high. Significant differences in facility characteristics and index scores exist across all levels for both indexes, indicating strong internal coherence. The Provider Integration Index is highly robust, while the Physical Integration Index shows considerable sensitivity.

Conclusion: The range of integration index scores and classifications show that while many providers and facilities have high capacity to provide integrated services, many others have limited capacity. The range of scores suggests that measuring integration as continuous rather than binary may (a) more accurately reflect integration variation within and across health facilities, (b) enable nuanced measurement of integration determinants and effects (c) provide tailored information about how best to support providers and facilities to improve integration.
Oral Abstracts

Pooja Sripad, Population Council

**Reaching the most vulnerable: investigating a composite multidimensional measure for targeted fistula programming in Nigeria and Uganda**

Co-authors: Pooja Sripad-Population Council; Elly Arnoff-EngenderHealth; Emmanuel Nwala-Population Council; Vandana Tripathi-EngenderHealth; Charlotte E Warren-Population Council

**Background:** Accessing surgical repair poses challenge to women living with fistula who experience intersectional vulnerabilities including poverty, gender, stigma and geography. Barriers to fistula care have been described qualitatively in several low- and middle-income countries, but limited effort has been made to quantify these factors. This study aims to develop and test a barrier index for accessing fistula repair in Nigeria and Uganda.

**Methods:** This quantitative study builds on qualitative findings to validate composite measures and investigates post-repair client surveys (n=315) conducted at tertiary hospitals in Northern and Southern Nigeria and Central Uganda asking women about the degree to which a range of barriers affected their access to fistula repair. Items were scored on 5-point Likert scale from ‘strongly disagree’ to ‘strongly agree’. Item reduction and final composite measures are analyzed through an iterative scale development process using STATA 13 software.

**Results:** Of the women interviewed, 45% are currently employed and 55% had never sought previous care for their fistula; they lived with fistula between one month and 30 years. The preliminary list of 43 items demonstrates face and content valid items triangulated by qualitative data collected prior to and concurrently with survey data. Exploratory analyses of barriers shows substantial variability across 41 out of 43 items; two of which were eliminated by floor and ceiling effects. A high level of correlation across items shows the likely grouping of multiple dimensions as predicted by the thematic areas of barriers including: awareness, psychosocial, sociocultural, gender/interpersonal, transport, financial and health systems quality. A shortened composite measure is assessed for sufficiency for health systems targeting in policy and programs.

**Discussion:** Given the hard-to-reach nature and multiple vulnerabilities of and restrains on women living with fistula; the composite barrier measure can be used to inform future programming and resource allocation for targeting prevention and treatment. Learnings around aggregate barriers to fistula care may allow for adaptation to other disadvantaged and stigmatized groups in the health system.
Danielle Wilhelm, Institute of Public Health, Medical Faculty, Heidelberg University, Heidelberg Germany

Measuring the quality of maternal obstetric and neonatal healthcare in low-income countries: development of a composite score

Co-authors: Danielle J Wilhelm-Institute of Public Health, Medical Faculty, Heidelberg University, Heidelberg Germany; Manuela DeAllegri-Institute of Public Health, Medical Faculty, Heidelberg University, Heidelberg Germany; Julia Lohmann-Institute of Public Health, Medical Faculty, Heidelberg University, Heidelberg Germany; Jobiba Chinkhumba-Department of Public Health, School of Public Health, University of Malawi, College of Medicine, Blantyre, Malawi; Adamson Muula-Department of Public Health, School of Public Health, University of Malawi, College of Medicine, Blantyre, Malawi; Stephan Brenner-Institute of Public Health, Medical Faculty, Heidelberg University, Heidelberg Germany

Introduction: In low-income countries (LIC), studies demonstrate greater access and utilization of maternal and neonatal health services, yet mortality rates remain high with poor quality increasingly scrutinized as a potential point of failure in achieving expected goals. To improve quality, proper measurements must first be developed, which can be challenging due to the multi-dimensional nature of quality and lack of consensus on appropriate tools to be used in LICs. Existing tools often lack a systematic approach or a comprehensive measure reflecting quality of care (QoC) dimensions. We aim to fill this gap by developing a composite score using a step-wise approach to evaluate the quality of maternal obstetric and neonatal healthcare in LICs.

Methods: Based on review of the literature and expert opinion, we employed a multidimensional conceptual framework of QoC, encompassing 85 indicators distributed over four dimensions (effectiveness, accessibility, patient-centeredness, and safety) reflecting input, process, and outcome elements. To fill the framework, we extracted data for the indicators from an evaluation of a results-based financing in Malawi to include: facility inventories, direct provider-patient observations, health worker surveys, clinical vignettes, and exit interviews with women who recently delivered. We used linear summation to aggregate indicators into twelve sub-composite scores representing elements and dimensions identified in our conceptual framework. These twelve sub-composite scores were aggregated into a single composite score representing overall maternal obstetric and neonatal healthcare quality, which were used to create facility rankings. Lastly, we compared our baseline composite score against alternative cases employing different methods to account for missing values, normalization, and aggregation.

Results: Facility rankings using our baseline case compared to alternative cases showed a high degree of stability demonstrated by Spearman rank correlations (0.922-0.977). The mean composite score for 26 facilities was 8.740 (maximum score 12, CI 8.254-9.225). Process elements had an overall mean score of 2.666 (maximum score 4, CI 2.420-2.913), while structure and output elements scored 2.938 (CI 2.733-3.144) and 3.135 (CI 2.939-3.331) respectively. The patient-centered dimension scored low in the structure element (0.590, CI 0.478-0.701), but higher in outcome (0.904, CI 0.823-0.985).

Discussion/Conclusions: Our study illustrates how to develop a comprehensive QoC composite score using a transparent, systematic approach that can be applied within the context of LICs, which accurately evaluates maternal obstetric and neonatal healthcare quality. Our approach identifies gaps in specific quality dimensions and elements that can be discerned from an overall QoC score, providing useful policy insight and supporting comprehensive quality improvement.
Combining semantic discourse and social network analyses with qualitative data to explore the contribution of the PBF Community of Practice to policy diffusion in Africa

Co-authors: Lara Gautier - University of Montreal School of Public Health; Manuela De Allegri - University of Heidelberg Institute of Public Health; Valéry Ridde - CEPED/French National Research Institute for Sustainable Development, Paris-Descartes University

Background: Communities of practice are flowering in the SDG era, yet their role in diffusing health systems reforms has been seldom investigated. A Community of Practice (CoP) was created to facilitate knowledge exchange on a particular health systems reform - performance-based financing (PBF) – and to build and promote a community of PBF experts in Africa. PBF suggests a shift from the traditional input-based transfer of financial resources to an output-based approach conditional on health providers’ performance. This reform has spread in African countries very rapidly. This study explores the ways in which the CoP contributes to PBF diffusion in Africa.

Methods: A mixed methods convergent design was used to document the CoP’s participation to diffusion mechanisms, i.e. policy framing, learning, and emulation (eg, how socialisation sparks interest for a policy). A semantic discourse analysis of the CoP’s online forum was performed. It included 1,346 messages (344 threads) posted from 2010 to 2016. These quantitative results were confronted to a thematic analysis of qualitative interviews conducted in 2016-2017 with selected CoP members and PBF experts knowledgeable of the CoP (N=43). Social Network Analyses (SNA) of contributors (n=182) citing other members were conducted to further investigate how the structure and openness of this PBF community shapes the diffusion mechanisms.

Results: CoP members’ framing of PBF typically referred to economics and new public management semantic fields. Online thematic discussions about PBF were fairly consensual: there is little dissonance across members. Members’ cohesion also built around a common defensive tone in reaction to externally-voiced PBF criticism. This brought about a sense of community, potentially inducing emulation among CoP members. Interviewees reiterated the CoP’s instrumental role in harnessing a critical mass of well-trained PBF practitioners, offering international organisations a pool of African experts to tap into. The CoP’s promoted learning strategy was to foster South-South knowledge exchanges about PBF practices. However, the SNA nuanced these findings: the promoted South-South community does not match the network’s structure, which is dominated by European individuals. They are driving the framing and emulation strategies, and learning agenda.

Discussion: This empirical research enabled to identify the critical dimensions of CoPs facilitating health systems reforms’ diffusion. These results can inform on CoPs’ influence in the SDG era. Still, this mixed method approach can hardly draw causal patterns: CoPs seldom represent the only active policy communities, hence their effective contribution to policy diffusion is difficult to isolate from other networks’ actions.
Oral Abstracts

Louise Kengne, Research for Development International / University of Yaoundé I

Understanding therapeutic geographies in the context of the Boko Haram insurgency: a systems dynamics analysis using group model building

Co-authors: Louise Kengne - Research for Development International / University of Yaoundé I; Bienvenu Mloumbakou - University of Ndjamer - Tchad; Joseph Ongolo - University of Maroua - Cameroon; Martina Audibert - University of Auvergne, Clermont-Ferrand, France; Mahamed Shafiu - University of Maiduguri - Nigeria

Background: Boko Haram, one of the world’s deadliest terrorist groups, is linked to insurgency in Nigeria since 2009. The violence escalated dramatically in 2013 and spread to Cameroon, Chad, and Niger thus becoming a major regional conflict. A systems dynamics analysis was conducted to understand how the movements of populations under conditions of war have contributed to a remapping or a geographic reorganisation of health care in the region.

Methods: Structured interviews were conducted with 40 stakeholders, selected to represent the diversity of the conflict experience across the four countries (Cameroon=11, Chad=9, Niger=7 and Nigeria=13). A group model building session was convened with 10 senior stakeholders from the same area, which used participatory scripts to review thematic analysis of interviews and develop a preliminary systems model linking identified variables.

Results: Health-care needs have become dispersed throughout the region. Increasingly, neighbouring cities in the four countries are absorbing the health needs of displaced populations fleeing violence. Frequent return visits, modifications of travel routes, and a process of trial and error to find good care contribute to increasing costs. Particularly for people with chronic diseases such as HIV/AIDS and diabetes, patients and families travel back and forth out of the region, visiting family and gathering money between successive sittings of treatment. This large-scale movement of populations is reshaping health care in the region. The Cameroonian ministry of health (MoH) has increasingly resorted to funding patients from some affected zones (in the Logone-Chari department) for complex treatments in N’Djamena, the city capital of Chad. In the Cameroonian border city of Kolofata, the Borno state MoH in Nigeria contracted an entire ward of the District Hospital. A full-time staff member at the hospital handles the patients coming from neighbourhood villages of Nigeria, where the health system is entirely collapsed, and for whom traveling up to Maiduguri, the state capital, has become highly risky. A largely unplanned and dispersed reorganization of medical care across the region that blurs other – national – boundaries, appear to have been protective of the operation of the health system in affected regions across the four countries.

Conclusion: A systems analysis using participatory group model building provided a mechanism to identify key pathways of threat and adaptation with regard to health service functioning. Generalizable systems characteristics supportive of resilience are suggested, and linked to wider discussion of the role of factors such as self-regulation, sub-level cooperation and integration.
Yes, no, maybe so: The importance of cognitive interviewing to enhance structured surveys on respectful maternity care for use in rural India

Co-authors: Kerry Scott-Johns Hopkins University; Aarushi Bhatnagar-Oxford Policy Management, India; Dipanwita Gharia-Oxford Policy Management, India; Aditya Singh-Oxford Policy Management, India; Rakesh Chandra-Oxford Policy Management, India; Alain Labrique-Johns Hopkins University; Diwakar Mohan-Johns Hopkins University; Amnesty E LeFevre-Johns Hopkins University

Background

Quantitative survey findings are an important aspect of measuring health-related phenomena and tracing progress, including on sensitive topics such as respectful maternity care (RMC). But how well do survey results truly capture respondent experiences and opinions? Pilot tests tend to focus on logistic considerations (survey length, skip patterns) and obvious problems with language and comprehension. However, they fail to deeply explore how respondents understand survey questions and response options. Responses are recorded as “truth” regardless of whether the respondent understood the question, or whether her understanding matched the researchers’ intended meaning. The strength of survey findings can particularly be compromised by translation between languages and cultures when using standardized questions and assessing the same domains across different contexts.

Methods

Expanding upon validated questions used in Ethiopia and elsewhere in India by other researchers, we developed survey questions (n=74) on RMC covering domains including consent, privacy, and abuse. We then conducted two rounds of cognitive interviews with rural women (n=12) in Madhya Pradesh, India. These interviews involved asking the respondent the survey question, recording her response, and interviewing her about what the question meant to her, what she was thinking of when she answered, and why she provided the response option recorded.

Results

Although women tended to provide answers to the survey questions, cognitive interviewing revealed widespread divergent understandings. Several core concepts in the survey tool failed to resonate, such as the idea of consent and confidential health information. Other questions were translated using unfamiliar Hindi words or overly complex sentence structure and vocabulary. Likert scale response options were incomprehensible to many women, particularly those with less education. Based on these findings, we successfully revised the survey tool with improved translations, use of local terms, dropping Likert response options, and removing questions on concepts that failed to resonate with local worldviews.

Discussion

Cognitive interviews revealed a number of problems with RMC survey questions derived from validated tools in other contexts, which would not have been detected through typical pilot testing and which threatened the tool’s validity and reliability. Questions and response options were particularly poorly attuned to the realities and understandings of the most marginalized women, potentially "including" them as respondents but excluding their experiences and opinions from being accurately captured. This presentation will provoke discussion on how to ensure that surveys are tested to maximize validity and reliability.
Oral Abstracts

Agnes Semwanga, Makerere University College of Computing and Information Sciences

Unraveling Complexity in Health Systems using the Dynamic Synthesis Methodology

Co-authors: Agnes Rwashana Semwanga, Makerere University College of Computing and Information Sciences

Despite the efforts being made towards promoting healthy lives, reports continue to show slow improvements in healthcare with Sub-Saharan Africa lagging behind. There is therefore need to employ alternative solutions that take into account intricate complexities in the health system. The design and successful implementation of health interventions hinges on the understanding the dynamic connections between the elements within the health system. The System Dynamics (SD) modeling approach has been widely used to study the complexity in health systems, however, not much evidence of qualitative and quantitative data in the case descriptions has been shown. This paper presents the Dynamic Synthesis Methodology (DSM), a System Dynamics method that employs rigorous research methods where both qualitative and quantitative data is collected and used to build models for accurately informing healthcare policies and interventions. The paper draws from three cases (immunization, neonatal healthcare and maternal healthcare) that have employed DSM to demonstrate the benefits as well as provide a step by step approach of how empirical data can be collected using DSM to facilitate policy analysis and design as well as information design of various health aspects ranging from prevention, promotion and healthcare delivery. The data collection process involved stakeholders with diverse social, political, economic and technological differences resulting in a balanced representation of local, national and regional healthcare aspects.

In the first case, DSM was applied to examine the challenges associated with the demand for immunization. A model showing the dynamic influences associated with the demand and provision of immunization services with the aim of facilitating decision making as well as health care policies and interventions was developed. In yet another research, DSM was used to examine the challenges linked with maternal healthcare. The model presents strategies of enhancing decision making and the development of relevant health information systems which could substantially improve maternal healthcare demand. In the third case, DSM was used to understand the challenges associated with neonatal mortality rates. The developed models facilitate the understanding and interpretation of the interactions and feedback which are key in designing and exploring potential strategies and their likely impact. The dynamic models can be used by health planners to investigate effects of possible changes in health policies by testing different scenarios for strategic planning and management.
Alayne Adams, Georgetown University

The Bureaucratization of Contracting Out Primary Health Care in Urban Bangladesh: a lost opportunity to increase municipal agency and responsiveness to local health needs

Co-authors: Alayne Mary Adams-Georgetown University; Rubana Islam-University of New South Wales; Shahed Hossain-University of New South Wales

Introduction: Contracting-out (CO) health services to non-state actors can extend coverage to marginalized populations and increase efficient use of available resources. Starting in 1998, a donor coalition funded a CO project in Bangladesh to overcome gaps in urban Primary Health Care (PHC). A chief objective of the project was to decentralize health authority and build capacity of Local Government Bodies (LGB) to manage contracts and purchase health services. This research examines the evolution of this vision, and its implications for future CO planning in LMICs.

Methodology: We conducted a qualitative explanatory study with 42 key informants including Government officials, donors, NGO providers and managers, and project personnel. Document review was used to assess contract, procurement and implementation changes over time, and to triangulate interview data. Guided by the Health Policy Triangle framework, relationships among actors, content, context, and process were explored. Data were examined in ATLAS.ti using a framework analysis approach.

Results: The CO project occurred alongside two decades of political turbulence, during which actors of various ideologies and interests entered and exited. LGBs did not possess sufficient capacity or political power to deal with these challenges. Given growing concerns about project governance and accountability, an Admin Cadre appointee within the Ministry of Local Government Division (MoLGD) assumed management control. Although an emergency measure, this continued for thirteen years and the project was effectively subsumed under the central bureaucratic administration of the MoLGD. MoLGD usurped authority over all contracting processes including design and procurement. Multiple layers of administration led to delays in disbursements. In addition, funding for LGB training was reduced, and in a number of cases there were reports of political bias in the selection of trainees.

Discussion & Conclusion: The goal of creating agency at the local level was replaced by increasing centralized control by Ministry level bureaucrats. The ensuing politicization, bureaucratic rigidity and lack of transparency in CO implementation were some of the undesired and unanticipated outcomes of administrative centralization. Insufficient readiness of central government to decentralize and lack of accountability for deviation from project goals lead to this lost opportunity. Difficult questions as to who is responsible when project objectives are abandoned, and who holds donors and central government accountable to their commitments, need to be asked before CO projects are proposed. An assessment of readiness in terms of capacity and political will is essential to ensure that their objectives are realistic, agreed and ultimately met.
Emily Adrion, University of Edinburgh

The Impact of Private Insurer Competition on Quality and Financial Protection: Findings from the U.S. Medicare Advantage Programme

Co-authors: Emily Adrion-University of Edinburgh

Background.

The U.S. Medicare programme provides health insurance coverage to adults over 65 and the permanently disabled. Traditional Medicare is a public insurance programme; the government reimburses private providers directly. However, Medicare beneficiaries may choose instead to receive their benefits through a private managed care plan (referred to as Medicare Advantage (MA)). The MA programme has grown substantially over time: private plans now cover 35% of Medicare beneficiaries and cost over $190 billion annually.

In recent years, proposed mergers and acquisitions among some of the largest health insurers in the U.S. – including those that offer MA plans – have attracted widespread media attention. Insurers argue that consolidation leads to lower prices through increased bargaining power in negotiations with providers. However, advocates, politicians and policy experts alike have raised concerns that such mergers would adversely impact patients via higher cost sharing and a reduced focus on quality and innovation.

Aims.

Despite the ubiquity of arguments about the value of competition, few studies have assessed the impact of insurer market concentration on health plan quality. This study examines the intersection between insurer market structure, health plan quality and premiums in the MA programme, in order to better understand the direct and indirect effects of mergers, as well as policies aimed at increasing competition.

Data and Methods.

Data for this study were primarily drawn from publicly-available Medicare administrative datafiles. Descriptive analyses examine trends in MA market concentration from 2008-2017. Generalized linear regression models examine plan quality and premiums as a function of market structure for 2011.

Findings.

Over the last decade, the MA market has become increasingly concentrated, with the majority of beneficiaries living in counties dominated by a small number of insurers. MA plans that tend to operate in more concentrated MA markets have a higher probability of having a high-quality health plan rating. Operating in more concentrated MA markets was also found to be associated with higher premiums. Among plans operating in very concentrated MA markets, high quality MA plans are associated with premiums that are as much as two times higher than those associated with lower quality plans.

Conclusions.

Financial protection and high quality health care are central elements of universal health coverage. Countries using private plans to administer public insurance should carefully consider policies directed at enhancing insurer competition, as the implications for health plan quality may be very different than the implications for enrollee out-of-pocket spending.
Mediating “Street-Level Bureaucracy” to Standardize Health Policy and Increase Access to Small Private Providers in Kenya

Co-authors: Lauren Suchman-University of California, San Francisco; Dominic Montagu-University of California, San Francisco

Background: “Street-level bureaucracy” describes the process by which policies drafted at high levels of government are enacted, and sometimes re-formulated, through the practices of low-level bureaucrats working directly with the public. Re-formulations may occur because street-level bureaucrats are resource-constrained. However, they can have serious repercussions for public service provision. Although small private providers make up a large proportion of the healthcare landscape in low- or middle-income countries (LMICs), engaging these providers in government initiatives to achieve universal health coverage can be challenging. National Health Insurance (NHI) representatives typically have little interaction with these providers. Drawing on interviews with private providers in Kenya, an LMIC country that has recently expanded NHI contracting, this paper analyzes a programmatic effort to increase private provider accreditation by mediating between providers and NHI officials.

Methods: This paper draws from a dataset of 126 interviews conducted with small private providers in Kenya, a country where NHI accreditation contracts have only recently expanded to better include small private providers. Data were collected as part of the qualitative evaluation of the African Health Markets for Equity (AHME) program; an initiative that aims to increase access to quality private providers for low-income clients in Kenya and Ghana. Semi-structured interviews were conducted with providers, both NHI- and non-NHI accredited, in 2013, 2015, and 2017. Interview data was supplemented with informal conversations with implementing partners and document review throughout the course of the data collection period.

Results: Providers often lacked information on the NHI accreditation process, which made it seem daunting and discouraged them from applying. Those who received accreditation assistance from AHME said that the program helped them navigate the process by: clarifying the process and requirements for accreditation; providing them with materials to prepare for assessment; ensuring they had the proper credentials in place to apply; and advising them on improvements to make before inspection. Providers also noted the importance of having external help to “push” the accreditation process along.

Conclusions: Our findings underscore both a challenge with engagement of small private practitioners and underscores the pitfalls of ‘street level bureaucracy’ where local administrators can themselves becoming a bottleneck to the private sector engagement they are empowered to advance. Our findings demonstrate the benefit of an external actor mediating between small private providers and accrediting NHI officials to create a process that was transparent and standardized.
Iboro Nelson, PhD Candidate, Department of Economics, University of Uyo, Uyo, Nigeria

The Markets for healthcare services, Government Regulations and the attainments of Universal Health Coverage (UHC) in Nigeria: Study of the Nexus

Co-authors: Iboro Ekpo Nelson-PhD Candidate, Department of Economics, University of Uyo, Uyo, Nigeria

Background: Healthcare due to its centrality to humankind is classified as a “special” category of goods and services in the markets. While some school of thoughts believe it should be best left outside of the domain of the market (forces of demand and supply), others have equally valid reasons for not dismissing the value the market could bring, especially pluralism and competitiveness. However, in the face of global glamour for collectivization of healthcare i.e., demand for everyone to have access to healthcare regardless of income or status based purely on normative principle of fairness and justice. As well the increasingly prominent role of the for-profit private health care providers whose ideology is profit maximization, then the central challenge for policy makers in healthcare is thus the optimum balance between the markets and the other alternatives.

Methods: The work deploys a combination of theoretical and qualitative analysis methods. It applies existing economic theories to analyze the healthcare landscape of Nigeria as well as the behavior and interactions of the various economic agents. Desk review of secondary data sources mainly policy documents and in-depth interviews using semi-structured questionnaire to private health operators and government to assess the available legal framework for regulation including linkage with other health systems as well as explore the views and perspectives of actors on gaps and opportunities and barriers and enabling factors to effective regulation of the private health care sector.

Result: The result shows that taken to the extreme both the market and strict government regulations offer unsavory results. Market failure is endemic and at the very least requires regulation. Also, government failures cannot also be overlooked. But more importantly, markets say nothing about whether the outcome will be fair and equitable. However, granted that rather complex nature of the health care, the public-private mix market can deliver real benefits but only in an environment that is properly regulated especially in developing economies like Nigeria.

Conclusion: Without effective stewardship mechanism to intervene and control health markets and provide incentives for quality, equity and affordability, health markets will continue to produce poor outcomes that favour the wealthier segments of the population and thus negates the principle of universal health coverage (UHC).
Where CHWs lead: Identifying impactful intervention areas through CHWs WhatsApp groups in India

Co-authors: Kavita Surendra Bhatia-Ashavani (a digital platform); Asha Workers CHWs-Accredited Social Health Activist Program, India

Introduction: WhatsApp Groups are a common communication channel among smartphone owners in the public health services system in India. A WhatsApp group of CHWs and supervisors was formed in the state of Maharashtra. Discussions in the local language, were centered on the life and work of the CHWs. All the participants were CHWs from the ASHA (Accredited Social Health Activist) program from India. Discussions were either initiated by the group participants or by the researcher. These discussions provided a rare insight into their lives and formed the basis of several initiatives by the researcher, in conjunction with WhatsApp group members.

Purpose: The purpose of the presentation is to introduce an unconventional but effective method for working with CHWs, namely WhatsApp groups. All the activities were geared towards the professional growth of Ashas. The following activities will be presented in the presentation:

1. Research.
2. Documentation.
3. Participation on international platforms including a structured discussion on an international platform and the creation and presentation of videos on the lives and issues of Ashas.
4. Identification of urgent issues for advocacy.
5. Identification of issues for field practice.

Content: A video/multi media presentation with examples from all the five areas of interventions as delineated above.

Significance/relevance: This presentation will demonstrate that mHealth goes beyond health education, and mobile phones can be used for more than just followup and reporting. WhatsApp groups are a powerful tool for participatory interventions with CHWs. This method has potential for use in global CHW settings.

Target audience: All those who are interested in the professional growth of CHWs; and all those who are interested in the use of affordable digital media for health care.
Red Zone Paramedics: a film about the everyday experiences of delivering emergency care. Using film to develop bottom-up solutions to address violence in Cape Town

Co-authors: Leanne Brady-School of Public Health and Family Medicine, University of Cape Town; Abdul Waheem Martin-Emergency Medical Services, Western Cape Department of Health; Jakob Van Zyl-Emergency Medical Services, Western Cape Department of Health; Shaheem De Vries-Emergency Medical Services, Western Cape Department of Health; Khalid Shamis-TubaFilms

Focus: Health systems are deeply rooted in historical and socio-political contexts. In 1994, the South African government inherited a deeply inequitable health system and apartheid policies created large disparities between racial groups in terms of socio-economic status, occupation, education, housing and health. These patterns of inequality are still present today, and exceptionally high levels of violence persist in geographic areas that mirror apartheid spatial patterns. Although outcomes for key issues (such as maternal and child health) are improving in South Africa as a whole, violence remains endemic and in the Western Cape specifically, the rates of violence are on the increase. Delivering emergency medical services in this context has specific challenges, and with an increasing number of attacks on ambulance crews since 2012, the safety of paramedics has become a national priority.

Historically, addressing violence was seen as the responsibility of the criminal justice system. However, the Western Cape Department of Health (WCDOH) is currently implementing a range of evidence-based inter-sectoral interventions that take a public health approach to violence, and seek to address the complex social factors (at the level of society, community, family and individual) that interact to produce violence. Violence is connected to Sustainable Development Goals 3 (Good Health) and 10 (Reduced Inequality) and given its complex nature, requires new research methods to support the community-based interventions required to address it. In the WCDOH, film is part of the process.

‘Red Zone Paramedics’ is a film about an ambulance crew working the night shift on New Years Eve in Mitchells Plain, a particularly violent part of Cape Town. The film follows the crew as they respond to emergencies. With long granular shots winding through darks streets while navigating the visceral complexities of delivering healthcare – this is a film about the everyday experiences of life on the road.

Sub-theme significance: Community-led and participatory governance initiatives are a key part of this strategy. Paramedics are the community health workers (CHWs) of emergency care. They deliver healthcare to people in their homes, at the time when they need it most. Improving neighborhood safety requires new models of community engagement to develop shared governance and bottom-up accountability frameworks, to achieve the goal of delivering emergency health care for all.

Purpose: WCDOH uses the film to facilitate public conversations with community-based inter-sectoral groups about issues of violence, and to co-produce appropriate strategies.

Target audience: as above, and general audience at HSR2018.
Oral Abstracts

Maryse Kok, KIT Royal Tropical Institute

Getting more than “claps”: a discrete choice experiment on incentive preferences of voluntary community-based mobilisers in Tanzania

Co-authors: Maryse Kok-KIT Royal Tropical Institute; Dinu Abdella-KIT Royal Tropical Institute; Rose Mwangi-Kilimanjaro Christian Medical University College; Mengi Ntinginya-Marie Stopes Tanzania; Ente Rood-KIT Royal Tropical Institute; Jennifer Gassner-Marie Stopes International; Kathryn Church-Marie Stopes International; Nkemdiri Wheatley-Marie Stopes International

Background

Marie Stopes Tanzania works with a voluntary cadre of 66 community-based mobilisers (CBMs), who are tasked with raising awareness, generating demand, and providing referral to potential clients for family planning, comprehensive post-abortion care and cervical cancer screening. CBMs extend the reach of urban clinics to peri-urban communities, enhancing access to – sometimes sensitive – sexual and reproductive health services. In an effort to optimize performance of CBMs, a study was conducted to explore the drivers of CBM motivation and inform the design of an incentive scheme.

Methods

Three focus group discussions with 17 CBMs and 11 interviews with CBM supervisors and managers were conducted in three clinics and the head-office. After thematic analysis of transcripts, findings on motivational factors were discussed in a reflection workshop and informed the development of a discrete choice experiment (DCE) involving 61 CBMs as respondents. The DCE included eight choice questions on two incentive schemes, each consisting of five attributes related to remuneration, training, supervision, benefits and identification. For each attribute, different incentive options were presented, based on the outcomes of the qualitative assessment. The DCE results were analysed using conditional logistic regression.

Results

A variety of factors motivated CBMs. Most CBMs were motivated to conduct their work because of an intrinsic desire to serve their community. The most mentioned extrinsic motivational factors were recognition from the community and supervisors, the monthly allowance, availability of supporting materials and identification, trainings, supervision and feedback on performance. Recommendations for improvement were translated into the DCE. Incentive attributes that were found to be significant in DCE analysis (p<0.05), in preference order, were carrying an ID card, bi-monthly training, supervision conducted via both monthly meetings at clinics and visits from head-office, and a monthly flat rate remuneration (over pay for performance).

Conclusion

Despite the recognition that being a CBM is voluntary, incentives, especially those of non-financial nature, are important. This study shows that the CBMs were able to think through what things are most important to them in their work. Programme design needs to take into account the voices of community-based workers, to optimize their motivation and service access of communities they serve.
Deepak Paudel, Save the Children

**Motivation and performance of community health volunteers in Nepal**

Co-authors: Deepak Paudel-Save the Children; Stephen Hodgins-University of Alberta; Sushil Baral-HERD International; Sagar Dahal-Ministry of Health; Kedar Baral-Patan Academy of Health Sciences; Chahana Singh-UNICEF

Background: 30 years ago, inspired by Alma Ata and motivated to empower village women and improve health, the Government of Nepal (GoN) created a new cadre of Female Community Health Volunteer (FCHVs), scaling up nationally by 1995. During the same period GoN introduced several other elements in its community-based primary healthcare (PHC) service, including sub-health posts, paid Maternal Child Health Workers, and routine PHC outreach clinics. Much has changed since then and the FCHV role has evolved. FCHVs currently number over 50,000. Though FCHVs receive modest financial incentives, it remains a volunteer program. FCHVs are widely seen as having made an important contribution to Nepal’s achievement of MDGs 4 and 5.

Methods: The presentation draws on multiple sources but primarily two large, nationally representative FCHV surveys, conducted in 2006 (n=5750) and 2014 (n=4302). These surveys were designed with a similar sampling strategy and questions, allowing for assessing changes over time. The second survey includes a comprehensive module on motivating/demotivating factors. Findings from these sources are supplemented with data from the GoN’s health information system and other studies.

Results: Several of Nepal’s successful PHC programs (including vitamin A, immunization, care for pregnant women, sick child care and others) rely heavily on FCHVs. In both surveys, the average number of hours FCHVs report spending per week on such duties was ~6 hours, though this varied considerably by individual. In 2006, 6% reported not having been involved in any FCHV-related activity over the previous week. By 2014, this proportion had increased slightly to 12%. Annual attrition has been less than 5% and is unchanged between the 2 surveys. Only 2 to 3% report wanting to reduce the amount of time spent on FCHV activities; this has not increased over time. FCHVs rank as the most important motivating factors (in order): gaining new knowledge and skills, helping improve health of others in their communities, and respect garnered in their community. They also rank financial benefits as important, though less than these other factors. Total value of financial incentives averages ~$250/year (vs. current GDP per capita ~US$700), though this varies considerably depending on presence of donor-supported health activities in the district. Most FCHVs also have access and co-manage saving and credit funds with other women.

Discussion/conclusions: The presentation will conclude by discussing important contextual factors and drawing key lessons potentially transferable to other country settings.
Using Photovoice to explore complex multi-sectoral social determinants of health in rural Malawi

Co-authors: Jane Ardrey-Liverpool School of Tropical Medicine; Kate Jehan-University of Liverpool; Kevin Mortimer-Liverpool School of Tropical Medicine; Rachel Tolhurst-Liverpool School of Tropical Medicine

Background: Rural Malawians are part of a 3 billion worldwide population exposed to toxic pollution and associated morbidity and mortality through cooking on open fires or inefficient cookstoves using biomass fuels. This burden is a significant challenge to health systems in low income countries as detailed in SDG 7 ‘Affordable and Clean Energy’ and is linked with, SDG3 ‘Good Health and Well-Being’, SDG11 ‘Sustainable Cities and Communities’ and SDG13 ‘Climate Action’. The Cooking and Pneumonia Study (CAPS) is village-level randomised controlled trial of an advanced cookstove intervention recently completed in Malawi (www.capstudy.org).

Methods: CAPS provided a unique opportunity to gain understanding about the social and cultural factors that may hinder or encourage use of cookstoves and to explore gendered household dynamics and decision making in this context. The participatory methodology Photovoice was used in 5 CAPS intervention villages. In each village, 10 participants were trained and collected images about cooking over 5 days, these were then discussed in village-level focus groups. Interim data analysis fed into sampling and design of 12 in-depth interviews. Data was analysed inductively using a thematic content analysis approach.

Results: The Photovoice methodology enabled participants to articulate their realities and priorities regarding food, and cooking methods, which was effective in developing a picture of the socio-cultural context of cookstove adoption in their household and community. The links between advanced cookstove use and health were generally not prioritised when the shorter-term aim of feeding families was a daily struggle. Understandings of health and technology were mediated through the socio-cultural context of the trial and village communities, with tensions expressed through rumours and ‘satanic beliefs’. However, villages and households were not homogeneous and actively engaged with new understandings of gender equality, technology and health.

Conclusion: A multi-stage Photovoice study of cookstove adoption in rural Malawi resulted in rich data. In rural Malawi and many other low-income environments where cooking is currently carried out using unhealthy, polluting open fires and inefficient cookstoves, alternative clean fuels such as electricity are unlikely to be widely available by 2030. Advanced cookstoves can provide an alternative solution but in practice use is generally inconsistent and incomplete, resulting in limited impact. Gaining in-depth understanding of the complex social, political, environmental and economic determinants of cookstove use is necessary if health impacts of air pollution are to be mitigated. Participatory methodologies such as Photovoice are valuable for exploring the multi-sectoral context of cookstove adoption.
Political economy of nutrition in Anambra and Kebbi states, Nigeria.

Adequate nutrition is pivotal to improving health and propelling human and national development in low income countries. Despite this knowledge, its multisectoral nature has always led to less attention and commitment from various governments. This lack of political commitment, is linked to low priority given to nutrition by government and by extension persistent high malnutrition burden. This presentation explores a case study of two states in Nigeria with varying malnutrition profile and different context to analyse the political commitment to nutrition and its outcomes. The Political Commitment Rapid Assessment Tool (PCOM- RAT), through in-depth interviews and workshops, was administered in a bid to measure institutional commitment, budgetary commitment, expressed commitment, agenda setting and stakeholder analysis. Data for each axes of commitment and the streams are represented as proportions of the maximum value attainable in the questionnaire. This paper finally identifies major strengths, weaknesses, opportunities and threats. In Kebbi State has high political commitment for nutrition with proportions ranging from 0.8 to 1 for each of the six-domain measured, in Anambra state, commitment varied. While institutional commitment was high (0.9), the problem stream and budgetary commitment were lowest at 0.67 and 0.6 respectively. In Kebbi state, high budgetary commitment exists along somewhat higher than average institutional and expressed commitment. Strengthening institutional commitment might benefit nutrition further in the state. The coming elections are open windows to drive down a case for nutrition in the state in addition to the open policy window. Effective advocacy in establishing nutrition as a problem would help propel efforts for eradication of malnutrition in the state. In Anambra state, the most pivotal strength is the presence of strong institutional commitment which exist as the state has a committee for food and nutrition. This though does not reflect in the budgetary commitment to nutrition. As a problem, nutrition appears to be placed lower in the state. However, the state is building the policy stream with the current development of the state cost plan. The political stream does not have an opening, but political support can be garnered through the policy stream leveraging on the malnutrition problems in the state. Opportunities exist for strategic framing and advocacy of the nutrition profile of the states especially using the local state media. The existence of institutional coordination committees made of different sectors is appropriate for driving commitment to nutrition actions, though this can be overshadowed by individual sectoral actions.
Maureen Mackintosh

**Industrial development as a social determinant of health: building productive synergies**

Co-authors: Maureen Mackintosh-The Open University, UK; Paula Tibandebage-Economic and Social Research Foundation, Dar es Salaam, Tanzania; Julius Mugwagwa-University College London, UK; Geoffrey Banda-University of Edinburgh, UK; Smita Srinivas-Indian Council for Research on International Economic Relations, New Delhi, India.

**Background**

The landmark report from the Commission on the Social Determinants of Health, Closing the Gap in the Generation, pointed to several paths by which industrial development influences health status and health equity in low and middle income countries. Key aspects addressed in detail were employment and working conditions; in somewhat less detail, aspects of industrialisation such as product regulation, impact of trade agreements on health, and constraints on medicines access resulting from patenting, were also considered. The contribution of economic development (and hence industrialisation) to increased resources for health was recognised.

**Focus**

Extending these arguments, this paper presents a framework for identifying and strengthening some of the dynamic interactions between local industrialisation and the health sector, and makes a case for the importance of these interactions with specific reference to African evidence and policy. The domestic and global linkages between mixed public/faith-based/private African health care systems and industrial investment and innovation are market linkages, currently subject to rapid change. Market structure, competitive behaviour and technological innovation are all shaped by health sector demand and procurement patterns; by partially effective regulatory interventions; by financing structures; and by broader industrial and trade policies and trends. While health and industrial policy domains remain largely independent, health systems and the industrial sectors supplying them co-evolve, dependent upon each other. This co-dependence is now increasingly recognised by African governments, with a current policy focus on extracting health benefits from shorter supply chains and improved local regulation. The global pharmaceutical industry is going through rapid change, including consolidation of large generic multinationals based in Asia and Africa alongside the emergence of important medium-size players. The more fragmented medical devices industry is under-studied but acts increasingly as a determinant of the scope for health sector innovation and improved access.

**Significance**

The framework developed in this paper draws on evolutionary industrial economics and on health systems research. We analyse specific examples of synergies and of lost opportunities to promote linked innovations. The impact of the market dynamics between the health sector and industrial innovation can, as is well understood, be positive or negative, blocking or promoting health care access and improvement while incentivising or blocking market access for innovative industrial provision. We draw some lessons for policy and practice from Indian experience, while focusing particularly on deepening industrial-health linkages within the sub-Saharan African sub-continent, nationally and particularly within regional markets, to benefit health system innovation and access.
Oportunidades y desafíos para alcanzar los ODS en salud en Argentina: Evidencia a partir entrevistas con tomadores de decisión del sistema nacional de salud

Co-authors: Alfredo Palacios-Centro de Estudios de Estado y Sociedad; Daniel Maceira-Centro de Estudios de Estado y Sociedad

Contexto: los Objetivos de Desarrollo Sustentable (ODS) representan una oportunidad para repensar la política sanitaria y los sistemas de salud a nivel global y local. Ellos proponen una mirada sistémica de la salud, priorizan la Cobertura Universal en Salud (CUS) y reconocen las interconexiones entre el sector salud y otros sistemas políticos y sociales. Sin embargo, esta aproximación novedosa y compleja podría plantear desafíos para los tomadores de decisión en salud.

Objetivo: identificar los principales desafíos del sistema de salud argentino y las potenciales oportunidades para la política sanitaria para alcanzar los ODS desde la perspectiva de los tomadores de decisión del sistema de salud argentino, caracterizado por la descentralización y fragmentación del financiamiento y prestación de servicios sanitarios.

Métodos: se realizaron entrevistas en profundidad semiestructuradas a diez tomadores de decisión pertenecientes sistema de salud nacional, o vinculados con el mismo, entre los que se encontraron referentes locales de los ODS, y directores/as de programas nacionales de salud vinculados/as directamente con temáticas de ODS (adolescencia, materno/infantil, salud sexual, etc). Un análisis tabulado de respuestas e permitió identificar desafíos y oportunidades en diferentes aspectos de la salud pública local: acceso a servicios de salud, capacidad de colaboración multisectorial y el desarrollo de instituciones más participativas y transparentes.

Resultados: muchos tomadores de decisión identifican fuertes desafíos para alcanzar los ODS en Argentina. Parte de estos desafíos se vinculan a características propias del sistema de salud nacional. Sin embargo, se identificó que el nuevo enfoque adoptado en los ODS, de mirada amplia y compleja, desfía la definición de prioridades sanitarias a nivel local, complejizando el uso concreto y eficaz hacia los ODS.

Discusión: los ODS representan un avance conceptual en relación a los Objetivos de Desarrollo del Milenio (ODM) al entender a la política sanitaria como parte de un proceso sistémico e integral. Desde la mirada de los tomadores/as de decisión de sistemas de salud argentino, dicho enfoque podría requerir de un debate sobre los dispositivos que faciliten el establecimiento de prioridades sanitarias y acciones concretas para mejorar el bienestar de la población.
Oral Abstracts

Gianna Gayle Amul, Lee Kuan Yew School of Public Policy

**Tobacco control in developing Southeast Asia: A health systems approach in assessing progress of the SDG target on FCTC implementation**

Co-authors: Gianna Gayle Herrera Amul-Lee Kuan Yew School of Public Policy; Tikki Elka Pangestu-Lee Kuan Yew School of Public Policy

**Background and Objective**

With about 11 per cent (18 million) of global disability adjusted life years (DALYs) and about 10 per cent (677,202) of global deaths attributable to tobacco smoke concentrated in the lower middle income countries of Southeast Asia (Cambodia, Indonesia, Laos, Myanmar, Philippines and Vietnam), tobacco use is clearly a threat not only to their health systems but also to regional development. The study thus reviewed the state of implementation of the WHO Framework Convention on Tobacco Control (FCTC) in these countries using the WHO health system building blocks.

**Methods**

Using the WHO health system building blocks, the study adapts a systems thinking approach to review the status and challenges of FCTC implementation in developing Southeast Asia. This preliminary study primarily looks into 16 articles of the FCTC with 23 indicators. The study compared data from the country reports to the WHO FCTC Secretariat and were supplemented with data from related literature (PubMed and Google Scholar) and the grey literature, including online news articles, official statements and press releases. The search terms for the related literature included a combination of the following: “tobacco control”, “FCTC”, “tobacco”, “policy” and “smoking.”

**Results and Discussion**

All the countries included in the study have implemented tobacco control in varying degrees. Among the six countries included, there are substantial differences in the leadership and governance, with implementation ranging from strong to weak. Although most of the countries are moderate or weak in terms of financing tobacco control, service delivery and human resources, all the countries are weak in terms of providing medical products and technologies for cessation support. The six countries are either strong or moderate in terms of information, both in reporting to the WHO and in surveillance of tobacco use and policy implementation. Socio-economic and political challenges arising from implementation stem from strong tobacco industry presence and interference in health policymaking in the region.

**Conclusions**

The study shows that there is still a long way towards strengthening FCTC implementation in developing Southeast Asia for the Sustainable Development Goals. The political challenges for strong leadership and governance needs to be addressed by protecting public policy, not just of health policy, from the interests of the tobacco industry. The study also provides a snapshot of FCTC implementation within health systems and can provide a way to integrate monitoring tobacco control (and possibly other NCD policies) towards strengthening health systems in the region.
Philippines’ Sin Tax Reform: A Story of Intersectoral Action for Health

Co-authors: Connie Hoe- Johns Hopkins Bloomberg School of Public Health; Caitlin Weiger- Johns Hopkins Bloomberg School of Public Health; Joanna E. Cohen- Johns Hopkins Bloomberg School of Public Health

In 2012, the Philippines successfully passed the Sin Tax Reform Act, increasing taxes on tobacco and alcohol products, while generating revenue for health. Within the first year, more than USD$ 1.2 billion was raised as a result, thereby allowing the country to deliver health services to an additional 45 million Filipinos. The World Bank lauded this reform as one of the “most successful” tobacco taxation efforts in recent years. Given the Philippines’ unique success and the dearth of research that examines the politics of health policy adoption in low-and middle-income countries (LMICs), this study aims to explore the factors that facilitated the passage of the Sin Tax in 2012. Method: Drawing on both public policy and collective action literature, we used a case study approach to meet our study aim. Data were gathered from key informant interviews (N=25) and documents (N=30) and analyzed using inductive and deductive coding. Results: Findings showed that a window of opportunity opened for advocates when President Benigno Aquino III came into power in 2010. Aquino, who was keen on achieving universal health care and increasing efficiencies in tax collection, prioritized the sin tax reform. This encouraged other members of the executive branch to also prioritize the legislation, resulting in the emergence of several key political champions. These champions along with other tobacco control advocates seized opportunity by skillfully building a broad-based intersectoral coalition, including organizations interested not only in finance and economic reform, but also health. An array of tactics including lobbying, media advocacy, and demonstrations, were used to counter opposition from both the tobacco and alcohol industry as well as their sympathizers. The advocates also framed, for the first time, the sin tax as a health rather than revenue generating measure. Conclusions: This case highlights the importance of coalition building for the purpose of cultivating intersectoral action for health. Results from the study may be used to assist those striving to pass similar policies in other LMICs.
Modelling equity, financial protection, health gains, and revenue generation of a Tax on Sugar-Sweetened Beverages in the Philippines: an Extended Cost Effectiveness Analysis

Co-authors: Adam Koon - Abt Associates; Akshar Saxena - Harvard University; Leizel Lagrada - Rombaua - Independent Consultant

A global campaign is underway to fight the growing threat of non-communicable disease through dietary interventions. Taxation of unhealthy food and sweetened beverages have been identified as potential avenues to limit the consumption of excess calories, generate government revenue, and contain escalating healthcare costs. Sugar-sweetened beverages (SSBs) are particularly attractive targets of taxation because they are one of the largest contributors to excess caloric intake, provide no nutritional value, and healthier alternatives are widely available (in most places). Manufacturers of SSBs and the sugar industry have vehemently opposed taxes on the basis that they hurt the poor, eliminate jobs, don’t change consumer behavior, and unfairly target a single segment of industry. This contest, between health activists and industry is not new. Indeed, much of the debate resembles previous conflicts over the regulation of tobacco and alcohol. Nevertheless, we believe that there are distinct lessons to be learned from the recent experience with SSB regulation in varied sociopolitical contexts. This presentation will discuss both these economic and political issues.

In early 2018, the government of the Philippines passed a SSB tax. While there are a number of exemptions, taxation is set at 8 Philippines pesos per liter of SSB (approximately a 14% price increase), which should help curb consumption of SSBs. We will discuss a recent analysis that was conducted to explore the revenue generation potential, the equity implications, health gains, and impact on financial protection of the SSB tax. This extended cost effectiveness analysis is similar to traditional cost effectiveness analysis with the addition of added measures of healthy life years gained, the distribution of benefits across wealth quintiles, and cases of catastrophic health expenditure averted. This robust modelling exercise yields important insight for policymakers who are anticipating the potential impact of SSB taxation in the Philippines and elsewhere. Also, as the first extended cost effectiveness on SSBs, it adds to the growing literature on robust forms of economic evaluation. This discussion will highlight the findings from the analysis and situate them in the complicated sociopolitical context of the Philippines as well as the growing movement on non-communicable disease control.
Innovative health financing to fight NCDs: a key catalyst of multi-sectoral collaboration

Co-authors: Suladda Pongutta-International Health Policy Program; Walaiporn Patcharanarumon-International Health Policy Program

Non-communicable diseases (NCDs), the leading cause of deaths worldwide, cannot be eliminated solely by the health sector. A number of global movements are calling for multi-sectoral actions to halt the threats. However, creating multi-sectoral collaboration to fight against NCDs is extremely challenging, especially in developing countries where a silo management of the bureaucratic structure and governance itself is a great chronic obstructive condition.

Thailand has the same difficult experiences as many other countries in addressing NCDs effectively. In the past, providing treatment was the only strategy to address NCDs, which apparently were unable to decelerate the rising trend.

Thai health financing has been radically reformed since 2001 when the Health Promotion Foundation Act (2001) and the National Security Act (2002) were enacted. By law, two innovative health financing schemes, namely Thai health promotion fund and Thai universal health coverage scheme (UCS), were invented and successfully implemented through the management of new governing bodies with multi-stakeholder composition in the Board of each scheme. Health promotion fund is the pooled fund of an earmark 2% surcharge of tobacco and alcohol excise tax. Its mission is to catalyse multi-sectoral collaboration for the enhancement of health promotive capability as well as a healthy society and environment to support health promotion, based on the “Triangle that moves the mountain” concept. With the support from Thai Health Promotion fund, several inter-disciplinary networks have been established to generate evidence, advocate for effective/cost-effectiveness policies, implement pilot programs and propose best practices to policy makers, and create social movements. With such effort, a growing number of promising multi-sectoral interventions, aimed to promote a healthy lifestyle and environment, have been implemented in the last two decades. UCS is an innovative financing in terms of funding management with a conventional funding source from the government annual budget. The fund is allocated to health care providers for delivering services to approximately 48 million Thai residents who are not covered by other public health security schemes. The fund strongly encourages health care providers together with the local governments to actively provide community-based health promotion and disease prevention.

Thailand has been through the revolution using health financing reform as a tool in cooperation with evidence-based approach as well as social and political engagement strategies. Despite the significant positive changes, there are few challenges to overcome including political instability, and limited individual and institutional capacity in providing more efficient and equitable implementation.
Integrated Knowledge Translation Approach for Inclusive policies and Multisector Partnerships to Achieve the SDGs: The Case of Childhood Obesity Prevention in Lebanon

Co-authors: Rana Khaled Saleh - Knowledge to Policy (K2P) Center - American University of Beirut; Rima Nakkash - Knowledge to Policy (K2P) Center - American University of Beirut; Fadi El-Jardali - Knowledge to Policy (K2P) Center - American University of Beirut

Background: With the challenging increase in Non-Communicable Diseases and childhood obesity in Lebanon, the Knowledge to Policy (K2P) Center has developed a Policy Brief (Knowledge Translation (KT) Tool) to identify effective school policies for childhood obesity prevention tackling the school food environment and the curriculum. However, the situation analysis identified that the challenge in Lebanon is not the absence of policies, but the fragmentation of multiple initiatives, the non-inclusive policies available and the weak policy coherence, governance and coordination between sectors. This presentation describes how the process of advancing the field of knowledge translation via citizen engagement, advocacy and policy dialogues can enhance inclusive societies and multisector partnerships in order to achieve the SDGs.

Methods: While applying the integrated KT framework, we developed and evaluated: 1) A model for citizen engagement in health policy; 2) A national Policy Dialogue with key stakeholders and decision makers. 3) An advocacy strategy encompassing the development of a multidisciplinary impact team along with media advocacy and lobbying.

Results: Citizens were engaged in four Citizen Consultation meetings across different Lebanese governorates for the development and contextualization of policies responsive to their values, needs, and aspirations. The participants believed that these consultations could support in setting the issue on the policymakers’ agenda (61%), allow for joint decision-making (66%) and almost all participants wanted to be involved in further advocacy. An advocacy strategy, based on the Center’s advocacy framework, resulted in the development of a multidisciplinary impact team that identified and mobilized around 30 stakeholders from different sectors for a collective action. Advocacy tactics such as lobbying and media advocacy are effective in influencing the stakeholders and the public before and after the policy dialogue. A Policy Dialogue convened key stakeholders from different sectors to discuss the contextualized policy elements, the implementation considerations and their role in uptake. They discussed the importance of policy coherence and agreed on developing a coordinated implementation and monitoring plan across different sectors to ensure the change in the school food environment and the development and integration of a school health curriculum for sustainable impacts on quality education and NCD prevention.

Conclusion: Knowledge translation tools are important but not sufficient to complete the policy cycle and influence multisectoral action. As such, an integrated KT approach with KT tools, Citizen Engagement, policy dialogue and advocacy strategies to follow up are necessary for completing the policy cycle, facilitating the development of inclusive and responsive policies, and enhancing the multisectoral collaboration for effective adoption of preventative policies to achieve the SDGs, even in challenging settings. Lessons learned can inform work in other countries/contexts.
Enhancing facility performance monitoring for targeted decision-making in the SDG era: comparative analysis of novel approaches to estimate catchment area size

Co-authors: Orvalho Augusto-Eduardo Mondlane University, Mozambique; Quinhas Fernandes-Ministry of Health, Mozambique; Kenneth Sherr-University of Washington, USA

Purpose

Accurate catchment area estimates are essential for health systems planning, performance monitoring, and targeted decision making. In many low-resource health systems lacking robust civil registration systems, catchment area sizes are derived from population censuses, which have questionable timeliness, with sub-optimal accuracy below the district level. As a result, catchment areas are poorly defined at the facility level, impeding target setting, performance and coverage monitoring, and efforts to improve the delivery of health services to meet community needs. To address this gap, we compare three novel catchment area size estimation techniques in central Mozambique, covering a network of 26 districts, nearly 300 public sector health facilities, and a population of approximately 4 million.

Content

Our presentation will present three approaches to catchment area size estimation.

The gridded population-based (GPW) approach uses remote sensing and satellite data to redistribute a country census by approximate 1 Km x 1 Km land surface grids, using redistribution weights computed based on land coverage and use, night light emission, and environmental conditions. In this approach we use GPW to estimate populations around each facility, using health service utilization and GPS data from a recent community HH survey to estimate each facility’s catchment area population.

Second, using spatial regression applied to a recent household survey, we compute the probability of seeking health services within a 5, 10 and 20 Km radius of a health facility to construct catchment areas for each facility. Variograms will be used to assess the appropriateness of these distance thresholds.

Third, we will use the current Ministry of Health catchment area estimates, derived from the census.

As a process of validation, selected indicators will be calculated based on the results of the each of the catchment area estimation techniques. Using ratios between measures, we will compare coverage estimates from household surveys to district small area estimates of the same indicators.

Significance for the sub-theme area

By exploring different approaches to estimate catchment area size that leverage the increasingly available data on population distribution and health service utilization, we generate discussion on how to best estimate catchment area size. These estimates are crucial for public sector health systems to set targets, to have accurate denominators for performance monitoring as part of improvement efforts, and ultimately ensure that health systems are on track for universal health coverage.

Target audience

This presentation will be of interest to policymakers, health system practitioners, and applied researchers.
Methodological Issues in Estimating Effective Coverage: A Systematic Review

Emily D. Carter, Johns Hopkins Bloomberg School of Public Health

Co-authors: Emily D. Carter- Johns Hopkins Bloomberg School of Public Health; Melinda Munos- Johns Hopkins Bloomberg School of Public Health

Background: There is growing interest in measures of “effective coverage,” which combine intervention need, utilization, and service quality, in monitoring progress towards universal health coverage. However, current methods for generating estimates of effective coverage are varied, largely untested, and rely on a number of assumptions.

Methods: We conducted a systematic review of methodological issues related to estimating effective coverage by linking population-based surveys with healthcare provider data. The search was conducted in Medline, JSTOR, and Population Health Metrics using terms related to effective coverage or data linking and health care quality or evaluation. The search was limited to English publications since 2000. Additionally, we hand searched in the references of two systematic reviews on linking and effective coverage estimation, as well as references of papers meeting the review criteria. Papers were included in the review if they addressed research questions related to the validity or comparability of sampling, data collection, or analytical methods in generating effective coverage estimates or in linking household and healthcare provider data.

Results: The review identified a number of methodological issues in generating effective coverage estimates. Definitions of “effective coverage” differed, resulting in methods that used a range of data sources, including household and facility surveys, facility records, HMIS data, and variable use of modelling in generation of estimates. Each approach presents unique limitations and methodological concerns. A limited number of publications addressed methodological issues directly. Multiple papers focused on the effect of temporal and geographic disparities in data sets used in generating estimates, including the potential impact of linking population and provider data based on geographic proximity or administrative units, use of centroid and displaced coordinates in linking methods based on geographic proximity, household and provider sampling methods, and measure stability. Other key issues included the construction of effective coverage estimates and definition of healthcare provider measures to accurately reflect quality of care or health outcomes.

Discussion: Effective coverage measures have the potential to inform health program planning and implementation as robust estimates of the population of need receiving appropriate care. However, these estimates will only be informative if they accurately reflect the care a population receives. Defining appropriate methods and testing their underlying assumptions is essential for constructing robust, standardized approaches for measuring effective coverage.
Comparison of registered and published intervention fidelity assessment in cluster randomised trials of public health interventions in low- and middle-income countries: systematic review

Co-authors: Myriam Cielo Perez-Université de Montréal; Valéry Ridde-Université de Montréal; Marie-Pierre Sylvestre-Université de Montréal; Mira Johri-Université de Montréal; Nanor Minoyan-Université de Montréal

Background: Cluster randomised trials (CRTs) are a key instrument to evaluate public health interventions. Fidelity assessment examines study processes to gauge whether an intervention was delivered as initially planned. Evaluation of implementation fidelity (IF) is required to establish whether the measured effects of a trial are due to the intervention itself and may be particularly important for CRTs of complex interventions conducted in low- and middle-income countries (LMICs). However, current CRT reporting guidelines offer no guidance on IF assessment. The objective of this review was to study current practices concerning the assessment of IF in CRTs of public health interventions in LMICs.

Methods: CRTs of public health interventions in LMICs that planned or reported IF assessment in either the trial protocol or the main trial report was included. The MEDLINE/PubMed, CINAHL, and EMBASE databases were queried from January 2012 to May 2016. To ensure availability of a study protocol, CRTs reporting a registration number in the abstract were included. Relevant data were extracted from each study protocol and trial report by two researchers using a predefined screening sheet. Risk of bias for individual studies was assessed.

Results: We identified 90 CRTs of public health interventions in LMICs with a study protocol in a publicly available trial registry published from January 2012 to May 2016. Among these 90 studies, 25 (28%) did not plan or report assessing IF; the remaining 65 studies (72%) addressed at least one IF dimension. IF assessment was planned or reported in 40% (36/90) of trial protocols and 71.1% (64/90) of trial reports. The proportion of overall agreement between the trial protocol and trial report concerning occurrence of IF assessment was 66.7% (60/90). Most studies had low to moderate risk of bias.

Conclusions: Fidelity assessment is not currently a systematic practice in CRTs of public health interventions carried out in LMICs. In the absence of fidelity assessment, it may be difficult to determine if CRT results are due to the intervention design, to its implementation, or to unknown or external factors that may influence results. CRT reporting guidelines should promote IF assessment.


Keywords: Cluster randomised trials, Implementation fidelity, Public health interventions, Process evaluation, Developing countries, Systematic review
Adriana Pérez Renfiges, Cátedra de Bioestadística - Facultad de Medicina - Universidad Nacional de Tucumán

**Análisis de datos georreferenciados en el ámbito de la salud y su importancia para la formulación de políticas en salud pública y privada**

Co-authors: Adriana Pérez Renfiges-Cátedra de Bioestadística - Facultad de Medicina - Universidad Nacional de Tucumán; Mirta Sara Santana-Facultad de Medicina - Universidad Nacional de Tucumán

Uno de los aspectos a los que se deben enfrentar las Instituciones de salud, es el estudio de las necesidades de atención médica de la comunidad para la toma de decisiones tendientes a mejorar la salud de la población y lograr un sistema de salud para todos. Si consideramos que, en general, las instituciones de salud poseen, entre otros datos, el domicilio (ubicación geográfica) de los usuarios de las prestaciones médicas; entonces es posible obtener su distribución espacial, pudiéndose aplicar la metodología que proponela Estadística Espacial. Sin embargo, muchas de las instituciones de salud desconocen la utilidad de esta metodología como también la disponibilidad de las herramientas informáticas de bajo costo o gratuitas para este tipo de análisis. Por tal motivo se plantearon como objetivos mostrar la importancia del análisis espacial de datos de salud y en particular, la detección de patrones no aleatorios en las distribuciones espaciales de patologías; así también, presentar las ventajas del uso de herramientas informáticas para el tratamiento de datos georreferenciados. Se trabajó con datos de afiliados al Instituto Nacional de Servicios Sociales para Jubilados y Pensionados (PAMI) internados en dos sanatorios de la Capital de la provincia de Salta, Argentina. Se utilizó el mapa digital de la Capital de Salta, y paquetes informáticos para el análisis de datos espaciales tales como Sistemas de Información Geográfica (GIS), software R y software Crimestat. La detección de patrones no aleatorios en la distribución espacial de patologías permite evaluar si la ocurrencia de una determinada patología en un dado lugar está relacionada con lo que sucede en regiones vecinas, esto a su vez, permite el análisis de los factores condicionantes a nivel individual y familiar como así también de los factores relacionados a la localización geográfica. En la última década, cada vez son más los GIS gratuitos, lo que es altamente beneficioso para el usuario de datos espaciales, ya que el elevado costo de algunos representaba una gran limitación en esta área. En conclusión, frente a un escenario de salud en constante cambio que requiere de información oportuna y eficiente, se propone que los Ministerios de Salud y otras instituciones del sector se interioricen en la metodología para el análisis de datos espaciales e implementen herramientas informáticas adecuadas que permitan este tipo de análisis con la finalidad de fortalecer las capacidades de análisis, gestión, monitoreo y toma de decisiones en salud pública y privada.
Beyond triumphalist discourses of global health research partnerships: Recognizing and sustaining West African research capacity in the wake of the 2014-6 Ebola epidemic

Co-authors: Elysee Nouvet -Western University; Ani Chénier-McMaster University; Oumou Bah Sow-Comité National d'Éthique pour la Recherche en Santé de Guinée; John Pringle-McGill University; Sékou Kouyaté-Laboratoire d'analyse socio-anthropologique de Guinée-Conakry; Sonya de Laat-McMaster University; Matthew Hunt-McGill University; Carrie Bernard-University of Toronto; Lynda Redwood-Campbell-McMaster University; Laurie Ellit-McMaster University; Lisa Schwartz-McMaster University

BACKGROUND

The 2014-6 West African Ebola epidemic, in which a neglected disease for which no effective treatment or vaccine was yet known claimed over 11,000 lives, was a stark reminder of the essential role that health research plays within health systems.

In 2016, we launched the "Perceptions and moral experiences of research conducted during the West Africa Ebola outbreak" study. This qualitative study seeks to better understand socially-situated practices and moral experiences of research conducted in public health crisis situations, and to deepen understanding of challenges to and strategies for the ethical conduct of research during public health emergencies. It explored, among other issues, the practical and ethical complexities of international research collaborations established during the outbreak.

METHODS

We conducted in-depth semi-structured interviews with 108 stakeholders directly involved in research at trial sites in Guinea, Sierra Leone, and Liberia. Participants included: 1- people having participated in clinical and persistence studies; 2- people engaged in the conduct of research (as investigators or research staff), 3- local and international research ethics board members; 4- governmental and civil society leaders. Most (91%) were from West African countries.

RESULTS

Participants identified many strengths of research conducted during the outbreak, notably: 1) the success of some international partnerships (especially vaccine trials), 2) the development of innovative and adapted strategies for communicating with participants, 3) opportunities for capacity building, especially for first-time researchers, and 4) rigorous and constructive oversight by national research ethic boards.

Key challenges or failures included: 1) limited opportunities for higher-level engagement of affected-country researchers within international partnerships, 2) limited engagement of mid- or late-career researchers in the development or leadership of studies, 3) unequal access to and control over research materials like bio-samples, and 4) failures to sustainably invest in national research institutions.

CONCLUSIONS

Our findings highlight the important role played by health research within local and national health systems, and complicate triumphalist discourses about the role of "capacity building" in international research. During the 2014-6 West African Ebola outbreak, efforts towards capacity building were appreciated by many. Yet many also expressed frustration with the lack of investment in national research infrastructure and institutions, and the lack of opportunities for mid- and late-career researchers from affected countries. This had important practical implications, notably for the setting of research priorities that reflect needs and possibilities at the national level. Capacity must not only be built: it must also be recognized, supported, and sustained.
Benjamin Tsofa, KEMRI-Wellcome Trust Research Programme


Co-authors: Benjamin Tsofa-KEMRI-Wellcome Trust Research Programme; Sassy Molyneux-KEMR-Wellcome Trust Research Programme; Timothy Malingi-County Department of Health - Kilifi County, Kenya; Hassan Leli-County Department of Health - Kilifi County, Kenya; Edwine Barasa-County Department of Health - Kilifi County, Kenya

Background: Recent literature has underscored the value of health policy and systems research (HPSR) as an intervention for systems strengthening. This discourse has highlighted the role of researchers-policy makers’ collaboration as an important conduit for real-time research translation.

Methods: We set-up a health systems governance learning site in one of the 47 Kenyan counties, to analyse the implications of devolution on the health sector. This entailed embedding ourselves in the context in which we carry our research (county health departments, hospitals, primary health care facilities), and collaboratively working with health system actors to “learn” the system; identify system level problems, formulate and explore research questions seek to provide real-time solutions.

Results: Our initial findings highlighted the central role of hospital user fees in addressing critical day-to-day recurrent expenditure needs in county hospitals. This was because of the autonomy hospitals managers had over the management of these funds prior to devolution. We later reported how, by requiring that all revenues collected at the county level be pooled into one county revenue account, the devolution laws had removed the autonomy of hospital managers over user fee collections. This presented a challenge to hospitals, who were not able to pay their routine bills, procure emergency supplies and other recurrent needs. We shared these observations to a broader stakeholder audience within the county, and this triggered policy dialogue, leading to the development of county legislation to reinstate the autonomy that hospitals had over user fee collection and management.

Conclusions: Our example highlights how in small ways – the functioning of researcher – policy makers’ teams, using their relationships overtime can act together in real-time to address practical health system challenges.
Promoting Evidence-Informed Policy Making through intersectoral action to improve health outcomes in Nigeria: Outcome of a Two-Way Secondment Model between University and Health Ministry

Co-authors: Chigozie Jesse Uneke - Ebonyi State University Abakaliki; Abel Ebeh Ezeoha - Ebonyi State University Abakaliki; Henry Chukwuemeka Uro - Ebonyi State University Abakaliki; Chinonyelum Thecla Ezeonu - Ebonyi State University Abakaliki; Jonathan Igboji - Ebonyi State Ministry of Health Abakaliki

Background: One of the major ways to strengthen the health systems is to promote intersectoral action among key actors in the health sector. This can be achieved by strengthening institutions and mechanisms that can more systematically promote interactions between researchers and policy-makers who can influence the uptake of research findings into policy and practice. In this study, we report the outcome of a two-way secondment model implemented between Ebonyi State University (EBSU) and Ebonyi State Ministry of Health (ESMoH) in Nigeria as an innovative collaborative strategy to promote evidence-to-policy-to-action.

Methods: This study was an exploratory design with a quantitative cross-sectional survey technique. A secondment memorandum of understanding (MOU) was signed between heads of EBSU and ESMoH. The secondment program lasted six months with ten researchers and ten policy-makers spending up to two days per week in each other’s organization. The secondees researchers got engaged in policy-making and implementation activities in ESMoH, while the policy-maker secondees got involved in academic activities in EBSU. Joint Secondees evidence-to-policy capacity enhancement meeting was held and questionnaires designed in 5-point Likert scale were used to assess impact.

Results: All the secondees policy-makers worked with some health research teams in EBSU and provided policy-making perspective to research design and execution. Some of them also served as members of the university research ethics committee, participated in academic conferences and facilitated some courses in the university’s health policy/systems training programme. The secondees researchers supported the policy-making and implementation process in EBSMoH through policy advisory roles and provided capacity enhancement for staff of the ministry on the use of research evidence in policy-making. They provided technical assistance in the development of policy briefs and supported the EBSMoH to organize a multi-stakeholder policy dialogue. There was a noteworthy increase on knowledge of policy analysis and contextualization among the secondees ranging from 20.7% to 50.4% and 31.3% to 42.8% respectively following the joint training session. The secondees policy-makers and researchers admitted having considerable knowledge of secondment with mean ratings (MNRs) of 3.40 and 3.74 respectively on the 5 points scale. Secondment appeared to be more common in the policy-makers’ organization (MNRs: 2.80-3.07) than in the researchers’ institution (MNRs: 2.58-2.84).

Discussion/Conclusions: The outcome of this study clearly suggests that secondment between university and health ministry is an important strategy that can promote intersectoral action and evidence-to-policy link, which can contribute in strengthening the health systems and improve health outcomes.
Building capacity in health systems research in post-Ebola Sierra Leone

Co-authors: Haja Wurie-College of Medicine and Allied Health Sciences, Freetown, Sierra Leone; Joanna Raven-Liverpool School of Tropical Medicine, Freetown, Sierra Leone; Mohamed Samai-College of Medicine and Allied Health Sciences, Freetown, Sierra Leone; Ayesha Idriss-College of Medicine and Allied Health Sciences, Freetown, Sierra Leone; Abdulai Jawo Bah-College of Medicine and Allied Health Sciences, Freetown, Sierra Leone; Michael Lahai-College of Medicine and Allied Health Sciences, Freetown, Sierra Leone; Tenema M'bayo-College of Medicine and Allied Health Sciences, Freetown, Sierra Leone; Sally Theobald-Liverpool School of Tropical Medicine; Tim Martineau-Liverpool School of Tropical Medicine; Imelda Bates-Liverpool School of Tropical Medicine; Justin Pulford-Liverpool School of Tropical Medicine

Purpose: To share learning about developing health systems research capacity in the fragile setting of Sierra Leone.

Focus/content: Ebola highlighted the need for responsive and resilient health systems within and beyond Sierra Leone. Development of health systems should be informed by policies based on evidence. Building capacity for health systems research in Sierra Leone is, therefore, critical. The College of Medicine and Allied Health Sciences (COMAHS), University of Sierra Leone, has strong links with the Ministry of Health and Sanitation and is one of the few institutions in the country conducting both health systems and clinical research, and is training future health professionals and researchers.

This session reports on strengthening health systems research capacity at three levels - individual, institutional and national - in COMAHS. We established a health systems research centre at COMAHS with the aim of producing relevant, timely and robust research responsive to country needs. To date, this platform has enabled the development of a 4-year research strategy, a short and longer-term action plan to support sustainable institutional capacity development, a website that includes a repository of research projects and publications, regular research seminars for staff and students to cultivate a research culture, and symposia to share research findings and discuss research needs.

We also focused on developing four research fellows to be health systems research leaders in Sierra Leone. Supported by mentors, they have collaborated with local and international researchers, donors, policy makers and key stakeholders to identify research priorities, develop research protocols, secure funding, implement the research, and ensure effective uptake of the research findings. These research fellows will support other researchers at COMAHS, thus developing the next generation of health systems researchers and promoting sustainability of the research centre.

Moving forwards, the challenges are to ensure that these capacity gains are maintained over time, and that international and national research partners and funders recognise the importance of further developing local health systems research capacity.

Significance for the sub-theme area/building dimension of relevance: leaving no one behind, capacity building.

Through a multi-pronged approach, health systems research capacity has been strengthened in Sierra Leone. This will support the generation of evidence to assist the building of sustainable health systems fit for effective outbreak response and for optimal health service delivery across the country, especially for the most disadvantaged populations.

Target audience: all actors engaged in capacity building of health systems researchers in fragile settings.
Oral Abstracts

Igor Francetic, Swiss Tropical and Public Health Institute (Swiss TPH), University of Basel and University of Applied Sciences and Arts of Southern Switzerland (SUPSI)

Going operational with health systems governance: supervision and incentives to health workers for higher quality health care in public health facilities in Tanzania

Co-authors: Igor Francetic-Swiss Tropical and Public Health Institute (Swiss TPH), University of Basel and University of Applied Sciences and Arts of Southern Switzerland (SUPSI); Paola Salari-Swiss Tropical and Public Health Institute (Swiss TPH) and University of Basel; Fabrizio Tediosi-Swiss Tropical and Public Health Institute (Swiss TPH) and University of Basel

Background

Health systems governance is increasingly high in the global health agenda. However, most analyses focus on conceptual frameworks rather than operational aspects and impacts on health service delivery. Three notable health systems governance interventions are top-down supervision, bottom-up community supervision and incentive policies for health workers. Some evidence is available about the individual effectiveness of these tools towards higher quality of healthcare in Tanzania. Yet, little is known about their combined impact as policy tools available to local government authorities. This study analyzed quantitatively the joint effect of top-down and bottom-up supervision as well as incentive policies on proxies of quality of care.

Methods

The study employed multilevel logistic regression techniques on a dataset from the Demographic Health Survey (DHS), the 2014/15 wave of the Service Provision Assessment (SPA) survey, focusing on a representative sample of Tanzanian health facilities. The data included process of care measures from patient visit observations and exit interviews, infrastructural and managerial data related to the health facility from an inventory survey as well as specific information about healthcare providers from health workers interviews. From the available dataset we obtained proxy indicators for quality of care, intensity of supervision and incentives available to health workers. The proxy measures of quality of care are compliance to Integrated Management of Childhood Illness (IMCI) guidelines on the one hand, and patient satisfaction on the other hand.

Results and discussion

Three main results emerge from the study, contributing to fill the evidence gap and better address policies focused on improving the productivity of medical staff and consequently patients' satisfaction. First, top-down supervision is not associated with increased quality of care. The existing supervision arrangements may be suboptimal, with low supervision intensity and/or lack of constructive feedback from supervisors. Second, bottom-up supervision that engages the community favors higher patient satisfaction. The community may be more aware of the effort put in place by health workers in their daily activities. At the same time, health personnel address better the needs of the community, with direct returns in terms of satisfaction even without quality improvements. Third, the provision of subsidized housing to health workers is associated with both higher healthcare quality and higher patient satisfaction. Moving away from their hometowns to address shortage of human resources in other parts of the country and with modest salaries, living arrangements seem to be an important motivational factor for Tanzanian health workers.
We shine a light on others so they can see the way: being a community defender for the right to health

Co-authors: Ana Lorena Ruano - Center for the Study of Equity and Governance in Health Systems; Walter G Flores - Center for the Study of Equity and Governance in Health Systems

Background:

Since 2006, CEGSS has worked with indigenous leaders from rural communities in 35 municipalities in the highlands of Guatemala in order to support a citizen-led and rights-based approach to demand accountability from the health system. Using the UN’s ‘human rights defenders’ figure, the ‘Community Defenders for the Right to Health’ (CDRH) receive training in human rights, the legal framework, and in technical skills like the use of cameras to document right to health violations in order to carry out monitoring and advocacy actions, and in the use of cameras to document right to health violations. Through this, our goal is to encourage active and meaningful participation that aims to disperse decision-making power among more stakeholders in a way that promotes pro-equity health policy.

Methods:

Of a total of 147 CDRH, 18 reported being community health workers (CHWs). An interview-based study was carried out with 10 CHW/CDRH that accepted our invitation to participate. Data was collected over three field visits between December 2016 and February 2017. We used deductive thematic analysis, which allows for the identification of recurrent patterns that can be grouped into categories and themes through an iterative process of discourse interpretation.

Findings:

Community members report having little access to medicine and care, and experienced moderate-to-severe instances of abuse and discrimination. In this context, CHWs play a key role in service provision, and communities respond positively to their efforts by continuing to seek their services. CHW/CDRH are able to go beyond service provision to improve the quality of care. In addition, their ability to link roles creates a support structure, and allows them to concentrate on improving community health by ‘shinning a light on injustice’. They do this by promoting organization, participation and by being advocates of patients that would otherwise not have a voice.

Discussion/conclusion

The linking of the roles of CHWs and CDRH is, according to our participants, a natural process because the roles can be complementary. Their experience as CHWs allows CDRH to see the health-related problems that exist and to bring them to municipal and health authorities so they can be prioritized and acted upon. As a result, communities may trust CHW/CDRH more than other CHWs that do not have any of their training. For the CDRH, their role is to fight on behalf of communities but also on behalf of their fellow CHWs, who may not yet have their tools and skills.
Veena Sriram, University of Chicago

What are the capacities of Ministries of Health to govern? Results from a scoping review of the literature

Co-authors: Veena Sriram-University of Chicago; Kabir Sheikh-Alliance for Health Policy and Systems Research; Maryam Bigdeli-World Health Organization

Background: National health authorities, such as Ministries of Health, have an exclusive constitutional or state-sanctioned authority over health. Ministries also contend with rapidly changing political, financial, ecological and health-related contexts. Centralized notions of governance have evolved to become participatory and inclusive, and Ministries are aiming to constructively engage stakeholders from government, civil society and the private sector. Such approaches will facilitate the ‘whole of government’ and ‘whole of society’ perspectives necessary for Ministries to ensure health for all.

Existing frameworks on health sector governance highlight the need for governments to promote normative principles such as accountability, transparency and trust, in the context of mandated responsibilities. To achieve these objectives, Ministries require specific capacities at the individual, organizational and system levels. However, few frameworks allow for a systematic analysis of these capacities as they relate to governance functions of Ministries. Our objective was to conduct a scoping review on the governance capacities of Ministries of Health, and develop a conceptual framework based on our findings.

Methods: A scoping review approach was used, drawing upon scientific and grey literature from 1994. Iteratively developed search terms were applied to Pubmed and Scopus. Free searches and reference list scanning supplemented database searches. Two authors developed a draft conceptual framework based on key literature. One author conducted a full-text review of each article and extracted data based on the draft framework. Two authors debrief regularly to discuss themes, and iteratively develop the framework.

Results: 78 scientific articles and 36 grey literature resources were included for full-text abstraction. Our review found few articles focusing on both individual competencies and organizational capacities within Ministries. Articles often focused on structural or role capacity, rather than on ‘human’ elements of personal, workload or supervisory capacity. Articles more frequently focused on capacities for mandated governance functions. Fewer articles focused on Ministry capacity to manage relationships, uphold governance principles and navigate changing context. We also found that internal factors, such as seniority-driven organizational cultures, enabled risk aversion, a fear of failure, and a lack of innovation. External factors included the relative low power of Ministries of Health within government, and bureaucratic policies that lead to frequent leadership transfers. Finally, capacity building often originated from donors and not from indigenous funding.

Conclusions: These findings provide insight on Ministry capacity to manage their complex governance functions. Our conceptual framework can facilitate empirical research, and contribute to short- and long-term capacity building efforts.
Ahmed Vandi, Njala University

**Responding to the Ebola viral diseases outbreak in Sierra Leone: Understanding the role and capacities of the districts**

Co-authors: Ahmed Vandi-Njala University; Susannah Mayhew-London School of Hygiene and Tropical Medicine; Lawrence Sao Babawo-Njala University; Tommy Matthew Hanson-Njala University; Richards Paul-Njala University; Melissa Parker-London School of Hygiene and Tropical Medicine; Dinara Balabanova-London School of Hygiene and Tropical Medicine

**Background**

District-level systems management is receiving increasing attention partly because it is regarded as a key element in the achievement of Universal Health Coverage (UHC). Nevertheless, a focus on the provision of quality essential services to everyone is challenging and is compounded when district systems have added burdens of responding to disease outbreaks.

The Ebola outbreak in Sierra Leone offers an opportunity to explore the role of the district as a critical juncture between national and community health services. This paper explores the experience with district-centred responses of Ebola outbreak in Sierra Leone, identifying challenges and potential for enhancing the role of the districts to deliver comprehensive programmatic responses for all.

**Methods**

A narrative review was conducted on the global experience with district-centred responses to outbreaks. In two districts c.50 key informants at the Peripheral Health Units, District Health Management Teams and Local Government Administrations were interviewed. c.200 questionnaires were implemented with primary health workers, including community health workers, to explore provider and organisational factors, including their training, knowledge and experiences of handling viral infections.

**Results**

The capacities of Districts to respond to the Ebola crises were limited. More than 80% of the health staff was never trained in detecting, prevention and controlling viral haemorrhagic fevers conditions. Data collection and reporting was not properly in place as a result, the disease surveillance system was a problem and local use and interpretation of data was neglected – it is likely that “official” Ebola figures are not accurate.

Devolution of health to local councils, though in law, was ignored by official Ebola response mechanisms and international actors, so local governments relied on the central government for resources. However, systems support (training, safety equipment) to health workers was slow and early responders became infected and died leading to perception that health workers were spreading the disease. Findings showed that trusting relationships between communities and health workers were key for successful investigation, treatment and referral.

**Conclusion**

The study reveals that the district health system is not only fragile but ill-prepared for the viral haemorrhagic fevers. Nevertheless it is a critical connector between national and community. Support for devolution, strengthening district health systems including community health-workers to operate effectively to address local needs, will be critical. In particular, the country should invest in the training, and supporting, of middle-level health care workers to recognise, and have authority and resources to investigate, disease outbreaks.
Oral Abstracts

Elodie Allabi, Enabel

Vouloir le possible et reconnaître le rôle des gouvernements locaux dans la santé : une expérience béninoise ancrée dans le SYLOS

Co-authors: Elodie Nadège Allabi-Enabel; Graziella Gill Ghésquière-Enabel; David Houéto-Université de Parakou; Vincent Akakpo-Maire de la commune de Dogbo Bénin


Méthode Formation des élus locaux et les cadres des administrations communales sur les déterminants sociaux de la santé et le système local de santé (SYLOS), la déclaration des naissances Renforcement des espaces de concertation offre et demande de soins au travers le comité de pilotage FBR et les cadres de concertation Désignation des points focaux santé mairies Appui élaboration PDC et planification ascendante Revue textes organes de gestion ZS Appui à l’Association Nationale des Communes du Bénin (ANCB).

Résultats Participation communautaire passée de l’information à la codécision : Dialogue offre/demande constructif Redevabilité améliorée: les prestataires et gestionnaires rendent compte de leur performance à la hiérarchie, aux maires et à la société civile Financement progressif du fonctionnement des espaces de concertation par les maires Amélioration de la satisfaction des usagers des services de santé Cohérence améliorée entre les besoins des populations et les planifications des secteurs de la santé et de la décentralisation Recrutement personnel de santé et équipements par les communes Compréhension du contenu de la ligne promotion de la santé dans les PDC Forum points focaux pour meilleure communication et pro activité des actions.

L’engagement des collectivités locales et la redéfinition de leur rôle en santé : Trois arrêtés avec double signature Ministre de la Santé et de Décentralisation et de la Gouvernance Locale remplacent des textes obsolètes sous la tutelle du Ministère de la Santé ; Plaidoyer pour arrimage des expériences vécues par les collectivités locales avec relecture des textes de loi sur la décentralisation.

Conclusion L’implication effective des collectivités locales dans le processus d’amélioration de la qualité des soins dans nos formations sanitaires est indispensable. D’une part, elles soutiennent les efforts des communautés à devenir coproductrices de la santé en exigeant une certaine redevabilité du secteur de la santé. D’autre part, elles soutiennent le secteur tant en actions concrètes qu’en investissements.
The Gavel and Universal Health Coverage – Engaging the Legislative Arm of Government to Strengthen Health Systems


Background: Progress towards Universal Health Coverage (UHC) in Nigeria has remained slow covering the formal sector and completely leaving behind vulnerable groups. Recently conducted National Health Accounts reveals that < 5% of the country’s population is covered by any pre-payment mechanism and 68.6% of total health expenditure is out-of-pocket. Household surveys on health conducted at the sub-national level revealed that healthcare expenditure in approximately half (50.3%) of all sampled households are at catastrophic levels. These factors compelled the Nigerian Government at all levels to reform the health financing landscape by implementing more equitable UHC attainment strategies on paper. Implementation, however, has been weak: failure to recognize and involve the legislative arm of government and its statutory functions by the health sector could be a contributing factor.

Methods: USAID’s Health Finance and Governance project supported the establishment of the Legislative Network for UHC bringing together health actors and national/sub-national legislators from the health and appropriation committees to dialogue on the use of their statutory roles of legislation, appropriation, and oversight to support the attainment of UHC. Based in the current Federal Senate Committee on Health, the network’s technical action group designed and conducted capacity building sessions for the state legislators and supported the development of legislative health agendas and tools to be used in the implementation of key strategies such as re-prioritizing health in the national/sub-national dialogue.

Results: The legislative network for UHC has improved the working relationship between the legislators and the health sector by depending their understanding of UHC and health financing concepts, UHC’s multi-dimensional benefits and their own specific role in ensuring progress towards UHC. Consequently, health sector leaders are partnering with legislators on raising more money for health through legislated earmarks and increased allocations where before they were defending their health budgets. Furthermore, there is increased emphasis on efficiency as legislators used their oversight functions and tools effectively to hold the health sector accountable for the equity and efficiency of its resource usage.

Conclusion: The legislature can be a powerful partner or an insurmountable barrier to UHC’s attainment. To bring about the large-scale, lasting, effective change that is needed to drive progress towards UHC, it is essential that health leaders step out of their health technocratic comfort zone and play in the less familiar field of political economy.
Sathyasree Goswami, National Foundation for India

**Leveraging Political Will for Prioritising Health: A multi-stakeholder approach to strengthening health system through legislative engagement**

Co-authors: Sathyasree Goswami-National Foundation for India

**Background:** Despite India's rapid economic growth over the past two decades, public health has been continuously neglected due to the lack of political will and gap in engaging political representatives with public health issues. Consequently, as India's indicators on maternal, child and reproductive health remain abysmal, attaining SDG 3 goals and realization of Universal Health Coverage needs an approach that seriously engages legislative spaces. Improvements in the quality and affordability of healthcare in India are predicated on the ability of elected representatives both in Parliament and in the state assemblies in prioritising health as a non-negotiable public good. This paper presents the model of engaging elected representatives and other major stakeholders in two relatively lesser developed states of India- Chattisgarh and Odisha, to articulate public health as an issue needing political engagement and investment.

**Methods:** In both states a multi-stakeholder process was started in 2015 that involved media houses reporting from the ground in real time, formulating debate questions, tracking discussions in the State legislative Assembly. This was concurrently supported by creating State level knowledge products around health status and policy details by knowledge institutions. A technology partner created a real-time mobile phone based data collection platform, where end-users could call and record the ground situation. All these datasets were collated, analysed and presented to legislators prior to the assembly sessions each year.

**Results:** Based on this reportage presented at the consortium that is formed of groups and networks involving multiple stakeholders both at the constituency level such as grassroots NGOs/CSOs, local citizens, key policymakers and local representatives of legislators, action is taken locally. Assembly questions around health increased from 105 in 2016 to 216 in 2017 in Odisha, similarly a 40% hike was found in Chattisgarh as well. A critical mass of sensitized and informed elected representatives is engaged in raising the level of debate and discussion in political and policy circles on the matters of public health. The role of vernacular print and electronic media with aid of the knowledge products plays a critical role in influencing and shaping public opinion.

**Conclusion:** Multi-stakeholder approach and continuous engagement with legislators with real-time reports have leveraged that health is placed at a higher degrees of discussion of the policy agenda of elected representatives in Parliament and state assemblies. The consortium of multiple stakeholders and networks are effective in facilitating the process of prioritizing health among other things with legislators.
Contribution of parliamentary health committees in tackling health issues in Africa: Experiences of the Network of African Parliamentary Committees on Health

Co-authors: Rose Ndakala Oronje - African Institute for Development Policy (AFIDEP); Eliya Msyiphazi Zulu - African Institute for Development Policy (AFIDEP)

While parliamentarians can play an important leadership role in tackling health issues, they are often not a priority for development efforts aimed at improving health outcomes. This paper reviews the contribution of the Network of African Parliamentary Committees on Health (NEAPACOH) to tackling health issues in Africa in order to share some insights on how parliaments could be engaged to tackle health challenges. NEAPACOH was set up in 2005 to strengthen the ability of parliamentary health committees in using their parliamentary functions (oversight, legislation, and representation) to tackle health challenges in Africa.

The study adopted a qualitative case study design, and data collection involved document review, and 34 in-depth interviews with NEAPACOH stakeholders (NEAPACOH’s Executive Committee, MPs, parliament staff and development partners, who participate in NEAPACOH activities).

Study results showed that NEAPACOH achieves its objective mainly through annual forums that convene committees and technical experts to discuss evidence on urgent and/or neglected health issues and solutions, and committees identify a few issues that they commit to address in their countries and report on progress in subsequent forums. NEAPACOH also conducts training workshops for MPs on a less regular basis. Results revealed five ways through which NEAPACOH has contributed to tackling health challenges in Africa including: focusing parliaments on tackling health issues in African countries, which has seen member committees realise increased budgets for, and/or legal reforms on, various health issues with concrete examples from Ethiopia, Malawi and Uganda; nurtured champions for health issues in African parliaments; linked parliaments with development partners thereby facilitating the provision of technical and financial support in the delivery of parliament functions; increased MPs’ access to evidence on health issues in Africa; and increased the capacity of MPs and staff in performing their functions.

NEAPACOH realized these achievements amidst many challenges including: inadequate resources; low levels of autonomy, which is linked to inadequate resources, with NEAPACOH being entirely reliant on development partners; difficulties in coordination and implementation of activities resulting from the bureaucratic nature of parliaments; and weak mechanisms for holding committees to account in implementing their annual commitments.

NEAPACOH could achieve more if it: is institutionalised in African parliaments; strengthens its funding mechanisms; identifies and implements a feasible mechanism for sustained country-level support to members committees throughout the year leading to the annual forums; designs and delivers a sustained capacity building programme for NEAPACOH members; and expands opportunities for increasing evidence use by member committees.
Oral Abstracts

Anne Coolen, Marie Stopes International Ghana

Public-private collaboration for delivering quality health services for universal coverage. Lessons learned from the Marie Stopes Ghana under the African Health Markets programme in Ghana

Co-authors: Samantha Dew-Marie Stopes International Ghana; Anne Coolen-Marie Stopes International Ghana; Jayne Rowan-Marie Stopes International

Purpose: Social franchising is a model for organizing a fragmented private sector. This presentation shares learnings from Marie Stopes Ghana (MSG), under the African Health Markets for Equity (AHME) programme. By delivering direct quality support to franchised networked members, and through a public-private partnership with the Ghana Health Service in training and quality assurance of Primary Health Care services, MSG is working to push the quality agenda forward as Ghana strives towards Universal Health Coverage by (a) ensuring that service standards are maintained (b) showcasing these standards to regulatory bodies such as the National Health Insurance Agency (NHIA) and the health facilities regulatory authorities (HeFRA) to enable accreditation into the National Health Insurance scheme (NHIS) for small and mid-level providers.

Focus/Content: The health sector in Ghana is in transition from a predominant government (public) health service network towards a more diversified and decentralized system. The NHIS accredits and contracts private facilities that pass the set criteria to provide services to NHIS clients in order to achieve high access coverage. However, equity of private sector access, especially in the Northern regions is still pronounced.

Under AHME, MSG focused on franchising small and mid-level providers located in poor districts into the BlueStar network. Key support has included: clinical training and supportive supervision in collaboration with GHS; marketing and demand creation; and business support for sustainable business. MSG also implemented SafeCare, a quality improvement scheme in selected clinics. The SafeCare certification programme aims to help providers deliver safe and quality-secured care to their clients according to internationally recognized standards.

By building the capacity of small and mid-level providers, MSG is ensuring that basic minimum quality standards for NHI accreditation are being met, translating into reduced out-of-pocket payments for NHI clients. 93 private facilities have been accredited onto NHIS, with (re)accreditation grade rating increases reported through quality support provided by MSG.

Significance for the sub-theme area/field-building dimension of relevance: The private sector is weakly regulated. Social franchise networks offer a platform to organize and quality assures small health care businesses that serve the poor, at scale, and help bridge a gap by helping franchisees gain insurance accreditation, which reduce out of pocket payments. The experience will be relevant to governments and development partners interested in linking private providers to UHC schemes.

Target audience: National health insurance agencies, ministries of health and public health programmes seeking to increase UHC by including the private sector.
Rene Loewenson, Training and Research Support Centre/EQUINET

Health as core business: integrating duties for health and health systems in the extractive sector in east and southern Africa

Co-authors: Rene Loewenson-Training and Research Support Centre/EQUINET

Countries in east and southern Africa (ESA) have significant shares of global mineral resources. Their mining/extractive sectors attract international corporates and contribute to growth in aggregate wealth, but are also criticised for how far they provide fair benefit to local communities. While the occupational risks for employed workers in the formal mining sector are largely recognised and regulated, the wider public health risks are less well monitored or regulated. They include public health risks to families, surrounding communities, health consequences of displacement and resettlement, chronic health problems affecting ex-mineworkers and residual risks after mine closure. This presentation outlines, with examples from own research and document review in the region, how these risks present externalities and burdens that are often absorbed by communities and under-resourced public health systems. What then is the role of this key economic sector in UHC? The framework developed by the Southern African Development Community (SADC) and the United Nations Economic Commission for Africa, Southern Africa to harmonise mining policies and standards, approved by SADC Mining Ministers in 2006, proposed that member states develop, adopt and enforce appropriate and uniform health, safety and environmental guidelines for the sector. Despite this, beyond general contributions to the fiscus, population health and health care in mining areas are largely left to voluntary corporate social responsibility. Research implemented on the extent to which international standards on public health duties are covered within current laws in 16 ESA countries found some areas included in some countries, but no country covering them completely. For example, while new environmental laws have integrated assessments and planning for environmental impacts prior to licensing, public health law, often older, does not similarly provide for health impact assessments. Drawing on dialogue held on the findings in several regional state and non-state forums, the presentation outlines proposals to clarify duties and standards for health and health care in the sector as a contributor to national strategies for health equity and UHC. Operationalising these measures combines public health authority, collaboration across sectors, disciplines and stakeholders and prior informed participation and consent of affected communities. While discussions on UHC are often focused on health providers and services, a lens on the extractive sector points to and would be of relevance to the much wider range of actors, sectors and disciplines needed to sustainably link UHC to the role of economic actors and activities that generate burdens and resources for health.
What are the main barriers to public-private partnerships in nutrition and how can they be overcome?

Co-authors: Yusra Ribhi Shawar-American University; Jessica Fanzo-Johns Hopkins University; Jeremy Shiffman-American University

Many of today’s complex nutrition-related challenges, such as obesity, would benefit from a public–private partnership (PPP) approach, with stakeholders from both sectors engaged. However, few high-quality PPPs exist in nutrition. In particular, there are an inadequate number of PPPs that have a (1) clear nutrition improvement goal, (2) resourced activities that have a strong pathway to the declared nutrition impact, (3) a governance structure that identifies and declares interests, and mitigates and manages potential conflicts of interests and other risks that inhibit potential improvements in nutrition and (4) an independent evaluation of whether goals were achieved. This paper analyzes the factors that facilitate and obstruct the emergence and success of PPPs in the nutrition field. Specifically, we probe whether there are in fact too few high quality PPPs in nutrition, and if so, the factors inhibiting their emergence and development and the strategies that can be advanced to encourage their success. We conduct a literature review, drawing on scholarship in the fields of public administration, organizational studies, and global health. In addition, we conduct 25 semi-structured interviews with key stakeholders, representing nutrition experts in the public and private sectors at both the global and national levels, as well as scholars of PPPs and global nutrition. A preliminary analysis suggests that several factors may hinder advancement of PPPs in nutrition, including: a lack of examples to learn from, insufficient dialogue about why and how to pursue such an approach, inadequate evaluations to demonstrate impact, and little trust among key actors because of past industry transgressions, the embrace of particular world views, and poor governance structures to enforce PPP agreements. This study concludes by discussing how to ameliorate these factors and incentivize more innovative and high quality PPPs in nutrition that are likely to be successful in advancing nutrition outcomes.
Eleanor Whyle, University of Cape Town

Models of engagement between the state and the faith-based health sector in Sub-Saharan Africa: A systematic review

Co-authors: Eleanor Beth Whyle-University of Cape Town; Jill Olivier-University of Cape Town

Background:

In sub-Saharan Africa (SSA), many individuals rely on private sector providers; and engagement between state and private sector actors is increasingly seen as a pathway to achieve universal health coverage. Faith-based organisations (FBOs) constitute an important source of care for many in the region, and are commonly integrated into national health systems through the alignment of priorities, contracting mechanisms, and service-level agreements. Little analytic research has been conducted on the various models of engagement with FBOs – which constitute a large portion of non-state, non-profit providers in the context – and research of sufficient depth to support the development of context-relevant guidelines is scarce.

Methods:

The aim of this research is to identify and categorise the mechanisms for public-private engagement (PPE) involving FBOs in SSA. We report on a secondary analysis and evidence synthesis of two review projects (conducted in 2016 and 2017) – a Campbell systematic review on PPE in SSA, and an ongoing systematic review of materials on religion and public health (held by the International Religious Health Assets Programme). Together these constitute a comprehensive topic-specific collection.

Results:

Models of engagement with FBOs align closely with generic PPE models (engagements between the state and secular non-state organisations). However, one particular type of partnership – the relationship between national faith-based health networks (NFBHNs) and the state – is not captured by standard PPP/PPE typologies and is best described as a combination of two generic models. This relationship highlights the complexity of PPE with the ‘faith sector’, which encompasses varied entities including different types of FBOs, donors and government bodies. This relationship is unique in that the strength of the partnerships is reportedly due to relational factors such as shared values and trust; and in that the scale of faith-based health provision creates a power imbalance that favours the non-state partner. However, the relational nature of these partnerships can also create challenges – requiring state actors to balance the strong ideological commitments that underpin the work of many FBOs with secularist commitments of many international donor agencies.

Conclusion:

The scale of faith-based involvement in SSA health systems is such that, for many countries, health systems strengthening necessitates strengthening relationships between NFBHNs and the state. This endeavour is hampered by the common failure to account for the complexity of the faith-based health sector, and by the uniquely relational nature of such partnerships.
Factors influencing the scale-up of public health interventions in low- and middle-income countries.

Co-authors: Susan Bulthuis-Royal Tropical Institute (KIT); Marjolein Dieleman-Royal Tropical Institute (KIT); Joanna Raven-Liverpool School of Tropical Medicine (LSTM); Maryse Kok-Royal Tropical Institute (KIT)

Purpose: To learn from barriers to and facilitators of scale-up of public health interventions in low- and middle-income countries.

Focus/Content: A systematic review was conducted to provide insight into barriers to and facilitators of scale-up of public health interventions in low- and middle-income countries. Two databases were searched for qualitative and mixed-methods studies, published between January 2010 and December 2017, to acquire in-depth information on the reasons for success or failure of scale-up of public health interventions in different contexts. The CerQual approach was applied to assess the confidence of each key finding.

This session reports on the key findings of this literature review. Various factors of influence were identified which were often related to planning of scale-up. For example: in the planning phase, the necessary additional (financial and other) resources and support requirements were frequently not taken into account. Also, when planning for scale-up, there is often no adequate focus on ensuring that institutionalization happens. Institutionalization, also called vertical scale-up, means embedding the intervention in the (health) system via for example national planning mechanisms, policy changes or legal actions. Various factors that facilitate the process of institutionalization were identified, such as: advocacy activities and providing insight into the costs related to scale-up. Other important facilitators for scale-up are user engagement and creating a user demand for the interventions to scale-up. Continuous monitoring and evaluation is described as a facilitator, enabling quality assurance of the scale-up and being able to react to contextual changes. Overall, the findings underline the importance of the development of a context specific scale-up strategy which can be used to guide the scale-up process.

Significance for the sub-theme area/field-building dimension of relevance: To reach the Sustainable Development Goals, and to achieve population-wide health improvement, whilst also ensuring that no one is left behind, scale-up of public health interventions, that have proven impact, is essential. However, scale-up is challenging and often not successful. To increase the success-rate of scale-up of innovative public health interventions, a thorough understanding of the factors influencing scale-up is important. When more innovative public health interventions are successfully scaled, universal health coverage will be one step closer.

Target audience: This session will be of interest for development organisations, programme implementers, donors, policy-makers and researchers involved or interested in the scale-up of innovative public health interventions.
Nicole Davis, JSI Research & Training Institute, Inc.

**Expanding Access to ART through the Implementation of Differentiated Models of Distribution: Lessons Learned from a Three-Country Study**

Co-authors: Nicole Davis-JSI Research & Training Institute, Inc.; Sabrina Eagan-JSI Research & Training Institute, Inc.; Malia Duffy-JSI Research & Training Institute, Inc.; Melissa Sharer-St. Ambrose University

**Background:** In an effort to expand access to antiretroviral treatment (ART), sub-Saharan African countries have begun to implement and scale differentiated approaches to ART distribution serving to reduce ART refill frequency, bring distribution closer to where patients live and work, and ultimately facilitate universal treatment access. While documentation of the results of these models exists, there is limited information on the learnings associated with scaling these models, which can help countries refine and expand these services to cover further PLHIV sub-populations, including key populations and adolescents, with such services.

**Methods:** For this qualitative study, data was collected through semi-structured interviews and focus group discussions with 163 multi-level stakeholders representing policy, programmatic, and patient perspectives in South Africa, Uganda, and Zimbabwe.

**Results:** Models included in this evaluation had largely been conducted with adult patients who were clinically stable. Respondents discussed the major lessons learned during the implementation of differentiated distribution models, and described key elements of implementation that could enable extension of these models to currently unreached populations such as adolescents, key populations, and pregnant women. Patients and programmers reported that comprehensive provider and patient orientation on the available models was critical to drive demand for enrollment, help patients determine which model best fit their needs, and allow both parties to adjust to the idea of reduced frequency of interactions between providers and patients who are clinically well. Such orientation facilitated patient empowerment to self-manage their care and gave providers the confidence that patients could maintain adherence with less clinical oversight.

Another factor relevant for extending the scope of these models to currently unreached populations discussed by respondents was understanding and addressing stigma in each implementation context. Stigma and fear of unintended disclosure were concerns expressed by many patients. However, respondents reported that in these differentiated models, stigma was reduced via peer support, less frequent facility visits requiring explanation at work, and normalizing of HIV when models combined ART distribution with other chronic diseases.

**Discussion:** While a single "one size fits all" approach does not exist to ensure accessible distribution of ART to PLHIV, these differentiated models do present a major opportunity for countries to increase access to treatment. Building on the learning from the early stages of implementation and scale-up in various countries can further refine these models to extend treatment coverage, which in turn, will benefit additional populations of PLHIV.
Scaling up Community Health: Prioritization and Costing of the Community Health Service Packages in Madagascar and South Sudan

Background: The role of community health workers is critical in extending access to health services for underserved populations, addressing high rates of preventable maternal and child morbidity and mortality, and reinforcing linkages to the country’s primary health care system. However, community health systems tend to be overlooked and are rarely formally integrated into the national health system. There is a lack of evidence at the country level on the costs, required financing and bottlenecks that may affect the successful implementation of community health packages, and on the expected health benefits.

Objective: The objective of the paper is to provide evidence for planning, financing and advocacy for community health interventions at the country level. Bottlenecks within community health systems, future costs and funding requirements of national programs, as well as expected health benefits are analyzed with data collected in Madagascar and South Sudan - two countries that are in the process of defining, prioritizing and implementing community health interventions as part of their recent national policy and strategy.

Method: The study combines qualitative and quantitative methods to analyze the cost of community health interventions over ten-year projections using different coverage and scale-up scenarios. Cost scenarios rely on a bottom-up approach and are modeled using the MSH/UNICEF Community Health Planning and Costing Tool. They reflect the normative cost of providing good quality services based on standard protocols. The costs include drugs and supplies, BCC / IEC support, community health agent start-up and refresher training, supervision, and meetings. The health impact of community health interventions is estimated using the LiST tool and FamPlan model. It provides an estimate of the projected number of death averted related to community health interventions.

Results: In Madagascar, the recurrent cost of implementing selected community health interventions varies from $10.4 million to $16.4 million in 2027 based on different levels of expected service utilization. In South Sudan, the recurrent cost varies from $25.6 million to $30.9 million in 2028. The impact analysis indicates that coverage of high-impact community health interventions would have a significant impact on lives saved. They vary from 49,000 to 85,000 after ten years of implementation in Madagascar and from 10,000 to 60,000 in South Sudan depending on the scenarios. The paper finally discusses policy implications and provides recommendations.
Joanna Raven, Liverpool School of Tropical Medicine, UK

**Building national capacity for managing scale-up of health systems interventions**

Co-authors: Joanna Raven - Liverpool School of Tropical Medicine, UK; Patricia Akweongo - School of Public Health, University of Ghana; Susan Buitkuis - Royal Tropical Institute, Amsterdam; Marjolein Dieleman - Royal Tropical Institute, Amsterdam; Alvaro Alonso - Liverpool School of Tropical Medicine, UK; Malcolm MacLachlan-Maynooth University, Ireland; Frederique Valliers - Trinity College, Dublin, Ireland; Xavier Nsabagasani - School of Public Health, Makerere University, Uganda; Justine Namakula - School of Public Health, Makerere University, Uganda; Hastings Banda - REACH Trust, Malawi; Kingsley Chikaphupha - REACH Trust, Malawi; Tim Martinez - Liverpool School of Tropical Medicine, UK; Kaspar Wyss - Swiss Tropical Institute for Health, Basel, Switzerland

Purpose: To share learning about the initial stages of building national capacity for the scale-up of a district health management strengthening intervention

Focus/content: A successfully tested district health management strengthening intervention is being scaled up in Ghana, Malawi and Uganda. Using the ExpandNet framework to guide the scale-up process, which includes assessing the environment, we have established national steering groups of users of the intervention to develop and oversee the scale-up strategy, and local resource teams to implement the scale-up. A critical part of the process is identifying and ensuring that appropriate stakeholders are engaged, and the scale-up is compatible with available resources and broader strategic plans to promote sustainability of the intervention.

This session reports on findings related to establishing the foundations of the scale-up process. We draw upon interviews with key stakeholders, reflections from national research teams and a desk review of policy, legal and research documents in the three countries.

We will discuss the challenges of taking into consideration the political-economic and health systems context, the initial engagement, negotiating multiple agendas, working in the crowded arena of development partners, and the incentives of other programmes. We explore the practicalities of establishing the structures for supporting the scale-up and facilitating their functions, in a way that promotes ownership and sustainability over the longer-term, as well as how to ensure that equity plays a central role in the scale-up process.

Significance for the sub-theme area/field-building dimension of relevance:

While there are many effective health services delivery innovations that could contribute to achieving Universal Health Coverage, scaling up these interventions remains a challenge. Effective scale-up should envisions that the benefits of the intervention are equitably distributed ensuring that they reach the vulnerable and underserved and that no-one is left behind.

Target audience: This session is aimed at policy-makers, donors and development agencies, and programme implementers who are engaged or interested in scale-up of tested interventions to improve equitable access to health care. It will also attract researchers – both those developing interventions for scale-up or those researching scale-up processes.
Oral Abstracts

Flavia Kaggwa, UNICEF Uganda

Community and District Management Empowerment for Scale-up (CODES) of child survival practices - a cluster-randomized controlled trial in Uganda

Co-authors: Flavia Mpanga Kaggwa-UNICEF Uganda

Background

Uganda has an under-five mortality rate (U5MR) of 64 per 1,000 live births and the three key killers of children under five years of age are malaria, pneumonia and diarrhoea. Highly effective evidence-based and affordable child survival interventions are well-known but local health system managers who have the responsibility to set health priorities and allocate resources accordingly often fail to do so because of management weaknesses, lack of analytic planning using available data and low motivation.

Methods:

The Community and District Empowerment for Scale-up (CODES) research project was designed with the aim to demonstrate that a district management strategy based on three pillars namely: 1) Improved targeting of interventions to match disease burden at district level 2) Evidence based management tools used to improve district health team performance 3) Increased community oversight to strengthen demand, exact accountability would lead to improvements in both coverage and quality of integrated interventions to reduce child deaths. 16 high burden districts were randomly assigned into either intervention or control arm and the management strategy was applied in the intervention arm. Implementation experiences were documented including changes in management practices. Evaluation by intention-to-treat analysis focused on effective quality-level population coverage of protective, preventive and curative practices for malaria, pneumonia and diarrhea in children under 5 years of age between implementation and comparison districts using a difference-in-differences approach.

Findings: The eight interventions districts were able to identify and implement prioritized interventions. Using population based data the CODES intervention was associated with net increases between intervention and comparison districts in effective coverage of treatment for symptoms of malaria (+23%), pneumonia (+11%), and diarrhea (+12%). Effects were also seen on immunization coverage (DPT3 +7.9%), Vitamin A and Breastfeeding. However, implementation of locally identified solutions was constrained by the very limited fiscal space available to district managers given the declining overall public funding to districts for health

Conclusion: The CODES research project is one of the first to test if a district level management intervention results into improvements in child health outcomes at population level. The CODES approach provides a model for district health systems strengthening in Uganda and beyond, and should be considered in efforts to scale up child health all over Uganda and in similar settings elsewhere. We recommend strong embedded implementation research to promote learning and context specific adaptations.
Elke Konings, Management Sciences for Health

**Plague in Madagascar: epidemic control starts in and with the community**

Co-authors: Elke Konings - Management Sciences for Health; Anton Luchytsky - Management Sciences for Health; Riana Ramanantsoa - Management Sciences for Health; John Yanulis - Management Sciences for Health

**Purpose:** In 2017, Madagascar experienced a plague epidemic, which claimed over 200 lives between August and November. Of the more than 2,400 cases, over 77% were clinically classified as pneumonic plague which, if untreated, is generally fatal within 24 hours. Therefore, timely case finding and prevention is critical.

Madagascar’s Ministry of Public Health (MOPH), with support from other partners, coordinated the national response. The USAID Mikolo Project, which has worked with community health volunteers (CHV) in the most affected areas since 2013, was a key partner for implementing response activities at the community level.

**Focus/Content:** The Project established a community-based system to identify and refer suspected cases to a health facility, trace contacts, and initiate prophylactic treatment. Activities included establishing, training, and supporting watch committees at the sub-district (commune) and village (fokontany) levels. Commune watch committees included the head of the health center (CSB), the mayor, and three other leaders of their choosing. Fokontany watch committees comprised the President of fokontany, two CHVs, and another local leader. In partnership with the district health authorities, we supported committee members to implement an integrated package of community plague response activities. These included (1) active searching for possible cases; (2) referring suspected cases to the nearest health center; (3) tracking cases that missed or refused treatment; (4) contact tracing of suspected cases; (5) conducting behavior change communication prevention activities; and (6) reporting data to the MOPH.

A total of 3,228 community leaders were trained in the plague response between October and December 2017 and established 30 commune and 220 village watch committees. Together, they provided plague sensitizations to 57,809 people, distributed 1,398 behavior change communications materials and tools, and identified and traced 3,914 contacts.

**Significance for the sub-theme/field-building dimension:** The combined efforts of the MOPH and international partners culminated in the containment of the pneumonic plague epidemic by December 2017. Our experience with the development and implementation of a strategy that brought the community into the plague response suggests that this is an effective way to strengthen the overall health system’s ability to respond rapidly to an outbreak. Working at the community level enabled response efforts to support the health needs of people the formal health system couldn’t reach.

**Target audience:** Those working on health security in national and local governments, health security policymakers and practitioners, and researchers examining ways in which to combat epidemics in low-resource settings.
Moses Tetui, Makerere University

Active ingredients for Harnessing Participatory Action Research to Strengthen Health Managers Capacity: A Critical Interpretative Synthesis

Co-authors: Moses Tetui - Makerere University; Joseph Mumba Zulu - Zambia University; Anna-Karin Hurtig - Umea University; Elizabeth Ekirapa Kiracho - Makerere University; Suzanne N Kiwanuka-Makerere University; Anna-Britt Coe-Umea University

Background

The much-needed health systems strengthening for improved and sustained health outcomes requires to be facilitated by a functioning health management system. The use of a participatory action research to strengthen management capacity is widely documented especially in high-income countries. This documentation however falls short of a comprehensive synthesis upon which participatory action research can be harnessed for strengthening health managers' capacity. This paper sought to fill this gap by reviewing existing literature on the subject matter.

Methods

A critical interpretive synthesis method was used to interrogate eight selected articles that met the criteria of strengthening health managers' capacity using PAR. The lines of argument approach guided the synthesis in which the authors interpretively made connections and linkages between different conditions identified in the literature. Finally, the Atun et al, framework on integration was used to model the ingredients synthesized in the literature into five main domains in accordance to the framework.

Results

Five active ingredients with intricate bi-directional interactions were identified in the literature reviewed. These included: a shared purpose, skilled facilitation and psychological safety, activity integration into organizational procedures, organizational support and external supportive monitoring. A shared purpose of the management strengthening initiative created commitment and motivation to learn. This purpose is built upon a set of skilled facilitation skills that included promoting participation, self-efficacy and reflection. Thereby creating a safe psychological space within which the managers interacted and learnt from each other and their actions. Additionally, an integrated intervention strengthened local capacity and harnessed organizational support for implementation. Finally, supportive monitoring from external partners such as researchers ensured quality, building of local capacity and professional safety networks essential for continued learning.

Conclusions

The five active ingredients identified in this synthesis provided a basis upon which the use of PAR can be harnessed not only to strengthen health managers' capacity but also other health systems strengthening initiatives involving implementation research. In addition, the findings demonstrated the intricate and complex relations between the ingredients, which further affirms the need for a systems thinking approach to tackling health systems challenges.
Contribution of the civil society to the achievement of health for all. The case of rural populations in Colombia.

Co-authors: Mauricio Torres-Tovar - Universidad Nacional de Colombia; Roman Vega Romero - Universidad Javeriana; Jenny Gutiérrez García - Universidad Javeriana; Katherin Carrillo Noguera - Universidad Nacional de Colombia; Juan Pablo López Moreno - Universidad Nacional de Colombia; Yadira Borrero Ramírez - Universidad de Antioquia; Jairo Luna García - Universidad Nacional de Colombia; Esperanza Echeverry López - Universidad de Antioquia; Diana Almonacid - Universidad Colegio Mayor de Cundinamarca

Antecedents: se desarrolló una investigación en Colombia, como parte de una más amplia del People’s Health Movements, denominada “Contribución de las Organizaciones de la Sociedad Civil al logro de la Salud para Todos” que involucró seis países del mundo, cuyo objetivo fue hacer una investigación empírica del involucramiento de la Sociedad Civil en el trabajo por la salud para todos.

Método: se desarrolló una investigación cualitativa, con enfoque de investigación-acción-participativa, que anidó varios casos. Acá se hace referencia al caso realizado con comunidades campesinas de la Zona de Reserva Campesina del Valle del Río Cimitarra (ZRCVRC) en Colombia, organizadas alrededor de una Asociación Campesina. Las técnicas de recolección de información involucraron: análisis documental, grupos focales, entrevistas semiestructuradas y observación participante.

Resultados: se encontró que las comunidades de la ZRCVRC desarrollan un proceso de construcción de capacidades relacionada con la formulación de su propio plan de desarrollo. En el tema de atención en salud se destaca la configuración de agentes comunitarios en salud, que aprenden habilidades para el desarrollo de la estrategia de atención primaria en salud, que les permite resolver parte de los problemas de salud de las comunidades, ante la ausencia de instituciones estatales en sus territorios.

Igualmente, la Asociación Campesina logra gestar un proceso de gobernanza en el territorio con instituciones públicas y privadas, que le permite desarrollar estrategias para ejecutar sus proyectos productivos, ambientales y de salud, contemplados en su plan de desarrollo.

Discusión/conclusiones:

Esta investigación evidencia que una comunidad campesina organizada puede establecer un horizonte de desarrollo territorial, con una perspectiva de sostenibilidad y de soberanía alimentaria, que le permite avanzar en mejorar su calidad de vida y trabajo, y a su vez mejorar sus condiciones de salud.

La figura de agentes comunitarios de salud se constituye en un recurso muy importante para mejorar las condiciones de vida y salud. El modelo de la Asociación para la formación de agentes, se constituye en un valioso conocimiento para los sistemas de salud.

La experiencia de la Asociación deja como enseñanza el valor de lo organizativo para elevar la gobernanza en salud, y de la figura de agentes comunitarios en salud para ampliar la posibilidad de llegar directamente a la gente en sus territorios, lo que debería configurar un recurso sustancial de los sistemas de salud, especialmente en naciones donde existen gran cantidad de población rural, para avanzar en la universalidad y la salud para todos.
Moving towards decentralised care for drug-resistant TB in South Africa: the role of high and low-level tinkering in health systems responses

Co-authors: Karina Kielmann-Queen Margaret University; Lindy Dickson-Hall-University of Cape Town; Mark Nicol-University of Cape Town; Alison Grant-London School of Hygiene & Tropical Medicine; Helen Cox-University of Cape Town; Waasila Jassat-University of Kwa Zulu-Natal; Marian Loveday-Medical Research Council South Africa; John Black-Livingstone Hospital NHLS; Koleka Misana-University of Kwa Zulu-Natal and NHLS; Mosa Moshabela-University of Kwa Zulu-Natal; Emmanuel Odjidja-Village Health Works, Burundi Office

Background: Assessments of health systems readiness to implement complex interventions often focus on the availability of functional systems components, but fail to capture the locally relevant, context-specific dynamic responses of actors that bring about or obstruct change. We use the example of early implementation of decentralized care for drug-resistant TB in three South African provinces to highlight the relationship between health systems and policy developments. A bottom-up examination of adaptive and spontaneous health systems responses (‘tinkering’) help explain how and why policy implementation is variable, partial, or unintended in its local manifestations.

Method: Thirty-four (34) key informant interviews were conducted in 2016-17 with influential government, non-government, and academic stakeholders involved with South Africa’s response to DR TB to examine the emergence and evolution of the 2011 draft policy framework to decentralise DR-TB care. We used framework analysis to identify how informants characterised drivers and mechanisms of and obstacles to decentralisation of DR-TB care in the three provinces.

Results: Whilst ‘putting systems in place’ (i.e. finances, health workforce, infrastructure, information) was seen as essential to facilitate implementation of decentralized care across the three provinces, local variations in the organisation of care were informed by 1) high-level stakeholders’ assemblage of emerging evidence drawn from pilot projects and models of care in other countries; 2) health worker ‘tinkering’ within service delivery to facilitate patient access, extend parameters of care regimens, and implement task-shifting and knowledge-sharing and; 3) patient agency to work the system in their favour.

Conclusion: Organisational readiness to implement policy initiatives across decentralised systems requires putting functional resource components in place. Equally important, however, is an evaluation of the historical and political decision-making space that actors within the system have to ‘tinker’ and innovate within a given policy script.
Oral Abstracts

Christian Molima, Institut de Recherche en Santé et Société, École de Santé Publique, Université Catholique de Louvain

Communauté et système de soins pour des soins centrés sur le patient au Sud-Kivu, RDC: un outil innovateur d’analyse organisationnelle du centre de santé

Co-authors: Christian Eboma Ndjangulu Molima-Institut de Recherche en Santé et Société, École de Santé Publique, Université Catholique de Louvain; Samuel Makali-École Régionale de Santé Publique, Université Catholique de Bukavu; Ghislain Balaluke Bisimwa-École Régionale de Santé Publique, Université Catholique de Bukavu; Hermès Bimana Karemere-École Régionale de Santé Publique, Université Catholique de Bukavu; Jean Macq-Institut de Recherche en Santé et Société, École de Santé Publique, Université Catholique de Louvain

Introduction

En République Démocratique du Congo, le système de soins de santé reste focalisé sur la prise en charge et la prévention des maladies. Le centre de santé fonctionne comme un prolongement de l'hôpital en assurant des soins qui tiennent peu compte des autres dimensions de la santé ou de la place de la personne dans sa communauté. L’objectif de cette recherche est de développer une analyse organisationnelle du centre de santé comme structure de soins capable de développer une approche centrée sur la personne et son entourage.

Méthodologie

Nous avons conçu un cadre d’analyse de la capacité organisationnelle inspiré de différentes composantes de capacité organisationnelle du Context and Capabilities for Integrating Care (CCIC) Framework. Par ailleurs, nous avons analysé la capacité de changement nécessaire à une approche centrée sur la personne au niveau du centre de santé au travers de l’outil NOMAD.

Une adaptation des concepts à la réalité locale a été réalisée au travers d’un atelier avec les parties prenantes clés du centre de santé et un pré-test au niveau d’un centre de santé a permis d’améliorer l’approche dans la collecte de données.

Une collecte de données a été réalisée au travers des focus-groupes organisés avec les agents de santé de 6 centres de santé (un dans chaque centre de santé) ainsi que des entretiens individuels organisés avec les mêmes agents de santé et des représentants de la communauté.

Résultats

Les résultats préliminaires mettent en lumière des lacunes dans l'évolution du centre de santé et ce dans le cadre de prestation de soins centrés sur le patient. Cela concerne, entre autres, (1) les systèmes d'information trop centrés sur les rapports et ignorant le dossier patient individuel complet, (2) les outils de prise de décision trop orientés vers la gestion de la maladie uniquement ; (3) un leadership multiple désintégré, structuré en fonction des programmes spécifiques de contrôle des maladies (4) une relation avec la communauté centrée uniquement sur la gestion des maladies. Des résultats plus détaillés seront présentés lors du congrès.

Discussion et conclusion:

Le cadre d’analyse ainsi conçu permet d’identifier des dynamiques émergentes propices ou non au développement des soins centrés sur la personne au niveau des centres de santé. Grâce à des discussions structurées, ce cadre devrait aider les acteurs à mieux comprendre comment réformer concrètement l'organisation des centres de santé pour développer une approche psycho-médico-sociale (soins centrés sur la personne) au Sud-Kivu en RDC.
Complex socio-ecological systems: SDG, health and resilience at the community level

Introduction and Background

The Dominican Republic is one of the most vulnerable countries in the world to climate change (German Watch, 2017). The location of the island in the hurricane route and the biophysical and socio-economic characteristics interact to increase the conditions of vulnerability and risk in the face of these events. Population growth, especially close to the coastline, uncontrolled urbanization and poverty has forced large population groups to live in areas prone to disaster (Rathe, 2015). Hurricanes Irma and Maria impacted in 2017, leaving communities flooded, houses destroyed, and material and human losses not yet truly quantified. Health impacts included increased leptospirosis, acute diarrheal diseases, epidemic outbreaks of dengue, chikungunya, Zika and Mayaro. (Alarcón and María, 2017). The country also experiences frequent drought periods which are expected to increase due to climate change, with projections of doubling of the heat index and lowering the availability of water (Cathalac, 2016).

Objective

Assess the socio-ecological vulnerability of five country’s municipal districts using socioeconomic, health and biophysical indicators to construct vulnerability indices and diagrams based on exposure, sensitivity and adaptive capacity, to help building resilient health systems at the community level.

Methods

Socio-economic, biophysical and health data gathered, as well as infrastructure and health resources available at the community level. Vulnerability indices (Izzo, Rathe and Arias, 2014) and vulnerability diagrams (Polsky, Neff, Yarnal, 2007) were built using complex systems tools. Interviews to key actors and focus groups to classify the “Principles to build resilience, maintain ecosystem services in socio-ecological systems”. (Biggs, Schutler and Schon, 2007). Work with five very vulnerable and poor Municipal Districts, with high pressure on natural systems, poor territory planning and serious socio-environmental problems

Results

Advance the knowledge of the complex relationships that interact between the components of the socio-ecological systems of five Dominican communities, focusing on the human impacts on natural systems that increase vulnerability and affect the quality of life. Demonstrate how a better understanding of these connections can lead to better policy interventions that tend towards resilience and sustainability from a preventive perspective. We will leave recommendations to improve territory planning, health and well-being, urban environment and the environmental services that support it.
Oral Abstracts

Zahra Mansoor, University of Oxford

Systems Approaches to Public Service Delivery: Lessons for Health from Education, Infrastructure, Public Finance, and Public Management

Co-authors: Zahra Mansoor-University of Oxford; Martin J. Williams-University of Oxford

Purpose

To draw lessons for the health systems field from systems approaches to public service delivery in other sectors.

Focus/content

We review recent advances in systems approaches to the study of education, infrastructure, public finance, and public management, and compare developments in these sectors to those in the health systems literature.

Background

While systems approaches have become increasingly mainstream across a range of sectors and disciplines, this work has largely proceeded in siloes, so there are potentially large learning gains by comparing developments across sectors.

Methods

Literature review and narrative synthesis. For each sector, we survey: the definition and scope of systems approaches, and their relationship to existing literature; theoretical frameworks for analyzing systems; empirical methods used to study them; major results and substantive insights; and linkages to policy.

Significance for the field

We find that although the health systems sub-field is comparatively better developed than other sectors, there are still numerous opportunities for cross-sectoral learning in areas such as empirical methods and the design of research funding. While the meaning of and rationale for “systems approaches” varies significantly across and within sectors, we synthesize these into two main perspectives: systems as networks of relationships, and systems as complexity. We suggest that a third perspective – systems as external validity issues – can add some clarity to the field and connect with other theoretical and empirical approaches. Finally, we discuss future directions for research at the intersection of health, public finance, and public management.

Target audience

Academics and practitioners interested in health systems research.
Yingxi Zhao, University of Washington

Ethnic Health System Strengthening in Post-Conflict Ethnic Regions of Northeastern Myanmar: A Qualitative Study

Co-authors: Yingxi Zhao-University of Washington; Kun Tang-Peking University

Background

Civil wars, political conflicts, ethnic issues, and stagnant social development have resulted in fragile health systems in Northeastern Myanmar. Different health services providers co-exist with limited resources in the project regions, including Ethnic armed organizations (EAOs) health authorities, Ministry of Health and Sports, international organizations and private sectors. The healthcare provision continues to be fragile and inefficient, with prevalent health inequity. Limited service point, poor financial protection mechanism and gender-based inequity restrain the population’s access to healthcare services, not to mention local authority’s lacking participation in the making, implementation and evaluation of health policies. The present study aims to audit the local ethnic health systems and their performance in Northeastern Myanmar ethnic-controlled region, identify key challenges faced by the health systems in achieving universal health coverage.

Methods

Qualitative data was collected through 26 semi-structured interviews and seven focus group discussion with key informants including NGOs, health officials, policy-makers, international donors, ethnic authority/government officials, local clinic managers/staff and health workers, private outlets, etc. in the border regions, Kunming (China), Yangon and Naypyitaw (Myanmar); Interviews and focus group were in person, audiotaped, transcribed and used a framework analysis.

Findings

Five central themes emerged from the qualitative study: 1) poor health planning: Health is a low priority of government and the top-down health planning and poor implementation reflects weak governance capacity; 2) health financing highly depend on out-of-pocket payment and international aid, leading to severe health inequity; 3) high turnover rate of health workforce; 4) information collecting and reporting depend on NGOs; 5) lack of essential drugs and standardized guideline; Also some participants emphasized the rooted mistrust between the Burmese and ethnic minorities population, which leads to poor utilization of health facilities and resources.

Conclusion

The findings indicated that challenges exist within each pillar of the health system. To achieve universal health coverage in the ethnic regions, health system alignment and decentralization is needed. Health system strengthening could serve as both an urgent need and also a way of peace building.
McQuality and HealthBucks? What fast-food franchises can teach us about health service delivery and quality of care. Lessons from disruptive innovators in private and public sectors

Co-authors: Priya Balasubramaniam-Public Health Foundation of India; Akshya Patil-Pathfinder International; Ravi Kaushik-Medtrons Foundation; Srinath Reddy-Public Health Foundation of India

Background: Quality of care in health services has been identified as a critical element to achieving Universal Health Coverage (UHC) and consequently fundamental to Sustainable Development health goals. Recent studies across developed and developing countries have documented widespread problems with providers who make little effort to ensure that patients receive high-quality care, geographic variations in healthcare service quality, and high levels of medical errors. Efforts to improve the quality of health services in low-resource settings, have typically focused on structural constraints.

Objective: Digital technology-enabled healthcare solutions and new models of care in emerging economies are increasingly addressing healthcare access and quality. Our study examines three innovative health-service models in India that have addressed quality in healthcare delivery through technology, novel partnerships and adopting management practices from non-health sectors.

- A private primary health network that borrows its working model from a popular coffee chain franchise and ensures service quality through standardised health practice procedures derived from the food-services industry.

- A public-sector hospital using technology-enabled low-cost diagnostics for outpatient care while monitoring quality through mobile digital platforms.

- A public-private sector health-services partnership that outsources health facility management in remote geographic areas monitoring patient satisfaction through innovations in e-health and provider training.

Methods: Our mixed-methods mapping exercise involved qualitative interviews with 210 patients and providers from 3 health facilities across 3 states. The Quantitative section utilized a 10-question structured questionnaire scored using a 5-point Likert scale. Items were coded so that a higher mean score on the instrument reflected greater satisfaction with quality of care. Questions covered structural indicators: health facilities, personnel, medicines; process indicators: diagnoses, referral, and prescription patterns along with provider attitude, expense-per-visit, waiting time and distance. Additional secondary data on socio-economic status, age and gender was also captured in the surveyed sampling.

Emerging findings: Preliminary analyses reveal that quality indicators like facility conditions, resources and provider attitude ranked high across respondent who were willing to spend more on a visit to a facility if assured of quality care. Waiting time at a facility followed by accessibility were the next important criteria in defining choice of a facility as well as return visits. Our findings will demonstrate how new healthcare models have embraced non-traditional methods of service delivery that include incentivising health workers by awarding them equity shares in the delivery-model, promoting a culture of data-driven policies, and adopting customer satisfaction practices used in non-health sectors. Impacting healthcare quality at facility and systems level requires innovating around healthcare process including health-worker capacity.
Promoting the Intersection of Engagement Between Traditional and Private Equity Stakeholders in Emerging Global Health Care Markets

Co-authors: Lesley Eva Bristol-Gillings School of Global Public Health, University of North Carolina at Chapel Hill

Purpose: Rising incomes and epidemiological transitions in emerging global health care markets (EGHCM) have contributed to increased demand for health services that surpass public sector capacity. Resource gaps have created new health care investment opportunities, and the private for-profit sector is rapidly increasing its level of activity in selected markets. Private equity (PE) firms in particular are targeting investments that increase health system capacity, such as improving health facility infrastructure and the workforce. These investments are often met with resistance by traditional global health stakeholders; in actuality, public and private sectors often have shared strategies and goals. The purpose of this research is to explore the intersecting visions and interests of traditional and PE stakeholders and to identify alternative pathways for public-private partnerships (PPP). Effective PPP have the potential to move health systems towards the goal of universal health coverage.

Focus/content: The EGHCM landscape is viewed through three themes: (1) emerging health market trends; (2) indicators of preparedness for for-profit/PE investment; and (3) investment strategy themes, including PPP. A literature review utilized multiple sources including PubMed, EBSCOhost Global Health databases and miscellaneous and gray results. This review resulted in 234 sources. India is used as a case example of the diversity of PPP. To assess stakeholder engagement, interviews were conducted with informants from traditional and for-profit/PE backgrounds. The EGHCM landscape and expert insights lay a foundation for a PPP framework that enables improved interaction and alignment between sectors.

Significance for the sub-theme area: The for-profit private sector, particularly PE, has played an increasingly significant role in EGHCM. It is crucial to have traditional stakeholders and newer actors engage in a meaningful and equitable manner to align strategies and increase care for underserved populations. Providing a framework to identify and overcome obstacles to inter-sector engagement provides a necessary pathway for collectively working towards the goal of universal health coverage.

Field-building dimension of relevance and target audience: The field-building dimension that most closely relates to this research is “novel strategies for building capacity.” Two field-building elements include a continuum of private sector investment strategies in emerging health care markets, including key investment drivers, as well as a PPP strategy framework that can be adapted to meet public sector and for-profit/PE needs for successful, integrated collaboration; this framework may be an extension of an existing model. The target audience for this research includes traditional and new stakeholders in EGHCM settings.
Sarah Dominis, Abt Associates

Innovating to achieve UHC: Optimizing the impact of the private health workforce

Co-authors: Diana Frymus-USAID; Emma Golub-Abt Associates; Sarah Dominis-Abt Associates; Sean Callahan-Abt Associates

Achieving universal health coverage (UHC) requires leveraging the private health workforce. Private providers in South Africa and India are innovating rapidly to grow and retain their human resources in order to sustainably provide services. As countries prepare to expand health insurance and access to services, including HIV/AIDS care, they must determine regulatory approaches that will optimize use of the private health workforce.

The Sustaining Health Outcomes through the Private Sector (SHOPS) Plus project, funded by USAID through PEPFAR, conducted a qualitative study to learn how private facility- and community-based providers are innovating to strengthen their health workforce and lay the groundwork for UHC, and how they can be better engaged to support an effective health workforce for HIV. Findings from 18 organizations in South Africa and India showed that providers are innovating through efficient and scalable staffing models, harnessing technology such as artificial intelligence to facilitate service delivery using lower-level cadres of health workers, and leveraging sustainable community-based models to link underserved communities into the health system. The organizations also shared how the regulatory environment both supported and hindered innovation and the organizations’ viability through tax policies, public insurance, contracting and quality assurance. Technological and structural innovations enabled many of the organizations interviewed to sustainably serve individuals in the lowest wealth quintiles.

South Africa and India have ambitious plans to vastly expand health insurance within the next decade, and their diverse and robust private health sectors are important sources of health care for HIV/AIDS and beyond. Particularly for countries with generalized HIV epidemics, engaging private providers in national HIV responses is critical to laying the foundation for UHC. The willingness and ability of the private sector to collaborate with the public sector depends on the regulatory environment, financial incentives, and the organizations’ own perceptions about their role in the movement for UHC. To effectively engage the private sector, donors and governments must consider how their programs and policies directly and indirectly incentivize private organizations to scale up service delivery or crowd them out.

Our target audience includes national health system staff, donors, and implementing partners seeking to engage and leverage the private health workforce, as well as private providers seeking to build their workforce and contribute to the movement for UHC.
The Role of Private Sector in Health Service Delivery in Smaller Cities of Bangladesh

Co-authors: SHAIKH MEHDI HASAN-icddr,b; SHAKIL AHMED-icddr,b; ALAYNE ADAMS-Georgetown University

Background

Globally, smaller cities account for 26 of the 43 fastest-growing cities in the world. In Bangladesh, small cities with a population size of 500,000 to 1 million, comprise about 40% of the urban population. However, they are generally overlooked in terms of public health systems strengthening investments, and public healthcare coverage is limited. Increasingly, the private for-profit sector has filled this vacuum in the urban healthcare market, and is taking advantage of rising healthcare demands associated with rapid urban population growth. Despite its prominence on the healthcare landscape, little is known about the size, nature, geographic coverage, and cost of services of the urban private sector in Bangladesh’s smaller cities.

Methods

The data used in this paper originate from health facility mapping exercise executed in Dinajpur and Jessore Municipality in 2016 and 2017. Dinajpur municipality is located in the North-West of Bangladesh, and Jessore in the South-West of the country. All operating health facilities were identified and geolocated, and a survey was conducted to gather service and cost-related information. Descriptive statistics were performed to analyze service and cost data. The prevalence and spatial distribution of different health services were quantified and mapped in order to identify gaps in service provision.

Results

Among all the static facilities in both cities, the private-for-profit is the dominant sector representing respectively 94% and 95% of total facilities, the large majority of which are drug shops and doctors' chambers. Private facilities mostly concentrated in close proximity to public hospitals in both cities. A noticeable gap in emergency and critical care services is apparent in both study areas. After 5 pm, the availability of services in Government and NGO facilities is limited. After working hours, mainly private health facilities are available for providing services. In both of the cities, there is a huge variation in cost of services across facilities.

Discussion/Conclusions

This study provides empirical evidence of the importance of the private sector in healthcare provision in smaller cities, and indicates possible entry points for engaging it more formally around the health sector goal of achieving UHC by 2030. Knowing more about the sector and its location and activities in small cities is a first step in efforts to hold it accountable in terms of quality, affordability and accessibility.
Is the private sector well positioned to help meet unmet demand for universal health coverage in Nigeria? What does the evidence say?

Co-authors: Uche Chukwuka Ikenyei-Western University; Ramona Kyabaggu-Western University; Modupe Ikenyei-Independent Consultant

Background

The 2013 Nigerian Demographic and Health Survey (NDHS) revealed dismal population health outcomes indicative of Nigeria’s poor universal health coverage (UHC) programs. With a modern contraceptive prevalence rate (mCPR) of 9.8%, total fertility rate (TFR) of 5.5 and 1 in 5 under 5 deaths due to malaria, the burden of disease statistics raises questions about Nigeria’s capacity to meet the Sustainable Development Goals (SDG). Among these concerns, 86% of the over 34,000 health facilities serving an approximately 180 million people are government owned, funded, insufficient and poorly distributed to ensure UHC for Nigerians, therefore exploring alternative options such as prioritizing the expansion of the private sector’s role in scaling-up health care appears to be probable alternative; however, mobilizing support for this alternative will depend on substantial evidence to demonstrate that the private sector receives significant patronage.

Methodology

A trend analysis of two service delivery indicators, source of Family Planning (FP) methods among current users of modern methods and source of advice or treatment for children with fever, was conducted. The analysis aimed to draw inferences about public verses private sector preference for women and child health services in Nigeria by comparing the results from the last three (2003, 2008 and 2013) NDHS findings and the 2015 Malaria Indicator Survey (MIS).

Results

The results revealed, that the private (NDHS, 2003, 58%; 2008, 61% and 2013, 60%) sector received more uptake of FP services patronage when compared to the public (NDHS 2003, 23%; 2008, 23% and 2013, 29%) sector. Furthermore the 2008 NDHS revealed that that the average cost of FP commodities was 57 Nigerian Naira in the private sector and 246 Nigerian Naira within the public sector leading one to deduce that cost of FP commodities was a potential contributory factor for sectoral preference. Regarding source of advice or treatment for children under 5 years with fever, the NDHS 2013 findings and the 2015 MIS indicated that 57% and 66% of the children, received care from the private sector while 35% and 30% received care for fever episodes from the public sector, respectively.

Discussions and Conclusions

These findings demonstrate that the private sectors can potentially ensure affordability, increase accessibility and provide quality health services and eventually universal health coverage if significant investments are made to increasing it’s potentials. This will not only increase access to health care but also stimulate more private sector initiatives to achieve UHC in Nigeria.
Rethinking the Role of the Private Sector in Health - Lessons from Brazil and the Way Forward

Purpose: To analyze the impact of past and current initiatives in Brazil's health system that highlight the positive contributions of private sector participation within the context of a government-funded public system.

Focus/Content: By introducing a government-funded public health system, Sistema Unico de Saude (SUS), Brazil took an important step to ensure the right to health for all. Brazil invested heavily in a primary care strategy to reach Brazilians formerly excluded from the health system, and SUS has been credited with operationalizing the right to health and reducing healthcare access inequities. Contrary to expectations, however, SUS did not curb the private sector's participation in the health system. One in four Brazilians is currently covered by private insurance, and private spending, insurance and out-of-pocket, comprises over 55% of total health spending. The Brazilian health system thus continues to be a complex mix of a nominally comprehensive public system and a large and active private system.

The coexistence of two health systems is accepted as a reality and Brazil's approach has been pragmatic. However, questions persist about equity, quality, coordination and regulation in a “dual system”. This paper documents past and current efforts to use the private sector as a vehicle for innovation and change in the public system. Highlighting these initiatives' positive outcomes, this paper argues that the private sector has incentivized improved performance in the public sector, and some collaboration has occurred. To make the case that the resulting improvements would not have been possible without the private sector, the paper will analyze: (i) the role of OSS hospitals in raising quality and accountability in the public system, (ii) for-profit minute clinics as pioneers in customer service in the health sector, and (iii) so-called “Corujão” - a concerted effort to eliminate the medical exam backlog by paying private providers off-hours to meet needs of the SUS population - as an example of innovative collaboration between the two sectors. Finally, the paper explores options to further capitalize on the contributions of private engagement in the health system.

Significance for the sub-theme area: The paper adds evidence on the role of the private sector in building health systems that provide high quality services for all. Brazil’s experiences are instructive and can be adapted to other countries and contexts.

Target audience: Low- and middle-income country policymakers, those interested in the topic, and Brazilian and Latin American policymakers, policy analysts and researchers.
Exploring the role of non-state actors in Indian healthcare: how mission hospitals can contribute to UHC expansion

In 2017, India’s National Health Plan outlined plans for progressive achievement of Universal Health Care (UHC). Among the key policy principles, was “inclusive partnerships”, a multi-stakeholder approach for achieving the country’s health goals. In the spirit of this principle, plans for progressive UHC call for selective purchasing of secondary and tertiary health care from private providers, especially non-profit providers, to maximize the use of existing human resources and health sector infrastructure. This study explores the current status of Indian mission hospitals, a subset of non-profit health providers, and assesses their ability to contribute to India’s vision for UHC.

Methods: We used interdisciplinary, mixed methodology collecting data through organizational material, internal reports, comprehensive literature review, a survey of 183 mission hospitals, and 81 key informant interviews at 11 mission hospital facilities across India. Interviews were thematically analyzed using NVivo and triangulated with other study data.

Results and Discussion: Mission hospitals maintain strong value alignment with UHC principles. Many were early exemplars of UHC principles, particularly the provision of free primary health and preventive health services. Beginning in the mid 20th century, many mission hospitals began to develop secondary and tertiary health services, often with explicit commitment to standard treatment guidelines. Among mission hospitals that survive today, there is increasing focus on improving the scope and quality of secondary and tertiary care, complying with national quality standards, and maintaining core commitments to provide services to those who cannot afford to pay. Due to charitable commitments and other challenges, many mission hospitals face ongoing financial and human resource constraints, often forcing them to look for outside partnership to help care for the poor including collaborating with state-level health and prevention schemes. For instance, many mission hospitals have experience as empaneled providers of RSBY, an early version of the type of public-private partnership envisioned in India’s progressive UHC policy. Survey data demonstrates that mission hospitals that partner with the state have improved performance in terms of outpatient volumes and occupancy rate. While there are opportunities for mission hospitals to partner with the government on UHC expansion, there are concerns about timely repayment and rising empanelment standards, which are particularly challenging for facilities in resource poor areas.

Conclusion: While mission hospitals face a series of internal challenges, many have long-standing commitment to population health and service to the poor, making them potentially strong partners with Government of India in the realization of UHC.
Rashid Zaman, Oxford Policy Management

**Half a loaf is better than none: Coverage, capacity and constrains of private sector health facilities in Somalia**


Background: The longstanding conflict and fragility has resulted in parallel and fragmented healthcare system in Somalia. In the absence of functioning public sector facilities, the country’s healthcare system has vertically privatised. Despite the crucial role of the private sector, there are extremely limited evidence on this sector.

Methods: During 2016-17, we carried out a comprehensive mapping exercise using an innovative and cost-effective telephone interviewing method in all 9,675 UN p-code areas to identify the private sector health facilities, to assess their capacity and to understand the constrains. We have also interviewed 600 patients and conducted key informants interviews with the providers and focus group discussions with the users in 30 sampled private health facilities to understand the demand side factors including the cost of care.

Results: We identified 3,481 suspected private health facilities across Somalia, of which 2,253 could be contacted, confirmed as private facilities, and consented to be interviewed. With a modelling based on response rates, we estimate that there are approximately 3,289 private health facilities with 79% in urban areas. The estimated density of private health sector facilities is 2.2 facilities per 10,000 population (including pharmacies) or 0.93 per 10,000 (excluding pharmacies). The density of health workers in private health facilities is 4.89 health workers per 10,000 population, compared with 4.28 per 10,000 in public sector. Among the facilities, 6% are hospitals, 32% clinics, 4% are diagnostic centres and 58% are pharmacies. Excluding the pharmacies, the private health facilities have an average of 1.2 qualified doctors, 1.1 clinical officers, 1.9 nurses/midwives and 1.2 pharmacists per facility. The service availability is very mixed with 66% hospitals offering 24-hours emergency services, 31% with the facility to carry out caesarean section and 25% of the clinics with immunization service. We have found evidence of extremely unregulated supply chain at the private sector in Somalia. The out-of-pocket expenditure is very high and a significant proportion of the users are getting care for non-communicable diseases at these health facilities which contradicts the known disease profile of the country.

Conclusion: This is the first comprehensive research on the private sector in health in Somalia and the findings reaffirms the importance of the private health sector in the country and highlights a number of areas of concern relating mainly to quality and coverage. The study highlights the need for a public-private partnership strategy to engage the private sector effectively in delivering healthcare in Somalia.
Health Needs of Migrant Workers in the Arab Gulf: The Role for Health Systems and Compulsory Health Insurance

Co-authors: Katharine A. Allen - Johns Hopkins School of Public Health; S. Irudaya Rajan - Centre for Development Studies - Kerala, India; Adnan A. Hyder - Johns Hopkins School of Public Health

Purpose: The health needs of vulnerable and marginalized groups, such as temporary labor migrants, are both distinct and poorly understood. Health systems must effectively serve these populations in terms of addressing their health needs, but often fail to do so. This abstract examines the situation of low-wage migrant laborers in high-income Arab Gulf states with a focus on compulsory health insurance schemes as a health systems approach to addressing the health needs of a vulnerable population.

Significance: Migrant workers in the Arab Gulf comprise up to 80-90% of the population and workforce in high-income countries like Qatar and the United Arab Emirates. These migrants are predominately low-income male laborers from South and Southeast Asia who are vulnerable based on their immigration and economic statuses. The introduction of compulsory health insurance schemes are thought to be one way to reach such marginalized groups—but their effectiveness is not always known.

Content: This abstract addresses three parts: 1. why labor migrants migrate, 2. their unique health needs while abroad and 3. the effects of compulsory health insurance schemes to reach such marginalized populations. Part 1 will feature data from Return Migration Surveys conducted in Kerala, India to demonstrate why individuals migrate to the Arab Gulf and their experiences (remuneration and access to health care) abroad. Part 2 will be present data from a 2013 burden of disease study in the United Arab Emirates to show the difference in health outcomes between migrants and citizens. It illustrates that the burden of injuries (such as falls, suicides) is higher among migrants, while chronic diseases remain a significant health burden especially among male migrants. Part 3 utilizes healthcare utilization data from 2010, when a compulsory health insurance scheme, meant to cover all residents regardless of nationality or economic status, was introduced in the Emirate of Abu Dhabi in the United Arab Emirates. Utilization data showed that health services appeared to be under-utilized by migrants, especially females. These three parts will be discussed from a health systems perspective and how marginalized groups can be more effectively reached.

Target audience: Researchers and policy-makers wanting to better understand how health systems can better serve the needs of marginalized groups such as temporary labor migrants.
CHRISTIAN ANGUISSA, Bureau Central des Recensements et des Etudes de Population

Implication des mécanismes informels de protection sociale dans l’assurance maladie des ménages en milieu urbain au Cameroun

Co-authors: CHRISTIAN ANGUISSA-Bureau Central des Recensements et des Etudes de Population

La protection sociale est l’un des moyens permettant de lutter contre la pauvreté et l’exclusion sociale. Au Cameroun comme dans de nombreux pays africains, des mesures sont prises dans ce domaine mais des défis restent à relever en ce qui concerne la couverture du risque maladie. Selon la résolution 58.33 de l’Assemblée mondiale de la santé de 2005, tout individu a droit aux services de santé sans difficultés financières. La mise en œuvre de cette résolution rencontre des difficultés économiques des pays en développement et la dépendance excessive aux paiements directs des soins de santé. La sécurité sociale camerounaise ne gère pas le risque maladie prescrit par l’OIT (Convention 102). Selon l’EDS-MICS, 76 % des dépenses de santé sont pris en charge par les ménages. Une grande partie de la population ne peut assurer financièrement ses soins de santé ni faire recours à une assurance privée, car 37,5% de la population est pauvre et le nombre de ces pauvres a augmenté (1,9 millions) entre 2001 et 2014 (INS, 2015). Face à ces manquements, la population a imaginé des mécanismes palliatifs de sécurité (associations à pratiques informelles, tontines) qui demeurent mal connus. Pourtant, le Cameroun a une longue tradition en matière de solidarité et d’entraide. Il est donc question de voir le rôle de ces structures dans la protection des ménages face aux risques financiers liés à la maladie. A travers une enquête (qualitative et quantitative) auprès de 303 membres des associations et mutuelles de santé à Yaoundé et Douala, nous avons appréhendé la perception sur leur importance pour l’assurance maladie. A l’analyse, 68% (76% à Douala et 66% à Yaoundé) des membres sont satisfaits des prestations de santé. Ceux du secteur informel sont plus satisfaits (84%) que les autres. Contrairement aux mutuelles de santé dont l’assurance maladie est la raison d’être, les associations ont des pratiques positives qui vont de la souplesse des procédures d’adhésion à la cohésion sociale. Elles protègent les ménages et préservent leurs biens productifs face au risque financier lié à la maladie, même si leurs allocations sont inférieures à celles des mutuelles de santé. Elles sont d’autant plus importantes pour les employés du secteur informel que pour les plus vulnérables incapables de souscrire une assurance maladie privée. Il est donc recommandé de sensibiliser les populations sur leur importance ; capitaliser les bonnes pratiques et faciliter leur intégration dans la stratégie des services sociaux.
The Challenge of Including People with Informal Jobs for Moving towards Universal Health Coverage in Three Latin American Countries

Co-authors: Pamela Francisca Bernales-Baksai - University of Bath; Orielle Solar Hormazábal - Facultad Latinoamericana de Ciencias Sociales FLACSO Chile

To provide coverage, quality health care and financial protection to the whole population, Universal Health Coverage (UHC) needs to address socially initiated inequalities and exclusion of the most disadvantaged groups. In Latin America (LA), people working informally are among those disadvantaged groups and, due to the organisation of most health systems based on contributory social health insurances, frequently lack proper inclusion.

Although most LA countries have developed health-policy reforms for UHC, very few of them explicitly target employment conditions and informal work as a central barrier in the access to health care, and remarkable gaps of information in this regard remain. To address this lack of attention, this article seeks to examine the ability to promote the inclusion of informal workers of health-policy reforms stated in three LA countries, namely Chile, Uruguay and Colombia, each having a different type of welfare regime.

The analysis focuses on the eligibility criteria for coverage and access to quality services: benefit packages and financial protection, as they are key dimensions for moving towards UHC. By considering these dimensions it fills a gap in the existing literature about the extension of health coverage to informal workers, almost exclusively focused on the financing arrangements.

The enquiry is grounded on country case studies conducted between 2013 and 2015 as part of the project ‘Health Inequalities, Work and Access to Social Security of Informal Workers: Latin America, Africa and Asia’ led by Flacso-Chile and it is complemented by an updated literature review.

The analysis shows that these three countries have applied relevant reforms for UHC, expressed in their success in covering previously excluded groups such as informal workers. Chile makes special efforts to provide quality services for all; Uruguay has promoted the extension of health coverage based on principles of citizen rights, and is moving to greater redistribution of risks and resources; while Colombia notoriously increased the coverage of people with informal jobs through the introduction of a subsidiary regime. Nonetheless, equity in access and financial protection still are major challenges. Data analysis unveils that informal workers have more limited access to health services specially in the secondary level of attention, which is related to the persistence of segmentation in these health systems as well as to the prominent and scarcely regulated role of the private offer (e.g. private providers), that provides more direct access to contributors in comparison to informal workers, mostly covered by subsidized schemes.
Oral Abstracts

Yogish Channa Basappa, Institute of Public Health

Is the beneficiary aware about their insurance scheme? A descriptive analysis from Karnataka, India.

Co-authors: Yogish Channa Basappa-Institute of Public Health; Narayanan Devadasan-Institute of Public Health

Introduction

India’s health care is predominantly financed by households through out-of-pocket payments at the point of care. Recognising this, successive governments have introduced various measures including health insurance schemes to protect the poor from high hospitalisation costs. One such scheme introduced in 2008, was the Rashtriya Swasthya Bima Yojana (RSBY). Meant for the poorest of the poor, the government subsidised the premiums so that patients from this population are able to get free hospitalisation care at select hospitals in their neighbourhood. Despite a 100% subsidy of premiums and the promise of free health care even in private hospitals, in 2011-2012 the enrolment rate in RSBY was 51.4%. The aim of our study was to identify the reasons for the poor enrolment and utilisation. In this abstract we present the reasons why enrolment was poor in Karnataka.

Methods

We interviewed 6,040 eligible families in Karnataka using a multi-stage sampling strategy in 2012. We specifically explored the social, economic, political and cultural barriers for eligible families to enrol and utilise the benefits of the RSBY scheme.

Results

6040 families were interviewed, 15% (903) household respondents were female, median age was 50 years, 85% (5127) from rural area, 45% (2714) who are literate, 30% (1795) had irregular wages and 32% (1931) were belongs to SC/ST.

Only 51% (3070) of 6040 households were aware about the RSBY scheme. The awareness of RSBY was independent of gender, religion, education, known health status or family members having a government job. However, the chances of families knowing about RSBY was higher in those households where the woman was a member of the local self-help group (OR: 1.2; 95% CI 1.12-1.26) or if the youth were members of a local organisation (OR:1.5; 95% CI 1.2-1.8). The main source of information about the RSBY was from the local leaders (40%) followed by the local health staff (22%).

Discussion

Any scheme that targets the poorer sections of society must be careful to ensure that people know about the scheme. Traditional information strategies like public announcements and pamphlets were used by the RSBY and could reach only half the eligible population. In the context of the government launching the National Health Protection Scheme (NHPS), the government would be advised to create awareness keeping in mind the fact that most of the potential beneficiaries are illiterate and daily wage earners. The government could try and disseminate information through existing local groups.
Exploring influential factors to retention of secondary midwives at health centres in rural Cambodia by qualitative interviews about their experiences and an influential factor-ranking activity

Background & Objectives: In the past two decades, Cambodia more than halved its maternal mortality ratios (MMR), achieving a Millennium Development Goal. This reduction was contributed to largely by the increase in the number of midwives (MWs), particularly in rural areas. Every Health Centre (HC) currently has at least one primary MW (PMW) (WHO 2015). To achieve a Sustainable Development Goal, Cambodia is seeking the deployment of at least one secondary MW (SMW), whose qualification is higher than PMWs, to every HC (MOH 2010). Thus, retaining SMWs is crucial. Previous literature has identified influential factors to MWs’ retention, not solely pertinent to SMWs, including salaries, HCs’ physical conditions and technical guidance from superiors (Sherratt et al. 2006, Willis-Shattuck et al. 2008, JICA 2012). Security concerns over SMWs and gender have also been mentioned but unstudied. This study explores influential factors to SMW retention and their levels of significance.

Methods: We conducted two-stage qualitative (Anderson 2010) interviews with stakeholders (Fujita et al. 2013) and SMWs and asked the SMWs to rank the factors. The first stage interviewed key-informants (KIs) including officials, development partners, chiefs of rural HCs (semi-structured, N=19) and women who had deliveries at the HCs (in-depth, N=8). Reflecting results of these interviews, the second stage conducted in-depth interviews with SMWs at rural HCs (N=10). Analysis applied Nvivo. The ranking was made by putting different quantity of beans for each factor (a tool for participatory rural appraisal).

Result & Discussion: Accommodations and living with family were identified as highly influential factors to the retention of SMWs. SMWs deployed to a place where they were living apart from their parents or spouse requested a transfer (end of retention) to an HC closer to home. The necessity of the exclusion of males from SMWs’ accommodations and the necessity for SMWs to live with their families were mentioned as norms. Some KIs seemed to help SMWs follow these norms. These norms are likely to originate from gendered perspectives, as SMWs have not faced security issues despite their persistent mentioning security concerns. Current salaries and their HCs’ physical conditions were not regarded as highly influential factors because these had improved. The cost of retaining SMWs and their transfers appeared to be borne by the KIs working with SMWs and the community level health system. This could weaken the health system. Possible responses might involve an accommodations policy or a housing allowance for SMWs.
Health system’s response for physician workforce shortages and the upcoming crisis in Ethiopia: a grounded theory research

Co-authors: Tsion Assefa-Jimma University ; Damen Haile Mariam -Addis Ababa University ; Wubegzier Mekonnen-Addis Ababa University ; Miliard Derbew -Addis Ababa University

Background: A rapid transition from severe physician workforce shortage to massive production to ensure the physician workforce demand puts the Ethiopian health care system in a variety of challenges. Therefore, this study discovered how the health system response for physician workforce shortage using the so-called flooding strategy was viewed by different stakeholders.

Methods: The study adopted the grounded theory research approach to explore the causes, contexts, and consequences (at the present, in the short and long term) of massive medical student admission to the medical schools on patient care, medical education workforce, and medical students. Forty-three purposively selected individuals were involved in a semi-structured interview from different settings: academics, government health care system, and non-governmental organizations (NGOs). Data coding, classification, and categorization were assisted using ATLAS.ti qualitative data analysis scientific software.

Results: In relation to the health system response, eight main categories were emerged: (1) reasons for rapid medical education expansion; (2) preparation for medical education expansion; (3) the consequences of rapid medical education expansion; (4) massive production/flooding as human resources for health (HRH) development strategy; (5) cooperation on HRH development; (6) HRH strategies and planning; (7) capacity of system for HRH development; and (8) institutional continuity for HRH development. The demand for physician workforce and gaining political acceptance were cited as main reasons which motivated the government to scale up the medical education rapidly. However, the rapid expansion was beyond the capacity of medical schools’ human resources, patient flow, and size of teaching hospitals. As a result, there were potential adverse consequences in clinical service delivery, and teaching learning process at the present: "the number should consider the available resources such as number of classrooms, patient flows, medical teachers, library…". In the future, it was anticipated to end in surplus in physician workforce, unemployment, inefficiency, and pressure on the system: "…flooding may seem a good strategy superficially but it is a dangerous strategy. It may put the country into crisis, even if good physicians are being produced; they may not get a place where to go…".

Conclusion: Massive physician workforce production which is not closely aligned with the training capacity of the medical schools and the absorption of graduates in to the health system will end up in unanticipated adverse consequences.

Keywords: Flooding strategy, Grounded theory, Medical education expansion, System response/continuity
Oral Abstracts

Edwinah Atusingwize, Makerere University School of Public Health

**Multidisciplinary human resources for sustainable health systems: One-health club approach of building workforce for emerging health threats in Uganda**

Co-authors: Edwinah Atusingwize - Makerere University School of Public Health; Charles Drago Kato - Makerere University, College of Veterinary Medicine Animal Resources and Biosecurity; Irene Naigaga - Makerere University, College of Veterinary Medicine Animal Resources and Biosecurity; Esther Buregyeya - Makerere University School of Public Health; David Musoke - Makerere University School of Public Health; Peninah Nsamba - Makerere University, College of Veterinary Medicine Animal Resources and Biosecurity; David Kabasa - Makerere University, College of Veterinary Medicine Animal Resources and Biosecurity; William Bazeyo - Makerere University School of Public Health; Rawlance Ndejjo

Purpose: Human, animal, and ecosystem health are inextricably linked, which makes addressing zoonotic infectious disease outbreaks from the perspective of a single sector, without considering the complexity of the entire system, slower and costly. Innovative approaches such as working across sectors are therefore important in addressing such complex challenges. The One Health approach which enhances multidisciplinary cooperation and collaboration is indeed critical by bringing together resources from different sectors including political support for building sustainable health systems. One Health Central and Eastern Africa (OHCEA) is a network of fourteen Public Health and Veterinary Higher Education Institutions that are located in eight countries in the Eastern and Central Africa region considered to be a “Hot Spot” for emerging and re-emerging infectious diseases. With the purpose of building a multidisciplinary health workforce, OHCEA has implemented One Health Student Clubs in Makerere University, Uganda. The club mobilizes and prepares students from various disciplines (including Veterinary Medicine, Public Health, Social Sciences, Engineering, Technology) through theoretical and field experiences to tackle One Health challenges including emerging and re-emerging disease outbreaks.

Focus: Through joint training and mentorship by University faculty, government ministries and partner associations, University students with multidisciplinary backgrounds are equipped with skills in One Health approach, including during disease outbreak investigation and response. Working with a national rapid response team, students are involved in national activities to control and respond to outbreaks such as Rift Valley Fever, Highly Pathogenic Avian Influenza, and Yellow Fever. Students also conduct joint community outreach activities including, one health advocacy, community sensitization, demonstrations, and radio talk-shows on one health challenges.

Significance: One health clubs are a novel opportunity for building a transdisciplinary health workforce. Through engagement in community outreach and one health advocacy, outbreak investigation and rapid response, students: 1) appreciate the multidisciplinary approach to health systems which is central to achieving the SDGs, 2) advocate for one health approach through community discussions, social innovations, 3) support national response to disease outbreaks. Conclusively, building a multidisciplinary health workforce through one health student innovation clubs is relevant for creating sustainable health systems especially for addressing emerging global health threats. Through experiential learning, creating community and institutional awareness, one health student clubs are central in building a multidisciplinary health workforce, collaborations and networks which are a powerful voice for moving beyond provincial approaches to a holistic way of building human resources for health.

Audiance: Researchers, training institutions, policy makers
Oral Abstracts

Donnela Besada, South African Medical Research Council

**Saving lives, saving costs. Investment Case for Community Health Workers in South Africa. What are the returns on investment?**

Co-authors: Donnela Besada-South African Medical Research Council; Emmanuelle Daviaud-South African Medical Research Council; Debbie Budlender-Equal Education; Kate Kerber-Save the Children; David Sanders-University of the Western Cape

**Background:**

Community health workers (CHWs) are increasingly shown to have the potential to improve health status, in particular that of the more disadvantaged or those living in hard to reach areas. However, in many low income countries the CHW platform is under-resourced with inadequate training, support and supervision; leading to low morale amongst CHWs, underperformance and poor results. The purpose of this investment case commissioned by the South-African Department of Health, was to make the economic case to higher levels of government for investment in CHWs.

**Methods:**

CHW impact over 10 years, are quantified through increased case-finding and improved adherence to treatment leading to fewer infections (communicable diseases) and higher treatment success rate of controlled conditions. Impact was modelled according to conservative estimates obtained from a thorough literature review of CHW activities globally. Cost of a well-supported and functioning platform is presented as well as the cost-effectiveness of each of intervention (WHO thresholds). Impact on employment of a strengthened platform is calculated together with the impact of injection of additional funds in the economy (the multiplier effect) using the methodology developed by the International Monetary Fund (IMF) and World Bank.. Additions to the GDP by people whose death was averted is calculated by applying the GDP per capita to each life year saved during productive ages.

**Results:**

Despite a conservative approach and scope, all interventions by CHWs in the fields of mother and child health, HIV/AIDs, TB, Hypertension and Diabetes would lead to a decrease of just under 200,000 deaths over 10 years and to 4.8 million DALYs averted. All the proposed interventions have been shown in this study to be highly cost-effective. In the areas of HIV/AIDs, TB and palliative care, CHWs interventions are in fact cost-saving for the health-system. The injection of the additional and increased salaries spent in the economy, would translate into an amount of R7.5 billion added to the country GDP over the first 3 years. The better health status of the population and deaths averted through the CHWs interventions, translate into an additional 5 million productive life years added to the workforce over 10 years, or R413 billion added to the GDP.

**Conclusion:**

Sufficient resourcing for community health workers is integral to health care delivery, and has the potential in South Africa to not only improve population health, but incur great savings in the long term. Potential lessons exist for other countries.
Improving the health workforce quality in Indonesia through collaborative approaches between higher education and health system: A proposal of multisectoral actions

Co-authors: Ralalicia Limato-Eijkman Institute, Jakarta, Indonesia; Arthur H.P. Mawuntu-Neurology Department, Faculty of Medicine of Sam Ratulangi University & R.D Kandou Hospital, Manado, Indonesia

Purpose

Health system strengthening is interdependent with other systems. Health system demands the provision of health workforce which is supplied by the higher education system. As one of health system building blocks, a well-performing health workforce is required to generate positive outcomes in health system functioning and population health. Therefore, the interface between the health and education system cannot be overlooked.

Quality services in healthcare have been a concern in Indonesia health system for a long time. Hospital accreditation has been conducting for more than two decades. In the last few years, the accreditation has also applied to Puskesmas (community health centre). At the same time when the hospital accreditation had started, higher education accreditation, including in health, experienced changes towards system-based mechanism (local and global competency driven).

The accreditation of health education institutions is aimed to ensure its quality is in line with the global standard and to produce health workforces who are capable to deliver competent health services that meet the community needs. At the same time, the goal of the hospital/Puskesmas accreditation is to deliver quality health services. This proposal is looking for a better way on how these two schemes can be synchronised to generate greater and sustainable impact in health workforce quality services.

Focus

When health graduates enter the professional markets, they often encounter difficulties to meet the required quality standard performance. Therefore, we propose four collaborative approaches to overcome this circumstance. First, to create a systematic and transparent feedback mechanism from the health providers’ employer/evaluator to the health education institutions where they originated on quality work-performance. Second, to give a greater portion for health systems and policy, and quality standard and service elements in the education syllabus. Next is to use the same instrument to assess the performance of health workforce when they were in school and when they are in the working environment. Last, to incorporate these three approaches in both higher education institution and hospital/Puskesmas accreditation methods.

Significance

The higher education accreditation is expected to generate competent and productive health workforce who can deliver quality services to meet the demand of health labour market. The existed accreditation in both health education institutions and health facilities must not be done in isolation to significantly improve the health workforce quality. The proposed collaborative actions above are expected to bypass the health workforce competence and quality issues in the health system.
"Volunteer" doesn’t mean free: The costs for volunteer health worker cadres and implications for the absorption into national health systems in low-resource settings

Background: Facility and community-based volunteer health worker cadres represent a substantial component of the human resources supporting health services in low-resource settings. Their impact on health access and outcomes are well-documented. Minimal data exist regarding the financial resources necessary to incentivize, supervise, and provide logistical support to these cadres. Costing data on volunteer cadres is necessary to inform on their long term sustainability within health systems. Volunteer cadres are, at times, erroneously considered to be free or low cost.

Methods: EGPAF supports HIV and other health services at more than 1,100 sites in Swaziland, Tanzania and Uganda. EGPAF conducted a retrospective analysis of costs to support volunteer cadres in EGPAF-supported facilities and communities in these three countries from October 2016 to September 2017. Data were disaggregated by type of volunteer cadre: lay health worker (LHW) and HIV treatment supporter (TS). As defined by WHO, LHWs are persons with no formal professional/tertiary instruction and trained to provide specific health services. TS are individuals providing formal/informal support to increase linkage to, and adherence on, HIV treatment. Costs were disaggregated by direct (stipends/honoraria) and support (trainings, supervision, non-monetary incentives, operational support). In-kind resources contributed by other partners, ministries of health, communities or volunteer cadres themselves, were excluded.

Results: Total annual costs across these countries ranged from $352 to $5,846 for each LHW and from $480 to $2,040 for each TS (Table 1). Stipend payments accounted for 75% of total costs, with operational and support (4%), supplies (4%), training (6%) and supervision (11%) accounting for the remainder. EGPAF supports 2,307 volunteer health workers in these three countries, representing a total annual cost of $1,727,556.

Discussion: Health services in low-resource settings, including HIV services, are increasingly being decentralized to lower-lever cadres and community-based delivery methods in an effort to make health services cost-effective, accessible, and sustainable. This analysis demonstrates that utilizing volunteer cadres has cost implications, and the sustainability of these cadres will depend on the availability of funding to support these costs and ongoing oversight structures to ensure quality of care. The effectiveness of these cadres in improving patient outcomes for HIV and other diseases is well-documented; however, additional focus should be given to how health systems will absorb these cadres or their functions, within constrained budgets.

Table 1: Costs per Cadre per Country

<table>
<thead>
<tr>
<th>Cadre Type</th>
<th>Swaziland</th>
<th>Uganda</th>
<th>Tanzania</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS</td>
<td>$2,040</td>
<td>$755</td>
<td>$480</td>
</tr>
<tr>
<td>LHW</td>
<td>$5,846</td>
<td>$1,033</td>
<td>$352</td>
</tr>
</tbody>
</table>
Medical Education Research: The weak link in Health Systems Research

Co-authors: Stephen Olus Okeyo-Great Lakes University of Kisumu; Dan Owino Kaseje-Dan

The training of Health workforce, a key pillar in health systems, lies at the intersection with education sector. As a result the accountability of training of health professionals, especially at undergraduate and graduate levels is often hazy and uncertain. the adverse effect of this on quality of training, and the resourcing of certain aspects like research is compounded by duality of clinical practicum management. Robust research of this complex educational ecosystem is lacking, and the adverse implication on quality of training and ultimately service delivery is obvious, especially in developing countries. This gap assumes significance in the face of sustainable development goal number four (quality education). However the significance of higher education has to be largely assumed, since there is a clear focus on lower levels of education. Medical education research is reported to be lagging 20 years behind primary health care and health systems research in terms of technical competencies, research methodology and funding (Todres, Stephenson and Jones). There seems to be a limited quantitative representation of medical education research in previous health systems global symposia, but available literature also suggest that there are significant qualitative issues in medical education systems research. This study was thus undertaken illuminate medical education systems research within the broad health system, including descriptions, metrics and how to determine and evaluate the adequacy of their integration in HSS interventions.

A cross sectional emergent design was employed to generate the relevant information which is targeted for a diverse group of medical educational service and research stakeholders, including policy makers, planners, and practitioners in Government Ministries, departments or units, training institutions, development partners civil society and communities.

The results affirm quantitative and qualitative gaps in medical education research in reviewed areas, including dissemination in the Health Systems Research Global interventions. Medical education research accounts for Under 1% of hundreds of abstract submitted to the 4 previous HSR Global symposia, and none in the 37 Health Systems Initiative awards.

A systems approach to addressing the gap in the integration of medical education system in the broad HSS is proposed that include: realignment and matching medical education research systems alongside HSS efforts; developing and integrating medical education information systems within the ongoing IHRIS which is currently focused on in-service training (CPD/CME); strengthening technical competencies in medical education research systems; developing resource mobilization for medical education research systems; developing robust metrics and evaluation system.
Margaret Prust, Clinton Health Access Initiative

Using modeling and scenario analysis to support evidence-based decision-making on human resources for health training and retention interventions in Malawi

Co-authors: Margaret Lippitt Prust-Clinton Health Access Initiative; Leslie Breman-Clinton Health Access Initiative; Lisa Chase-Clinton Health Access Initiative; MacFarlane Mogombo-Ministry of Health of Malawi; Agnes Mononga-Ministry of Health of Malawi; Helen Witte-Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); Grace Namagana-HRH2030; Timothy Tchereni-Clinton Health Access Initiative; Annie Tsakalaka-Ministry of Health of Malawi

Purpose: To demonstrate how an Excel-based health workforce projection model using Ministry of Health (MOH) staffing and training data can be used to model and compare HRH intervention scenarios related to pre-service training, recruitment, and retention of the health workforce to inform strategic planning and target setting.

Significance: The use of health workforce models is critical to evidence-based decision making in the health sector. This describes a practical, interactive modeling exercise that directly engaged policy makers.

Target audience: Decision-makers and managers building investment cases for HRH interventions or making strategic decisions around HRH, as well as people developing mathematical models for public health application.

Content: Interventions in HRH are characterized by time delays between implementation and outcomes and are often beyond any single government department’s purview; even small interventions involve multiple actors to catalyze system-level shifts. In this context, it is complicated to understand the effects of discrete choices. Modeling allows decision-makers to weigh the implications of different strategies that consider various bottlenecks in the health worker pipeline, to make decisions after evaluating the trade-offs of different courses of action. The presentation will share the experience of Malawi, where a group of partners led by the MOH developed a model to forecast size of the health workforce against national and international targets for clinical and allied cadres under various scenarios. The Excel-based model accounts for the number of individuals enrolling in local training programs, percentage graduating and passing licensure exams, percentage recruited by the public sector, number hired from training programs outside Malawi, and number of health workers lost due to all forms of attrition. Model results indicate that with current trends and no changes to national targets Malawi will only achieve its national target for health workers in 2034. Model scenarios provide evidence supporting strategies in Malawi’s 2018-2022 HRH Strategic Plan to mitigate attrition, develop recruitment strategies, and guide workforce investments towards increasing pre-service training enrollments. We will discuss:

1) Availability of HRH data in Malawi and how to address data gaps 2) Timeline and process for model development 3) How the model helped identify key bottlenecks and opportunities for improvement 4) Successful strategies for jointly developing intervention scenarios with the MOH and stakeholders 5) Extending the utility of the model beyond initial planning by integrating the model into national program planning and continually updating the model inputs 6) Areas for future development, including attaching costs to various implementations to further contextualize options for decision-makers
Sustainable funding for HIV/AIDS and TB: producing evidence for a successful donor transition in Cambodia

Co-authors: Sophie Faye - Abt Associates; Benjamin Johns - Abt Associates

Background

In Cambodia HIV/AIDS and TB have historically been financed by donors, the Ministry of Health, and out-of-pocket spending. However, in recent years donor funding has been declining and upcoming social health protection reforms may increase the likelihood that the National Social Security Fund (NSSF) might cover HIV/AIDS and TB services. In this context, the objective of this study was to estimate unit costs/cost components and identify the sources of funding for HIV/AIDS and TB services. Such information aim to help the government better understand the financing of these services to prepare for donor transition; and help the NSSF shape future purchasing mechanisms and inform reimbursement rates.

Methods

Cost data were collected for the year 2016 from a sample of 21 health facilities in four high burden provinces in Cambodia. Total and unit costs were calculated using a step-down approach. Additionally, the sources of financing were tracked, and a variance analysis was performed to identify cost-drivers.

Results

The cost per VCCT visit ranged from $8.79 to $14.03. For first-line ART it ranged from under $214 to more than $323 per patient per year and for second line from just over $500 to over $716 per patient per year. The cost of TB diagnosis, inclusive of all visits and laboratory testing ranged from $18.17 to $44.12 and the cost per diagnosed sputum smear positive patient ranged from $39.32 to $119.59. The Global Fund and the US Government provided the financing for about 16% to 68% of the costs depending on the type of facility; mostly paying for commodities and staffs salaries. Cost for ART was driven by drug costs, while staff was the largest cost category for most other services.

Conclusions

The relatively large ranges found in unit costs may indicate inefficiencies in the delivery of services and can make it harder to design accurate reimbursement rates. As funding for HIV/AIDS and TB is transitioning from donors to local government in Cambodia, additional financial and technical resources need to be secured to maintain commodities procurement as well as staff positions previously supported by donors.
Lela Sulaberidze, Curatio International Foundation

How to Sustain Public Health Gains in the SDG Era when Countries in European Region Transition from the Global Fund Support?

Co-authors: Lela Sulaberidze-Curatio International Foundation; Tamar Gotsadze-Curatio International Foundation; George Gotsadze-Curatio International Foundation

Background:
The Global Fund (TGF) provides 55.5% of external/donor funding spent on TB programs Globally. In the era of dwindling external assistance twelve countries in Europe are expected to graduate from TGF’s support following Fund’s Sustainability, Transition and Co-Financing (STC) policy introduced recently. For years TGF supported supply of quality drugs, diagnostics and new technologies, especially for Multi-Drug Resistant TB (M/XDR), because the region has been particularly affected reporting the highest proportion of M/XDR-TB cases among new and retreated patients 18.4 and 46.2% respectively. Therefore, sustainable transition assuring uninterrupted supply of quality drugs and diagnostics becomes critical for effective M/XDR-TB control in this part of the world.

Methods:
This is a twelve -country study investigating the potential impact of the STC policy on the quality of supplied TB drugs and commodities during 2014-2017. Using a conceptual framework for evaluating procurement and supply management systems, the study systematically collected qualitative and quantitative information from published documents, public databases and through in-depth interviews and narrowly examined the domains of health systems related to commodity supply during transition of TB programs.

Results:
Seems STC policy is delivering initial results as countries are increasing the share of national funding for TB programs. Most likely in response to STC policies the national TB program budgets are being optimized, which could in part be a result of reduced prices for TB commodities achieved through Global efforts. Albeit, in the past inadequate attention to the national drugs policies and regulations, when most grant-funded commodities were procured internationally and supplied to countries using one-off waivers, is expected to emerge as a major impediment for sustainable transition. The challenges could be compounded by inadequate tools or capacity to use these tools for demand forecasting causing inadequate supply of drugs and diagnostics leading to stock-outs. Variable public financial management and procurement practices along with stringent procurement rules and weak procurement arrangements are also expected to negatively affect TB program implementation after transition.

Conclusions:
If donors have genuine interest in a transition which assures that public health gains achieved with donor support are further sustained and expanded, it seems necessary to engage with other sectors beyond the health. Without multisectoral action dealing with issues such as enhanced public finance management, public procurement, national drug legislation, procurement transparency and accountability the risks of transition could be high and public health gains could be lost.
Oral Abstracts

Irene Thuo, The George Washington University: Milken School of Public Health

A Sustainability Planning Framework for Countries To Use When Donors Exit: A Case Study of Neglected Tropical Disease Programs

Co-authors: Irene Wangeci Thuo-The George Washington University: Milken School of Public Health

Background: Sustainability of public health programs is a holy grail in global health. This is of most relevance to neglected tropical disease (NTDs) control and elimination programs which are heavily donor dependent. Many countries are utilizing the World Health Organization (WHO) guidelines to design, implement and plan for the sustainability of NTD elimination programs. These guidelines typically focus on technical factors, such as the prevalence of the disease and the treatments required, that influence the sustainability of elimination programs. Experience in sustainability planning for other types of public health programs shows that this guidance is on the programmatic and contextual that also impact sustainability planning. This qualitative research reviews existing literature on sustainability and on NTDs to identify the programmatic and contextual factors that influence the sustainability of NTD elimination programs.

Methods: A two-step qualitative methodology was applied in this research. The first step was a literature review of 29 NTD related articles and 15 sustainability frameworks to identify the contextual and programmatic factors that influence sustainability and develop a draft NTD sustainability framework. The second step was to test this draft NTD sustainability framework, using a multi-case study methodology. The Kenya National Program for Elimination of Lymphatic Filariasis (LF), was selected and three counties, each with an active LF elimination program were identified. Testing of the framework was done by conducting 24 semi-structured in-depth interviews with key informants, reviewing 11 key program documents and observing four key NTD meetings. All data sources were selected to ensure either a global, regional, national or county level representation. Data was transcribed entered into NVivo Pro 11 and coding and analysis.

Results: The results showed that the main contextual factors that influence the sustainability of NTD elimination programs are political commitment, reliable funding, political stability and environmental improvements. The main programmatic factors that influence the sustainability of NTD elimination programs are leadership, capacity, integration, adaptability and performance. Overall, the contextual factors of funding and government decentralization, had the most influence. The programmatic factor of integration into other existing health programs was found to be the most relevant. This research also found that planning for sustainability is best undertaken during the design of the program.

Conclusion: Based on these findings, this paper presents an NTD sustainability framework that highlights the most relevant contextual and programmatic factors that need to be considered. This is a useful tool for NTD Practitioners and policy makers.
Private Sector Participation in HIV Programs after Donor Exit: Evidence from an Evaluation of PEPFAR’S Geographic Prioritization in Uganda

Co-authors: Jess Alan Wilhelm-Johns Hopkins Bloomberg School of Public Health; Ligia Paina-Johns Hopkins Bloomberg School of Public Health; Moses Mukuru-Makerere University School of Public Health; Henry Zakumumpa-Makerere University School of Public Health; Freddie Ssengooba-Makerere University School of Public Health; Sara Bennett-Johns Hopkins Bloomberg School of Public Health; Mary Qiu-ThinkWell, Global

Background

Private facilities provide a large share of Uganda’s health services through both private not-for-profits (PNFPs) that are integrated into planning and poorly-regulated and largely urban private for-profits (PFPs). The President’s Emergency Plan for AIDS Relief (PEPFAR) has encouraged private provision of HIV care in Uganda. However, PEPFAR’s recent Geographic Prioritization (GP) transitioned support for 734 facilities in Uganda to government, of which 140 were PFPs and 137 were PNFPs. It is unclear whether private facilities will be willing or able to maintain HIV services without PEPFAR.

Methods

In order to assess the effects of GP on health facilities, we fielded a survey in mid-2017 to 42 private for-profit (PFP), 37 private not-for-profit (PNFP), and 183 public facilities in Uganda. The survey collected information on PEPFAR support, service readiness, commodities, laboratory, time-allocation, and human resources. We also extracted all DHIS2 service delivery data available for PEPFAR facilities for October 2013 to December 2017. We used regression models to explore the association between ownership and outcomes following transition, such as number of HIV tests provided, controlling for other characteristics. All comparisons are made to public facilities transitioned from PEPFAR.

Results

PFPs in our sample were more likely to discontinue HIV outreach (Odds Ratio [OR] = 3.03, 95% CI: 1.33—6.93, p&lt;0.011) and to report spending less time on HIV care (Relative Risk Ratio = 4.02, 1.32—12.19, p=0.016). Transition PFPs in Uganda have had declining volume of HIV tests relative to transitioned public facilities (Incidence rate ratio = 0.66, 0.54—0.80, p&lt;0.001). However, facility in-charges at PFPs were less likely to report a perceived decline in quality of HIV and maternal, neonatal, and children health services. PNFPs were more likely than public to report declining frequency of supervision (OR = 2.51, 1.46—4.32, p=0.002) and loss of staff (OR = 5.89, 2.91—11.88, p&lt;0.001). However, the volume of HIV testing and treatment provided by transitioned PNFPs did not differ significantly compared to transitioned public facilities.

Conclusions

Although PNFPs continue to provide HIV services following GP, they do so with less supervision and fewer staff, prompting concerns about long-term sustainability. The gap left by PFP facilities in HIV testing could potentially be filled more testing at public facilities, but some patients who prefer the anonymity and service of private providers may forgo testing. The special situation of private sector providers should be considered when transitioning HIV programs to government, especially when stigma is a factor.
Inequities in the quality of antenatal care: evidence from 91 low and middle-income countries

Background

The 2030 agenda for sustainable development calls upon the international community to prioritize the needs and rights of the most vulnerable, so that no one is left behind. Although substantial progress has been made in increasing coverage of health services, less is known about the quality of care provided in low and middle-income countries (LMICs). Many studies have shown that vulnerable women are less likely to have access to, and use, health services. However, whether these women receive poorer quality care once they reach health facilities remains unclear. This is the first study to provide a systematic analysis of inequalities in antenatal care quality in LMICs. This analysis was conducted as part of the Lancet Global Health Commission on High Quality Health Systems in the SDG Era.

Methods

We used data from the most recent household surveys in 91 LMICs (demographic and health surveys and multiple indicator cluster survey, 2007-2016). Among women who attended antenatal care with a skilled provider during their last pregnancy, we calculated the proportion who received three essential antenatal care services: blood pressure measurement and urine and blood testing. We estimated wealth-related inequalities in the receipt of these three services using the slope and relative indices of inequality. To summarize inequalities, we pooled the estimates across countries and income groups using random-effects meta analyses. We also assessed the extent to which these country-specific inequalities could be explained by other geographic and sociodemographic factors.

Results

Only 73% of women attending antenatal care received the three essential services, ranging from 54% on average in low-income countries to 94% in upper-middle income countries. We found statistically significant absolute inequalities in antenatal care quality in 70 of the 91 countries. Pooled estimates revealed that the wealthiest women were on average 4 times more likely to receive the three essential services during consultations than the least wealthy women in their own countries (relative index of inequality=4.01, 95% CI 3.90, 4.13). Many countries showed high levels of coverage (>90% with at least one visit) but low and inequitable levels of quality. A substantial proportion of wealth-related inequalities were explained by adjustment for region, urban residence, maternal education and the number of antenatal care visits, but important inequalities remained after adjustment for all covariates.

Conclusions

Although women are increasingly accessing care during pregnancy, the quality of services provided remains poor and vulnerable women are substantially less likely to receive quality care.
Sistemas de salud y redes sociales. Efectos de la construcción del “mal” profesional de salud por parte de mujeres ex-pacientes en Argentina

Co-authors: Raquel Irene Drovetta-National Scientific and Technical Research Council (CONICET)

Antecedentes

Numerosas investigaciones dan cuenta del impacto que las opiniones publicadas en las redes sociales tienen para la permanencia de un producto o servicio en el mercado. Sin embargo, son escasas las indagaciones sobre la eficacia de las redes sociales para divulgar experiencias negativas atravesadas por expacientes en los servicios de salud.

En Argentina los movimientos por el parto humanizado cobran cada vez más importancia y promueven la visibilización y denuncia de la violencia obstétrica. En este trabajo nos proponemos analizar cómo influyen las opiniones negativas divulgadas en la red social por ex-pacientes, en mujeres embarazadas al momento de realizar la elección de un profesional de salud y/o una institución.

Métodos

Estudio descriptivo con diseño cualitativo. Se analizaron mediante software el texto de las opiniones vertidas durante 9 meses (2016), por mujeres que atendieron sus partos en las 5 principales instituciones públicas y privadas de salud de la ciudad de Córdoba. Los testimonios son tomados de un grupo habilitado en la red social Facebook en torno al tema del parto humanizado, que cuenta con alrededor de 10.000 integrantes. Para triangulación de métodos, se realizaron 7 entrevistas en profundidad a informantes clave: médicos ginecob as y lideres del movimiento por el parto humanizado local. Se complementó con la realización de 2 grupos focales a 15 mujeres que sufrieron violencia obstétrica.

Resultados

Las mujeres advierten que las redes sociales son un escenario privilegiado de denuncia de insatisfacción en la atención médica recibida. Las principales acusaciones refieren al abuso de diagnósticos para justificar una cesárea y la no entrega de información basada en evidencias. Los resultados muestran el efecto que causa en mujeres embarazadas la visibilización de la atención médica impropia: las mujeres que visitan el grupo de la red social admiten que al recibir esta información realizaron cambios y ajustes en su itinerario terapéutico, influenciadas por las experiencias de otras durante el parto/cesárea. Paralelamente, la construcción de la imagen del “buen” y “mal” profesional de salud, impacta en el prestigio asociado a su carrera y en la institución de salud en la que trabajan.

Discusión

La atención al parto de forma humanizada debe ser una prioridad para las instituciones de salud y los profesionales que las componen. Si el respeto a los derechos de las pacientes no es suficiente atractivo, los profesionales deben contemplar el daño hecho a su imagen, a través de la divulgación de las experiencias negativas en las redes sociales.
Improving delivery care quality at scale: Modelling service redesign in six countries

Co-authors: Anna Gage-Harvard T.H. Chan School of Public Health; Fei Carnes-Harvard Center for Geographic Analysis; Jeff Blossom-Harvard Center for Geographic Analysis; Jalemba Aluvaala-Kemri Wellcome Trust; Address Malata-University of Malawi, Kamuzu College of Nursing; Sanam Roder-Dewan-Harvard T.H. Chan School of Public Health; Nana Twum-Danso-MAZA; Margaret Kruk-Harvard T.H. Chan School of Public Health

Background: Facility delivery is widely encouraged as a means for reducing maternal and neonatal mortality in low and middle income countries, yet facility delivery will not necessarily translate into reduced mortality if the facilities provide poor quality care. Many primary care facilities currently provide delivery services, but may lack the skills, equipment and volume to adequately manage complications. We model the feasibility of redesigning services to shift all delivery care from primary care facilities to hospitals in order to improve quality of care in six countries. This analysis was conducted as part of the Lancet Global Health Commission on High Quality Health Systems in the SDG Era.

Methods: We developed geospatial models for travel time to facilities in Haiti, Kenya, Malawi, Namibia, Nepal and Tanzania using master facility lists, maps of population density, road networks and travel surfaces. We estimated the percent of pregnancies within 2 hours of a current delivery facility and within 2 hours of a hospital. We measured technical and interpersonal quality of maternal and newborn care at current delivery facilities and hospitals. Finally, using current facility delivery patterns, we estimated how many pregnancies would need to be shifted to hospitals under redesign.

Findings: In shifting childbirth from current facilities to hospitals, less than 10% of pregnancies would no longer be within 2 hours of a delivery facility, ranging from 0.6% in Malawi to 9.9% in Tanzania. Technical quality of maternal and newborn care is 22 to 43 percentage points better in hospitals than in non-hospital delivery facilities, while there is no difference in interpersonal quality. Over half of facility births already occur in hospitals in five of the six studied countries.

Discussion: Redesigning delivery services could result in significant gains in quality for pregnant women and newborns without unduly compromising interpersonal quality or geographic access to care. A range of tools will be required to successfully redesign delivery services, including improving hospital quality and capacity, enabling access, strengthening primary care and generating demand for quality.
Cambio en las prácticas basadas en evidencia: Evaluación cualitativa sobre atención durante el parto en hospitales comunitarios de México.

Co-authors: Marisela Olvera García-Instituto Nacional de Salud Pública; Solange Madriz-Universidad de California San Francisco ; Dilys Walker-PRONTO International

Antecedentes. La atención y cuidados materno-infantil representan un porcentaje importante de las intervenciones médicas que se realizan en las unidades de salud en México (94.6%). En la última década las acciones para la calidad de la atención han estado relacionadas con la ejecución de protocolos. Sin embargo, estas estrategias han tenido resultados limitados o nulos, por lo que se ha planteado la necesidad de contar con intervenciones innovadoras que optimicen el tiempo y recursos invertidos y motivación de los proveedores

Métodos. En el 2015, se implementó el Programa de Rescate Obstétrico y Neonatal Tratamiento Óptimo y Oportuno (PRONTO) en el estado mexicano de Campeche. Dentro de esta intervención de capacitación se diseñó una evaluación cualitativa con el objetivo de registrar las percepciones de tres prácticas basadas en evidencia (realización de episiotomía de manera rutinaria, aplicación de oxitocina en la tercera etapa del parto y pinzamiento tardío del cordón umbilical) La muestra quedó conformada por 53 entrevistas. Se realizó un análisis temático y se utilizaron también principios de la teoría fundamentada. Para el proceso de codificación se utilizó el software Atlas-ti © versión 7.5.7.

Resultados: Los criterios para analizar las respuestas fueron conocimiento de la normatividad y la percepción y utilidad de cada práctica. Los hallazgos en cuanto al conocimiento de las normas mostraron que la mayoría de los profesionales entrevistados no conocían las normas vigentes, a pesar de reconocer que los documentos están disponibles en sus unidades de servicio. En cuanto a la utilidad de las prácticas mencionaron los proveedores que hacer alguna práctica o no les causarían complicaciones ya sea de tipo organizativo, administrativo o de alguna otra índole más que una razón clínica fundamentada.

Discusión. El conocimiento acerca de la normatividad queda sujeta a la decisión de cada individuo y no se lleva una supervisión por parte de las autoridades locales. La percepción de las prácticas resultó ambigua e inconsistente respecto a su utilidad o indicaciones para aplicarlas. La relación de jerarquía intervino en la decisión de practicar o no alguna de las prácticas estudiadas.

Conclusiones: La determinación de cambio es multicausal, el trabajo en equipo y el apoyo de sus superiores podría influir al cambio. La resistencia podría corresponder al habito medico correspondiente a la formación y al conocimiento adquirido durante la práctica habitual.
Nicole Arends, University of the Western Cape

Interprofessional teamwork to improve quality care: barriers and facilitators

Co-authors: Nicole Arends-University of the Western Cape

Background: To achieve quality health for all in any context requires an interprofessional teamwork approach. Health systems in the twenty-first century cannot function linearly due to the complexity that the burden of disease has placed on individual health needs. Thus integration is required, amongst health professionals, to provide a holistic health service to the individual with complex health needs. To this end interprofessional teamwork is an essential approach to provide quality health services and would also be a catalyst for good health and wellbeing (SDG 5).

Aim: The aim of the research is to explore the perceptions, barriers, and facilitators of interprofessional teamwork amongst health professionals working at a tertiary government hospital in Cape Town.

Research Methods: A qualitative, descriptive, exploratory study design was employed where purposive sampling was used to determine the sample for each focus group to be representative of the typical interprofessional team. Three focus groups was conducted to collect data using a semi-structured focus group guide. A total of fourteen participants from several health professions participated in the focus groups (Doctors, nurses, physios, social worker, dietitians and speech therapists). The data was edited using Creswell’s data analysis framework and assigned to two pre-determined themes: barriers and facilitators to interprofessional teamwork. Ethical clearance was obtained from the University of the Western Cape Biomedical Research Ethics Committee and the research department of the facility at which the research was conducted.

Findings: Within the context of tertiary level of care, there are a greater number of barriers such as high patient turnover, lack of human resources, time, hierarchy amongst interprofessional team members, challenges with the referral process, lack of knowledge of colleagues roles and scopes of practice, attitude, communication inefficiencies, language barriers, and professional jealousy found to impede the interprofessional teamwork process and has been recognised to affect efficiency in providing patient care. Within the context of tertiary level care, several facilitators were also found to improve working together such as, increased human resources, communication technology, respect, and relationship building.

Conclusion: For healthcare to be of quality in its delivery and provision a concerted interprofessional team effort is required however, health systems need to assess, contextually, what barriers and facilitators exist within their systems that impedes health professionals from working together or what facilitates them to work better together. The results can be used to strengthen health system processes internally.
Strengthening financial risk protection: How USAID’s LuzonHealth project increased access to Philippine health insurance corporation accredited facilities and improved access of pregnant women & newborns

Co-authors: Noemi Bautista-LuzonHealth Project, RTI International; Rebecca Flueckiger-International Development Group, Global Health Division, RTI International; Cristina Bisson-International Development Group, Global Health Division, RTI International; Rajeev Colaco-International Development Group, Global Health Division, RTI International; Elizabeth Ohadi-International Development Group, Global Health Division, RTI International; Easter Dasmarinas-LuzonHealth Project, RTI International

Background: In 2016, building on the gains of earlier health reform policies, the Philippine government launched the 2016–2022 Philippine Health Agenda, known as “All for Health toward Health for All.” This program identified health financing as a key mechanism to ensure essential health care services are provided to all families. The Philippine Health Insurance Corporation (PHIC) maintains a no balance billing policy, stipulating no fees should be charged to indigent patients above packaged rates during their treatment period. PHIC accredited birthing facilities play a critical role in the health systems enabling mechanisms; effectively securing financial risk protection among pregnant indigent women and newborns.

A 2013 assessment of 290 birthing facilities found 51% accredited for PHIC maternal care package (MCP) and 38% for newborn care package (NCP). Obtaining and sustaining accreditation status in these unaccredited facilities would ensure provision of financial protection to more than 500,000 pregnant women and 500,000 children.

To improve accreditation rates, the LuzonHealth project provided hands-on support and conducted coaching and mentoring activities administering step-by-step guidance for completing criteria to secure MCP/NCP accreditation and license to operate (LTO) certification.

Methods: We tracked and investigated the extent to which the intended benefits of MCP/NCPs were delivered to target beneficiaries from 2013 to 2017 in 360 birthing facilities across 14 provinces and 7 cities. We conducted a descriptive analysis of MCP/NCP accreditation and LTO certification. Tracking of actual and potential beneficiaries was conducted using quarterly tracking of status and field monitoring of birthing facilities.

We also examined how our approach delivered expected return on investments in terms of increased financial resources and stronger financial viability among birthing facilities. We generated a detailed documentation of the implementation approach and finally conducted a return-on-investment analysis.

Results: We observed a 91% increase in number of accredited facilities, with corresponding additional access to $10 million USD for the period 2015-2017, providing 1.2 million pregnant women and children access to MCP/NCP, as well as 6,000 women of reproductive age access to post-partum family planning services.

Conclusions: The LuzonHealth project approach for obtaining and sustaining accreditation status of birthing facilities provides a model for successful national health insurance program implementation and movement toward the goal of increased financial risk protection among pregnant women, newborns and women of reproductive age in the Philippines.
Elana Fiekowsky, Jhpiego

Introducing high-impact, integrated day of birth and post-pregnancy interventions in Kinshasa, Democratic Republic of Congo through a low dose – high frequency capacity development approach

Co-authors: Elana Landes Fiekowsky-Jhpiego; Virgile Kikaya-Jhpiego; Patricia Gomez-Jhpiego; Gahan Furlane-Jhpiego; Zénon Mujani-Kinshasa Regional Health Office; Fernand Katembwe-Jhpiego; Megan Lydon-Jhpiego; Eva Bazant-Jhpiego; Willy Shasha-Jhpiego; Susheela Engelbrecht-Jhpiego

Background

In the Democratic Republic of Congo (DRC), facility birth rate is 88% yet maternal and newborn health (MNH) outcomes are not improving. Over half of women in their first two years postpartum have unmet need for family planning (FP). Jhpiego’s health workforce capacity-building and quality improvement interventions aim to improve the ability of providers and facilities to offer MNH care. Interventions include a low-dose, high-frequency (LDHF) approach to build capacity of health workers in high-impact interventions, and provision of equipment, supplies and drugs within a broader quality improvement framework. LDHF is competency-focused, interactive, team-based, onsite, and ongoing learning that optimizes technology, addresses gaps, and improves quality of care.

An evaluation is underway to assess skill acquisition and day-of-birth and post-pregnancy care at eight facilities in Kinshasa. Objectives are to assess effects of the intervention on: Provider retention of key skills at six months post training Use of key MNH interventions on the day of birth and immediately postpartum Health outcomes: intrapartum stillbirth, early newborn mortality (<24 hours after birth), and post pregnancy FP uptake Early lessons learned on the appropriateness of LDHF to build capacity and the methods for measuring changes at a system level

Methods

This evaluation examines provider knowledge and capacity at six months compared to pre and post-intervention; and service delivery and health outcome data from registers before, during and after the intervention in eight health facilities. Service delivery (e.g. treatment of newborn asphyxia; provision of immediate post pregnancy contraception; and treatment of babies with possible severe bacterial infection) and health outcomes are documented in Ministry registers and supplemental project registers. Regression analysis will compare competency, quality service delivery and health outcome indicators in pre- and post-intervention periods to determine changes, adjusting for clustering, individual, and facility-based attributes.

Results

Data collection for health outcomes began in eight facilities with a baseline assessment in August 2017 and collection of service statistics in December 2017. By October 2018, three time points for provider competency data and six months of service and health outcome data will be collected and analyzed.

Conclusions

The project’s early phase learning will enable drawing conclusions about the novel approach to increase provider capacity in eight sites in Kinshasa in Phase I. The findings will inform a Phase II implementation in eight additional sites, demonstrating scalability. This evaluation will inform efforts to build capacity in facility-based MNH service delivery in other settings.
Oral Abstracts

Abdullah Nurus Salam Khan, International Center for Diarrheal Disease Research, Bangladesh (icddr,b)

A Clinical Vignette Based Assessment to Identify Competence of the Health Workers in Diagnosing and Managing Complicated Pregnancies: in District and Sub-District Hospitals in Bangladesh

Co-authors: Abdullah Nurus Salam Khan-International Center for Diarrheal Disease Research, Bangladesh (icddr,b); Farhana Karim-International Center for Diarrheal Disease Research, Bangladesh (icddr,b); Mohiuddin Ahsanul Kabir Chowdhury-International Center for Diarrheal Disease Research, Bangladesh (icddr,b); Sk Masum Billah-International Center for Diarrheal Disease Research, Bangladesh (icddr,b); Nabila Zaka-Health Section, Maternal and Newborn Health team, UNICEF HQ; Alexander Manu-Liverpool School of Tropical Medicine, Liverpool, UK; Shams El Arifeen-International Center for Diarrheal Disease Research, Bangladesh (icddr,b)

Background: Prompt identification and management of pre-eclampsia (PE) and antepartum haemorrhage (APH) depend on competency of the birth attendants. Clinical vignette based assessment could identify the extent of health worker's competence in managing these infrequent conditions as part of emergency obstetric care (EmOC).

Method: During June-August 2016, competence of 39 Medical-Officers (MO) and 95 nurses working in obstetric-ward of 15 government health facilities (3 district hospitals, 12 sub-distri-ct hospital) was measured using clinical vignettes on PE and APH. The vignettes resulted in three outcome measures: i) total scores, ii) scores for diagnosis and iii) management component. Mean vignette scores were compared using T-tests and linear regression was performed to measure the association of vignette scores with cadres of health workers, facility readiness for EmOC and average annual utilization of normal deliveries after adjusting for type of facility, health workers' work experience and training status on managing maternal complication. Cumulative EmOC readiness score (range: 0-7) was generated for each facility depending on provision of seven EmOC signal functions within last 6 months. Average of all normal deliveries conducted during three years (2013-2015) preceding the survey was calculated to estimate the annual utilization.

Result: About 80% health workers received any training on managing maternal complication, however, only 7% received any refresher's training within last 12 months. The overall vignette score was 8.8 (range: 0-19), which was significantly higher among MO than nurses (10.7 vs. 8.1, p&lt;0.001) and the score was not associated with health facility types, training status and years of experience of the providers. Vignette score for management component (range: 0-9) increased with higher annual average number of deliveries in their respective working facility (adjusted β-coefficient 0.16, CI 0.03-0.28, p=0.01) and increased with each unit increase in EmOC readiness score (adjusted β-coefficient 0.44, CI 0.04-0.8, p=0.03). The diagnosis component of vignette score was not associated with any of these factors except it was higher among MO than nurses (adjusted β-coefficient 1.2, CI 0.13-2.18, p=0.03).

Conclusion: In developing countries, nearly all normal deliveries are conducted by the nurses, hence, their lack of competence in diagnosing and managing obstetric complication is of concern. Better EmOC preparedness and higher utilization of normal deliveries resulted in higher vignette score for the management component, which might indicate the role of experiential learning through higher number of case management in better prepared facilities. Periodic refresher's training should be arranged for retention of competency in obstetric case management.
Is Quality Improvement (QI) a game changer in contraceptive utilization? DHIS2 data shows high contraceptive prevalence rate in QI districts compared to non QI districts

Co-authors: Ramadhan Kirunda-FHI360; Frederick Mubiru-FHI360

Purpose

Advancing Partners and Communities (APC) project has been supporting 22 selected districts to offer community based family planning (CBFP) services from 2014 to 2017. APC introduced community based quality improvement intervention in four districts to pilot-test the applicability and effectiveness of the QI model at community level. The objective was to improve community health worker (CHW) family planning services using community and client centered approaches, and ultimately increase utilization and uptake of contraceptive family planning methods. The fact that CHWs are semi-literate made the application of the QI model paramount. In September 2017, after the end of phase one of the APC project, APC conducted secondary analysis of data to measure the impact of the CBFP program but also to measure the effect of the QI intervention.

Content

APC trained CHWs in family planning method administration, documentation, QI model and mentored health workers in QI and reporting. In January 2018, data was abstracted from DHIS2, exported to Stata and analyzed to see if there is a difference in the modern contraceptive prevalence rate (mCPR) between CBFP catchments, non CBFP catchments and CBFP catchments with and without QI.

Significance

Results indicated that there is a higher mCPR in the QI catchment areas (29.5%) compared to non-QI catchment areas (26.5%). A chi square test revealed that nationally, there is a highly significant difference in the mCPR for CBFP and Non-CBFP sub counties (p&lt;0.01), which indicates that CBFP program had a great impact on mCPR.

The application of quality improvement model has a great potential in increasing the mCPR rates in Uganda. APC implemented QI intervention in just four districts, but the results were very encouraging. Thus, if the QI model is applied all districts, for both CBFP and facility FP services, the mCPR of the country would drastically increase. As such, it is correct to state that the application of QI model for all family planning programs will help Uganda achieve her family planning goals faster and/or on time.
New evidence mapping inequities of quality of care: cross-country and local-level analysis of primary health care systems in 10 low- and middle-income countries


Background Core to high quality health systems is primary health care (PHC), which has potential to advance progress towards UHC and increase health equity. However, underestimation of PHC quality leaves countries blind in identifying areas lagging behind and addressing PHC deficiencies. More than three decades after Alma Ata, quantifying PHC quality is needed to assess the state of primary care and identify areas needing most attention and improvement. To our knowledge, this study is the first to examine subnational disparities in PHC quality using a novel measure focusing on processes of care rather than health system inputs.

Methods We used the Service Provision Assessment (SPA) data to estimate differences in quality of PHC facilities in Ethiopia, Haiti, Kenya, Malawi, Namibia, Nepal, Rwanda, Senegal, Tanzania, and Uganda. We quantified PHC quality measured as a composite index using SPA indicators that best fit the domains (competent systems, evidence-based care, and user experience) and subdomains of the new Lancet Global Health Commission on High Quality Health Systems (HQSS) framework. We examined gaps in performance measures and inequities in PHC quality across-and within-countries, examining associations with facility-and country-level characteristics using multilevel models.

Findings Across 7 049 PHC facilities in ten countries, quality remains poor (mean=0.40, SD=0.15) from 0.31 in Ethiopia and Malawi to 0.45 in Namibia. PHC systems score higher in competence (0.51), but lower in evidence-based care and user experience (0.36). Countries were consistently low in client-focused care (0.30), prevention and detection (0.31), and population health management (0.49). Large regional disparities exist in PHC quality with least progressive areas receiving worse quality care and public facilities outperforming private facilities, a difference of 0.04 (p&lt;0.05). Although PHC quality increases with better health systems capacity (service readiness index), having more health workers do not show significant differences on PHC quality. More progressive economies and high health spending increases PHC quality, a difference of 0.07 than least progressive countries (p&lt;0.05). Countries with lesser income inequality also have 0.05 higher PHC quality than more unequal countries (p&lt;0.05).

Interpretation PHC quality remains poor and disparities worsen when comparing across regions, facility-and country-characteristics, implying that narrowing these gaps in the quality of primary care service delivery is critical to strengthen health systems and achieve equitable health. Findings of this study mapped health system and geographical areas that are lagging behind, critical to direct future PHC strengthening initiatives.

This analysis was conducted as part of the Lancet HQSS Commission.
Background Countries around the world are seeking to strengthen their primary health care (PHC) systems to meet the dual goals of Universal Health Coverage (UHC) and Integrated People-Centered Health Systems (IPCHS). However, data to assess gaps and track progress is often scarce, particularly regarding patient experience of care. This paper reports on a novel 2016 survey in Ghana to quantify patient experiences and their determinants. To our knowledge, this is the first nationally-representative survey of patient experience of PHC in sub-Saharan Africa.

Methods We quantified responsiveness of care and other patient reported outcomes and examined determinants of patient experience (patient demographic characteristics, facility type, and care seeking reasons) using generalized linear models.

Results Of the 3,783 women who sought primary care services in Ghana, PHC was overall rated as moderately responsive, 0.66 on a scale of 0 (low) to 1 (high). Respectfulness of providers was rated lowest (0.58), while provider communication and ability to follow advice were rated highest (0.71 and 0.70). Although quality of care was rated good (0.77), likelihood of returning to the facility (0.62), having the same provider (0.56) and ease of seeking care (0.55) were lower. 28% of respondents had to borrow money to afford cost of care. Patients who are older, wealthier, and have formal education have 7% higher responsiveness rating and 8% higher quality rating (p<0.05). Patients who are wealthier and those with insurance coverage have 8% higher confidence in the system and 3% higher likelihood of returning to the facility (p<0.01), but those who borrowed money to afford care have 16% lower confidence and 6% lower return rating (p<0.05). Patients who visited community-based planning health services than hospitals reported 28% higher likelihood of having the same provider, but insured patients were 11% less likely to be cared for by the same provider (p<0.05). Patients who sought HIV care also have 24% higher quality rating and 15% higher return rating than those who went for non-communicable disease.

Discussion Ghana is making progress in improving female patient experience, but gaps remain particularly in ensuring respectful, easily accessible, and continuous care. Patients with better socioeconomic status report better patient experience, implying inequities of care. Insurance coverage and higher capacity to pay increases confidence in the system and likelihood of returning to the same facility, but no significant effects were seen on quality rating, indicating how expanding coverage alone may not be adequate to improve patient experience.
Assessing the quality of care for patients on antiretroviral treatment in northern Uganda using Lot Quality Assurance Sampling

Co-authors: Ulrike Seeberger-Liverpool School of Tropical Medicine; Joseph Valadez-Liverpool School of Tropical Medicine

Background: Health systems provide access to essential services that correspond to the patient's needs. This important role of the health system is fundamental for protecting the society. An often forgotten component that is fundamental for the health system to achieve its goal is ensure service have a high quality of care. Otherwise patients remain at risk to health problems and remain undetected by the health system. High quality of care (QoC) of antiretroviral treatment (ART) is essential to prevent treatment failure. Uganda significantly increased access to ART by decentralizing provision to districts. However, little is known about the quality of these services.

Methods: We conducted a stratified random cross-sectional survey among health facilities (HF) in the Acholi (n=11) and Lango (n=10) sub-regions of northern Uganda, applying lot quality assurance sampling principles. Using a rapid health facility assessment tool we assessed ART services vis-à-vis national treatment guidelines, using 37 indicators. The tool included patient and health worker interviews, direct observation of clinical consultations, and assessment of HF infrastructure, human resources, medical supplies and patient records. The QoC performance standard was at least 80% of HF had to comply with national guidelines for each indicator. LQAS cut-off values were dAcholi=8, dLango=7.

Results: HF in neither sub-region tended to comply with the treatment guidelines. No HF clinically monitored patients properly and carried out adequate training and supervision; only three institutions regularly monitored CD4-counts. Access to either a first or second line antiretroviral medication (ARV) met the target in both sub-regions; and patients’ reported they complied with drug use. Patients’ knowledge of HIV/AIDS transmission was poor.

Discussion: This study documents poor QoC in northern Uganda, especially in clinical monitoring of patients and raises major questions about ART efficacy despite ARVs being accessible. These doubts about clinical care render patient reports of their compliance with treatment as insufficient. The data suggest that patients did not receive the correct clinical care to appraise their treatments. A priority for Uganda is assessment of the clinical status of ART patients. This paper documents the importance of institutionalising regular assessment of the quality of clinical care for HIV/AIDS patients in Uganda. This result raises important concerns about the poor quality of care that may exist for other services as well.
Implementación de Modelo de Cuidados Crónicos, Salud Familiar y Estratificación según riesgo en pacientes de alto riesgo de hospitalización en Servicio Salud Metropolitano Sur Oriente

Co-authors: Paula Zamorano-Centro de Innovación Pontificia Universidad Católica de Chile; Giovanni Alejandro Inostroza Lecaros-Complejo Asistencial Hospital Dr. Sótero del Río; Jose Luis Contreras Muñoz-Complejo Asistencial Hospital Dr. Sótero del Río; Jorge Alexis Inostroza Morales-Complejo Asistencial Hospital Dr. Sótero del Río; Alvaro Tellez-Centro de Innovación Pontificia Universidad Católica de Chile; Andreina Gabriela Alvarado Labra-Centro de Innovación Pontificia Universidad Católica de Chile; Esteban Irazoqui-Centro de Innovación Pontificia Universidad Católica de Chile; Geernith Sandoval-Complejo Asistencial Hospital Dr. Sótero del Río

ANTECEDENTES

Según datos de última Encuesta Nacional de Salud (ENS), en Chile viven 11 millones de adultos con enfermedades crónicas y el sistema de salud chileno es capaz de atender un máximo aproximado de 3,5 millones generándose una gran brecha. El modelo de atención que hoy aplica a personas con ECNT es fragmentado en torno a diagnósticos, programas y niveles de atención, dejando de lado el automanejo, la estratificación por riesgo y las necesidades individuales. Esto se enmarca en las líneas estratégicas de acción para el control de las enfermedades crónicas no transmisibles (ECNTs) de la OPS: generar respuesta de los sistemas de salud a las ECNTs y sus factores de riesgo.

METODO

Propósito: Prevenir nuevas complicaciones en pacientes adultos con ECNTs de alto riesgo, fortaleciendo su cuidado desde Atención Primaria, y de esta manera, disminuir la demanda asistencial en niveles secundarios y terciarios de atención.

Método: La intervención consiste en implementación de un plan de acompañamiento clínico para el paciente y su familia en toda la red asistencial, que considera distintas intervenciones que se encuentran enmarcadas en el Modelo de Cuidados Crónicos (MCC), Salud Familiar, Gestión de Casos (GC) y apoyo al automanejo para pacientes portadores de ECNTs de alto riesgo de hospitalización.

La importancia para el subtema: “Los sistemas de salud a nivel comunitario: el lugar en donde se ubican las necesidades de la comunidad son, a menudo, el nivel invisible de los sistemas de salud”. Se persigue con esta intervención que los centros de atención primaria fomenten de manera integral el automanejo en la persona y su familia a través de acciones coordinadas entre el centro de salud, nivel hospitalario y el hogar, haciendo eficiente el uso de recursos de acuerdo a las necesidades individuales asegurando la continuidad del cuidado. De esta manera, empoderando a los pacientes para que sean los protagonistas de su cuidado, asegurando la coordinación durante su navegación en la red asistencial.

Resultados

A 6 meses de intervención con los pacientes participes, los días cama utilizados por hospitalización disminuyeron de 136 a 107, mientras que por descompensación de ECNTs disminuyeron de 98 a 22 días, 76%.

Discusión/conclusiones

Se ha diseñado un modelo de innovación asistencial que ha mostrado excelentes resultados en disminución de complicaciones por ECNT, siendo pilar fundamental la coordinación expedita entre APS y nivel hospitalario. Es importante considerar un modelo de evaluación que dé cuenta del impacto en gasto en salud.
Lea Kilenga, Masamo

**Left Behind : The Forgotten Face Of An Inadequate Health System**

Co-authors: Lea Kilenga Masamo - Africa Sickle Cell Org

Photography is a tool used when no words, data or quantifiable research exists to make a case.

Within the Ministry of Health Kenya, most needs outweigh the ability to meet the demand. In the Division of Non-Communicable Disease, there are diseases that have been given priority above all others with regards to policy, budgetary allocation, clinical guidelines and staffing. These are the Cancers, Diabetes, Hypertension and Cardiovascular Diseases, the highest prevalent NCDs in Kenya currently. We find that there are certain Non-Communicable Diseases (NCDs) that require as much priority and are left behind due to the lack of funding and data, which makes it difficult to make a case. One such neglected disease whose patients are left behind with regards to policies, health systems, budgetary allocation and data is Sickle Cell.

A very informal, unprecedented photo documentary of people living with Sickle Cell was carried out. A total of 400 monochrome portraits and oral narrative experiences were taken and recorded from remote Sickle Cell prevalent communities in Kenya. These communities being Taveta, Mumias, Busia; are known Malaria endemic areas. The photography and collection of stories was randomized for known Sickle Cell Anaemia (SS) diagnosed patients.

70% of those photographed were children of age 12 or less. Of the 400, 200 stated they lacked access to pain management medication. Majority were only diagnosed after multiple misdiagnoses and visits to numerous health providers. All of the patients and their guardians were stigmatized by the community and lacked proper guidance about the disease, symptoms and management upon diagnosis. Only 5% have access to healthcare for Sickle Cell and attend clinical visits and many of the patients have no access to basic health insurance. The findings indicate the massive gaps in health systems around Sickle Cell and the burden patients bear because of these gaps.

This research findings were shared with the Ministry of Health as justification for policy and health system strengthening around Sickle Cell. There has been progress resulting in creation of National Healthcare Management Guidelines in Kenya for Sickle Cell. Furthermore, these findings initiated the advocacy for provision of UHC for the Sickle Cell patients considered uninsurable in Kenya. There’s a need for health system actors and researchers to magnify and test existing systems from end consumer and translate that to policy makers, in this case photography proved useful in magnifying these gaps.
Oral Abstracts

Adrianna Murphy, London School of Hygiene and Tropical Medicine

Financial risk protection for people living with Non-Communicable Diseases: an analysis of households from 18 countries in the PURE study

Co-authors: Adrianna Murphy-London School of Hygiene and Tropical Medicine; Benjamin Palafox-London School of Hygiene and Tropical Medicine; Timothy Powell-Jackson-London School of Hygiene and Tropical Medicine; Salim Yusuf-Population Health Research Institute, McMaster University; Martin McKee-London School of Hygiene and Tropical Medicine; Kara Hanson-London School of Hygiene and Tropical Medicine

Background

In 2014, the United Nations (UN) made commitments to reduce premature mortality from non-communicable diseases (NCDs), including to strengthen health systems to address prevention and control of NCDs through universal health coverage. Evidence before 2014 showed that use of drugs for cardiovascular disease and hypertension was low globally, especially among women, that these drugs were unavailable and unaffordable to large proportions of the population in lower-income countries, and that out-of-pocket costs for treatment of NCDs imposed a significant economic burden on patient households. Using data collected since 2014, we examine the economic burden of treatment for NCDs on patient households in 18 countries.

Methods

With data from the Prospective Urban and Rural Epidemiology Study in 18 countries, we estimate catastrophic spending and impoverishment among households with NCDs (CVD, diabetes, kidney disease, cancer and respiratory diseases; N=14,938), with hypertension (N=10,371) and with neither (N=20,808). Adjusting for covariates that might drive health expenditure, we estimate the odds of these outcomes for NCD and hypertension households compared to households with neither, and test for a trend between the groups. We also estimate the prevalence of financing sources and difficulties accessing care due to cost. We conduct analyses by high-income (HIC), upper-middle-income (UMIC), lower-middle income (LMIC) and low-income (LIC) countries. China is analysed separately due to its larger sample size.

Results

Catastrophic spending is highest among NCD households in LMIC (11.1% (95% CI: 8.6-14.1)) and China (14.8% (12.4-17.5)), as is impoverishment: LMIC (4.0% (2.7-5.9)), China (3.3% (2.3-4.6)). After adjustment, the odds of catastrophic spending are higher in NCD households (OR=1.74), and hypertension households (OR=3.51), (p for trend <0.001). There is also a statistically significant increasing trend in China. A similar pattern is observed for impoverishment. Financing payments by borrowing is most common in LMIC and a high proportion of those with NCDs in LIC, especially women (30 %) reported not accessing care due to costs.

Conclusions

The Third UN High Level Meeting on the Prevention and Control of NCDs will be held in 2018, to track progress toward NCD targets made in 2014. Our findings show that we are far from achieving financial risk protection for people with NCDs, particularly in LMICs. While the burden of NCD care may appear greatest in LMICs, the burden in LICs may be disguised by foregone care due to costs. Females with NCDs are most dramatically affected, which is likely to explain gender inequality in treatment.
Direct cost of illness of patients with chronic cough: experiences from rural Malawi

Co-authors: Junious Mabo Sichali-Research for Equity and Community Health (REACH) Trust; Jahangir AK Khan-Centre for Applied Health Research and Delivery (CAHRD)-Liverpool School of Tropical Medicine; Elvis Mpakati Gama-Centre for Applied Health Research and Delivery (CAHRD)-Liverpool School of Tropical Medicine; Jason Madan-University of Warwick; Hastings Thomas Banda-Research for Equity and Community Health (REACH) Trust; Grace Bongololo-Research for Equity and Community Health (REACH) Trust; George AF Bello-iTECH Malawi; Ireen Namakhoma-iTECH Malawi; Rachael Thomson-Centre for Applied Health Research and Delivery (CAHRD)-Liverpool School of Tropical Medicine; Rasmus Malmborg-LHL International; Berthe Stenberg-LHL International; Bertie S Squire-Centre for Applied Health Research and Delivery (CAHRD)-Liverpool School of Tropical Medicine

Background

Chronic cough is a distressing symptom and a common reason for people to seek health services. Chronic Airways Disease (CAD) which includes asthma, chronic obstructive pulmonary disease (COPD) and bronchiectasis represent a major burden of disease in Malawi and most sub-Saharan countries. Risk factors for these conditions include tobacco-smoking, indoor air pollution from biomass fuels and lower respiratory tract infections (LRTI). Costs experienced by adults seeking diagnosis and management of symptoms of chronic cough are estimated to be substantial. In developing countries, provision of diagnostic services and clinical management of these conditions is rudimentary, so patients make costly and unyielding repeated care-seeking visits. There is, however, lack of prospectively collected cost data about these direct care-seeking costs. Such data are needed to inform the design and provision of universal coverage programmes for CAD. The objective of this paper is therefore to explore health seeking costs associated with chronic cough as well as to extract information on usage of the coping mechanisms.

Methods: Conducted a community-based, population-proportional cross-sectional study, surveying 15,795 people. We collected information on socioeconomic and socio-demographic characteristics and health care utilization of chronic coughers as well as care-related costs in Dowa and Ntchisi districts of Malawi in 2015. We also collected information on how health seeking costs were funded. In this study, we included only those chronic coughers who had a diagnosis of TB, Asthma, COPD, Bronchiectasis and LRTI in their health card/passport.

Results: 608 chronic coughers were identified and reported costs related to their latest confirmed diagnosis written in their hand-held health card/passport with a total mean cost of MK1,796.6 or US$3.9 (95% CI: 1330.1 - 2263.1). The largest costs were transport (MK 640.4) followed by drugs (MK 594.4). We, however, observed that the cost of non-medical inputs was considerable (52.3%). A total of 148 respondents (24.4%) reported dependency on inconvenient financial coping mechanisms like borrowing and selling household assets. For example, 41% (n=66) borrowed from neighbours and 33% borrowed from family members while 23.2% (n=608) of respondents sold some property and the majority of assets sold was from farm produce (58.8%) followed by livestock (30.4%).

Conclusions: Direct costs of treatment of chronic coughers incur an estimated 10.25% of consumption expenditure in rural Malawi. Transport and drugs have remarkable contribution to this economic burden. Costs of chronic coughers bring themselves into further economic hardship due to inconvenient ways (borrowing and selling assets) of managing the costs of healthcare.
The synergic effect of integrating mental health support to the physical health promotion program among Syrian refugees and Jordanian’s in host communities

Co-authors: Shang-Ju Li-Americares Foundation; Tara Leytham-Powell-University of Illinois; Michelle Thompson-Americares Foundation; Aseel Farraj-Royal Health Awareness Society

Introduction

The Syrian civil war, which began in 2011, has been labeled the worst humanitarian crisis since World War II. Over 6 million people have fled to neighbor countries and Europe with Turkey, Lebanon, and Jordan taking the largest influx of Syrian refugees. Those who are living in exile from their home country are at a disproportionate risk for physical and mental health symptoms. Studies have suggested that clinical levels of post-traumatic stress are as high as 71% among Syrian Refugees and at least 50% of Syrian households have at least one family member with a non-communicable disease. Given the high influx of Syrian Refugees in Jordan, border communities have been unable to provide adequate healthcare to individuals with chronic non-communicable diseases (NCDs) and mental health conditions. To address the need for physical and mental health services among Syrian Refugees in Jordan, an international humanitarian organization, Americares, in collaboration with a local partner, implemented a health education project addressing non-communicable disease, behavior change, and mental health in the city of Irbid, 70 km north of Amman, Jordan.

Methods

An implementation research study was designed to measure the impact of an integration of health awareness project with the Royal Health Awareness Society in Irbid, Jordan. Measures used in this study included the biometrics and the PTSD checklist and Duke Health Profile (DHP) which examines physical, mental, social, general, perceived health, and self-esteem, and four dysfunction measures anxiety, depression, pain, and disability. The analyses were aimed to identify the synergic effect of combing mental health support and chronic disease management.

Results

A two-way repeated measures ANOVA examined treatment over time. Results indicated that the combined intervention group shows significant positive impacts compared to the control group on body weight loss $F(2, 457)=6.118$, p$\lt$.01, PTSD scores $F(2.453)=15.201$, p$\lt$.001. The patients who participated the integrated health promotion sessions lost average 6.9 kilograms after 6 months participating intervention when the control group gained 4.83 kilograms. Conclusion

Our results show a significant benefit of integrating mental health support to chronic disease management. It provides a synergic effect on improving chronic patient’s health outcome. A national-level intervention will be required in the future and collect robust data to understand the mechanism of how mental health affects chronic health status in the crisis or manmade disaster setting.
Corrina Moucheraud, University of California Fielding School of Public Health

**Experiences with integrated health care in Malawi: A survey of patients receiving treatment for HIV and hypertension**

Co-authors: Corrina Moucheraud-University of California Fielding School of Public Health; Matthew Hing-University of California David Geffen School of Medicine; Juliet Seleman-Partners in Hope Medical Center Malawi; Khumbo Phiri-Partners in Hope Medical Center Malawi; Daniel Kahn-University of California David Geffen School of Medicine; Alan Schooley-University of California David Geffen School of Medicine, Partners in Hope Medical Center Malawi; Agnes Moses-Partners in Hope Medical Center Malawi; Risa Hoffman-University of California David Geffen School of Medicine

**Background:** There is mounting interest in integrated health care delivery, particularly for people with both communicable and non-communicable diseases — yet little is known about care experiences of these patients within health systems that are weakly equipped to provide high-quality ongoing care for multiple conditions. This study aimed to quantify the costs and patterns of care-seeking for people receiving treatment for both HIV and hypertension in Malawi.

**Methods:** Data were collected at an urban, PEPFAR-USAID supported HIV treatment site in Malawi that provides integrated HIV-chronic disease care but charges patients for antihypertensive medicines (all clinical services, and all medicines for HIV, are free). Adult patients on antiretroviral therapy who were also taking at least one antihypertensive were invited to participate in the survey. Data were collected between June-December 2017. Questions included experiences with hypertension care, locations and frequencies of visits, and costs of refills (direct medicine and transport costs, as well as indirect costs including lost wages).

**Results:** There were 199 survey respondents, of whom 65% were female. The median age was 53, and median duration on hypertension treatment was 4 years. On average, patients reported taking 2 antihypertensive medicines, and making 8-9 refill visits each year. Half of respondents (50.3%) opted to receive integrated hypertension-ART care (i.e., medicines refilled simultaneously) at the study site. Among non-integrated patients, the most common refill locations were drug shops and public-sector health facilities (37% and 32%, respectively). These locations were reportedly selected due to lower cost and greater convenience. Patients receiving non-integrated care reported paying approximately 4 times more each year for their antihypertensive refill visits ($90/year, versus $21/year for patients with integrated care). For these non-integrated care patients, medication costs were higher on average than for those receiving integrated care, and transport costs and opportunity costs (lost wages) were a substantial cost burden. No significant sex differences were found for refill patterns or costs in this study population.

**Conclusions:** We found substantial access barriers — including high medication and transaction costs — in this population of patients who have the opportunity to receive integrated HIV-hypertension care in Malawi. Despite the lower cost of integrated care, half of respondents opted to go elsewhere for their antihypertensive medicines. More research is needed to understand patient preferences for non-communicable disease care, and identify how health systems can implement effective and equitable care models for the growing population of people with multiple chronic conditions.
“Now We Are Free”: Reorienting health systems towards community-based primary health care - a film on integrated HIV-care in South Africa

Co-authors: Angeli Rawat - University of British Columbia; Trev DeTal - Lake Allison Films

Purpose: Expanding access to HIV treatment in low and middle-income countries (LMICs) has historically been offered via separate vertical health systems. These vertical models created challenges for patients to initiate and remain on HIV treatment while accessing other health services especially for co and multi-morbid conditions. Integrating HIV-care to primary health care (PHC) clinics improved access to treatment for HIV patients but also had astonishing impacts on communities and the health system. The purpose of this film is to give a voice to patients, communities, and frontline health care workers in order to show viewers firsthand how integrated, community-based service delivery models changed the lives of people in South Africa.

Focus/Content: We are introduced to the main character (Jo-Ann) describing difficulties in accessing HIV treatment before integration into PHC clinics. A rural nurse speaks about how the health system treated those with HIV as “special people going to special treatment”. Experts (Minister of Health, Provincial Coordinator, professor) describe how previously the health system catered to diseases opposite of the vision of PHC in Alma Ata. From integrated HIV-care, numbers of patients on HIV treatment in PHC clinics rose from 1500 to 57,000 in a few years. Jo-Ann speaks about how patients now receive care for all conditions, not just HIV. Nurses discuss how integrated care allows them to manage diabetic and hypertensive patients holistically, how patients gain confidence in the health system and the providers and the ease of tracing defaulters in the communities where they live. A manager discusses the provision of comprehensive care for HIV+ babies who were lost in the system prior. More so, integration normalized HIV. Health workers recount the end of isolation for HIV patients while community members discuss supporting those on treatment and decreasing stigma. Jo-Ann talks about how people are now “more open” as they see treatment working on others and a young woman talks about how “now we are free” by having integrated HIV-care.

Significance: As countries are moving towards universal health coverage, PHC as described in Alma Ata, is experiencing a revitalization. This film uses HIV integration into PHC in South Africa as a case study on the reorientation of health systems towards community-based primary health care. Integrated care not only increased access to HIV treatment and holistic, people centered health services, but it transformed communities. Integrated models must be considered to meet the health care needs of people within their communities.
Nicole Yan, Liverpool School of Tropical Medicine

Discrete event simulation modelling the operational impact of integrating HIV, syphilis, malaria and anaemia point-of-care testing in antenatal care clinics in western Kenya

Co-authors: Nicole Yan-Liverpool School of Tropical Medicine; Miriam Taegtmeyer -Liverpool School of Tropical Medicine; Garazi Zulaika-Liverpool School of Tropical Medicine; George Aol-Kenya Medical Research Institute; Meghna Desai-Centers for Disease Control and Prevention; Godfrey Bigogo-Kenya Medical Research Institute; Feiko ter Kuile-Liverpool School of Tropical Medicine; Ivor Langley-Liverpool School of Tropical Medicine

Background: HIV, syphilis, malaria and anaemia are leading preventable causes of adverse pregnancy outcomes in sub-Saharan Africa. Despite WHO policies advocating an integrated approach to antenatal care (ANC), service coverage for conditions other than HIV is low. Availing point-of-care tests (POCTs) at peripheral dispensaries can improve access to essential services. However, adding activities in facilities that are often burdened with human resource shortages and long queues could over-stretch the system. Using discrete event simulation modelling (DES), we explore the impact of integrating POCTs on patient wait times and resource utilization in ANC clinics in western Kenya.

Methods: An 8-month longitudinal study integrating the 3 POCTs with existing HIV testing was conducted in 7 rural dispensaries from December 2014 to August 2015. We collected time-motion data in one high volume facility with the intervention in August 2015 over 20 working days. The DES model was built in WITNESS®. Empirical arrival distributions, activity times and patient pathways were inputted into the model and wait times and nurse utilizations were generated. Next we reduced ANC consult durations by the estimated time required for the additional tests and re-generated the outputs. We found low staff utilization in both cases and there was insufficient time in the ANC consultations for implementing all WHO recommended activities. We then modelled a scenario where ANC consult durations were increased to sufficiency. Wait time distributions were compared using Wilcoxon non-parametric rank-sum tests.

Results: The dispensary had 2 full-time nurses and 1 part-time clinical officer who were on duty for 14, 11 and 4 days respectively. It received 183 women for reproductive health services; 14 received the intervention. With integrated testing, wait times increased for 26(14.2%), reduced for 7(3.8%) and unchanged for 150(81.9%) women (p=0.0012). Median increase in wait times (hrs:min) was 00:12 (n=26, IQR: 00:08-00:22). Ensuring sufficient consult durations led to wait times increasing for 60(32.8%), decreasing for 18(9.8%) and unchanged for 105(57.4%) women (p<0.001). Median increase in wait times was 00:31 (n=60, IQR: 00:17-00:54). With sufficient consult durations, nurse utilizations averaged 70%(14 days) and 75%(11 days).

Conclusion: Delivering integrated POCTs does not highly impact all women’s wait times at ANC and ensures they receive essential diagnostics for timely treatment. We found nurses should have sufficient time to deliver WHO’s required ANC activities. Resource neutral strategies should be explored to reduce absenteeism and off-site trainings. More frequent supervision and audit feedback could help with ensuring essential services are performed.
Oral Abstracts

Meenakshi Gautham, London School of Hygiene and Tropical Medicine

Need for a multi-stakeholder approach to develop antibiotic stewardship with rural informal healthcare providers in India.

Co-authors: Meenakshi Gautham-London School of Hygiene and Tropical Medicine; Dipesh Das-Liver Foundation, West Bengal; Surpurna Chatterjee-Liver Foundation, West Bengal; Roopkatha Dasgupta-Liver Foundation, West Bengal; Arindam Bannerjee-Liver Foundation, West Bengal; Soumyadeep Chatterjee-Liver Foundation, West Bengal; Debdeep Bhatchacharyya-Liver Foundation, West Bengal; Abhijit Chowdury-Liver Foundation, West Bengal; Neil Spicer-London School of Hygiene and Tropical Medicine; Catherine Goodman-London School of Hygiene and Tropical Medicine

Background: Informal providers (IPs) without medical qualifications, deliver healthcare at first contact in many Low and Middle Income Countries. Training programmes have improved IPs’ case management but not their inappropriate antibiotic use (ABU). We explored the patterns and drivers of ABU by IPs in rural West Bengal in order to identify potential strategies for antibiotic stewardship in this health market.

Methods: We first surveyed all 303 IPs practicing in 18 village clusters randomly selected from two contrasting districts: South 24 Parganas and Birbhum. This was followed by four focus group discussions with community members in each district, in-depth interviews with 15 IPs per district and 16 Key Informant Interviews with government regulatory and health department officials, pharmaceutical representatives, and formal doctors and medical association representatives.

Results: More than 90% IPs used antibiotics including amoxicillin, fluoroquinolones and second and third generation cephalosporins. More than 50% IPs reportedly dispensed/prescribed at least one antibiotic to more than 50% patients, but on average only 2-3 daily doses were dispensed at a time as patients typically could not pay for longer courses. Antibiotics were not the most profitable drugs for IPs, but they were critical for sustaining patient flows. IPs learned about antibiotics from formal doctors and pharmaceutical representatives. IP sales comprised substantial revenues for pharmaceutical companies who aggressively promoted antibiotics to IPs through periodic workshops, free samples and other incentives (e.g. buy one strip, get two free). The Drugs Control department had extremely limited resources for promoting compliance and an underpinning unspoken recognition that if IPs were banned in any way, access to medical services in rural areas would be severely affected. The Indian Medical Association and Pharmacists’ Association were opposed to training IPs, or even training mid-level practitioners and community pharmacists as future alternatives to IPs. Community members had very limited knowledge about antibiotic use and abuse. They typically bought their antibiotics from IPs or directly from pharmacies and shared with neighbours and family members. Although they could not afford full doses, they preferred purchased drugs to the free ones at government facilities that they perceived to be of low quality.

Conclusions: Given the complex mix of actors and incentives involved in ABU, antibiotic reduction among IPs cannot be achieved by working with IPs alone. An effective antibiotic stewardship programme will need to address the interests and influences of multiple stakeholders including the health and regulatory systems, the pharmaceutical industry and rural communities.
Sustained reductions in inappropriate prescribing of antibiotics to children in rural Chinese primary care facilities: 18-month follow-up of a cluster randomised controlled trial

Background
Inappropriate antibiotic prescribing is a major cause of drug resistance, and is a particularly widespread and serious problem for healthcare in low- and middle-income countries including China. We developed an antimicrobial stewardship programme that aimed to reduce inappropriate prescribing of antibiotics to paediatric outpatients with upper respiratory tract infections (URTIs) attending Chinese rural primary care facilities. We previously reported six-month follow-up results in the Lancet Global Health, and here report 18-month follow-up results. We conducted a cluster randomised controlled trial in 25 primary care facilities across two rural counties in Guangxi province, China, but here report results from just 14 facilities (allocated in a 1:1 ratio) in one county. Our intervention addressed clinicians, providing clinical guidelines and training on antibiotic prescribing and monthly peer-reviews. It also addressed caregivers, who received counselling from clinicians on appropriate usage of antibiotics, an information leaflet and exposure to an information video. Control facilities received no intervention components and prescribed as per their usual practices. Eligible outpatients were aged 2-14 years old and free of serious illness requiring antibiotics. Patients were masked to their treatment allocation, but clinicians were not. Our primary outcome was whether a patient visiting a facility for a URTI was prescribed an antibiotic or not, based on electronic records. We used multilevel logistic regression for analysis, excluding cases with missing data. Results
At six-months the antibiotic prescription rate declined from 84% (1171/1400) to 37% (515/1380) in the intervention arm, and changed from 76% (1063/1400) to 77% (1084/1400) in the control arm, a statistically significant (adjusted odds ratio [AOR]: 0.09, 95% CI: 0.07, 0.11) and clinically important effect. At 18-months the antibiotic prescription rate had increased to 54% (2748/5084) in the intervention arm, compared to 75% (2772/3685) in the control arm. This again represented a statistically significant (AOR: 0.15, 95% CI: 0.12, 0.19) and clinically important reduction in the intervention arm rate from the baseline rate. However, compared to the six-month rate this did represent a statistically significant and clinically important increase in the 18-month intervention arm rate (AOR: 1.74, 95% CI: 1.42, 2.15). Discussion
Our intervention has proven highly effective at reducing inappropriate prescribing of antibiotics to children with URTIs in rural Chinese primary care after six-months, and has remained highly effective after 18-months, despite some relapse. The intervention was explicitly designed for scale-up through integration with the Chinese rural health system, and could be adapted to similar settings.
Oral Abstracts

Oyunaa Lkhagvasuren, Technical Assistance project, Asian Development Bank

Improving access to affordable medicines in public hospitals of Mongolia

Co-authors: Oyunaa Lkhagvasuren-Technical Assistance project, Asian Development Bank; Altantuya Jigjidsuren-ADB Mongolia Country Office

Mongolian families with middle or/and low income are in higher risk of facing huge financial expenses when their members get ill and medical attention. High out-of-pocket expenses are one of the biggest issues in the country and counts for 41% of total health expenditure. One third of the households’ out-of-pocket spending on health goes to medicines.

Mongolian government has taken some actions to reduce the economic burden of health expenses for its citizens and in particular, to reduce the cost of medicines and ensure access to affordable and good quality medicines in public hospitals. There are many ways to address these issues, and the Ministry of Health has decided to take a holistic approach. It has implemented a technical assistance project which consisted from three main components. First component has looked at the procurement process of medicine and piloted a framework agreement. This piloting process has allowed not only to reduce the price of selected medicines but introduced new procurement system in the country. Purchasing the medicines by combining the needs of all public hospitals helped to raise an interest of various pharmaceutical companies and allowed to introduce a competition between these companies, which have resulted in reduction of the prices.

For the first time, Mongolia has used framework agreement in the procurement of medicines and has gained many expected and unexpected positive results from this pilot process. It did demonstrate that good will of the government, close collaboration of government and international organizations, good coordination of all stakeholders; efforts could lead to good results.

The second component has focused on reorganizing pharmacies in public hospitals to supply low-cost generic medicines—obtained through pooled procurement mechanisms—to ambulatory patients. It intended to grant the public hospitals the right to sell medicines to outpatients and wished to increase access to low-cost generic medicines. Its expected side effect was to indirectly lead to a decrease in the market price of essential medicines as it will serve as a benchmark for the private sector.

The third component has support the Government efforts to strengthen the medicine regulatory functions by means of revision an existing legal framework, such as medicine bill and other documents.

In this presentation, we wish to share our lessons learned, achievements and challenges that we have faced in implementation this project.
Methods to document antimicrobial use in pluralistic health systems

Co-authors: Ayako Ebata-Institute of Development Studies; Hayley MacGregor-Institute of Development Studies

Background: Antimicrobial resistance (AMR) is considered one of the biggest threats to biomedicine and is a challenge that requires a health systems perspective, including recognition of the intersections between human and veterinary healthcare. Empirical research to date has struggled to adequately characterise the relationship between veterinary antimicrobial use and drug resistant infections in humans. In tackling AMR, it is also vital to recognise the role of informal, and/or private, actors in providing access to antimicrobials for both human and animal use, particularly in low- and middle-income (LMIC) countries where formal health systems are weak may not adequately reach marginalised people. Research methods require approaches that can uncover who are providing antimicrobials, and what proportion of drugs are provided by formal and informal actors.

Methods: We conducted social science research on the pig sector in Myanmar. We employed qualitative data collection methods to explore attitudes to antimicrobials, what antimicrobials were used in what proportions of pigs raised by small- to large-scale pig farmers, who were providing veterinary healthcare to the farmers, and the rationales for drug use. The methods included a participatory mapping exercise, in-depth individual interviews, focus group discussions, ethnographic observation, antibiotic diaries, and photo documentation of antibiotics.

Results: Although Myanmar’s law prohibits people without official veterinary certificates from injecting antimicrobials, we found that pig farmers injected them or relied on informal providers of veterinary services. Moreover, Community Animal Health Workers, who are trained by the government but not authorized to inject antimicrobials, also apply antimicrobials because farmers have limited access to certified veterinarians. Farmers and veterinary healthcare providers used a fixed set of drugs. When they had questions about pig treatment, they referred to other farmers, both public and private veterinarians, and lay people who were considered experts in pigs, and often also provided other services to farmers. Many veterinary healthcare providers acknowledged that they sometimes used human drugs in animals. Local drug shops were a source of antimicrobials.

Discussion: Because of the informal nature of these practices, farmers, unofficial providers and some drug shop retailers were reluctant to provide accurate information regarding the use of drugs. We sought to overcome this difficulty in data collection by using ethnographic and other qualitative research methods. We argue that in-depth qualitative data need to be collected in addition to conducting large-scale quantitative surveys to develop reliable data on antimicrobial usage in LMICs where informal providers are crucial for drug access.
Guillermo Hegel Algara, Municipalidad de Villa Nueva, Guatemala

Atención primaria en salud, un reto urbano: la experiencia de Villa Nueva, Guatemala en el proceso de construcción de la política de salud municipal

Co-authors: Guillermo Hegel Algara-Municipalidad de Villa Nueva, Guatemala; Bruno Marchal-Instituto de Medicina Tropical, Amberes, Bélgica; Ariadna Nebot-Instituto de Medicina Tropical, Amberes, Bélgica; Sergio Penagos-Organización Panamericana de la Salud/Organización Mundial de la Salud - Guatemala; Werner Soors-Instituto de Medicina Tropical, Amberes, Bélgica

La presente revisión narrativa presenta los esfuerzos particulares para coordinar y fortalecer el sistema local de salud en el municipio de Villa Nueva, Guatemala, durante el quinquenio 2012-2017. Guiado por los principios de Alma-Ata, los valores de la APS renovada y el enfoque de redes integradas de servicios de salud, la municipalidad se ha enfrentado a las dificultades de un sistema mal preparado para las nuevas realidades urbanas, en su inicio las autoridades municipales hicieron uso del espacio de autonomía ampliado por la ley de descentralización para establecer su propia red de atención primaria. En un entorno de expansión urbana típicamente caracterizado por proliferación de proveedores pero también de brechas de cobertura persistentes y desigualdades crecientes, la municipalidad luego ha conducido un proceso participativo que busca generar una visión local común de largo plazo y fortalecer la coordinación de los actores de salud presentes en el municipio o con influencia en ella. La revisión crítica de este proceso en construcción no se limita a lo descriptivo, sino que también explora retos y oportunidades, y su potencial de aprendizaje tanto para Villa Nueva como para otros municipios de la región en el camino hacia la realización de la APS urbana y el fomento de redes integradas de servicios de salud.
Community-based participatory prioritization exercise for development of primary level health care services package among urban poor communities

Background

Decisions about services to be delivered in publicly-funded primary care are not generally based on communities’ expressed priorities, especially those of socially excluded groups; but the value of participatory processes is increasingly being acknowledged. This paper describes a community-based participatory prioritization exercise for development of primary level health care services package for urban poor communities in the capital city of Kerala, India.

Methodology

The prioritization exercise was carried out among five urban poor communities in Thiruvananthapuram Corporation area, Kerala. In a community-meeting setting, participants worked in sub-groups to select by consensus a designated number of health needs, based on a list derived from a community-survey of health needs. They were also given the option to add any important needs that were missing from the list. Following the sub-group process, paper bags labelled with names of health needs identified in the earlier steps were given to the large group. Each participant distributed a given number of tokens into the bags according to his/her assessment of the level of priority of that particular need. The total number of tokens in each ‘health need’ bag was then counted. The higher the number of tokens in a bag, the higher the priority for that specific health need. A rank list of health needs was prepared for each community, and these were then consolidated for the urban poor in the district.

Results

There were 10-18 participants, both women and men in each of the five groups, ranging in age from 15-86 years. Across all five groups, curative services such as treatment for body pain, diabetes, hypertension, eye care and cancer were highly prioritised (ranks 1-5). Interestingly each group identified as important health needs services not included in our list. Many of these were preventive and promotive health care needs including pre-marriage and adolescents’ counselling on sexuality and reproduction; routine screening for non-communicable diseases; home-based palliative care; geriatric care; and provision of emergency services during disasters.

Discussion

This step-wise process of taking on board every single person’s perspectives and consensus-building resulted in inclusive decision-making that did not leave out concerns of the minority. Unlike top-down PHC packages, this participatory community-based process resulted in prioritization of several curative concerns to be addressed at the primary care level. Without community-based, participatory priority-setting, the unmet health need gap is likely to widen for marginalised populations even in urban areas.

Key words: prioritization, health care needs, urban poor
Institutionalizing ‘Urban Health Atlas’, a geo-referenced web-based visualization tool to strengthen planning, delivery and oversight of MNCH services in urban Bangladesh: a mixed-method implementation research

Co-authors: Sohana Shafique-Health Systems and Population Studies Division, icddr,b; Shaikh Mehdi Hasan-Health Systems and Population Studies Division, icddr,b; Dipika Shankar Bhattacharyya-Health Systems and Population Studies Division, icddr,b; Tarek Hossain-Health Systems and Population Studies Division, icddr,b; Shakil Ahmed-Health Systems and Population Studies Division, icddr,b; Rahenul Islam-Health Systems and Population Studies Division, icddr,b; Nibras Ar Rakib-Health Systems and Population Studies Division, icddr,b; Alayne Adams-Department of International Health, Georgetown University

Background: Health Management Information Systems (HMIS) in Bangladesh lack information from urban areas, where major inequities exist in maternal neonatal and child health (MNCH) services and outcomes. A novel geo-referenced web-based visualization tool – the Urban Health Atlas (UHA) – provides health facility location and service information to support evidence-informed policy and planning in urban areas. This study documents stakeholder perceptions and experiences in institutionalizing UHA for planning, decision-making, and oversight of urban MNCH services, and identifies policy and programmatic entry points to facilitate broader use of UHA and its regular update.

Methods: The study was an implementation research, using mixed-methods for data collection in three cities in Bangladesh: Dhaka, Dinajpur and Jessore. Study participants were government officials, NGO programme managers, private sector actors and MNCH service providers. Six hands-on trainings and refreshers on UHA were organized to strengthen the capacity of these managers for better MNCH service delivery. To understand and document stakeholder perceptions and experiences of institutionalizing UHA, KIIs and IDIs were conducted along with desk reviews. Systematic documentation of the implementation process was also carried out to understand the motivations of stakeholders, and examining facilitators and barriers for institutionalizing UHA.

Results: Training improved the capacity of local level authorities on using UHA for planning purposes, and ultimately applying it to redistribute service locations based on gaps and duplications. Various national, local and personal level factors and attributes influenced the institutionalization process of UHA. At the national level, commitment of policy makers and budget allocation for ICT is crucial yet difficult to achieve in the absence of evidence of the efficiencies they might contribute. At the local level, coordination and engagement of all concerned decision making authorities is necessary for uptake and regular update. Efforts to develop local capacity and comfort in using ICT tools, and uninterrupted access to internet are also fundamental to institutionalization. Although technological champions at the central level encouraged institutionalization, lack of system readiness and unclear roles and responsibilities at the local level hindered uptake of the UHA.

Discussion/conclusion: While there is consensus that UHA has potential for planning, decision-making, and oversight of urban MNCH services, implementation is not straightforward. Careful assessment of context, actors and system readiness is crucial, as are clear roles and responsibilities at the local level for institutionalization. Efforts to facilitate use of evidence in policy-making are prerequisite to enabling uptake of UHA or any ICT by government systems.
Understanding the extent and nature of evidence-informed urban health planning: Lessons from three Asian cities

Ensuring universal access to health services among all groups and populations remains a challenge for many countries. Rapid socio-economic transitions in many Asian countries are placing further pressures on their national health systems to deliver for all. Within increasingly-urbanised contexts, there are substantial and growing concerns about availability, accessibility and quality of essential healthcare for the most disadvantaged urban slum dwellers such as rural migrants or urban poor.

The value of evidence-informed health policy and planning is well-recognised nationally and internationally. Although numerous frameworks and guidelines exist on how to improve evidence-informed policymaking, there is limited published empirical evidence on what datasets are preferred and available by the city planners, and how available datasets are used to inform decision-making to address urban health issues and inequities.

This presentation will share results from one component of a larger mixed-methods health systems research which aims to improve quality, availability and utilisation of different datasets for urban planning in three Asian cities: Dhaka (Bangladesh), Hanoi (Vietnam) and Kathmandu (Nepal). In this component, we used qualitative methods to assess the extent and nature of data use within municipalities (specifically focusing on health planning), including key influences on the extent of data use in urban planning. In each city, we conducted in-depth interviews with municipality and central government staff, non-participant observations of urban planning processes and events and reviewed key policy and planning documents. Data from all methods were triangulated and analysed using thematic analysis.

We will report results of comparative analysis across the three cities structured around four broad issues: 1) current information systems and the resultant data available to urban planners, 2) key approaches to urban planning used within each city municipality, 3) views of key stakeholders (including the municipality planners) on what constitutes good-quality ‘evidence’ for urban planning, and 3) the extent of data use in urban health planning within each city’s context. We will conclude with key lessons learned from our study that should also apply to many other increasingly-urbanised countries, and share practical recommendations for designing effective interventions to enhance evidence-informed urban planning to help city municipalities identify and address the needs of the most disadvantaged populations.

This presentation should be of interest to: researchers interested in better understanding the extent, and key influences on, evidence-informed urban planning; and policymakers and funders interested in funding, designing and implementing effective interventions to improve urban health planning processes and systems.
Unraveling the role of mHealth for maternal health service delivery in sub-Saharan Africa using realist methodology: process, lessons learned, implications for practice

Co-authors: Ibukun-Oluwa Omolade Abejirinde-Athena Institute, Vrije Universiteit Amsterdam; Marjolein Zweekhorst -Athena Institute, Vrije Universiteit Amsterdam; Azucena Bardaji -ISGlobal, Barcelona Centre for International Health Research (CRESIB), Hospital Clinic- Universitat de Barcelona, Spain; Jos van Roosmalen -Leiden University Medical Centre, Department of Obstetrics, The Netherlands; Bruno Marchal-Health Systems Unit, Department of Public Health, Institute of Tropical Medicine, Antwerp, Belgium; Vincent De Brouwere -Maternal and Reproductive Health Unit, Department of Public Health, Institute of Tropical Medicine, Antwerp, Belgium; The Bliss4Midwives Consortium -Cordaid, Netherlands; Relitech, Netherlands; TNO Organization for Applied Scientific Research, Netherlands; Simavi, Netherlands; Enviu, Netherlands; Association of Church Development Projects, Ghana; Presbyterian Health Services-North, Ghana

Focus: This abstract presents processes, lessons learned and implications of applying realist methodology to a maternal health intervention involving mobile technology, and how its use guided stakeholders’ (private-public, north-south, practitioner-researcher) expectations and actions.

Background: Many low- and middle- income countries are experiencing an obstetric transition, with an increase in indirect causes of maternal mortality. In 2016, the Bliss4Midwives (B4M) consortium piloted an integrated diagnostic and clinical decision support system (CDSS) in two rural districts in Ghana. The device facilitated point-of-care screening for pre-eclampsia, gestational diabetes and anemia during antenatal care (ANC), prompting appropriate action. Project implementers collaborated with researchers to determine what worked, how and why.

Methods: After mapping evidence on CDSS use, a realist review on the influence of mHealth on health worker performance was conducted. Review findings informed a realist evaluation of the intervention. Program theories were tested in nine intervention facilities using mixed methods, culminating in a theory-validation meeting with users.

Results: In facilities with limited diagnostic capacity or low patient compliance to screening, motivated workers adopted B4M for its innovativeness and benefits. “Champion” users displayed high adoption-utilization behavior. Re-alignment of mHealth to workflow and user needs was identified as a crucial mechanism for its utilization. Despite perceived usefulness and user motivation, the suppression of utilization mechanisms due to intervention-related (technical challenges, device rotation) and context-related (staff turnover, understaffing) factors explained sub-optimal use over time. In addition to intrinsic motivation and a sense of accountability, utilization was also facilitated by third-party (patients, peers, supervisors) support.

Discussion: Generic evidence on the growth and potential of mHealth in improving service delivery especially in a critical domain such as maternal health may have overshadowed important individual, health system and implementation factors that preclude its alignment in specific contexts and by certain user types. In addition to contextual factors, innovative technologies for maternal care need to consider the generative mechanisms (i.e. reasoning and resources) that influence outcomes.

Conclusions: Application of realist methodology helped unveil evidence gaps and refine program expectations. Stakeholders gained fresh insight on how crucial factors like supervisory support and implementation strategies influence the potential of mHealth to address maternal health challenges in low resources settings. In addition to informing scale-up of the B4M prototype, our results and approach highlight the need for interventions that are guided by research processes that account for complexity.
Oral Abstracts

Bassey EBENSO, University of Leeds

How can digital health technologies be implemented to enable health systems to increase universal access to PHC services in resource-limited settings? Insights from Nigeria

Co-authors: Bassey EBENSO - University of Leeds; Matthew Allsop - University of Leeds; Babasola Okusanya - University of Lagos; Godwin Akaba - University of Abuja; Jamilu Tukur - Aminu Kano Teaching Hospital, Kano; Joseph Hicks - University of Leeds; Tolib Mirzoev - University of Leeds; James Newell - University of Leeds; Tolga Ors - Inmarsat Global Limited, London; OKey Okuzu - InStrat Global Health Solutions Ltd, Abuja, Nigeria; Terence Jagger - Inmarsat Global Limited, London

Purpose: Improving access to quality primary health care (PHC) is challenging for resource-constrained countries with chronic infrastructure deficits and shortages of trained health workforce. There is growing international consensus that information and communication technologies (ICTs) can offer innovative ways to strengthen health systems to extend the reach of PHC services to areas where health care challenges are most severe. While there is extensive literature on the efficacy of ICT strategies for improving single health services problems (e.g. non-adherence to treatment, poor communications among rural health workers), few empirical studies report about implementing ICT interventions at scale, to solve health systems challenges.

In 2013, the Nigerian Government adopted ICTs as a strategy for achieving the targets of a “save one million lives” (SOML) initiative that aimed to increase universal access to essential PHC services for vulnerable mothers and infants. As part of SOML, several ICT Applications were implemented to improve the quality of mother and child health (MCH).

Focus: This presentation focuses on a 2-year project (March 2017-March 2019) evaluating the use of satellite communication technology (SatCom) to provide communication links for health facilities in areas without mobile network connectivity. Through also implementing Apps for video training of health workers and digitization of health data, the project aimed to increase standards of MCH services and broaden access for pregnant women.

From March 2017, we used a mixed methods evaluation design to assess the process and impact of digital technologies (SatCom, video training, and digitization of data); and the influence of contextual factors on implementation of digital technologies in Ondo, Kano states and the Federal Capital Territory of Nigeria. Framework analysis was used to continuously triangulate quantitative health facility data and qualitative interviews (with patients, health workers, and policymakers) to understand the impact of the interventions on workers’ training, health systems functions and on health outcomes.

Significance for sub-theme area: Emerging findings suggest that using digital health technologies to configure health systems, can strengthen three key health systems components:

i) Health workforce, through supporting staff at grassroots level

ii) Health information systems, through data digitization, to improve the quality and management of health data

iii) Governance, by providing real-time data to expedite policymakers’ decision-making

Simultaneous and sustained implementation of multiple digital health technologies can mobilize health systems to ensure workers enjoy unrestricted access to reliable training content and data necessary to improve standards of MCH and increase access for women in rural areas.
Community Readiness for mHealth in rural Bangladesh

Co-authors: Fatema Khatun-International Centre for Diarrhoeal Disease Research, Bangladesh ; Anita E Heywood-The University of New South Wales, Sydney, Australia ; Abbas Bhuiya-International Centre for Diarrhoeal Disease Research, Bangladesh ; Pradeep K Ray-The University of New South Wales, Sydney, Australia ; Siaw-Teng Liaw-The University of New South Wales, Sydney, Australia

Background: Evidence in favour of using mobile phones for healthcare delivery (mHealth) in settings with limited health workforce is accumulating. With rapidly increasing access to mobile phones, mHealth is seen as a solution to the health workforce shortage in Bangladesh. Currently, there are more than 40 mHealth initiatives in place and increasing. “Community readiness” is a crucial determinant of successful implementation of mHealth initiatives. However, systematic assessment of community readiness is often not done. This study aimed to understand community readiness in the context of mHealth in rural Bangladesh.

Methods: A literature review guided the development of a conceptual framework to study community readiness for mHealth (CRM), which included technological, motivational and resource dimensions. This guided the mixed methods methodology to examine CRM in Chakaria, Bangladesh. A quantitative survey was conducted during 2012-2013 and complemented with in-depth interviews with family members and key stakeholders.

Results: A total of 4915 randomly selected participants were surveyed and 36 in-depth interviews conducted. The data could be explained using the three readiness dimensions. (1) Resource readiness: 45% of respondents owned a mobile phone with ownership higher among male and younger participants in the highest socioeconomic quintiles. (2) Technological readiness: Of the mobile phone owners, 50% were aware of SMS and 37% generally read the received SMS. (3) Motivational readiness: The majority (73%) of the respondents was interested in joining future mHealth programs. Multivariate analysis showed mobile phone ownership (aOR 1.3), younger age (aOR 2.6), males (aOR 1.8), educated respondents (aOR 11.1) and wealthier respondents (aOR 3.7) were independently associated with awareness of current mHealth services. Illiteracy, lack of English language proficiency, lack of trust and technological incapability were identified as barriers to mHealth use. However, a sense of ownership, evidence of utility, a positive attitude to the use of mHealth, and intentions towards future use of mHealth were driving forces in the adoption of mHealth services.

Conclusions: Three high level dimensions of readiness are described based on collected data. The community had a degree of technological and motivational readiness but resource readiness was likely to be limited by inequitable access to technology. The proposed conceptual framework can usefully guide the data collection to assess and explain community readiness to adopt mHealth in this context, thereby assisting policy-makers in planning and implementing mHealth programs. However, further studies are required to assess its usefulness in other contexts and countries.
Willem Odendaal, South African Medical Research Council; Department of Psychiatry, Stellenbosch University

Do mHealth interventions deliver on their promise of enhanced accessibility to care? Health workers’ perceptions from a qualitative evidence synthesis?

Co-authors:

Background

Guided by the Alma Ata, the vision of health for all has in instances been met. In the transition from MDGs to SDGs, it is clear that many people remain marginalised and without ready access to quality primary healthcare services. One means of enhancing access, particularly in remote and poorly resourced settings, is through the utilisation of mobile technology by health workers. Theoretically this would better link them to centralised services, and therefore enable better access for their clients. In this presentation we explore the reality of mHealth interventions, including the ability to facilitate better access, by considering the experiences of health workers across the globe.

Methods

The review team identified, appraised and synthesised qualitative evidence on healthcare workers’ perceptions and experiences regarding their use of mHealth technologies in primary healthcare. We searched for studies up until 2015, screening 3878 titles/abstracts. Thematic content analysis was applied to the included studies, so as to translate findings from individual studies into a composite whole.

Results

A total of 23 full text articles, of which 19 were from LMIC settings, have been included thus far. Studies included health workers using both phones supplied through the intervention, as well as their personal phones. The health workers described multiple benefits of mHealth, including: accessing emergency care on behalf of their clients, improved co-ordination of the logistics of their services, being able to access both peer support and support of higher level health workers, and enhanced supervision of those they managed. Health workers stationed in remote and geographically challenging settings, emphasised how mHealth eased their service delivery task, for example by enabling them to contact clients even when they could not see them in person. Despite these benefits, there was some cause for anxiety, including: poor network connectivity, rapidity in the changes to the technology, techno-literacy, cost of using personal phones, and concerns over the safety of client information. Some challenges were specific to the health system such as poor responsiveness by higher level workers to requests from lower level workers.

Conclusions

Our findings demonstrate that the use of mHealth, whether personal or intervention provided, seems well entrenched. Health workers were generally positive about the enhanced access enabled by mHealth, but their narratives also showed caution with respect to technological, personal and health systems’ barriers. Future improvements to mHealth must take health workers’ perceptions and experiences into account.
Luke Boddam-Whetham, Marie Stopes International

Enhancing health markets for the poor by linking private providers with government health financing schemes

Co-authors: Nirmala Ravishankar-Consultant for Marie Stopes International; Jayne Rowan-Marie Stopes International; Luke Boddam-Whetham-Marie Stopes International

Purpose

In this presentation, we describe a framework developed by the African Health Markets for Equity (AHME) project for exploring the market conditions that are essential for private providers to deliver high-quality essential health services to the poor.

Focus/Content

There are few topics that garner as much heated discussion as the role of the private sector in delivering services to the poor. Even as this debate rages, many low- and middle-income countries are undertaking purchasing schemes wherein governments are purchasing priority healthcare services from a range of public and private providers on behalf of the poor. To be successful, these schemes have to make sense not just from the public or social perspective – i.e. reaching the poor, delivering value for money, etc. – but also from the point of view of private providers and their business goals.

In this context, AHME developed a framework to holistically assess the market conditions necessary for such purchasing arrangements involving private providers to succeed. The framework is comprised of 5 elements: the poor are enrolled; the benefit package covers essential primary healthcare services; accessible providers are contracted for the program; the facilities contracted provide quality services; and providers are able to run viable businesses. We posit that unless all these conditions are met, the scheme will fall short of the ideal of a poor person walking into a private healthcare facility and accessing quality healthcare services free at the point of delivery.

We apply the framework to assess two pro-poor health financing schemes in Africa, namely the Health Insurance Subsidy Program being implemented by the National Hospital Insurance Fund in Kenya and the National Health Insurance Scheme in Ghana. Using qualitative interviews with private providers, government officials, and development partners, we assess the strengths and weakness of the scheme in each of the five areas.

Significance for the sub-theme area/field-building dimension of relevance

The polemic on the role of the private sector in universal health coverage (UHC) schemes focuses on whether the private sector can serve the poor. Here, we adopt a more pragmatic approach to explore how or under what market conditions the private sector can serve the poor. The conditions bring together the needs of the purchasing agency as well as the business imperatives of the private providers, thereby offering a more holistic approach to diagnosing gaps in existing UHC schemes.

Target audience

Government purchasing agencies, private health sector stakeholders
RITTIKA BRAHMACHARI, Sahay

Universal Health Coverage through Linkages of Informal Healthcare Providers with the Private Sector: Social Network Analysis in a Disadvantaged Region of India

Co-authors: RITTIKA BRAHMACHARI-Sahay; MANASEE MISHRA-IIHMR University

Background

The Sundarbans is a climatically fragile and geographically inaccessible impoverished region of India. Informal Healthcare Providers (IHPs) dominate its healthcare sector. They practice modern medicine without any formal training or authorization. They are usually community-based and have strong social ties with various actors in the government and private health sectors. This abstract is based on a study that explored the nature of social ties of IHPs with diverse health system actors and its implications for the health systems in the Indian Sundarbans. It provides a deeper understanding of such linkages and offers insights into how these can be leveraged for achieving Universal Health Coverage

Methods

The study adopted Social Network Analysis (SNA) which is an innovative method to explore the types, nature, and strength of social ties. Qualitative Ego-network approach of SNA has been used. Through Participatory Network Mapping, the linkages of a focal node called ‘Ego’ (IHP in the study) are explored with ‘Alters’ (i.e. the list of people the Ego is directly connected with). A total of 34 IHPs were selected purposively using the maximum variation principle. Qualitative data were analyzed in NVivo10

Results

Over the years, the IHPs have developed linkages with diverse health system actors. Ties in their network may be located in the Indian Sundarbans or away from it. Such linkages help IHPs to improve their knowledge about medical conditions and lines of treatment. Referral conduits and destinations are established and maintained. IHPs provide healthcare in such an ecosystem. The 34 IHPs had a network comprising 1362 social ties. The ties with (formal and informal) private healthcare providers were dominant 882 (65%) and for several reasons such as seeking knowledge, referrals, transfer of material resources, association and affiliations, and taking advice.

Discussion

IHPs are firmly embedded in the health systems of the Indian Sundarbans due to their social ties. Their strong ties with private healthcare providers and institutions make them functional and resilient. They provide care in the face of deficiencies in the health systems in the Indian Sundarbans such as unavailability or non-functioning of primary healthcare, and frequent climatic shocks. Urgent policy level exploration is required for recognizing and strengthening such private-private linkages for achieving Universal Health Coverage. The integration of IHPs into the health systems could be a cost-effective and sustainable solution to address health inequities in disadvantaged regions in India and other countries

Keywords

Informal Healthcare Providers, Universal Health Coverage
Jade Khalife, American University of Beirut

Hospital performance-based contracting: Engaging private and public hospitals towards improved patient outcomes, equity and efficiency in Lebanon

Co-authors: Jade Khalife-American University of Beirut; Bjorn Ekman-Lund University; Fadi El-Jardali-American University of Beirut; Walid Ammar-American University of Beirut, Ministry of Public Health

Background

The Ministry of Public Health (MoPH) contracts with most private and all public hospitals to provide hospitalization service coverage for about half of the Lebanese population that lacks any insurance coverage. The MoPH previously determined hospital reimbursement rates using a tri-annual accreditation process. In 2015 it also included a hospital casemix index and patient satisfaction. Our project develops the MoPH-hospitals contracting model into a performance-based one that emphasizes patient outcomes and evidence-informed components. We will also evaluate the impact of the new model on patient outcomes and on health system equity and efficiency. The project is a grant recipient (MR/N015916/1) from the Joint Health Systems Research Initiative (DFID/MRC/Wellcome Trust/ESRC).

Methods

This is an implementation-focused initiative (2016-2020) with an intervention, monitoring and evaluation. In the first two years of the project we developed evidence-informed indicators and algorithms for several components including hospital readmissions, casemix index and patient satisfaction. This included literature review, case definitions, automation of numerous algorithms, and analysis and validation of results using 2011-2016 hospitalization data. Hospitals were engaged in the component decision-making process, including the Syndicate of Private Hospitals. Component weights were determined by an analytic hierarchical process and further refined using an iterative process with pre-defined rules for balancing components. Focus group discussions were also used to develop the patient satisfaction tool. Additionally, algorithms and indicators were developed on service utilization and cost, to monitor unintended consequences and for subsequent project evaluation.

Results

The new scoring model included hospital casemix index, readmissions (general, pneumonia, stroke and cholecystectomy), patient satisfaction, accreditation, Intensive Care Unit (ICU) case proportion and elderly case proportion. Hospital casemix index, patient satisfaction and accreditation had the greatest weights, however hospital variation was greatest within readmissions, ICU proportion and casemix index. Private hospitals (119) and public hospitals (29) were assigned into one of three reimbursement rate tiers used by the MoPH based on their score.

Conclusions

The design of the new model is intended to incentivize improved casemix, reduced readmissions, improved patient satisfaction, reduced exclusion of elderly patients, and increased investment in needed ICU capacity. It includes performance-based components that enable the MoPH to engage and incentivize private and (semi-autonomous) public hospitals. The model relies on hospital innovation and is sustainable in its reliance on non-bonus financial incentives (reimbursement tiers) and use of routine administrative data. Impact on patient outcomes, system equity and efficiency will be evaluated in 2018-2019.
Oral Abstracts

Inke Mathauer, World Health Organization

**Mixed provider payment system in Morocco: what are the effects on private sector health provider’s behaviour and the implications for equitable access to health services?**

Co-authors: El Houcine Akhnif-Ministry of Health Morocco; Hafid Hachri-World Health Organization Morocco; Fahdi Dkhimi-World Health Organization Switzerland; Inke Mathauer-World Health Organization Switzerland

**Background:** Morocco’s health financing system is fairly fragmented, with different purchasing agencies and various coverage schemes for different population groups. This also implies varying payment methods and rates in place. Access to private sector providers is covered by the insurance scheme of formal sector providers.

Based on an analytical framework developed for this work, this study assessed the set of incentives created by the mixed provider payment system, how this affected the behaviour of public and private providers and ultimately Universal Health Coverage related objectives, with a focus on equity. This paper focuses on private sector health providers.

**Methods:** The study is based on a multi-method approach, combining review of legal provisions and government documents with in-depth interviews with key purchasing agencies and public and private health care providers, using a question checklist. Quantitative data was gathered from ministry of health and purchaser reports.

**Results:** Private sector providers are paid through fee for service or case based payment, but can also combine the two methods, with a strong incentive to overprovide and overbill, which is a cause of inefficiencies, expenditure growth and higher out-of-pocket expenditure. 92% of SHI expenditures go to the private sector, contributing to the relative underfunding of the public sector. There are indications of service, resource and cost shifting, but little indication of cream skimming in favour of patients with voluntary health insurance coverage. The higher remuneration rates paid for the insured leads to inequitable access to health care. The poor and vulnerable face high out of pocket expenditure (OOP) and cope with long waiting lists and time, coupled with health worker shortages in the public sector.

**Conclusions:** The existing mixed provider payment setup makes the private sector more attractive to both patients and health workers in view of higher remuneration rates, thus contributing to a brain drain from the public to the private sector. There is need to harmonise the mixed provider payment system in order to set coherent incentives for all providers with the aim of reducing cost-, resource- and service-shifting and cream skimming that are to the detriment of disadvantaged patient and population groups and in order to enhance equitable access to health services. For that matter, governance arrangements also need to be strengthened, in particular with respect to the private sector. More blending and bundling of payments could help to improve progress towards UHC objectives.
Engaging private sector primary healthcare providers in the progress towards universal health coverage: models of contracting general practitioners into South Africa’s public sector

Background:

Non-state providers (NSPs) can potentially address gaps in health service delivery that the public sector lacks. South Africa (SA) has made a commitment to realise the attainment of universal health coverage (UHC) in the form of national health insurance (NHI). It is envisioned that healthcare services will ultimately be purchased from a mix of private and public providers. The general practitioner contracting initiative (GPCI) is a health systems strengthening initiative piloted in the first phase of NHI implementation. It aimed to address the shortage of public sector doctors by contracting-in private general practitioners (GPs) to render services in public primary healthcare clinics. Piloting aimed to identify implementation models for future potential scale-up. This paper describes three models of contracting-in and explores factors influencing their evolution. This study was part of a series of multi-country case studies funded by the AHPSR on the role of NSPs in strengthening health systems towards UHC.

Methods:

This qualitative multi-case study draws on three cases. Data collection comprised document review, key informant interviews and focus group discussions with national, provincial and district managers as well as GPs (n=68). Walt and Gilson’s health policy analysis triangle and Liu’s conceptual framework on contracting out were used to explore the policy content, process, actors and contractual arrangements involved in the contracting models.

Results:

Three models of contracting-in that emerged are described: a centralised-purchaser model, decentralised-purchaser model and contracted-purchaser model. These models derive funding from a single central source but have varying levels of involvement of national, provincial and district managers. Funds are channelled from the purchaser to provider in slightly different ways. Contract formality differed slightly by model and was found to be influenced by context and type of purchaser. Emergence of the models was influenced by three main factors, flexibility in the piloting process, managerial and financial management capacity.

Conclusions:

The three contracting models were essentially iterations of the centralised-purchaser model. Emergence of the other models was strongly influenced by purchaser capacity to manage contracts, payments and recruitment processes. Despite the need for well defined contractual arrangements to facilitate contract management, allowance for adaptability to the local context and capacity is vital. Purchaser capacity, existing systems, institutional knowledge and experience in contracting and financial management are important considerations in future contracting strategies. The findings provide valuable lessons for future contracting approaches with NSPs in SA and other similar contexts in the progress towards UHC.
Can strategic purchasing of health services from the private sector drive value for money? Evidence from the Results Based Financing programme in Malawi.

Co-authors: Matthew Nviiri-Results-based Financing for Maternal Newborn Health Programme; Corinne G Grainger-Results-based Financing for Maternal Newborn Health Programme; Reagan Kaluluma-Results-based Financing for Maternal Newborn Health Programme; Fannie Kachale-Malawi Ministry of Health and Population, Reproductive Health Directorate; Sarah Fox-Options Consultancy Services Ltd.

Background: The Malawi Government is the largest provider of health services (61%), followed by the not-for-profit Christian Health Association of Malawi (CHAM) (37%). With insufficient and unpredictable resource flows to deliver the revised Essential Health Package, the government recognises the potential of Public Private Partnerships (PPPs) to contribute to increased service coverage, and efficiencies of health sector investments. The government’s MOU with CHAM provides the framework for district governments to purchase health services from CHAM facilities, mostly located in rural, hard-to-reach areas.

Since 2012, a results-based financing for maternal and newborn health (RBF4MNH) programme implemented by the Ministry of Health with financing from Governments of Germany and Norway, provides performance-based financial rewards to public and CHAM facilities. Although operating in very similar contexts, it has been observed that CHAM facilities take a more innovative and strategic approach to the investment of performance rewards, compared with public sector facilities. For example, saving rewards over time to build staff housing at a cheaper cost than can be done centrally.

Methods & results: Qualitative research will be carried out from March to May 2018. It will take an interpretative approach, based on semi-structured interviews with 5 CHAM facilities contracted by RBF4MNH and 5 matched public health facilities, supplemented by key informant interviews and literature review. The objective is to understand how public and private facilities autonomously invest funds by looking at: what facilities invest in and value for money of these investments (i.e. the effects on local health system functioning); how investment decisions are taken and executed; and contextual factors for decision making (needs, constraints, enabling factors). Interviews will be recorded, transcribed and analysed.

Discussion: When public sector capacity is limited, seeking a public / private mix can be seen as a pragmatic response to constraints (financial, human resource, policy and regulatory). While some evidence suggests that contracting out services to nonstate providers can increase access and utilisation of health services, context and intervention design are critical determinants of success. Less is known about the effects on health systems. Malawi’s policy and strategy documents highlight the need to assess the risks and opportunities presented by private sector financing and delivery of health services for universal coverage. This research will build on the literature and contribute to the knowledge base, informing on-going policy debates on the role of contracting out to non-state providers in Malawi and low-income countries.
Oral Abstracts

Melvin Obadha, KEMRI - Wellcome Trust Research Programme

The experiences of health care providers with provider payment mechanisms in Kenya: A focus on capitation and fee-for-service.

Co-authors: Melvin Obadha - KEMRI - Wellcome Trust Research Programme; Edwine Barasa-KEMRI - Wellcome Trust Research Programme; Jane Chuma - The World Bank - Kenya Country Office; Jacob Kazungu - KEMRI - Wellcome Trust Research Programme

Background: In pursuit of universal health coverage (UHC), mechanisms used to reimburse health care providers by governments, social health insurance, and private health insurance are important due to the incentives they create for providers to deliver needed quality services efficiently and in a fair and impartial manner. However, when designing these reimbursement methods, the experiences of health care providers with these payment mechanisms are not prioritised. This results in provider payment mechanisms that are inefficient, costly, and limited in coverage of needed services. To bridge this gap, we set to find out the experiences of private-for-profit, faith-based, and public health care providers with capitation and fee-for-service (FFS) payment mechanisms in Kenya.

Methods: We conducted a qualitative study in two administrative regions (counties) in Kenya between September and December 2017. Data was collected using 29 semi-structured interviews with 29 health workers who were members of the health management team in six health facilities (two private-for-profit, two faith-based and two public facilities). The interviews explored health care providers’ experiences with capitation and fee-for-service payments, characteristics of payment methods that they considered important, and influence of the reimbursement mechanisms on service delivery. A framework approach was utilised in data analysis while also including emergent themes after familiarisation. Then, data was indexed, charted, mapped and interpreted.

Results / Discussion: The positive experiences that health care providers had with capitation and FFS payments are that they viewed them as good revenue sources. FFS payment amounts were easily predictable and covered a wide range of services such as advanced diagnostic procedures and surgeries. Negative experiences included: inadequate capitation payment rates, delays in disbursement of capitation and FFS payments, limitation of services covered by capitation, the inability of knowing the number of people registered to their facilities under capitation, online system challenges, and lack of autonomy by public health care providers in re-allocating reimbursed payments.

The most important characteristics of capitation and FFS payment mechanisms according to health care providers were payment schedules, range of services covered, and reimbursement amounts. Finally, if both capitation and FFS were designed according to the preferences of health care providers, then they would be motivated to provide high quality needed services and improve efficiency in delivery.

Conclusion: As Kenya and other Low-Middle Income Countries reorient their health financing policies towards UHC and effectively implement them, then health care providers especially private-for-profit and faith-based should not be left out in the process.
Oral Abstracts

Shita Widodo, Center for Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

Using a contract-based team to support promotion-preventive service at primary care level in East Jakarta

Co-authors: Shita Listyadewi Widodo-Center for Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada ; Likke Prawidya Putri-Center for Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada ; Relmbus Biljers Fanda-Center for Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada ; Sri Yuliani Umasugi-Center for Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada ; Muhammad Ikhsan Jufri-Center for Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada ; Laksono Trisnantoro-Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

Background:
All public primary health care centers (Puskesmas) in East Jakarta have received regional public service agencies (BLUD) designation, which gives them financial management authority to use resources as they wish to reach their goals. Each Puskesmas is mandated to implement promotion-preventive services for its catchment area (approximately 33,000 individual on average.). Capitation funds from the social security managing agency (BPJS) flow to puskesmas, if universal health coverage (JKN) registered participants choose puskesmas as their primary health care provider. Because of their BLUD designation, Puskesmas in East Jakarta may use the capitation funds to implement contract-based (KPLDH) teams to support health promotion-preventive services. The team is paid by salary and local incentives according to work activities and budget absorption.

Methods
We carried out in-depth interviews with 12 stakeholders in East Jakarta including Head of Puskesmas, Head of district health office (DHO), or head of district employment agency. We conducted small group discussions (SGD) with 24 participants divided into general practitioners (GP) group and non-general practitioner groups. We collected secondary data on Puskesmas performance and income.

Results
According to respondents, to reach their health promotion and prevention goals, Puskesmas used contract-based (KPLDH) teams. The teams included doctors, nurses, and midwives, who collect household data regarding public health indicators and identify promotion and prevention needs in the puskesmas catchment area. The teams provide support services e.g. screening for blood pressure for elder, pregnant women, and Tuberculosis screening. Due to this outreach program, Puskesmas are able to meet the performance indicators set by the BPJS, and receive full capitation payment. The KPLDH teams have increased promotive-preventive services and also increased their JKN registered participants through outreach. In other districts, most puskesmas are not BLUD, and they struggle to achieve the capitation performance indicators and they depend on DHO funds to support promotive-preventive care.

Discussion/Conclusion
Puskesmas in East Jakarta were enabled by BLUD status, local regulations and capitation funds to meet performance targets. The BLUD status allows them flexibility to use their funding to hire KPLDH teams and customize their outreach to the local population. Puskesmas succeeded in increasing the number of participants in JKN and improving health promotion and preventive services due to the support of a contract-based team. Increasing the number of BLUD designated puskesmas in other districts may help Indonesia better achieve its health promotion and prevention targets.
Oral Abstracts

Annie Haakenstad, Harvard T.H. Chan School of Public Health

Assessing financial risk protection by disease in the context of health system reform: Equity and NCDs

Co-authors: Annie Haakenstad-Harvard T.H. Chan School of Public Health; Gene Bukhman-Harvard Medical School; Matthew Coates-Harvard Medical School; Andrew Marx-Harvard Medical School; Margaret McConnell-Harvard T.H. Chan School of Public Health; Stephane Verguet-Harvard T.H. Chan School of Public Health

Background: Since 2000, major reforms focused on financial risk protection were undertaken in some of the largest health systems. Programs such as Seguro Popular in Mexico, the National Rural Health Mission in India, and New Rural Co-operative Medical Scheme in China aimed to expand access and improve financial risk protection, with a focus on the poor. However, these reforms were designed primarily considering maternal and child health (MCH) and infectious diseases, not the non-communicable diseases (NCDs) rapidly becoming the leading cause of death and disability in developing countries. We currently know little about how well people are protected from the financial risks of NCDs, how that contrasts with other disease areas, and whether health reforms have exacerbated the financial risks associated with NCD care.

Methods: Our data consist of the 2002-2004 World Health Survey (WHS) and the 2007-2010 Study on Aging and Adult Health (SAGE). We estimate the catastrophic health expenditure (CHE) associated with broad disease areas in 39 countries using unique questions in these two surveys. We assess changes in CHE by disease in China, Ghana, Mexico, India, Russia, and South Africa. We employ machine learning methods to model health care utilization by disease. Focusing on differences between the poor and non-poor, we examine how utilization and OOP expenditure patterns differ across the six SAGE countries and the different health system reforms.

Results: In 2002-2004, 43.6% (95% UI: 42.0-45.8%) of CHE cases were associated with high fever, severe cough or diarrhea; 4.9% (4.4-5.3%) with MCH; and 4.2% (3.8-4.6%) with heart disease. By 2007-2010, the CHE associated with a major NCD – heart disease – increased substantially, including in countries with health reforms focused on improving financial risk protection. Outpatient visits per user, costs per visit and annual OOP per person were higher for NCDs than communicable causes across almost all SAGE countries. The NCD poverty gap is also 1.6-7.4 times larger than the communicable poverty gap in these settings.

Discussion: Even where health systems were reformed to improve financial risk protection, NCDs are putting people at substantial financial risk. We show this has implications for equity: the poor who use NCD care incur financial hardship and potentially face long-term repercussions for financial well-being. As the NCD burden rises, emphasizing these diseases alongside the health areas traditionally stressed in developing countries will be key to reform that catalyzes progress toward universal health coverage and alleviates health-driven impoverishment.
Impact of a national integrated care programme for multimorbid patients: Lessons from Taiwan’s Family Doctor Plan

Co-authors: Li-Lin Liang-National Sun Yat-sen University

The complex health needs of individual patient with multiple chronic conditions (i.e. multimorbid patients) have posed challenges to health care systems. Different integrated/comprehensive care programmes have been proposed, mostly in the North America and Europe, to overcome such challenge. There seems to be less discussion of policies on multimorbidity in Asian than in Western countries. Moreover, related literature shows that for western countries, evidence on the effectiveness of integrated care programmes for multimorbid patients is still insufficient. The present research helps to fill the gaps in policy discussions and research literature by investigating the impact of Family Doctor Plan (FDP) introduced by Taiwan National Health Insurance Administration (NHIA).

FDP is a supply side intervention that aims to integrate primary care with specialized treatment so as to promote patient-centeredness. It targets high-cost and high-need patients, most of whom have multiple chronic diseases. Under FDP, local clinics form community health care groups and cooperate with at least one hospital in the neighbourhood. Each group receives performance payments for achieving quality targets or cost-saving on patients covered by FDP.

Because participation is voluntary for physicians, and physicians are allowed to select their own patients (although NHIA also assigns patients to them), selection bias may arise both at the institution and patient level. To tackle this issue, this study combines a triple difference method with propensity score matching in evaluating the program effects. This strategy generates three comparison groups, which allow us to obtain average treatment effect on the treated, along with three other effects: (a) the spillover effect, (b) the effect of other policies on multimorbid patients, and (c) the effect of systematic shocks on all patients. Data used are provided by NHIA, from 2010 through to 2014.

The results show that after the program was introduced, the average number and expenditure of outpatient visits increased. The average number of admissions, the expenditure of inpatient care, and the length of hospital stay all decreased. Reduction in hospital utilization may be an indication of quality improvement in outpatient care. Moreover, reductions in inpatient expenditure outweigh increases in outpatient expenditures, suggesting that the program may generate cost savings on the whole. However, the results show little impact of FDP on mortality rates for multimorbid patients. The present study provides policy recommendations for improving health outcomes of multimorbid patients, and discusses facilitators and barriers in relation to health care integration under FDP.
Sandeep Maharaj, The University of the West Indies

A Contextual Model for Healthcare Sustainability – A case study of the Chronic Disease Assistance Programme in Trinidad and Tobago.

Co-authors: Sandeep B Maharaj-The University of the West Indies ; Gour Saha-Arthur Lok Graduate School of Business

Within the Caribbean, Trinidad and Tobago has reported the highest morbidity and mortality rates for CNCDs, maintaining a steady state post implementation, in 2005, of the Chronic Disease Assistance Programme (CDAP). This study seeks to develop upon Olsen 1998 open system theory for healthcare sustainability, which identified the constructs which impact upon sustainability however we endeavour to identify the mechanism by which they interact to create a sustainable system.

A mixed-method case study of a healthcare intervention (CDAP) was used to investigate the strength of legitimacy (ability to provide acceptable levels of care) and viability (ability to provide affordable care to patients) of the implementing organization and the moderating effect of readiness (ability to adapt with the changing environment) for sustainability. Legitimacy was a product of the organizations strategy, viability a product of organizations capacity to deliver and readiness was derived from the organization awareness of the changing environment.

To ensure a legitimate organization the following strategies were gained from the literature- communities of practice, self-care management and risk group segmentation. While critical capacities were found to be leadership, healthcare information system, human resources and financing.

A Sample of 161 pharmacies registered in the CDAP program was surveyed to test four hypothesized relationships among the constructs in creating sustainability. The levels to which each of the above mentioned strategies, capacities, and stakeholder’s awareness of the contextual environment and the performance of the programme were measured. A qualitative survey of members of the Ministry of Health was also done to gain further insights into the issues affecting CDAP.

Legitimacy of the organization and its viability were found to have the greatest impacts upon CDAPs ability to be sustainable. However readiness which is a multilevel construct was found to not have a great impact on the health systems sustainability.

Readiness is important for sustainability but must be responsive to environmental conditions, from which organizations obtain legitimacy and viability. Varying configurations of legitimacy and viability impact the sustainability of the organization in different ways. Activities of the parent organization as well as general stakeholder expectations influence the legitimacy, viability and sustainability of healthcare implementing organizations.

The study provides guidance to leaders of healthcare intervention organizations to proactively improve the sustainability of their organizations by aligning the internal operations to meet societal expectations.
Health benefits and financial risk protection from primary prevention of cardiovascular disease in Addis Ababa, Ethiopia: An extended cost-effectiveness analysis

Co-authors: Mieraf Taddesse Tolla-Harvard T.H.Chan School of Public Health; Mahlet Kifle Habtemariam-Harvard T.H.Chan School of Public Health and Formerly, Ministry of Health of Ethiopia; Øystein Ariansen Haaland-University of Bergen, Norway; Jan-Magnus Økland-University of Bergen, Norway; Ole Frithjof Norheim-University of Bergen, Norway and Harvard T.H.Chan School of Public Health; Kjell Arne Johansson-University of Bergen, Norway

Background: The burden from cardiovascular disease (CVD) is growing at an alarming rate in Ethiopia, especially in urban settings such as the capital Addis Ababa. Coverage of health insurance is very low in Ethiopia—7% in 2014. Therefore, out-of-pocket payments for prevention and treatment of CVD represent a substantial financial risk to households in Addis Ababa. 27% of households that sought CVD services suffered catastrophic health expenditure (CHE) in 2015—spending 10% or more of households’ annual income on CVD care. The financial burden disproportionately affected the poorer and people outside Addis. We evaluated the expected health benefits, financial risk protection, and provider cost of the universal public finance (UPF) of primary prevention among individuals with an increased absolute risk of developing CVD events in the next 10-years in Addis Ababa, Ethiopia.

Methods: We used the extended cost-effectiveness analysis methods to estimate the expected health (in disability-adjusted life years (DALYs) averted) and financial risk protection gains (in CHE cases averted) afforded by the policy disaggregated by income quintile. The proposed UPF policy would provide a combination of aspirin, antihypertensives, and statins to individuals having > 5%, > 15%, > 25%, and > 35% absolute risk of developing a CVD event during the next 10 years free of direct medical costs at primary health care level.

Findings: In total, the UPF policy would avert about 5,800 DALYs per year. The DALYs averted at each risk level ranged from 1,180 (at >25%) to 2,240 (at >15%) and were distributed as Q1: 22%; Q2: 18%; Q3: 24%; Q4: 26%; and Q5: 10%. In addition, about 850 cases of CHE would be averted by the policy in total: the number progressively increasing from 96 at > 5% risk level to 394 at > 35% and with a distributional pattern that favors the poorer: 23% (Q1), 20% (Q2), 21% (Q3), 23% (Q4), and 13% (Q5). Moreover, the policy would avert US$ 1.1 million on private OOP expenditure in total with an estimated total annual cost of US$ 1.9 million per year to the government for all these gains.

Conclusion: The UPF policy would afford significant health and financial risk protection gains that seems to disproportionately favor the poorer households. Therefore, UPF of medical prevention of CVD is an attractive strategy worth considering for inclusion in the essential health benefits package in Ethiopia as it addresses key health system objectives including financial risk protection and distributional concerns, in addition to its cost-effectiveness.
José Bispo Júnior, Federal University of Bahia

Performance of Primary Health Care in multisectoral care: experiences of the Brazilian health system

Co-authors: José Patrício Bispo Júnior-Federal University of Bahia; Diane Costa Moreira-Federal University of Bahia

Background- Comprehensive Primary Health Care (PHC) supposes the encouragement of community development and multisectoral articulation ability. Integration with other sectors fosters an approach focused on the social determinants of health. The study aimed to analyze the experience of PHC in Brazil in developing multisectoral actions, where we sought to identify advances and challenges towards comprehensive PHC.

Methods- This is a multiple case study, with a qualitative approach, performed in six towns in the Northeast region of Brazil. The data sources were: (1) In-depth interviews with 40 professionals from the Family Health Teams, 43 professionals from the Family Health Support Centers, 43 community health workers and 45 users; (2) Field observations made between March and December 2017. We used an analytical matrix developed based on the model of the social determinants of health. Results- The results showed important advances regarding the development of multisectoral actions. PHC professionals organize work not only in the development of clinical actions, but also articulate activities with community and government institutions to cope with the social determinants of health. The actions are mainly developed with the following areas: (a) Social Assistance, with emphasis on vulnerable populations and income transfer programs; (b) Education, with a focus on the nutritional status of children and sexual education of adolescents. Nevertheless, we have identified difficulties such as: high demand from PHC centers; resistance of other sectors in developing joint actions; and low adherence of the population to health promotion activities. The Brazilian experience reveals that the establishment of the Family Health Support Centers, with support staff composed of several professional categories, such as social workers, nutritionists and psychologists, have broadened the articulation with other sectors and strengthened the work of the PHC teams about the social determinants of health. Discussion/Conclusion- In Brazil, PHC is based on a comprehensive concept of primary care. However, the results show that multisectoral actions are not fully developed in line with the recommendations of Alma-Ata. The high social inequality, distrust of the populations towards the health promotion actions and institutional resistance emerge as great challenges. The approach about social determinants of health is complex in nature and requires the mobilization of diverse social segments. The work of the Family Health Support Centers is an important tool to articulate multisectoral actions, provide comprehensive care and advance towards social development.
Whether subsidizing construction of toilet is a sustainable solution for reducing open defecation in rural India? An Impact evaluation of Swachh Bharat Mission

Co-authors: DEBRASREE BOSE-University of Calcutta; ARIJITA DUTTA-University of Calcutta

Health systems research has strongly identified the inter-linkages of health sector with other areas, including sanitation and drinking water. The SDG7 pathway through creating access to sanitation has been identified as a strong multi-sectoral initiative in reducing a huge disease burden among developing countries. In this connection, India reiterated her policy implementation on construction of toilets with the launch of Swachh Bharat Mission (SBM). The subsidy for toilet construction among below-the-poverty-line households has been raised with the assumption that open-defecation results only from low access to improved sanitation facilities. The contradictory evidences of massive progress in toilet construction, along with persistence of alarming incidence of open defecation in rural India directly questions the basic tenant behind the program. Therefore, it is imperative to study the impact of partially or fully subsidized constructions of household toilets (input) on elimination of open defecation (outcome) across different income groups for a correct evaluation of the program.

The paper uses Difference-in-Difference (DID) estimation technique to capture the change in outcome after SBM across 630 districts of India. The districts have been segregated into treated and control groups according to intensity of the program. The outcome variable is defined as percentage of Gram Panchayats (GP) declared open defecation free (ODF) in a district.

Greater program intensity on self-construction by APL households (through more investment in awareness) across districts revealing significantly higher improvement in outcome than that of subsidized construction by BPL households, though it is interesting to note that pre-intervention difference of ODF shares are almost equal for both the income categories. To validate the robustness of findings, a new treatment variable has been formulated incorporating difference in program intensity between APL and BPL households within a district. The DID estimate strongly suggests that districts with higher focus towards APL households are likely to expand ODF zones at a greater extent as compared to that of BPL households.

The results indicate that subsidized constructions by BPL households are doing well in increasing the statistics of access to toilet in rural India but actually playing little role on elimination of open defecation which questions the subsidy mechanism as well as sustainable usage of toilet constructed through subsidy. Though the program might have unleashed better niche in creating vertical equity in terms of economic criterion, the sustainability of the program is questioned. A deep dive into the allocation of funds for construction certainly needs to be revisited.
AKINOLA OLUWOLE, SIGHTSAVERS INTERNATIONAL, NIGERIA COUNTRY OFFICE

Revitalising multi-sectoral approaches for the delivery of health interventions: Bridging the gap between the health and education sectors

Co-authors: AKINOLA STEPHEN OLUWOLE-SIGHTSAVERS INTERNATIONAL, NIGERIA COUNTRY OFFICE; LURET LAR-SIGHTSAVERS INTERNATIONAL, NIGERIA COUNTRY OFFICE; OLUWATOSIN BABATUNDE ADEKEYE-SIGHTSAVERS INTERNATIONAL, NIGERIA COUNTRY OFFICE; SUNDAY ISIYAKU-SIGHTSAVERS INTERNATIONAL, NIGERIA COUNTRY OFFICE; JAMES YASHIYI-SIGHTSAVERS INTERNATIONAL, NIGERIA COUNTRY OFFICE; RUTH DIXON-SIGHTSAVERS INTERNATIONAL, UK; KIM OZANO-LIVERPOOL SCHOOL OF TROPICAL MEDICINE, UK; SALLY THEOBALD-LIVERPOOL SCHOOL OF TROPICAL MEDICINE, UK; LAURA DEAN-LIVERPOOL SCHOOL OF TROPICAL MEDICINE, UK

Background

SDG 3, indicator 3.3, focuses on the control of neglected tropical diseases (NTDs), whilst SDG 4 focuses on enhancing quality education for all. Control of NTDs, specifically schistosomiasis and STH present a challenge in many LMICs to educational attainment and ultimately the SDG3 goal. WHO recommends that multi-sectoral action through school based deworming programmes is the most effective strategy to ensure sustainable health interventions in schools and enable shared (health and education sector) goals of social development. This abstract critically examines the intersectoral working relationships and gaps between the health and education sector in a school based NTD health intervention in Ogun and Kaduna state, Nigeria, making recommendations to support equitable and effective cross sector collaboration.

Methods

Twelve participatory workshops and twelve interviews were conducted with teachers and key informants in the education sector. Data collection explored involvement and experiences of implementing the school deworming programme, relating to; collaboration with the health sector, training content and delivery, supervision and monitoring and sensitisation and mobilisation of parents and children.

Results

Challenges in programme delivery frequently stemmed from a communication gap between the health and education sector, leading to poor programme planning, de-motivation of teachers and disengagement from communities. Communication gaps resulted in: school authority refusal to take part in activities due to them taking place during exam time. Disengagement and lack of ownership from policy makers in the education sector; and inadequate training and health sector support for teachers, resulting in knowledge gaps in health communication and side-effect management. To overcome communication and collaboration barriers, teachers requested that comprehensive training, supervision and parental sensitisation were delivered in partnership with the health sector in order to build their capacity to deliver health interventions within schools and gain respect and acceptability from parents. The innovative use of existing education structures such as school based management committees and parent teacher associations was also emphasised as effective in supporting community mobilisation and education.

Discussion and Conclusion

There are clear communication and implementation gaps between the health and education sector which has negative consequences for school based deworming in Nigeria. Stronger joint planning and implementation across the sectors is required to build trust, ownership and sustainability of health interventions in schools. A strong commitment and desire from the education sector to enhance engagement with the health sector as well as improving collaborative intervention governance presents a strong platform for multi-sectoral action on health.
Evaluating and strengthening the sustainability of school-based NTD interventions in India, Kenya and Ethiopia: working across health and education sectors

Co-authors: Umang Prabhakar-Dalberg; Christine Ribeiro-Dalberg; Sasha Zoueva-Children's Investment Fund Foundation; Sahra Mohamed-Children's Investment Fund Foundation; Manpreet Singh-Bill & Melinda Gates Foundation

Sustainability is a common problem for donor funded health programmes, particularly for school-based deworming interventions as responsibility for implementation sits between ministries of health and education.

The Children’s Investment Fund Foundation commissioned Dalberg to evaluate the sustainability of national deworming programmes in India and Kenya, as well as across NTDs in Ethiopia, and provide strategic recommendations to institutionalize processes within the governments.

Here we will present findings from the assessments and demonstrate the utility of a generalizable tool that can be used to assess and strengthen sustainability of other multi-sectoral programmes. The focus of the tool is not to evaluate programmatic outcomes, but rather to be forward-looking – allowing health programme managers/implementers and policy-makers to optimally plan for longer-term government ownership of NTD programming.

The target audience is policy-makers, health managers, project implementers in low- and middle- income countries and donors funding multi-sectoral health programmes with the long-term goal of institutionalization within government.

We developed a theory of change from a literature review and feedback from key stakeholders. It defines sustainability as ‘governments own and are accountable for all aspects of a quality, evidence-based programme’. It has six components: Policy & Leadership, Budgets, Delivery Systems, Organization Capacity, Partnerships, and Evaluation & Adaptation. This framework was applied in the three countries, with adaptations to ensure relevant indicators for each.

Our qualitative evaluation used semi-structured interviews; informants were initially identified using purposive sampling and subsequent snowball sampling, totaling 32 in India, 27 In Kenya, and 28 in Ethiopia. Coded interviews were used to score the components.

Across all countries, policy & leadership was strongest, with top-down buy-in and formal policies in place. However, when it came to delivery and organizational capacity, there was a clear lack of policy implementation on the ground and limited evaluation occurring. Domestic resource mobilization and partnerships varied across countries, depending on the level of resources and structures.

Using a holistic approach, our tool is able to assess whether a programme can continue to deliver high coverage and high-quality services without external support, and does not focus exclusively on financial sustainability. External funders can encourage greater sustainability by investing in government capacity from the outset, and by creating systems and structures within government rather than funding external secretariats to implement programmes. It also can be used to assess the sustainability of any multi-sectoral or NTD program, with some context-specific adaptation required.
“Subsidized vouchers for private services improved continuum of care even after public sector fees were removed: an evaluation of the Kenya maternal health voucher program”

Co-authors: Mardieh Dennis-London School of Hygiene and Tropical Medicine; Timothy Abuya-Population Council, Kenya; Oona M.R. Campbell- London School of Hygiene and Tropical Medicine; Angela Baschieri- London School of Hygiene and Tropical Medicine; Lenka Benova- London School of Hygiene and Tropical Medicine; Matteo Quartagno- London School of Hygiene and Tropical Medicine; Ben Bellows - Population Council, Zambia

Background
From 2006 to 2016, the Kenyan Government implemented a reproductive health voucher program in select counties, providing poor women subsidized access to public and private sector care. In June 2013, the government called for free maternity services to be provided in all public facilities. The concurrent implementation of these interventions presents an opportunity to provide new insights into how users adapt to a changing health financing and service provision landscape.

Methods
We used data from three cross-sectional surveys to assess changes over time in use of 4+ antenatal care visits, facility delivery, and postnatal care among a sample of predominantly poor women in six counties. We also examined use of the recommended package of maternal care, comprising 4+ ANC visits starting in the first trimester, facility delivery, and postnatal care within 48 hours of delivery. We conducted a difference-in-differences analysis to estimate the impact of the voucher program on these outcomes, and whether program impact changed after free maternity services were introduced.

Results
Between the pre-intervention/rollout phase and full implementation, the voucher program was associated with a 5.5% greater absolute increase over time in use of facility delivery and substantial increases in use of the private sector services. After free maternity services were introduced, the voucher program was associated with a 5.7% higher absolute increase in use of the recommended package of maternal health services; however, disparities in use of facility births between voucher and comparison counties declined. Increased use of private sector services by women in voucher counties accounted for their greater use of the recommended package of care across the continuum. We did not find any evidence that either financing intervention had an effect on use of antenatal or postnatal care individually.

Conclusions
Our findings show that the voucher program was associated with a modest increase in women’s use of the full continuum of maternal health services at the recommended timings after the introduction of free maternity services. The findings suggest that even when services are free in the public sector, when given a choice of affordable providers, a substantial proportion of women will choose to complement public services with care in the private sector, or exclusively seek care in the private sector. As the government expands the free maternity services scheme, it is imperative to better understand the role of quality of care and other non-financial factors in determining where women seek care.
Community Results-Based Financing: An Innovative Approach for Community Engagement and Health

Laura Ferguson, University of Southern California

Co-authors: Laura Ferguson-University of Southern California; Guenther Fink-Harvard School of Public Health; Chantelle Boudreaux-Harvard School of Public Health; Yaya Jallow-University of Leicester; Menno Mulder Sibanda-World Bank Group; Rifat Hasan-World Bank Group; Project Implementation Committee-National Nutrition Agency & Ministry of Health and Social Welfare, The Gambia

Background

Although financial incentives have been used widely to improve provider performance and to achieve behavioral change among health workers, very little is currently known about the feasibility and impact of financial incentives and health-related performance contracts through direct engagement with communities.

The Government of The Gambia has been implementing a program that combines demand- and supply-side results-based financing (RBF) interventions to improve maternal and child nutrition and health since 2014. The demand-side interventions combine: (i) RBF contracts with communities to increase demand for and utilization of health and nutrition services through counselling and timely referrals for life-saving health services; (ii) conditional cash transfers to individual women to increase utilization of timely antenatal care; (iii) Social and Behaviour Change Communication (SBCC) aimed at promoting behavioural changes and increasing demand to improve household practices related to health and nutrition. Community contracts were designed to incentivize local groups to prioritize health and nutrition, empower communities to implement community development projects, and foster ownership of results and achievements generated.

Methods

A randomized phased-in 2 x 2 design mixed methods impact evaluation is being carried out to assess the project’s impact across different study arms: areas with only supply-side interventions, areas with demand-side only interventions, and areas with both types of intervention, all of which are compared with control areas. At baseline and midline, survey data were collected from approximately 2,400 households and 220 community committees. Multivariable linear regression models were estimated using pooled baseline and midline data to assess the impact of community contracts on targeted behaviours.

Results

Compared to control areas, areas with supply- and demand-side interventions, experienced a significant increase in: uptake of early ANC (p=0.039); referral (p=0.005), accompaniment (p=0.010) and transportation (p=0.004) to health facility for delivery; availability of a system to transport women and children to the health facility (p=0.003); exclusive breastfeeding for 6 months (p=0.006); and availability of soap at the household handwashing station (p=0.013). These effects were generally larger in areas with both supply- and demand-side interventions compared to areas with only the supply-side intervention. Some indicators also improved significantly in demand-side only areas e.g. having a handwashing station in the home (p=0.044); and increased communication between village development committees and health facilities (p=0.020).

Discussion/Conclusions

These findings highlight how existing supply-side focused RBF efforts might be strengthened through community involvement in health and development, including SBCC and possibly RBF-type contracts with communities directly.
Oral Abstracts

Dimitri Renmans, Institute of Development Policy (IOB), University of Antwerp

When the system strikes back. A realist evaluation of implementation fidelity of a PBF intervention in the Ugandan private not-for-profit sector

Co-authors: Dimitri Renmans-Institute of Development Policy (IOB), University of Antwerp; Nathalie Holvoet-Institute of Development Policy (IOB), University of Antwerp; Christopher Garimoi Orach-Makerere School of Public Health, Makerere University; Bart Criel-Institute of Tropical Medicine, Antwerp

Background: Although heavily debated, performance-based financing (PBF) is still on the receiving end of large amounts of donor funds. In Uganda, the Belgian development agency Enabel, in close cooperation with the Ministry of Health, started to implement a PBF scheme in the private not-for-profit sector of Western and Northern Uganda in 2016. We assessed the implementation fidelity of the intervention from a realist evaluation perspective. This is slightly different from a traditional fidelity study. In realist evaluation (RE), fidelity concerns whether the theorized program theory materialized. Our study looks at for whom, in what context and why certain mechanisms did not emerge to the extent expected.

Methods: The study uses the realist evaluation approach combined with insights from systems thinking. We gathered data before the start of the intervention and after one year of implementation. Given the method neutrality of RE we used quantitative surveys among the health workers, semi-structured interviews with the health workers, key informant interviews and observations. The data was analysed according to the theorized program theory and mechanisms, which were constructed based on an extensive literature review, the program manual and key informant interviews at the level of the Ministry of Health, the donor, and the governing authorities of the private not-for-profit facilities.

Results: Our study found that factors related to the pre-existing health care system, the design of the intervention, and the capacities of the stakeholders had an important negative influence on the occurrence of the theorized program mechanisms. In specific, the organization of the health care system and the competition between the government facilities and the private not-for-profit facilities hampered the materialization of several important program mechanisms, created frustration and demotivation and strengthened a pre-existing inequity between facilities.

Conclusion: Because of unaddressed flaws in the organization of the public and private health care sector, the PBF intervention of the Belgian development agency failed to fully deliver on its program theory. Established interests hampered the creation and implementation of a coverage plan which would have mitigated several shortcomings of the intervention. Based on our results, we claim that when a PBF intervention fails to address beforehand certain existing system challenges it will further exacerbate them.
Can Social Impact Bonds achieve better outcomes than traditional financing mechanisms?

Co-authors: Stefanie Tan-London School of Hygiene and Tropical Medicine; Alec Fraser-London School of Hygiene and Tropical Medicine; Nicholas Mays-London School of Hygiene and Tropical Medicine

Background

Social Impact Bonds (SIBs) are a funding mechanism where governments enter outcomes-based contract with private investors to provide up-front financing for interventions, which is only reimbursed if pre-determined targets are met. Proponents argue that SIBs allow governments to work with the private sector to support promising but untested interventions, while only paying for successful programming, ensuring greater accountability, measurability and value for money. Critics suggest that SIBs have the potential to fragment health services through the introduction of private sector interests that can undermine public accountability and transparency. Empirical evidence from pay for performance suggests that performance monitoring regimes can improve outcomes and the collection of robust impact data but may result in adverse behaviour including client risk-selection, or ‘gaming’ to meet outcomes.

Methods

This paper presents findings from an evaluation of five SIBs in UK Health and Social Care that assesses whether SIB contracts achieve better outcomes than alternative financing mechanisms. We use a qualitative, case study approach to examine the impact of private sector financing on five SIB ‘Trailblazer’ sites. We draw on interviews and documentary analysis with commissioners, investment managers, financial intermediaries, investors, and service providers to understand how private sector financing affected service delivery.

Findings

The findings suggest that SIBs enable funding for novel preventative health interventions, or the delivery of personalised, long-term services, that might not otherwise be funded. We identified three main challenges: 1) the focus on outcomes, increased data monitoring, and performance management resulted in stronger managerial pressures to meet outcomes, but potentially adverse behaviour such as cream-skimming in one site; 2) that providers were unprepared for potential sanctions by financial intermediaries and investment managers for performance below agreed outcome targets in two sites; and 3) SIBs contracts may result in a suboptimal allocation of risk where one party bore a disproportionate level of contractual, financial, or reputational risk in three sites.

Discussion

SIBs may be a useful policy tool for upfront funding of public services by private investors, but should be approached with appropriate caution given the potential for adverse provider behaviour, investor sanctions, or suboptimal allocations of risk between commissioners, providers and investors – and the role of financial intermediaries in brokering relationships. This suggests that more research is needed to understand the potential implications of SIBs before scaling up to larger contract values or applying SIB contracting to a wider range of services.
Sustaining the Dominican HIV Response through Integration with Social Insurance

Co-authors: Jonathan Cali-Health Finance and Governance Project, Abt Associates; Claudia Valdez-Health Finance and Governance Project; Nassim Diaz-Health Finance and Governance Project, Abt Associates; Maria Castillo-Consejo Nacional para el VIH y el SIDA; Rosa Sanchez-Consejo Nacional para el VIH y el SIDA; Leticia Martinez Martiñón-Superintendencia de Salud y Riesgos Laborales; Pedro Ramirez-Superintendencia de Salud y Riesgos Laborales; Carolina Piña-United States Agency for International Development, Dominican Republic; Josef Tayag-United States Agency for International Development, Washington DC

Background

The HIV response in the Dominican Republic (DR) is not integrated with the country’s health system and relies on international assistance, risking its long-term sustainability. The National Strategic Plan calls for coverage of HIV services, including antiretrovirals (ARVs), by the public-private Dominican Social Insurance System (DSSS). Barriers include lack of an integrated supply chain and legal mechanisms for financing ARVs through the DSSS while maintaining central procurement.

Methodology

The study team reviewed regulatory documents, conducted stakeholder interviews, and estimated potential efficiencies from supply chain reforms. Other vertical programs in DR were reviewed to identify best practices for supply chain management and integration with the DSSS.

Results

The study estimated the HIV program could reduce annual ARV warehousing and transportation costs by 40% (US$ 163,115) by storing ARVs in public warehouses with existing capacity rather than contracting-out, and by integrating ARV transport with the national distribution network.

The study recommended three options for modifying financial flows to facilitate DSSS coverage of ARVs: 1) Creating an ARV fund which would receive from the Social Security Treasury (TSS) the portion of the per capita corresponding to the cost of ARVs for insured patients, and transfer the funds to the National Procurement Agency (PROMESE/CAL) for central procurement. The fund would receive money for ARVs for the uninsured from the Ministry of Health (MSP); 2) Ministry of Finance would receive funds for the insured population from TSS, and withhold from MSP the amount necessary for purchasing ARVs for the uninsured, and 3) Insurers receive the full per capita from TSS, and then reimburse PROMESE/CAL the cost of the centrally-procured ARVs for their affiliates. MSP would pay PROMESE/CAL directly for the uninsured population. The study also assessed the feasibility of each option and identified the regulatory reforms needed for implementation.

Conclusions

The team is weighing the trade-offs of each option and will present a proposal with elements of options 2 and 3 to MSP and Social Security Council for approval. DSSS coverage of ARVs would guarantee sustainable financing that automatically increases as treatment scales up and declines as the epidemic subsides. DSSS coverage would liberate MSP resources for prevention, facilitate private insurance contributions to ARV costs, provide an example for integrating other disease programs, and reduce reliance on international assistance. This study charts a path for sustaining DR’s HIV program and provides a model for other countries for covering HIV services through social insurance.
Factors associated with Intention Non-Affiliation to Popular Health Insurance in Mexico

Background: The Popular Health Insurance (PHI) in Mexico faces a new challenge due to the fact that a large proportion of the population does not request or conclude their re-affiliation process at the end of the three years of coverage, which generates the loss of their affiliation and which in turn contributes to the persistence of the population without a health insurance scheme. Objective: Identify the main factors that influence the intention of the population to not re-affiliate to Popular Health Insurance in Mexico.

Methods: An observational, transversal, analytical study was carried out with the National Health and Nutrition Survey (ENSANUT) 2012 data, that included 20,376 households affiliated to Popular Health Insurance. The intention of re-affiliation was measured and the reasons why the population affiliated to PHI would not re-affiliate. The characteristics of the head of the household and of the dwelling, the availability of resources for health, characteristics of the environment and penetration of the PHI were included as explanatory variables. A multivariate logistic regression model was used to determine the factors associated with the intention of re-affiliation.

Results: The prevalence of the intention not to re-affiliate to PHI at the national level was 3.46% [IC95% 3.06-3.91]. Households located in the richest quintile [ORA 2.42; IC95% 1.53-3.82] and in urban localities [ORA 1.45; IC95% 1.07-1.95] are more likely that the head of the household reports the intention of not re-affiliating with to PHI. Likewise, the head of the household with the greatest number of years of affiliation to PHI and who have not used the services offered by PHI providers [ORA = 1.26, IC95% 1.09-1.46] were more likely to report no intention to re-affiliate. The main reasons for non-re-affiliation were the shortage of medication (22.6%) and the inadequate personal care of health personnel (17.7%).

Conclusions: The main reasons for non-re-affiliation are related to the organization of health services, this lower satisfaction not only discourages the use of health services but also the continuity of affiliation to PHI. To achieve the goal of providing coverage to 25% of the Mexican population that, according to ENSANUT 2012 still does not have access to health insurance, PHI will have to improve and regulate the quality of the health services it hire and establish strategies to guarantee the medical supplies.
Rethinking collaboration: Developing knowledge partnerships to address under-5 mortality in Mpumalanga province, South Africa

Co-authors: Oghenebrume Wariri 1. Medical Research Council Unit The Gambia, at the London School of Hygiene and Tropical Medicine; 2. Centre for Global Development and Institute of Applied Health Sciences, University of Aberdeen, Scotland UK; ; Lucia D’Ambruoso-2. Centre for Global Development and Institute of Applied Health Sciences, University of Aberdeen, Scotland UK; 3. Umeå Centre for Global Health Research, Epidemiology and Global Health, Department of Public Health and Clinic Medicine, Umeå University, ; Peter Byass-2. Centre for Global Development and Institute of Applied Health Sciences, University of Aberdeen, Scotland UK; 3. Umeå Centre for Global Health Research, Epidemiology and Global Health, Department of Public Health and Clinic Medicine, Umeå University, ; Barry Spies-5. Mpumalanga Provincial Department of Health, South Africa; ; Steve Tollman-3. Umeå Centre for Global Health Research, Epidemiology and Global Health, Department of Public Health and Clinic Medicine, Umeå University, Sweden; 4. MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health; Rhian Twine-4. MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, University of the Witwatersrand, South Africa; ; Maria Van Der Merwe -5. Mpumalanga Provincial Department of Health, South Africa; ; Sophie Witter- 7. Institute for Global Health and Development, Queen Margaret University, Scotland UK

BACKGROUND: In South Africa, a complex and socially patterned burden of avoidable mortality exists and continues to evolve. Despite over 20 years of progressive health policy, implementation is beset with challenges in a dysfunctional public system with scarce resources. Our aim was to develop a research process relevant for use in health systems, generating and feeding back evidence of practical relevance on the social determinants of avoidable ill-health and on policy implementation.

METHODS: Drawing on the health policy and systems research paradigm, we developed an approach to co-produce evidence with and for the provincial and district health system in Mpumalanga province, South Africa. With input from the Provincial Directorate for Maternal, Child, Women and Youth Health and Nutrition (MCWYH)&amp;N on priority topics, we developed quantitative and qualitative evidence on under-5 mortality with the MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt). We used Verbal Autopsy (VA) to quantify levels, causes and circumstances of deaths, and Participatory Action Research (PAR) to gain local knowledge on lived experiences and priorities for action. Two engagement workshops were held to review the VA/PAR evidence with the district and provincial Directorates of MCWYH&amp;N, Non-Communicable Diseases, Primary Health Care, and Research and Epidemiology. With investigators, stakeholders analysed and interpreted these data, and appraised the process for use in the health system.

RESULTS: Several systems issues were identified: (a) inadequate infrastructure and organisation of services; (b) constrained availability and performance of health workers; (c) frequent policy and programming changes and parallel initiatives; and (d) lack of capacity of the health system to address social determinants. Action agendas were developed to: (a) reduce waiting times through improved clinic organisation; (b) improve response times with organised ambulance services; (c) expand community education on health rights and responsibilities; and (d) develop the process towards multi-sectoral collaboration with departments adjacent to health. The actions ranged from immediate low- and no-cost re-organisation of existing services, to those where responses from higher levels of the system were implied. The process was appraised as acceptable and relevant for use in health systems, and the combination of quantitative and qualitative evidence was viewed as powerful and insightful.

CONCLUSIONS: HPSR informed the development of a knowledge partnership connecting research evidence, here on rural health priorities, with the means for enhanced interpretation, and ultimately, more effective action. Sustaining the partnership is essential to realize gains for health systems strengthening through operationalizing, and learning from, action.
Clara Juarez Ramirez,

Los grupos de ayuda mutua como estrategia novedosa para el apoyo emocional a pacientes de origen Maya que padecen diabetes.

Co-authors:

Objetivo. Conocer la opinión de personas de origen Maya de México participantes en grupos de ayuda mutua (GAM) para enfermos de diabetes, con la intención de conocer su experiencia en el trabajo grupal de apoyo emocional, así como el rol del GAM en el apego al tratamiento.

Antecedentes. ¿Cómo atender la salud mental de la población indígena? Es una pregunta que surgió a partir de los resultados de una investigación que buscaba conocer la experiencia de pacientes de origen Maya que padecían diabetes. La atención a la salud mental es uno de los grandes pendientes para la organización de los sistemas de salud, particularmente es un tema poco abordado en el caso de la población indígena. Los GAM forman parte de la estrategia de atención a los pacientes crónicos, es un recurso que se provee de manera gratuita en los servicios públicos de salud.

Métodos. El diseño de la investigación fue cualitativo. Se realizó una submuestra con 30 casos paradigmáticos, seleccionados por tener algún tipo de complicación por la enfermedad: ceguera, daño renal, amputación de extremidades. Se realizaron entrevistas y registros etnográficos. La información se analizó con Atlas ti y manualmente.

Resultados. La opinión sobre los GAM fue positiva. Las expresiones de angustia emocional fueron manifestadas como “nervios, angustia, miedo”. Las narraciones de personas que han sido amputados por complicaciones de la diabetes son narraciones de trauma y resistencia. El trauma deviene en la discapacidad que representa la amputación para su vida diaria, lo cual genera no sólo más sufrimiento emocional y social, sino también consecuencias para la subsistencia económica debido a la imposibilidad para seguir trabajando. Al depender de la familia, hay un reposicionamiento en el lugar que se ocupa según el género. El GAM provee apoyo emocional a los participantes, el grupo funciona como soporte para tolerar las restricciones al tratamiento y esto mejora el apego.

Discusión/conclusiones. Los GAM pueden servir como una vía para la atención a la salud emocional de los pacientes crónicos, con la debida capacitación al personal de salud se puede mejorar su participación como moderadores de los grupos y posteriormente buscar la autogestión de los GAM a partir de la organización de los pacientes, lo cual es una meta de las terapias grupales.
Effectiveness of strategies for implementing childhood vaccination programs in fragile countries

Introduction

Despite the emphasis on childhood vaccination programs as being the most effective intervention in reducing childhood mortality, millions of children remain unvaccinated globally; the majority of whom live in countries in ‘fragile states’ with crumbling health infrastructure and poor healthcare delivery.

Hypothesis

Due to lack of infrastructure and poor accessibility, fragile countries are more likely to have gaps in the delivery of immunization programs. To get a measure of pragmatic solutions for supporting health systems within these ‘fragile countries,’ it is imperative to understand how existing services operate in these states. Our aim, therefore, was to identify strategies to improve childhood vaccination uptake in ‘fragile’ countries and compare community-based programs for their effectiveness.

Methods

‘Childhood,’ ‘immunization’ and ‘fragile states’ were key concepts identified for systematic literature search, limited to the English language, conducted between January and March 2017 by two independent reviewers. Screening results were compared at three levels and kappa statistics calculated at each level. Cochrane collaboration criteria and Effective Public Health Project tool (EPHPP) were used to assess the risk of bias.

Data extraction included the year of the study, location, setting, study design, characteristics, type of vaccination assessed in the study, the intervention or campaign, control, vaccination outcomes, study limitations and measures of effect (OR, RR) describing an increase in coverage or decrease in dropout and missed vaccination. Random effects model was used to evaluate the effectiveness of vaccination programs.

Results

Twenty-seven studies published between 1996 and 2016 were identified as effective community-level strategies for childhood vaccinations in fragile countries. Kappa for the three levels of screening ranged from substantial to good (0.75, 0.61, 0.58). The identified strategies included: recall and reminder through SMS texts, phone calls, reminder stickers and cards; health education programs; microplanning strategies; monetary incentives. Data was collected from 43,018 participants. SMS text reminders were found to be the most effective intervention (RR 1.32, CI: 1.14 to 1.52).

Discussion and conclusion

Despite the heterogeneity in vaccination coverage and outcomes, the present study was able to identify key strategies to improve the effectiveness of vaccination delivery in fragile countries. Reminders and recalls through SMS texts and phone calls; educating spiritual leaders, youth and care providers; including communities in planning and implementation of vaccination campaigns and integrating childhood vaccinations with animal vaccinations in pastoralist and nomadic communities are effective ways to improve childhood vaccination in fragile countries.
Oral Abstracts

Shehrin Mahmood, icddr,b

Does healthcare voucher provision improve utilization in the continuum of maternal and newborn care for poor pregnant women?: Experience from a quasi experimental study

Co-authors: Shehrin Shaila Mahmood-icddr,b; Mark Amos-University of Portsmouth; Shahidul Hoque-icddr,b; Mohammad Nahid Mia-Unicef; SMA Hanifi-icddr,b; Mohammad Iqbal-icddr,b; William Stones-Malawi College of Medicine; Saseendran Pallikadavath-University of Portsmouth; Abbas Bhuiya-Partners in Population and Development

Background: Improving maternal health is one of the major developmental goals, particularly for developing countries like Bangladesh. Despite the steep fall in maternal mortality ratio over the past decade, it has currently stalled at 196 per 100,000 live births in Bangladesh. Considerable challenges remain in ensuring comprehensive access to maternal care. Since 2007, the country is implementing a voucher scheme as a programmatic response to reducing financial, geographical and institutional barriers, particularly for the poor-pregnant women. However, the effect of the scheme on the continuum of maternal care and the extent to which this extends to newborn care is yet to be explored. With the growing attention of development organizations around the world on ensuring continuum of care to improve maternal, newborn and child health, the current paper analyses the effect of vouchers on the entirety of maternal and newborn care.

Methods: The study was conducted in Chittagong and Sylhet divisions of Bangladesh in 2017. 3,593 women with children aged 0-23 months were interviewed. Cluster analysis was used based on utilisation across the continuum of care. The clusters were regressed on voucher receipt to identify underlying relationship between voucher receipt and care utilization after controlling for other variables. Predicted probabilities of cluster membership were generated to aid interpretation.

Results: The study identified 4 clusters of women based on service utilization. Continuity in service utilization gradually decreased from one cluster to the next. 20.3% women belonged to the highest-utilization cluster maintaining complete continuum of care, whereas 39.3% belonged to the lowest-utilization cluster with intermittent or discontinued use of care. Voucher receipt encouraged utilization of complete continuum of care and reduced probability of belonging to low-utilization cluster. For poor pregnant women, the probability of voucher recipients belonging to the highest-utilization group was higher than that of the non-voucher poor women (36.1% vs. 7.1%). On the contrary, probability of voucher women being in the low-utilization cluster was much lower than the non-voucher women (15.7% vs 51.8%).

Conclusion: Programmatic investments in many developing countries have historically been directed towards financing individual service components. In recent years it has been realized that access to quality healthcare services in pregnancy, childbirth and postnatal period may yield multiple returns on investment. A coherent continuum based approach to understanding care seeking behavior can be anticipated to have substantial policy implications for the design of programmes aimed at improving maternal, neonatal and child health.
Pallavi Mishra, Centre for Chronic Disease Control

Widening the Scope of Health System Governance to Achieve the Goal of Malaria Control with the Help of Public-Private Partnership

Co-authors: Pallavi Mishra-Centre for Chronic Disease Control

Background: Sustainable Development Goals (SDGs) are not just a set of few goals to be achieved within the timeframe. They manifest an entirely new vision and strategies for a better future. These strategies keep human and its future generation at the centre while envisioning, drafting and implementing development policies. One of the grave public health issues, in the era of SDG, is Malaria, which is also known as a disease of poverty. Malaria is one of the communicable diseases severely affected by the climate change. Achieving the goal of malaria control will help in achieving many of targets of the SDGs. The current study has taken the case of Multilateral Initiative on Malaria (MIM) which has worked towards malaria control with the help of community development, localization of knowledge and the ownership among the affected community in the African region. Method: The current study has drawn from the doctoral research carried out between July 2012 and July 2015. The study majorly relies on the secondary sources including published research work on malaria control. The study has adopted case study approach to understanding the operation and functioning of MIM to understand how the scope of governance can be broadened to achieve the goal of malaria control. Result: MIM is one of the Public-Private Partnership which has uniquely focused on three areas of governance which has helped in establishing a health system to cater health needs in malaria-endemic regions in Africa: Ownership; Development of community and; Localisation of Knowledge. In the past decades, the focus of global health initiatives and partnerships have been on curative care by investing on antimalarial drugs and for prevention of malaria insecticide-treated bed nets (ITNs). However, the need of the hour is to develop a health system with the help of PPPs, which can provide need-based care to people. Discussion: The ownership of disease refers to the acknowledgement of the prevalence of disease and making it a part of regular discourse at the policy level rather than treating it on a seasonal basis, which is a characteristic of malaria. It is crucial to foster local scientific community development including in NGOs and CBOs for evidence-based policymaking. Lastly, the emergence of knowledge at the local level is essential for an informed policy. All these components are interlinked. This model of PPP can be replicated in many resource-limited settings of LMICs to control malaria.