

Poster Abstracts



23RD CANADIAN CONFERENCE ON GLOBAL HEALTH · 23^E CONFÉRENCE CANADIENNE SUR LA SANTÉ MONDIALE

OCTOBER 29-31 OCTOBRE, 2017



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Benefit of innovation technology in management of TB and DRTB cases

Rapid diagnostic machines have been made available in Nigeria to test for infectious diseases such as tuberculosis (TB), drug resistant TB, and HIV. Yet test results were not reported in real-time due to communication delays, and oversight of diagnostic machines and their management was limited. Stock outs of test cartridges, quality assurance, or machine errors and misuse were not properly documented or resolved in a timely manner

Methodology: Systemone developed and piloted GxAlert in 2013. An internet-based solution that helps to improve testing by automatically reporting test results for TB and MDRTB in as soon as they are ready to the GxAlert dashboard. It delivers real-time disease surveillance data to points of care for treatment initiation. To understand the scale of this mHealth technology, We used data from GxAlert in 2014 and 2015. The data are disaggregated by facility and state and identify for each test. We then obtained NTB program data with state level reported tests, MTB cases, RIF cases, and HIV prevalence from 2014 and 2015. The NTB program data come from all facilities in all states. Health facility-specific results are provided. Data cleaning and analysis will be done using Microsoft Excel and Stata 12 statistical software.

Results: A total of 37 states were included in both GxAlert and NTP data by 2015. GxAlert data is also disaggregated at the health facility level. In 2014, 83 facilities reported to GxAlert from 36 states, and in 2015, 177 facilities reported to GxAlert from 37 states.

Table Description of GxAlert and NTP Data.

Conclusions and recommendations: The findings of this analysis show an added benefit of the GxAlert system as its reported tests and cases are at comparable levels with the NTP or higher. Furthermore, the coverage of GxAlert is only a proportion of health facilities compared to all health facilities reporting to the NTP. The GxAlert system shows that there is management and disease monitoring benefits to a real-time database system that not only provides information on complete tests and cases, but also on test errors and quality assurance efforts

ALLISON, Jill. Memorial University of Newfoundland, Canada

The importance of community collaboration in Safer Birth Programs in rural and remote Nepal.

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Introduction: Nepal's Safe Motherhood Initiative has been in progress since 1997, shaping its programs in a shifting political and constitutional climate. Recent national health plans include an emphasis on Institutional Births and development of community birthing centers. However, decision-making around birth and improving access to safer births in rural Nepal requires flexible strategies that account for a complex family dynamic that draws on many aspects of local culture.

Methods: This paper draws on qualitative research that includes interviews and focus groups with health care providers, Mother's Groups, Female Community Health Volunteers (FCHVs) and local government decision-makers, participant observation, and community based workshops. Our team consisted of local, Nepali and expatriate health care providers and social science researchers. We present perspectives of health care providers and community leaders in rural remote Mugu District and community members from one Village Development Committee to highlight diversity.

Findings: Preliminary findings indicate that government programs and provider discourses that encourage institutional births in even in the most remote areas of the country must also account for the complexity and decision-making processes at the local level. Rooted in government training objectives, providers cite the need for educating women about safe birth preparedness and birthing centres through Mothers' Groups and FCHVs, and developing waiting homes for expectant mothers. Women in some communities argue that they are making informed choices to deliver at home. Providers describe shyness and lack of women's agency around decision making and use of finances. Women identify lack of trust in consistent 24 hour care in the centres, lack of care providers' cultural understanding and communication, lack of transport options, and fear of walking to health care facilities at night. Health care providers identify elements of community context as part of the challenge rather than part of the opportunity to reach communities.

Conclusions: We argue that culturally responsive approaches based on local scenarios are necessary to build trust, improve uptake and ensure no mothers are left behind in accessing safer birth. This is especially important in the most remote and culturally distinct areas, such as Nepal's Karnali region. In addition to emphasis on trained attendants, institutional birth, and resourced maternity waiting homes where feasible, health promotion and birth preparedness planning must be contextually informed and based on a deeper understanding of local values. Safe birth strategies must include communities as assets and partners in order to bridge the gap between ideals and reality.

ALMUJADIDI, *Basmah. McGill University , Department of Family Medicine, Canada

The role of primary care physicians and the nature of inter-professional collaboration in addressing the social determinants of health in a large university teaching hospital in Saudi Arabia

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Issue/problem: While the WHO Commission on Social Determinants of Health calls for action at multiple levels to improve living conditions, particularly among the most marginalized, even wealthy countries can face challenges in reducing health inequities. Health workers at the frontlines can often observe firsthand how living conditions and structural factors lead to disease and even premature death. Yet, more empirical evidence is needed on how they can mobilize wider change to create more supportive environments for health.

Objectives and Methods: We conducted an exploratory sequential qualitative study from June to December 2016. The aim was to explore what primary care physicians and social workers at a large university teaching hospital in Riyadh consider the main social challenges faced by patients, as well as suggestions on how to mobilize wider change to impact the social determinants of health. Purposive sampling was used to identify participants with a range of genders and years since graduation. Semi-structured in-depth interviews continued until data saturation was reached (15 interviews) followed by a single focus group with social workers to better understand the dynamics involved and issues relating to inter-professional collaboration. Data was analyzed using a thematic deductive-inductive approach.

Results: Primary care physicians were aware of the social determinants of health, but broadly fell into two main camps: those who have tried and want to help patients deal with these challenges, and those do not think this is part of their mandate or within their abilities to create wider change. Social workers considered that learning about the local support resources available could help physicians better support patients, yet they were also concerned about defining professional role boundaries and ensuring a collaborative approach to patient care and social accountability.

Lesson to date: While participants are aware that social determinants contribute to the poor health outcomes of their patients, not all health workers are interested in getting involved in addressing these issues. For those who do get involved, it is also important to be sensitive to potential concerns of social workers in terms of role encroachment, which has similarly been described in Western contexts.

Main messages: Further training and support systems are needed to improve the ability of primary health care physicians to address the social challenges of their patients, to collaborate more effectively with social workers and other local partners, and ultimately mobilize broader community action to improve the living conditions of those who are most marginalized.

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Applying a global innovation for equitable action to Canada's north: Analysis of access to assistive technology using WHO's GATE initiative

Issue: Access to assistive technology (AT) has been identified as a facilitator in achievement of the Sustainable Development Goals (SDGs). However, globally, most people who require AT do not have access. The Global Cooperation on Assistive Technology (GATE) initiative was developed by the World Health Organization (WHO) to guide states and other actors in stimulating equitable access to AT. Canada's Northern territories are home to unique intersecting socio-political and physical features that produce different AT needs from other regions, including a small and predominately Indigenous population, colonization and ongoing legacies of oppression and racism, large geographic area with cold climate, and lack of accessible infrastructure.

Objectives: The purposes of this paper are to: (1) apply the GATE Priority Assistive Products List (APL) to Canada's Northern territories, and (2) critically analyze social injustices and proposed innovative solutions to stimulate equitable access to AT. We conduct this analysis through review of peer-reviewed and grey literature, and experiential knowledge as health-care providers in Canada's north. We then use critical social science and anti-oppressive perspectives to analyze gaps in AT access not highlighted by the GATE initiative, and to reflect on the impact of socio-political determinants in shaping inequities.

Results: Analysis illuminates AT access inequities specific to Northern Canada, including the lack of appropriate devices for unique environmental conditions, lack of access to provision and maintenance services, and limitations of current urban-centric AT funding structures, contributing further to social and economic injustices.

Furthermore, while the APL is not intended to be restrictive, its focus on standardized priority products rather than the function they enable, denies AT provision based on individual needs, circumstances, contexts and preferences. For example, wheelchairs on the APL enable community mobility in some environments, but are inappropriate for use in Northern Canada, no relevant alternative product is listed for this function.

Lessons: The GATE initiative highlights inequitable access to AT within Canada and where action is needed to meet SDGs commitments. This reinforces the need for funding reform and AT design that address the context-specific functional relevance of AT, are responsive to the intersections of populations' social locations and, in turn, promotes health equity. This must include partnerships with local and Indigenous experts.

Main messages: GATE provides innovative tools to support equitable access to AT in Canada. However, to advance equitable actions, global innovations must be adaptable to address the function- and context-specific needs of all Canadians.

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Policy agenda-setting analysis: examining factors that placed Canadian refugee health policy reforms on the decision agenda in 2016

Issue: Since November 2015, Canada has welcomed 40,080 Syrian refugees, in addition to refugees from various countries of origin, all of whom receive healthcare coverage under the Interim Federal Health Program (IFHP). Cutbacks to the IFHP in 2012 severely restricted coverage for refugees, until some services were restored in 2014. The services provided under the IFHP were reinstated in 2016.

Objectives and Methods: Kingdon's (1984) Multiple Streams Framework of policy agenda-setting will be applied to answer the following question: what were the factors involved in setting the refugee health policy reforms on the decision agenda in 2016? A systematic search of news media articles was conducted using the LexisNexis database. Keywords included: "refugee health" and "Canada." Canadian media reports (n=192) were identified and 142 articles were included in this study. Government documents, organizational reports, scholarly papers and one court proceeding, were included in this analysis to understand the problems, policies, and politics streams. A content analysis was employed using a constant comparative approach to abstract themes within the problems, policies and politics streams.

Results: The focusing event of Alan Kurdi's death and the Syrian refugee crisis captured the attention of the government officials, while organized action in the form of a legal challenge and a change in government contributed to the movement of the refugee health policy reforms onto the decision agenda. These two streams coupled with the policies stream, which brought about the viable policy solution of the restoration of the policy, opened a policy window because the federal election introduced new governmental priorities that were in line with the problem and its solution. The convergence of the three streams led to the adoption of the new IFHP in 2016 under which all refugees and claimants now receive comprehensive healthcare coverage.

Lesson and Main messages: Refugee health policy is of wide significance, given the increasing volume of displaced persons seeking refuge in Canada and around the world. We have learned how the convergence of three streams (problems, policies and politics) situated refugee health policy on the decision agenda. The focusing event of Alan Kurdi's death, organized action by interest groups against the cutbacks, coupled with the federal election and the rise of the Liberal Party to power, ultimately opened the political policy window that was needed to place the well-recognized problem of refugee health and its widely accepted policy solution, the restoration of the IFHP, on the decision agenda.

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Impact de la consommation alimentaire responsable sur la nutrition et la santé en Équateur.

La région andine de l'Équateur foisonne de mouvements sociaux en faveur de l'alimentation responsable, saine pour l'humain, la société et l'environnement. La population subit toutefois une transition nutritionnelle, nourrie par une urbanisation accélérée et la mondialisation agroalimentaire. Ces changements accroissent les iniquités sociales en matière de santé. Bien qu'une part significative d'Équatoriens demeure affectée par la dénutrition, le pays n'échappe pas à la pandémie d'obésité. Il apparaît donc intéressant d'étudier les comportements aidant certains individus à demeurer en santé, dans un contexte national propice à la fois à la dénutrition et aux maladies chroniques.

L'hypothèse soutenue est que la consommation alimentaire responsable s'avère un modèle de saine alimentation et de santé outrepassant les classes sociodémographiques. Cette étude transversale se déroule dans le cadre d'un projet de recherche autour d'une campagne de marketing social sur la consommation alimentaire responsable en Équateur. La collecte de données se déroulera à l'été 2017. Un questionnaire sera administré à des hommes et des femmes de 19 à 59 ans, provenant de ménages sélectionnés aléatoirement à Quito, Riobamba et Ibarra. Le questionnaire nous informera sur les facteurs sociodémographiques, les pratiques alimentaires, la relation à la campagne de marketing social, l'anthropométrie et la santé des participants. De plus, un sous-échantillon aléatoire répondra à un rappel alimentaire de 24h, permettant notamment de tenir compte de la contribution à la diète des aliments ultra-transformés.

L'étude fournira une meilleure compréhension de la façon dont la consommation alimentaire responsable est pratiquée. De plus, elle dressera un profil des consommateurs responsables, ce qui permettra de cerner la façon dont la consommation alimentaire responsable est associée à la santé au travers des différents groupes sociodémographiques.

Seront présentés, les résultats préliminaires sur les différentes facettes de la consommation responsable et les associations entre celle-ci et les facteurs sociodémographiques de la population.

En plus de leur contribution académique, les résultats de l'étude pourront aider au niveau mondial à orienter les stratégies politiques de santé publique, ainsi que les campagnes de marketing social, en considérant les impacts de la consommation alimentaire sur la santé, l'équité sociale et la durabilité environnementale.

Messages clés :

- Étude de comportements salutogènes, à travers les groupes sociodémographiques.
- Contribution significative à l'opérationnalisation de la consommation alimentaire responsable, un concept qui n'a pas encore été largement mesuré.
- Investigation du lien entre la consommation alimentaire responsable et la présence de facteurs de risque cardiométaboliques dans une population en pleine transition nutritionnelle.

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Évaluation du niveau de santé buccodentaire des enfants d'âge scolaire vivant dans des communautés rurales andines

Problème : La santé buccodentaire (SBD) est une composante essentielle pour assurer le bien-être et la qualité de vie. Cependant cet aspect de la santé est souvent négligé. La carie dentaire (CD) est le problème le plus important de toutes les affections buccodentaires. La CD affecte principalement les populations plus pauvres et peut avoir des conséquences importantes chez les enfants. Comme pour plusieurs pays en développement, les communautés rurales andines péruviennes sont particulièrement touchés par les impacts de la CD. Les programmes de promotion de la SBD ciblant les enfants d'âge scolaire et réalisés en collaboration avec différents acteurs peuvent contribuer à diminuer l'incidence de la CD chez les enfants. Depuis 2007, le ministère de la santé péruvien a développé un programme de promotion de la SBD mais aucune donnée nous permet d'évaluer son effet auprès de ces enfants.

Objectif et méthodes : L'objectif de cette recherche est d'évaluer le niveau de SBD des enfants d'âge scolaire vivant en communautés rurales andines. Pour se faire, un recensement des enfants de neuf à 13 ans de trois communautés rurales isolées a été fait. À l'aide de questionnaires auto-administrés validées et d'examens dentaires, différentes composantes de la SBD ont été évaluées dont le niveau d'hygiène orale (HO) et la présence de CD. Lors des examens dentaires, le niveau d'HO a été mesuré avec l'indice de plaque communautaire (IPC) et la CD avec l'indice CAOD.

Résultats : Un total de 66 enfants ont participé à l'étude. Le niveau d'HO est considéré mauvais avec un IPC moyen de 75,8% (écart-type: 9,7) chez les enfants sondés. Le nombre de CD des participants est aussi considéré élevé avec un indice CAOD de 6,4 (écart-type: 3,9).

Leçons tirées à ce jour: Le programme péruvien de promotion de la SBD semble avoir un effet limité dans les communautés rurales andines. À la lumière de ces résultats, il est crucial d'explorer les éléments et les mécanismes pouvant expliquer le maintien d'une forte prévalence et incidence de la CD chez les enfants vivant en zone rurale.

Principaux messages :

- La CD est un problème important chez les enfants des communautés rurales andines.
- Il est primordial de mieux comprendre les éléments pouvant favoriser le maintien de la CD dans le but d'adapter les interventions de promotion de la SBD au contexte particulier présent dans les communautés rurales andines.

BHATT, *Palki. McMaster University, Canada.

Children's wellbeing as influenced by family violence and caregiver psychosocial wellbeing in humanitarian contexts—a scoping study

Children make up more than 50% of the population affected by conflicts or disasters in humanitarian settings. These children are growing up in areas of violence, instability and loss, leading to a wide spectrum of poor health outcomes. There is extensive evidence demonstrating the many negative effects of war on the wellbeing of children, both in the short and long term, evident in high levels of PTSD, depression and anxiety disorders. The protection and promotion of the wellbeing of children in these contexts is of utmost importance not only to improve the quality of life of these children, but to create a resilient society moving forward. It has been shown that a stable, nurturing and safe home environment can help mitigate the negative effects of ambient violence and instability. However, during times of crisis, parents and caregivers, also faced with a variety of stressors, often have a diminished ability to provide this environment for their children. Predictably, with the deteriorating family structure and poor psychosocial wellbeing of parents and caregivers, children are faced with an additional source of instability and harm from within an environment that should protect and safeguard their wellbeing. This scoping review was conducted to survey the current published and grey literature to provide an overview of the literature that explores the relationship between both caregiver psychosocial wellbeing and family violence, and child wellbeing in LMIC humanitarian contexts. Using the Arksey and O'Malley framework, our objectives were to a) examine the extent to which caregiver psychosocial wellbeing and family violence affect the wellbeing of children and b) understand if through interventions and programming, changes in caregiver psychosocial wellbeing or family violence affect the wellbeing of children. The findings from 25 identified observational studies indicated that caregiver psychosocial wellbeing and family violence are both associated with various dimensions of child wellbeing. However, the strength and nature of this relationship varies according to context and developmental age. The search of interventions revealed limited evidence in the form of evaluated programs that focus fully, or in part, on caregiver psychosocial wellbeing or family violence, while also measuring child outcomes. This knowledge synthesis presents the extent, range and scope of literature available on this topic in order to identify gaps in evidence and practice, and to guide interventions and research efforts that will ultimately improve the wellbeing and resilience of children.

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Global health placements: Building health professionals' capacity to work in global health contexts

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Issue/Problem: Building health professionals' capacity, to address global health issues, is important to ensure future progress on global health challenges. Exposure to global health through experiential learning, such as observerships and electives, provide students with immersive opportunities to develop skills required for global health practice. Global health placements create opportunities for students in the health professions to develop competencies required to work in low-resource settings in Canada and abroad.

Objective and Methods: This prospective study identifies some of the competencies required to address global health challenges in practice, and allows us to determine whether global health placements impact medical students' personal and professional development. Medical students participated in a pre-global health assessment survey; a pre-departure training session; completed an observership, research placement, or clinical elective; participated in a post-departure debrief, and a post-global health assessment survey.

Results: Global health placements impact students' personal and professional development in the following areas: awareness of the social determinants of health, awareness of resource utilization, adaptability to resource limitations, understanding of community needs and how to meet those needs, communication skills, and compassion in clinical care. Global health placements also influenced medical students' future speciality choices, and approach to practicing medicine.

Lessons to Date: Global health placements create opportunities for students in the health professions to develop competencies required to work in low-resource settings in Canada and abroad. This prospective study identifies some of the practice competencies required to address global health challenges, and allows us to determine whether placements abroad are associated with the development of global health competencies. Gaps in knowledge or skills that create barriers to working in global health settings need to be explored.

Main Messages:

- Global health placements impact health professional students' personal and professional development.
- Placements increase students' awareness of the social determinants of health, awareness of resource utilization, adaptability to resource limitations, understanding of community needs, communication skills, and compassion in care.
- Other knowledge or skill gaps that create barriers to working successfully in global health settings need to be explored.

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Socioeconomic inequality in community based health insurance premium contribution in Rwanda

The biggest challenge in the current global health agenda for developing countries, is the need for establishing low cost health financing schemes which are pro-poor, in order to achieve Universal health coverage (UHC). Raising finance for health, and at the same time ensuring that the contributions are equitable, is a primal objective. Studies have shown that community based health insurance (CBHI) are possible solution to this health policy dilemma. In response to UHC, Rwandan government introduced a national wide-stratified premium contributions CBHI in 2010/11, so as to achieve equity in health financing. However, the issue of equity in contribution to such large national scheme(s) is not yet established.

In view of this, this paper aims at investigating socioeconomic inequality in premium contribution in the government supported CBHI scheme in Rwanda. The specific aims are to investigate and describe if inequality in premium contribution is different among socioeconomic categories between and within 2010, to 2014. Secondly, I investigate the factors that explain the gender premium contribution gap between and within 2010, to 2014. Lastly, I investigate the extent of progressivity (regressivity) of the CBHI premiums. To assess the gender related gap in premium contribution, I use the Oaxaca-Blinder decomposition, quantile regression and recentred influence function (RIF) decomposition. In assessing the incidence and depth of inequality in premium contribution, the concentration indices (CI) are computed, and then decomposed using the Wagstaff and the Heckley method. Lastly, in assessing progressivity of the CBHI scheme the Kakwani indices are computed. Two sets of cross-section secondary data from Rwanda, for the period 2010/11 and 2013/14, are used for this analysis.

The key takeaway message from the results is that; firstly, stratification of insurance premiums brings in progressivity, but evidence of its contribution to inequality in insurance premium contribution is mixed. Secondly, insurance premium stratification is pro female, since there is a difference of 47.5% in premium contribution between female headed households. This is good in the African context, where many female households are economically vulnerable. Thirdly, Premium stratification explains 1.42%, to 42% of inequality in CBHI contribution. Although the CBHI scheme is still regressive, the extent of regressivity, and inequality in CBHI contribution has been reduced by the policy. The lessons for other countries enroute to UHC is that they should consider employing a form of stratified contributory CBHI schemes or National health insurance (NHI) schemes.

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Toward equitable action in research: Using the CCGHR Principles for Global Health Research as an analytic tool

Co-Authors: Stephanie Nixon, Department of Physical Therapy, University of Toronto

Issue: The inequitable distribution of power, opportunities, and material wealth is directly and indirectly responsible for poor health outcomes. Global health research is potentially a tool to redress health inequities, yet research can unwittingly perpetuate inequity. To promote global health research that advances equity, the Canadian Coalition for Global Health Research (CCGHR) developed a collection of six research principles. These principles are intended to “offer a set of tools to...inform practice, spark dialogue, and inspire reflection.” To date, there are few examples of researchers reporting on the use of the CCGHR Principles for Global Health Research as a tool to inspire reflection.

Objectives and Methods: We report on lessons learned from using the CCGHR Principles as a framework to guide retrospective critical reflection on a global health research project. The research that we reflect upon was a constructivist qualitative study on disability in Western Zambia conducted as part of a doctoral dissertation.

Results: The CCGHR Principles for Global Health Research effectively inspired a structured mode of reflection on the research project. Through this reflection, we illuminated how power was exercised through the conduct of the research. We then used these insights to guide the follow-up process for this study and to identify suggestions for doctoral researchers striving to conduct global health research to promote equity.

Through this process, we found that the CCGHR Principles were not equally weighted in priority. We found that the principles of authentic partnering and shared benefits were particularly helpful in inspiring reflection. Moreover, we found that we were able to conceptually rearrange the principles according to the function that they served in our reflective process: as foundational principles, as research practice principles, and as a mainstreamed demeanour.

Lessons to date: The CCGHR Principles for Global Health Research were a valuable tool to inspire reflection on a global health research project. This reflection led to additional insights that informed our follow-up activities and increased our understanding of power dynamics. We reoriented the principles according to the specific way in which we used them: as foundational, practice-oriented, and a demeanour. Although used retrospectively in our case, the principles could be a valuable tool to prospectively inform research practice.

Main messages: The CCGHR Principles for Global Health Research are a useful, flexible, and valuable analytic tool for global health researchers.

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The role and cost of comprehensive community health services in Sierra Leone

Co-Authors: Colin Gilmartin, Management Sciences for Health; Jerome Pfaffmann, UNICEF

A key element of achieving Universal Health Coverage is to improve access to services through strong community health systems. However, little is known of the cost of implementing a comprehensive package of community health services, partly because no appropriate tools have existed. A new planning and costing tool was, therefore, developed by UNICEF and was piloted in Sierra Leone and Malawi.

The piloting of the tool in Sierra Leone was timely because the government was in the process of developing a comprehensive community health package of services, comprising 42 promotive, preventive, and curative services, including the treatment of malaria, pneumonia, and diarrhea and distribution of family planning commodities.

The costing pilot was conducted in March 2016, and involved the collection of data through structured interviews with primary health care system managers and community health workers in two districts. The data was entered into the new tool and the results were validated with the government and partners.

The government proposed that 15,000 community health workers (CHWs) would be trained to provide services to a target population of 6.4 million people. The costing study identified that the start-up costs for training and equipping the CHWs and supervisors would be USD 8.9 million, while the annual recurrent cost of achieving full coverage would be USD 30.0 million, which comes to USD 3.85 per capita. The interventions with the highest costs would be community case management of malaria, pneumonia and diarrhea for under-5 children (49%) and adult malaria case management (20%). Not all of the USD 30.0 million in costs would be additional, since the community services would replace some health facility services, allowing for a more cost-effective use of facility staff. And the financial and economic costs faced by households should be reduced.

The specific lesson from the piloting in Sierra Leone is that community health services may not be cheap, especially where community health workers are paid, but is likely to be cost-effective in terms of increasing access while reducing cost to the health system and families. These lessons are applicable to other countries with similar access challenges.

The key message is that a comprehensive costing of community health services is essential to be able to model the full cost of community health services and to develop an affordable, prioritized package of services based on available resources.

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Leaving Many Behind, Indeed: Fractured Families and the Social Cost of Migration

Co-Authors: Mariajose Aguilera, Dalla Lana School of Public Health, University of Toronto

Issue/Problem: Globally, approximately 250 million people live outside of their countries of birth. Less than 10% of them are officially recognized refugees. The remaining 90% are people who have moved in search of better economic and social opportunities. While migration is one of the constitutional characteristics of our species, the phenomenon has grown dramatically, since the 1980s, in response to the new international division of labour resulting from the mechanisms of the global economic regime; to growing inequities; and, increasingly, to climate change and environmental degradation. Internal migration has grown in parallel with international movements. The characteristics of contemporary migration fluxes have also changed. For example, today almost one half of all migrants are women of reproductive age. Both internal and international economic migrations increasingly result in the separation of families, often for periods of months or years. Separation, in turn, has a significant impact on the mental health and well-being of individuals, families, and communities. This paper presents the results of a systematic review of the literature focusing on interventions in support of fractured families.

Methodology: The objective of the review was to identify interventions aimed at preventing or treating the mental health problems, and promoting mental well-being, of members of families fractured due to economic, long-term migration. The search strategy was designed to maximize the yield and included three bibliographic databases (Medline, PsycINFO and the Web of Science). The initial search strategy was complemented by an analysis of the list of references included in each relevant paper, as well as the citation history for each paper.

Results: The very limited number of peer-reviewed publications identified, and the characteristics of the interventions they describe, show how little attention this phenomenon receives, in spite of its significance and its cross-generational health impact. Only 8 interventions were described. All interventions were based in the US and the majority targeted Latin American immigrants. Most of them were individual and family counseling interventions addressing post-reunification challenges. In some cases, separation was not even the initial focus of the intervention.

Lessons and Main Message: The presentation will: discuss the results of the review; frame the problem of fractured families in the context of the mainstream discourse on the role migration plays in development, highlighting related explicit and hidden double standards; and suggest additional steps in the development of a long-term research agenda on this topic aimed at measuring the social costs of economic migration.

COUTURIER, François. Université de Sherbrooke, Canada

DECLIC : Un modèle pertinent de partenariat entre les milieux cliniques de 1e ligne et les institutions académiques pour des soins de santé renforcés

Co-Authors: Issa Traoré, Association de Santé Communautaire de Banconi

Enjeu ou problème : Le Mali est engagé depuis 1992 dans un vaste processus de décentralisation qui a permis de créer 800 centres de santé communautaires (CSCoM). Ces CSCoM font face à une pénurie des ressources humaines et un manque d'adéquation entre les compétences de leur personnel et les besoins réels des populations.

Objectifs et méthodes : Le Projet de Formation des professionnels de la santé au Mali, (DECLIC), a comme objectif de contribuer à rendre disponible, en quantité et en qualité, les ressources humaines de première ligne en santé pour la population du Mali. Mis en œuvre par le Centre de coopération internationale en santé et développement (CCISD), le Cégep de Saint-Jérôme et l'Université de Sherbrooke, ce projet bénéficie de l'appui financier d'AMC et de la collaboration de plusieurs partenaires maliens.

DÉCLIC mise sur la formation des médecins et des paramédicaux à travers :

1. la création d'un Diplôme d'études spécialisées en médecine de famille/médecine communautaire à la Faculté de médecine et d'odontostomatologie (FMOS)
2. le renforcement pédagogique et organisationnel à l'Institut National de Formation en sciences de la Santé (INFSS)
3. la transformation de 5 CSCoM en centre d'enseignement clinique universitaire (CSCoM-U).

Ces CSCoM-U distribués en milieu urbain et rural sont des lieux privilégiés de prestation de soins interdisciplinaires, de formation intégrée et de recherche.

Résultats (effets ou changements) :

1. Le développement d'un DES en médecine de famille/médecine communautaire, basée sur les compétences nécessaires pour répondre aux besoins des populations.
2. La mise en place d'un réseau de 5 CSCoM-U permet de :
 - délocaliser des activités de prestation de soins, d'enseignement et de recherche à l'extérieur des hôpitaux universitaires ;
 - favoriser le recrutement et la rétention de personnels de santé en région.
3. L'appui pédagogique et organisationnel à l'INFSS permet d'actualiser les programmes de formation et d'exposer les stagiaires à une pratique interdisciplinaire dans la communauté.

Leçons tirées à ce jour :

Le projet DECLIC a permis de

- renforcer les soins de santé primaires ;
- soutenir le développement d'une masse critique de professionnels ;
- mettre en place des partenariats entre les institutions académiques et les milieux de soins.

L'insertion structurée et planifiée d'activités de prestation de soins, de formation et de recherche est un modèle pertinent qui mérite d'être répliqué.

Principaux messages :

- Plus-value de la collaboration interinstitutionnelle et interdisciplinaire
- Adaptation des programmes de formation aux besoins des populations

DAJANI, Hani. Canadian Red Cross, Afghanistan.

Sustaining humanitarian interventions through Social Investments

Co-Authors: Ross Duncan, Canadian Red Cross; Haytham Qosa, Canadian Red Cross; Ayham Alomari, Canadian Red Cross

Problem: The international humanitarian aid system was designed to reduce suffering and loss of life in extraordinary circumstances through immediate and short-term interventions. However, more people are affected by protracted and complex crises, and the downsides associated with the vulnerabilities concomitant with such changes have become more exposed and prolonged for many already poor and vulnerable people. In protracted or recurring crises, a more collaborative, long-term, sustainable approach to aid that accommodates the immediacy of the initial response is required. Humanitarian funding does not allow for long-term investments and sustainability considerations of not only the aid delivered, but of the humanitarian system itself are often overlooked or postponed (Delmaire and Patinet 2012; Mosello et al 2016).

Objective: The Canadian Red Cross (CRC) since 2015 is supporting the Afghan Red Crescent Society (ARCS) in operating ten provincial mobile health teams (MHTs) to provide life-saving medical care, vaccination, and health education and awareness sessions. During the period of Apr 2016-Mar 2017 they reached out to 249757 people in remote villages. Given the facts that a) the CRC project will end in 2019; b) Afghanistan's health system and infrastructure are not able to address mounting needs currently exacerbated by extensive population movements and intensifying armed conflict; c) the high reputation and acceptance that ARCS has on the ground which allow them to work and access regions that other actors cannot; jointly CRC and ARCS started to think about options to start weaning process early and make the work of MHTs more independent and sustainable.

Results: CRC and ARCS started working with Social Investment through the National Society Investment Mechanism (NSIM) which aligns with the Grand Bargain that emerged from the 2016 World Humanitarian Summit. NSIM is an approach to mobilizing private capital that delivers a social dividend and an economic return to achieve social and environmental goals through structured outcomes-based programming that generate financial and social value. Such is backed by a put option (covering inflation and a slim profit margin) through ARCS, who own considerable amounts of land. ARCS is expected to raise (through internal or external means) 20-25% of total amount needed per year to sustain MHTs and will be required to provide a secondary guarantee of 100% backed by fixed assets to prospective financiers.

Key message: A new concept to create sustainability for a key pillar of emergency health services during any humanitarian intervention.

DASSAH, *Ebenezer, Queen's University, Canada

A qualitative synthesis of access to primary health care services for persons with disabilities in low and middle income countries

Co-Authors: Heather Aldersey, Queen's University; Mary Ann McColl, Queen's University; Colleen Davison, Queen's University.

Issue/problem: Access to primary health care (PHC) is central in the performance of global healthcare systems, however substantial disparities of access exist within and across populations. Persons with disabilities generally experience greater barriers to access to PHC than the general population. These problems are further exacerbated for those with disabilities in low and middle income countries (LMICs). Access barriers are important contributors to health disparities in these settings. Understanding the barriers to PHC access for persons with disabilities is particularly important as such knowledge can inform policies and clinical practice.

Objective and methods: We conducted a synthesis of published literature to explore the experiences of persons with disabilities in accessing PHC in LMICs. We searched five databases (CINAHL, EMBASE, Global Health, Medline and Web of Science) from 2000 until May, 2017. This was supplemented with a manual search of disability, health and LMIC-related journals and the reference lists of included articles. We imported the included articles into NVivo and used Russell, Humphreys, Ward, Chisholm, Buykx, McGrail and Wakerman (2013) framework for access to PHC, including: availability, geography, affordability, accommodation, timeliness, acceptability and awareness for the synthesis. We coded the articles deductively into the framework and subsequently conducted inductive thematic analysis.

Results: We identified 19 studies that met our inclusion criteria. A majority of the studies (11) were conducted in Africa. We found that persons with disabilities are unable to access PHC by obstacles including the interplay of three dimensions; availability, geographical accessibility and affordability of healthcare services. In particular, the limited availability of healthcare services means those in need of healthcare services had to travel for healthcare. The geographic distance is worsened by transportation problems. We also observed that where health services were available most people could not afford the cost of such services.

Lessons to date: Our review suggests that the population characteristics were highlighted in most of the studies. Greater attention is needed in the health system characteristics including the perspectives of healthcare providers and service users. Our synthesis also noted that modifying the framework to incorporate the relationship among the barriers might help better conceptualize healthcare access.

Main message: Our review calls for prioritizing investment into research about access to PHC for persons with disabilities in LMICs. Such investments may improve health policies and clinical practice which can lead to equitable access to healthcare in these settings.

DE SILVA, *Ethige, Student, Canada

Beverage – specific visual aids and standard drink conversion chart to assess alcohol consumption in any country setting

The second and third questions of the Alcohol Use Disorders Identification Test (AUDIT) are used in assessing alcohol consumption globally. The questions employ “standard drink” concept which refers to an amount of an alcoholic beverage with 10 grams of ethanol. Interviewers clarify the concept by explaining beverage – specific standard drink sizes.

Responding these questions accurately is not easy to an average respondent, particularly to heavy drinkers whose cognitive ability may be impaired. Inaccuracy is higher with spirits than either with beer or wine and when varying sizes and shapes of containers are used. Respondents in low and middle-income countries face additional problems due to higher use of illicit alcoholic products.

This paper introduces two simple tools developed in a South – Asian country, Sri Lanka, a middle-income country: beverage - specific visual aids and beverage - specific standard drink equivalent conversion chart. The innovation was the outcome of a project in assessing risk factors for high – risk drinking in a sample of Sri Lankans in 2005.

These are simple tools that could easily be adapted to any cultural setting. Its relevance is for low and middle-income countries where standard drink concept is not the norm. Moreover, an intervention manual is available with the AUDIT which is in public domain.

Objectives : To develop beverage – specific visual aid and standard drink equivalent conversion chart to improve responses to second and third AUDIT question items; To determine accuracy of AUDIT quantity – frequency items

Methods: After obtaining the ethical clearance from the Ethical Committee of the Medical Faculty of the University of Kelaniya in Sri Lanka, following steps was carried out: constructing visual aids with photographs of glasses and replacing standard drink responses with a chart of equivalent beverage specific volumes and bottles, and validating instrument with a sample of 237 men.

Results: The innovations were incorporated into the question items. The internal consistency of the AUDIT-C was 0.89 and the area under receiver characteristic curve (AUROC) for AUDIT-3 was 0.99 (0.98 – 0.99). Both tools will be presented at the conference. These could be sent upon request.

Lessons to date: The innovations improve assessing alcohol consumption.

The tools relieve respondents and users from cognitive burden.

Main messages:

- Beverage – specific visual aids and standard drink conversion chart promote assessing alcohol consumption.
- The methodology is adaptable to any setting.
- The tools save users’ time and relieves burden on heavy drinkers.

DONER, *Meaghan, University of Glasgow, United Kingdom of Great Britain and Northern Ireland.

Gender inequality in WASH during disaster response

Issue/Problem: Billions of people worldwide continue to live without basic water, sanitation and hygiene (WASH). In the wake of natural disasters even highly-developed countries can be affected by a disruption of resources, with women and girls facing a disproportionate disadvantage in their attempts to access services.

Objective: To promote awareness and discussion of ways in which inadequate WASH may exacerbate gender inequality in disaster and post-disaster care around the world.

Method: A literature review was conducted by looking specifically at the health outcomes of natural disasters in the last two decades. Numerous sociological, medical and nursing/allied health databases were reviewed; supplementary data was obtained from health organization reports and websites.

Results:

1. Gender-based violence (GBV) - Numerous researchers have studied how inadequate WASH can lead to safety issues for women/girls. GBV increases after disasters and is exacerbated when there is a lack of safe spaces for women/girls to maintain their hygiene.
2. Maternal/child health - The stress of a disaster situation already puts pregnant women at an increased risk of miscarriage and preterm delivery; not having safe water and hygienic spaces to labour and deliver has been shown to further contribute to increased maternal and child mortality. The ability to breastfeed may be affected due to maternal dehydration or illness; formula-feeding may not be plausible in all contexts due to cost, availability, or inability to access safe water to mix formula or sterilize bottles.
3. Menstrual health management (MHM) - Poor MHM can lead to infection and physical illness, as well as psychological distress. Multiple studies have explored experiences of shame related to an inability to care for menstrual health in the aftermath of disasters.

Lessons: Taboo subjects such as GBV and MHM can prevent victims from voicing their WASH-related concerns, yet participatory action research has shown success in projects that include local women/girls in the planning and evaluation processes when re-establishing WASH in the wake of disasters.

Main messages: If we are to accomplish the targets set out in the SDGs, we must continue to explore relationships between gender inequality and WASH. This is especially important during disaster and post-disaster care, when resources are limited and infrastructure may be damaged. WASH-related gender inequality can have a significant impact on the physical and psychological health of women/girls. A gender-sensitive approach to WASH should be an integral part of disaster planning to ensure that we are 'leaving no one behind'.

DUNCAN, Dolorosa, Pathfinder International, United Republic of Tanzania

Uber for emergencies: Innovative maternal and newborn emergency care for low-resource settings

Co-Authors: Rebecca Herman, Pathfinder International; Hellen Magige, Pathfinder International; Nitike Alinani, Pathfinder International; Simon Ogunde, Pathfinder International

Maternal and newborn health outcomes in Tanzania are poor, maternal mortality rate is 556 per 100,000 live-births and neonatal mortality rate is 2,500 per 100,000 live births, which accounts for 40% of under-five mortality. For every woman who dies during pregnancy, it is estimated that 16-20 women suffer from some form of disability such as obstetric fistula. The three delays are used as a framework for examining maternal and neonatal mortality; decision to seek care, transport to care and receive quality care

Mobilizing Maternal Health (MMH) project focuses on a district wide approach to use a combination of community, facility and hospital based interventions linked with extensive use of mobile technologies for communication, enhanced service delivery and establishment of a centralized emergency transport dispatch system. The MMH is leveraging technology to improve efficiencies and reduce delays through the implementation of an innovating emergency referral system in northwest Tanzania since 2014. A 24-hour call center, staffed by dispatchers using a mobile decision support application, respond to emergency calls on a toll-free number. In this, the dispatchers:

- Triage calls from communities and health facilities to determine emergencies and referral locations for pregnant and postpartum women and babies;
- Organize transport using the government ambulance system or community drivers
- Pay community drivers automatically using Vodacom's M-Pesa
- Follow up with all referrals to obtain outcome information

An online dashboard provides the program implementation team and the Ministry of Health with real-time data to track emergencies as they occur, review programmatic indicators, analyze trends and use data for decision-making.

As of May 2017, more than 42,000 pregnant women were enrolled in care by Community Health Workers, 17% increase in Antenatal Clinic (ANC1) and 13% increase in ANC4. On average, 8 maternal/neonatal emergencies are transported per day. Preliminary analyses indicate that Maternal case fatality rates decreased across all facility from Y1 to Y3, 52% at District hospitals and 32% at lower level facility. Among project supported clients there has been a 29% decline in newborn deaths .

- Learning objectives
- Understand how the emergency referral system functions through a simulated call involving audience.
- Discuss how a similar system could be developed in other contexts.
- Discuss how mobile money integration can support digital health programs
- Explore how data can be used for decision making to strengthen government ambulances operation, monitor and address referrals delays and tailor support to improve the quality of car.

EL-KHATIB, *Ziad, Partners In Health / Inshuti Mu Buzima - Rwanda, Rwanda

Protocol for a Pilot Intervention study to assess impact on adherence to clinic visits among children with Type 1 Diabetes in rural Rwanda

Co-Authors: Crispin Gishoma, Rwanda Diabetic Association; Paul H. Park, Partners In Health - Inshuti Mu Buzima - Rwanda; Edison Rwagasore, Diabetes and Kidney Disease Unit, Rwanda Biomedical Center, Rwanda; Marie Aimée Niyonsenga, Non-Communicable Diseases Division, Rwanda Biomedical Center, Rwanda; Simon-Pierre Niyonsenga, Diabetes and Kidney Disease Unit, Rwanda Biomedical Center, Rwanda; Gedeon Ngoga, Partners In Health / Inshuti Mu Buzima - Rwanda; Ryan Borg, Partners In Health / Inshuti Mu Buzima - Rwanda; Frederick Kateera, Partners in Health / Inshuti Mu Buzima - Rwanda; Bethany Hedt-Gauthier, Partners In Health / Inshuti Mu Buzima - Rwanda; Alvera Mukamazimpaka, Rwanda Diabetic Association; Ziad El-Khatib, Partners In Health - Inshuti Mu Buzima - Rwanda

Issue/Problem: Today, Type 1 Diabetes Mellitus (T1DM) is an emerging epidemic in sub-Saharan Africa. The Rwandan Diabetic Association (RDA) is a non-governmental organization helping pediatric and young adult T1DM patients, through the support to public district hospitals in rural Rwanda. Patients are required to come back every quarter for their clinic follow-up, insulin refill and plasma glucose concentration monitoring (HbA1C) which is crucial for their insulin dosage management. Patients are reminded about their clinic visits through radio communication. However, adherence to the quarterly visits is low. Here, we propose an intervention study where we assess the impact of a mobile health (mHealth) intervention on adherence to clinic visits and HbA1C check-up, in three rural sites in Rwanda.

Objectives and Methods: This is collaboration between Ministry of Health, RDA and Partners In Health/Inshuti Mu Buzima in Rwanda to describe the baseline patient population, the implementation of a pilot intervention, and the changes in adherence to the clinic visits under the pilot intervention.

Results: Preliminary review for the literature indicated a gap in the impact of interventions on adherence to clinic visits among T1DM patients..

The suggested pilot will last three months, and include three study arms (N=25 each): i) using SMS as a reminder; ii) using phone calls by clinic staff to remind patients of their visit and iii) relying on the patients' clinic cards for their appointments (standard of care). Ethics will be sought at University of Global Health Equity in Rwanda.

The data, pre and post-intervention, will be analyzed using relative difference ($\Delta\%$), ANOVA and logistic regression analysis.

The primary outcome will be the improvement of adherence to clinic visits, and reduction in HbA1C level among the intervention study arms.

Prevalence of loss to follow-up will be assessed as well, in all of the three study arms.

Lessons to Date: There is an immediate need to improve adherence to clinic visits among T1DM patients. This pilot intervention will guide future decisions, to avoid lost-to-follow-up among this vulnerable patient populations.

Main Message: There is a limited evidence on the outcome of using follow-up reminders among T1DM patients for clinic visit adherence.

FAOUR, *Elizabeth, Memorial University Faculty of Medicine, Canada

Reflection on the HIV/AIDS epidemic in Zambia in the context of Maternal and Child Health: A medical student perspective

Co-Authors: Maria Powell, Memorial University Faculty of Medicine

Issue: Medical electives are becoming an increasingly popular way to explore the field of global health in addition to gaining exposure to alternative medical practices and cultures. This project involves medical students' reflective experiences on the HIV/AIDS epidemic and Maternal and Child Health in Zambia during a clinical placement. Zambia has an estimated adult HIV prevalence rate of 12.9% (UNAIDS 2015). While being one of the highest in the world, it has decreased from 2002 when it was estimated to be 16% (World Health Organization 2005). This epidemic has significant implications on Maternal and Child Health in Zambian communities.

Objective: Challenge pre-departure assumptions about the impact of the HIV/AIDS epidemic in Zambia with a focus on Maternal and Child Health.

Methods: A preliminary literature review was completed to inform our perspective prior to our community-based medical elective based in Lusaka, Zambia in February 2017. Based on this review and through discussion we devised assumptions based on the epidemiology, medical, and social implications of HIV/AIDS on Maternal and Child Health. Field observation, clinical experience, and discussion with local health care workers in Zambia guided reflection on these issues in the context of our pre-departure assumptions.

Results:

Assumptions

- **Social:** There is a fear of stigma among pregnant women and mothers living with HIV that leads to avoidance of testing and appropriate treatment.
- **Epidemiology:** Men have a higher prevalence of HIV than women. Women will have high rates of vertical transmission.
- **Medical:** Zambia does not have adequate resources to manage the HIV/AIDS epidemic as it would be managed in Canada.

Observations

- **Social:** Ng'Ombe antenatal clinic offers HIV testing to all patients. The majority of mothers opt for testing. Couples testing and counselling services are also offered to women who test positive in the prenatal clinic.
- **Epidemiology:** Ng'Ombe clinic has seen vertical transmission rates decrease in the past four years due to better adherence and education efforts.
- **Medical:** Antiretroviral treatment in Zambia is fully funded by the federal government, however, for cost reasons, the country is not using the same first line drugs as Canada. Zambia is using similar prophylactic treatments as Canada for HIV complications.

Main Messages: Zambia has implemented a number of strategies to combat the epidemic including technology, social campaigns, government-funded ARVT, and specialized clinics and counselling services to meet patient needs. This project describes a valuable learning technique that can be used by medical students participating in global health electives.

Fasola, Olivia, University College Hospital

The economics of cervical cancer and HPV vaccination: Is nationwide coverage sustainable in low resource settings?

Issue/Problem: The burden of cervical cancer has remained very high in low income settings. The 21st century heralded the availability of HPV vaccination as a means of preventing cervical cancer. Since 2006, about 64 countries have implemented nationwide HPV vaccination for girls aged 9-13 years as recommended by the World Health Organisation. Unfortunately, the regions most affected have not recorded any marked uptake of the vaccine due to its costs which is mostly out of pocket. Based on support from international organisations such as the GAVI Alliance and the Program for Appropriate Technology in Health (PATH), few countries in Africa such as Rwanda and Uganda, have been able to implement nationwide vaccinations which have been sustainable due to the low purchasing cost of the vaccines from the manufacturers at about \$5 USD per dose. However, the vaccine still costs as high as \$50 USD per dose in Nigeria, which is yet to benefit from this alliance, with up to 80% of the Nigerian population living on less than \$1 USD per day. A global effort is required to tackle this disadvantage which is stemmed in poverty and has hindered the global positive change desired in preventing cervical cancer accrued to women due to their gender and location.

Objectives and Methods: The proposed paper aims to compare HPV burden with HPV vaccine uptake in low income regions and highlight the barriers and strategies for successful nationwide HPV vaccination in low income regions. These will be achieved based on a review of literature in the last 10 years covering low income countries in Africa.

Results: Preliminary results show that the prevalence of cervical cancer is highest in low and middle income countries where HPV vaccination is still not affordable. Identified barriers are mainly due to socio-cultural, health systems and political factors.

Successful implementation of vaccination in low resource countries have been through international collaborations, school based programs, integrating HPV vaccine into existing health programs, community mobilization, and training of health workers.

Lessons to date: The countries that are in most need of HPV vaccinations are not able to afford it. Individual countries need to act on policies that tackle their internal politics, and socio-cultural influences on health and vaccine uptake.

Main message: Despite numerous barriers, nationwide coverage for HPV vaccination is possible and sustainable in resource poor settings, with advocacy and global collaborations.

FATIMEHIN, Victor A. Centre de coopération internationale en santé et développement (CCISD), Nigeria

Towards building a formidable disease surveillance and response workforce in West Africa: Experience from the West Africa Regional Disease Surveillance Capacity Strengthening (WARDS) Project in selected Local Government Areas (LGAs) in Nigeria

Co-Authors: Ericka Moerkerken, Centre de coopération internationale en santé et développement (CCISD)

Issue: In Nigeria, where at least 80 million people are living below the poverty line, disease surveillance data from health facilities and communities are collated at the Local Government Area level (LGA), to the State and National levels. As demonstrated in the recent deadly outbreak of Cerebrospinal Meningitis (CSM) in Northern Nigeria, strong disease surveillance and notification data are key to timely outbreak investigations and response, and health emergency preparedness (SDG indicator 3.D.1). Gaps in capacity to perform effective surveillance directly affect availability of data, as a result, among others, of the lack of adequate training in Healthcare workers in charge of surveillance at the LGA level. Information is scarce on the impact of such training on disease surveillance system performance.

Objectives/Methods: The objective was to assess the impact of targeted support and on-the-job training program in field epidemiology on 18 epidemic-prone LGAs selected in 17 states, compared to their initial capacity ('before and after'). Training focused on data analysis for improved preparedness, early detection and reporting coupled with on-the-job supervision and mentorship. Methods include secondary analysis of weekly IDSR reports submitted by the 18 trained LGA Disease Surveillance and Notification Officers (DSNOs) and assessment of key surveillance indicators (number of reporting health facilities, completeness and timeliness of reporting, baseline and performance half-year after training). In addition, key informant interviews were administered among 17 State-level DSNOs to rate the performance of their respective trained LGA (perceived contribution to disease surveillance relative to other DSNOs in other LGAs within States).

Results: Timeliness of weekly reports from the LGAs improved (average of 52% to 96%); completeness increased from 78% to 100% in the half-year following training. In the same timeframe, the number of reporting health facilities per study LGA increased from an average of 18% to 91%. 94% of the trained DSNOs were rated and perceived as more outstanding with better performance than their counterparts in the control LGAs. Some of the supported LGA DSNOs in Northwestern Nigeria have stood out in the recent CSM outbreak in terms of preparedness, early detection, reporting and response.

Lessons to date: Building capacity at the LGA (peripheral) level has the potential to curb infectious disease outbreaks and improve preparedness to the benefit of vulnerable populations.

Main Message: LGAs can play a central role in stronger surveillance and preparedness, with adequate training and an enabling environment; an equitable scale-up to all Nigerian LGAs is needed.

FAUST, *Lena, University of Ottawa, Canada

Wealth inequality and other socioeconomic correlates of HIV-related knowledge among women in Nigeria

Issue: As there is high heterogeneity in HIV prevalence as well as socioeconomic characteristics between states in Nigeria, it is a relevant setting for studies into socioeconomic correlates of HIV transmission. Although the relationship between absolute poverty and HIV transmission has been studied, wealth *inequality* as a predictor of HIV transmission has yet to be investigated in Nigeria, underlining the need for attention to marginalized population subgroups in order to inform future preventive efforts, thus aligning with the conference sub-theme “Research for Equitable Action.”

Objective: To determine the influence of wealth inequality on HIV-related knowledge (HK) in Nigeria, and the association of other socio-demographic factors with HK.

Methods: This study utilizes the nationally representative Nigerian Demographic and Health Survey (NDHS) (n=56307). As the primary outcome, a HK score was computed based on HK questions in the NDHS, and the sample mean used as the cut-off for low/high HK category dichotomization. Predictor variables included sex, wealth inequality, absolute wealth, unemployment, and literacy. The effects of predictor variables on HK were analysed via bivariate analyses using the X^2 test, Mann-Whitney U Test, or T-test for categorical, non-normally-distributed continuous, and normally distributed continuous predictors, respectively. Ultimately, logistic regression analysis will be conducted to determine the associations of wealth inequality and other socio-demographic covariates with HK.

Results: In bivariate analyses, sex, employment status, absolute wealth, and literacy level were found to be significantly associated with HK (all p values <0.001), with females, the unemployed, those in the lowest wealth quintile, and those with low literacy levels being more likely to have low HK. Importantly, wealth inequality ratios also differed significantly between HK categories (t= 23.191, p<0.001).

Lessons to date: Women, and individuals with low literacy levels, are more likely to have low HK than men, and literate individuals, respectively. In contrast, individuals in the highest wealth quintile and those living in states with the lowest wealth inequality levels are least likely to have low HK. The implications of this for HIV prevention in Nigeria and similar settings are that prevention efforts should preferentially target the socioeconomically marginalized for future HIV awareness and sexual health education campaigns.

Main messages: Wealth *inequality*, rather than simply absolute wealth, is significantly associated with HK. A relevant next step is to investigate how other socio-demographic factors influence this relationship between wealth inequality and HK, to more accurately inform targeted preventive interventions for HIV in Nigeria.

FOLEY, *Veronique. Université de Sherbrooke, Canada

Repenser les services de réadaptation pour réduire les inégalités sociales

Problème: Plus de 1.3% des enfants présentent une déficience physique au Québec. Leurs besoins sont nombreux et complexes allant de difficultés physiques, émotionnelles, sociales ou mentales. Toutefois des enjeux de marginalisation et d'exclusion sont prédominants et touchent également les familles. Plusieurs moyens sont présents pour tenter de répondre à ces besoins, dont les services de réadaptation. Pourtant, les inégalités sociales pour ces familles persistent et l'accès à des services pertinents et suffisants reste limité.

Objectif : Développer un cadre conceptuel permettant de mieux illustrer à l'aide des principes de l'intersectionnalité les écarts entre les besoins et les services offerts pour soutenir les familles d'enfant ayant une déficience physique, le positionnement du chercheur et la place des familles dans cette identification.

Méthode : Scoping review (analyse de la portée) et analyse approfondie de la littérature. Analyse thématique soutenant la synthèse des résultats.

Résultats préliminaires : Le modèle conceptuel permet de mettre en évidence les avantages et les désavantages vécus par les familles en lien avec les différentes dimensions de l'accès aux services de réadaptation.

Leçons : Le modèle proposé permet d'illustrer avec plus de nuance le vécu par les familles, les enjeux de pouvoir sous-jacents et les situations de vulnérabilité et de résilience. L'approche intersectionnelle permet un regard micro et macro sur l'expérience vécue des familles et l'organisation de services en identifiant des leviers d'action possibles afin d'améliorer l'accès et la qualité des services offerts en positionnant la famille au coeur de la démarche.

FONG, *Emily, Centre for Global Child Health, Hospital for Sick Children, Canada

Adherence to recommendations at a tertiary care family travel clinic

Background: International travel has shown an unprecedented growth worldwide. This surge not only increases opportunities for the spread of disease, but also the speed of epidemics. Pediatric travellers and travellers visiting friends and relatives (VFRs) have been identified as high-risk groups. Many health risks associated with travel are reduced when travellers adhere to the recommendations provided at a travel medicine clinic. This study aims to describe and compare adherence to recommendations made at a Family Travel Medicine Clinic in a large urban Canadian city.

Methods: A prospective cohort study was conducted at the Family Travel Clinic at the Hospital for Sick Children in Toronto, Canada between October 2014 and July 2015. All non-hospital employees travelling for less than 1 year and seeking pre-travel consultation from the travel clinic were eligible for participation. Adherence to recommendations regarding malaria prophylaxis, safe water and food consumption, mosquito bite protection, and motor vehicle safety was assessed using post-travel questionnaires. Vaccine adherence was assessed during the clinic visit. Adherence among VFRs was compared to adherence levels among those travelling for other reasons. Between group comparisons were conducted using Fisher and chi-squared tests.

Results: 293 participants, of whom 157 (54%) were adults and 136 (46%) children under the age of 18, were included in this study. Adult VFR (aVFR) adherence to malaria chemoprophylaxis, mosquito bite avoidance, safe water and food consumption, motor vehicle safety were 33%, 12%, 74%, 6%, and 11% respectively and adult non-VFR (non-aVFR) adherence were 68%, 13%, 65%, 6% and 27% respectively. Child VFR (cVFR) adherence were 47%, 21%, 71%, 18% and 13% respectively and child non-VFR (non-cVFR) 82%, 12%, 62%, 25% and 17% respectively. Both non-aVFRs and non-cVFRs were more likely to fully adhere to malaria chemoprophylaxis recommendations than their VFR counterparts ($p < 0.05$). Adult and pediatric adherence to recommended travel vaccines were 95% and 96% respectively. The main reasons for declining a vaccine for both adults and children were having a low perceived risk of disease (52%) and cost (29%).

Lessons: Both VFR and non-VFR adults and children had sub-optimal adherence levels to important travel recommendations thus increasing their risk for travel-related conditions. There were significant differences in the adherence rates to malaria chemoprophylaxis between VFR and non-VFR travellers. This highlights the importance of identifying barriers to adherence and the need to emphasize the risk of malaria in endemic countries.

GIRGIS, *Labib, Family Medicine Department, McGill University, Canada

Lessons from the eastern mediterranean region on how health workers can mobilize action on the social determinants of health

Co-Authors: Anne Andermann, Family Medicine Department, McGill University

Issue/problem: Reducing health inequities requires intersectoral action, health in all policies and structural change. Many high-level documents highlight the potential role of frontline health workers as change agents. However, there is little empirical evidence on what frontline health workers are doing or can do within and beyond their clinical practices to mobilize action on the social determinants.

Objectives and Methods: A qualitative study was carried out from October to December 2016 by researchers based in the Department of Family Medicine at McGill University. The aim was to explore what health workers from the Eastern Mediterranean Region have done and what more they believe could be done to support patients living with disadvantage and marginalization and how to mobilize wider change to impact the social determinants of health. Purposive sampling and snowballing technique was used to identify participants with a range of countries of origin, genders, types of health profession and years since graduation. Semi-structured in-depth interviews were used to identify barriers and facilitators to action on social determinants. Data collection continued until saturation was reached (19 interviews) and data was analyzed using a conventional content analysis approach.

Results: Participants have tried to help their marginalized patients suffering from challenges such as poverty, illiteracy, food insecurity and domestic violence by providing free medications and medical services, making referrals to social workers and support services where available, and creating a donation box to partially cover expenses for underprivileged patients. Few health workers have been involved in mobilizing larger community action beyond the clinic. Barriers include the clinical culture which focuses on biomedicine, lack of familiarity with existing advocacy organizations in the local community, chronic shortage of health workers and high work load.

Lesson to date: While participants are aware that social determinants contribute to the poor health outcomes of their patients, most of their actions focus on mitigating these effects at the clinic level. A culture change in the Eastern Mediterranean region and worldwide would foster engagement with local leaders and grassroots organizations to create more supportive environments for health.

Main messages: Participants recognized that their efforts in assisting their marginalized patients were not enough, but were unsure what else they could do to address the larger underlying challenges. Educating both health care providers and patients about the importance of discussing social challenges within the clinical encounter and mobilizing broader community action would be a first step in promoting grassroots-level change.

GOTO, Miho. Agence Japonaise de coopération internationale/Projet de renforcement des soins de santé maternelle et néonatale, Senegal

Effets de la mise en œuvre du modèle PRESSMN sur l'amélioration des soins de santé maternelle et Néonatale au Sénégal

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Issue/Problem: Worldwide displacement numbers are on a rise, particularly the result of the Syrian civil war, which has displaced millions. Canada has a long humanitarian tradition of resettling refugees, and has so far resettled approximately 26,000 Syrian refugees. It is crucial to effectively and efficiently respond to the needs of some of the issues that this population faces based on the experiences and needs of prior individuals. Women are a highly vulnerable and often marginalized group among the refugee population, who may require particular needs addressed. This scoping review examines current literature in the Canadian context in order to explore the needs, concerns, and issues that arise among refugee women, post-resettlement. A scoping review was conducted using various databases, including literature in the Canadian context from 2001 to 2016. Grey literature was obtained from the 2015 North American Refugee Health Conference. A total of 21 articles were used. Inclusion criteria: peer-reviewed, focused on the Canadian context, published between 2001 and 2016, focused on refugees, focused on women, published in English, focused on post-arrival or the resettlement phase. Exclusion criteria: non-differentiation between immigrants, migrants, and refugees, and studies that focused on pre-arrival or pre-settlement.

Results: Five themes emerged from the literature collected, including: reproductive health, maternal health, diet & nutrition, trauma, barriers to access & health care services.

Lessons: More research needs to be conducted with refugee women in the Canadian context, research that is representative and uses mixed methods. Themes found in this review along with the Inter-Agency Standing Committee's (IASC) intervention pyramid can be used for program planning purposes in local communities or at a larger systems level. Program planners who aim to address the health and well-being of refugee women in their communities, should aim for topics that emerged from this review, in particular: PAP smears, contraceptive use, post-partum depression, vitamin D deficiency, navigation of the food environment and meal prep, trauma, navigation of health and social service system, and/or introduction to the Canadian healthcare system and its functions.

Main messages: Cultural perceptions were an underlying theme of the majority of literature. Themes were characterized and prioritized from a capacity building standpoint using the IASC intervention pyramid for humanitarian emergencies. Studies and research surrounding refugee women's health in Canada is either highly qualitative such as semi-structured interviews, or strictly quantitative such as hospital data and chart reviews. Barriers to access is most common issue cited in Canadian literature.

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Keeping Ground, Refusing Vulnerability: Community resistance against a Canadian mine in rural Nicaragua

Issue: Mineral exploration and extraction can create wealth for some, but also frequently generate environmental, social, and health problems, especially for residents of communities proximal to mine sites. Concomitantly, conflict has become inherent in the ways that the extractive industries in general, and Canadian mining companies in particular, interact with rural communities across Latin America. Those interactions – both at the mine site and in the affected communities - frequently impact adversely on human rights and on health by creating social and environmental vulnerabilities and introducing new forms of inequities. Increasingly, health researchers are being asked to describe and analyze effects that mining has on community wellness, as well as to document and share the strategies used to resist such effects in rural mining affected communities.

Methods/Results: In the case of Rancho Grande, Nicaragua, a resistance movement of local peasants has successfully staved off mining exploration by a Canadian mining company for twelve years -- and hence avoided augmenting increasing health and environmental vulnerabilities. In this remote rural coffee and cacao-growing municipality, the strategy of becoming organized, active and vocal helped make the community resistant. Based on a two-year case study using interviews, focus groups, workshops and observation, this poster describes how the community's strategy has so far worked to stave off the intrusion of an aggressive Canadian mining company, allowing the community to preserve their culturally and agriculturally vibrant community.

Lessons/Main message: Community organizing and resistance to environmentally destructive, health damaging practices of mining companies can be effective ways to preserve health-enhancing ways of life. While challenging to do, engaged upstream research on such 'unusual' health enhancing practices can yield important lessons for those concerned with reducing the vulnerability of isolated, poor and agricultural communities to exploitation via extraction.

HATEM, Marie, Université de Montréal, Canada

A variety of human resources offering healthcare to mother and neonates in Togo and Guinea: which quality of services is expected?

Co-Authors: Hana Halabi-Nassif, Université saint-Joseph; Marie Maroun, McGill University - Telehealth Coordination Centre - MUHC

PROBLEM: The quality of mother and neonate's healthcare that contribute to the reduction of high mortality rates of these vulnerable populations, remains a challenge for low and middle income countries, particularly in Sub-Saharan Africa. Expectations for implementing quality interventions that target this goal require qualified health resources services.

OBJECTIVES: Describe the human healthcare resources status and the quality of their services (technical, interpersonal, organisational) they provide to mothers and neonates in Guinea and Togo; and determine the beneficiaries' satisfaction.

Data are provided by Guinea and Togo's case studies which were directed by the PI of the present study, commanded by WHO-Geneva through the French Funds Muskoka Initiative. The embedded levels of analysis of the primary study covered the central, intermediate and peripheral levels of the health system of each participant countries. The population comprised: healthcare personnel (e.g. Physicians, nurses, midwives), healthcare beneficiaries, community members (women, men, leaders). Data collection methods comprised: observation of the healthcare personnel available during the survey realized at their practice setting, in the context of their pre, per and postnatal clinical consultations; interviews (Togo and Guinea respectively: 59-284 mother-neonates' healthcare personnel; 28-30 beneficiaries, 12-13 health institution responsible, 8-8 educational institution responsible); and focus groups (2-5 men, 2-7 women, 2-4 community leaders, 8-8 students). Ethical considerations were applied through the primary study.

RESULTS: In both countries, the observations revealed a low level of healthcare quality for all criteria. The technical quality of care is insufficient for all the perinatal period: Healthcare during labor, childbirth and postnatal period are unsatisfactory and must be ameliorated particularly regarding the confidentiality and respect required by the beneficiaries of care. The non-technical quality varies according to: the health institution as well as the level of experience, the individual qualification, the specialization and basic training of the mothers and neonates' healthcare personnel. The most important gap is the geographic and financial accessibility; the mothers and neonates' healthcare personnel's capacities, the extent of their services are unsatisfactory.

LESSONS: The recommendations target the establishment of public policies : reinforcing mothers and neonates' healthcare personnel's capacities and their training conditions, norms that rule their practice, supervision system, and working conditions. Such measures will have impact if applied separately but concomitantly, they might allow for a broader and more efficient impact. Conclusions could be benchmarks for other countries from Sub-Saharan Africa.

MESSAGES: Insufficient quality healthcare for mothers and neonates, Sub-Saharan Africa; needs for public policies.

HAYNES, *Logan. University of Calgary, Canada

Brucellosis Outreach to Primary Schools in the NCA of Tanzania: Creating Health Education Resources Through Teacher Consultations

Co-Authors: Lydia du Toit, University of Calgary; Camille Adams, University of Calgary; Becca Bodenham, University of Glasgow; Jennifer Hatfield, University of Calgary; Frank van der Meer, University of Calgary; Karin Orsel, University of Calgary

Issue/problem: The Ngorongoro Conservation Area (NCA) of Tanzania is inhabited by the Maasai people, whose pastoralist lifestyle increases their risk for zoonotic diseases. Brucellosis is endemic to the region. This project focussed on translating local research findings into health prevention knowledge by exploring the use of educational resources at the primary school level. Access to health education may enable children to protect themselves against brucellosis through increased knowledge of healthy behaviours, leading to improved health of this marginalized and underprivileged population.

This project aimed to: i) Identify the current state of knowledge about brucellosis among primary school educators in the NCA; ii) improve local understanding of the disease through health education resources; and iii) receive teachers' feedback to guide the development of revised educational materials. Six primary schools with longstanding relationships with the University of Calgary Field School were visited, and teachers were shown a poster and lesson plan on brucellosis. Group discussions were used to clarify teachers' understanding and assess their current state of knowledge. Teachers were also asked to provide feedback and complete an image selection exercise for poster visuals. This project addresses knowledge translation of global health research, which is a critical step for improving health outcomes.

Results: Many teachers had heard about brucellosis, but there were clear gaps in knowledge of symptoms and transmission. Brucellosis was absent from primary school curricula, but teachers showed interest in sharing newly acquired knowledge with students and receiving revised educational materials. Through the image selection exercise, teachers indicated a preference for realistic photos over cartoon images, stressing the importance of visuals that fit the local cultural context. Teachers also identified the importance of written lesson guides in Kiswahili to ensure they can make the best use of the educational materials.

Lessons: This project demonstrates that primary school teachers in the NCA are receptive to health education outreach that translates local research findings on endemic diseases. Furthermore, it highlights how educators can be included when designing educational resources to ensure their suitability to the local context. Similar collaborations with primary school teachers in other settings may allow global health researchers to ensure findings translate to improved local knowledge and compliance with disease prevention protocols.

Main messages: Brucellosis educational outreach to NCA primary schools may facilitate knowledge uptake of recent research findings among the Maasai. Collaboration with teachers allows for the creation of educational resources that are appropriate to the local context.

HERRINGTON, *Emma, CAMSAHT, Canada

Improving human trafficking victim identification in the healthcare setting by modifying Canadian medical education

Human trafficking is a global violation of human rights. Trafficking is not limited to specific populations; however, factors that result in the destabilization and displacement of peoples, such as natural disasters and political instability, facilitate increased risk of trafficking for marginalized populations. Victims of human trafficking endure extreme and prolonged psychological, physical, and sexual trauma, which often lead to healthcare facility visits while in captivity. Current healthcare professionals lack the training and screening protocols to effectively identify and support victims. Recent studies have demonstrated that self-reported knowledge on recognizing victims can improve drastically with brief training modules for healthcare providers. Standardizing human trafficking learning objectives in Canadian medical education could help to: improve awareness and screening for victims of human trafficking, increase collaboration between healthcare providers and trafficking-specific support services, and provide an overall increased quality of care addressing victims needs.

This project was divided into two parts: the first identified an effective and validated screening protocol, and the second-currently ongoing-provides training to medical students across Canada on identifying and supporting human trafficking victims.

English screening protocol literature was summarized and compared. A scoping review was conducted using the five-stage Arksey and O'Malley (2005) framework with minor revisions. Findings were summarized thematically into: 1) pre-screening, 2) screening questions, 3) post-screening, and 4) training. Twenty-nine sources were included of 325 identified. There was only one validated screening protocol: 94.12% of screening protocols lacked scientific reasoning for chosen questions. With limited access to evidence-based screenings protocols, healthcare professionals globally may be using less effective screening questions to identify potential victims.

The second component appraised the medical curriculum at the University of Alberta to assess the need for material on trafficking. A literature review and consultation with trafficking victim support services aided in developing a list of learning objectives accompany the screening protocol. This information was covered in an hour lecture from a local expert on trafficking. Students completed a pre and post-test survey: results showed improved knowledge of identifying victims, increased recognition of the need for trafficking awareness in medical education, and an improved ability to list specific healthcare needs of victims.

In summary, there is a limited number of validated screening protocols globally. With support from medical faculties and healthcare facilities, increased implementation of training based on validated screening protocols can aid healthcare providers and medical students in identifying potential victims of human trafficking and facilitating trauma-informed care.

HOWELL, Embry. Urban Institute, United States of America

The impact of war and conflict on child health in 18 African countries

Issue/problem: Sustainable Development Goal 3.2 seeks to substantially reduce mortality for children under 5. This is challenging in African countries where child mortality remains high. Many African children experience war and conflict that impacts their health in many ways including a lack of food.

Objectives and Methods: We sought to quantify the impact of war and conflict on wasting, stunting, and mortality for children ages less than 5 and 5-14 in 18 African countries. We merged Demographic and Health Survey data over 3 decades with a data base on war and conflict in Africa since 1990. Logistic regression and survival analysis is used to measure the impact of different levels of war and conflict (those with and without violence) on child health outcomes.

Results: Preliminary results show a strong relationship between war and conflict and child health. Results are most pronounced for the youngest children. Results vary substantially from country to country.

Lessons to date: Humanitarian agencies should target food assistance to the youngest and most vulnerable children. Nations and partisan groups should consider the impact of their conflicts on children.

Main messages: War and conflict in Africa has a direct and measurable effect on child health.

HUSSAIN, Sameera. University of Queensland, Australia

The World We Want, leaving no one behind: how were the voices of marginalized communities represented into the post-2015 global health discourse?

Issue: Global agenda setting and policy-making in the context of the evolution of the SDGs gave rise to a post-2015 discourse that the UN referred to as the “World We Want”. With sustainable development as a universal agenda, there remained the unfinished business of the MDGs and a concern to “leave no one behind”. But how are people heard? Go4Health, an international consortium of academics from multiple disciplines was commissioned as a response to the post-2015 discourse to identify Essential Health Needs from the marginalized to translate findings into a coherent set of right to health expectations for a global social contract.

Objectives/methods:

1. To document and translate the voices of marginalized communities in the Chittagong Hill Tracts (Bangladesh) and Mindanao (Philippines) into the global post-2015 discourse around health. Primary research employed qualitative techniques including focus group discussions with lay community people and in depth interviews with key informants ranging from service providers, local government representatives, and members of civil society.
2. To critically examine how the Go4Health project enabled the voices of the marginalized to be heard in the discourse leading up to the SDGs. This component is a thematic analysis of Go4Health’s publications in international peer-reviewed and open access literature.

Results: Engagement and dialogue with communities in the Chittagong Hills and Mindanao exposes the dynamic intersectionality that is evident in these communities. Lived experiences in their social, environmental and political context bring to light issues around livelihoods, land tenure and rights, and access to basic services, in addition to quality health care. Go4Health documents and synthesizes the voices of marginalized peoples, and these are evident in its products. Sometimes homogenized and filtered, the findings from this work are represented in wider global health discourse, and even acknowledged by the UN prior to finalizing the SDGs.

Lessons: The marginalized experience an extraordinary diversity of intersectional experiences of inequity that diminish human dignity and rights, leaving them behind. Including and documenting the voices of the marginalized in wider discourse is possible but requires building enabling conditions and sustainable platforms for meaningful engagement.

Key messages:

- The marginalized want to be included: they discuss the opportunities and constraints encountered in utilization and participation in decision making
- Inclusive agenda setting and policy-making is possible but requires meaningful engagement
- If we want the “World We Want” by 2030, leaving no one behind, what have the marginalized asked of us?

JEANS, *Jennifer, Memorial University of Newfoundland, Canada

The Access Clinic

Co-Authors: Alison Hamilton, Memorial University of Newfoundland

Problem: The Access Women's Clinic was initially developed following reports that identified a gap in healthcare services for women in St. John's living with complex social issues. Students at Memorial University of Newfoundland developed a clinic that aimed to meet these population needs by providing respectful, comprehensive, anti-oppressive care while also engaging medical students in community service learning. The clinic opened in May 2016, but despite the identified gap in care, only four patients attended the six clinics that were offered.

Objective: Upon learning that a new interdisciplinary community partnership was already meeting the needs of our target population, we worked with the physicians of this emerging collaborative to re-evaluate the objectives of The Access Women's Clinic and to redefine our target population. In collaboration with The Gathering Place, a local service center in St. John's that aims to build community, promote equality and provide nourishment, our program shifted focus to include a broader range of vulnerable and marginalized populations, and we became The Access Clinic.

Results: We began by facilitating monthly clinics at The Gathering Place, and the need was great enough that we are currently transitioning towards weekly clinics. The program has held 11 walk-in clinics to date with a total of 58 patients seen. We have had 34 medical students supporting clinics and associated services to date, and have facilitated social justice training for over 135 medical students. Preliminary results indicate that our change in direction is meeting a community-identified need.

Lessons:

1. This project has shown us the value of a bottom-up approach in the development of community services, reaffirming a key component of global health. It has also highlighted the significance of experiential learning in our community.
2. In a small, resource-limited city such as St. John's it is important to identify your allies and collaborate with others working towards the same goal.
3. Our experience highlights the necessity of being flexible in the development of a new community program. Our clinic had to reevaluate our fundamental objective of providing care exclusively to women in order to evolve into an effective service.

Messages:

1. The value of service learning in experiencing the need for flexibility and collaboration.
2. Working with new and existing resources to optimize services for a target population.
3. Projects should continually be reassessed and improved to meet the needs of the current population and respond to changes in the community.

KARAMALIANI, Rozina, Aga Khan University, Pakistan

Locating the marginalized in health systems

Pakistan is a developing country, but with an unstable political system. It has had military rule for over 30 years of its 70 year old history. The civilian governments also tend to be dictatorial even as they have parliamentary system of governance, which is dominated by feudal lords, tribal chiefs and some religious parties. Though government has established institutions for promoting rights of women and marginalized, ground realities retain discrimination on the basis of gender, class and religion. Pakistan has a fairly large private sector in health and education, but plight of the poor and marginalized continues to be abysmal. Key health indicators for women and children, poor enrolment of girls in primary and secondary schools, and indifference to the social determinants of health prevail. . With this backdrop, a study was designed to examine the role of the marginalized in health governance. This paper describes how the marginalized experience the health system available to them.

The study had 20 sites, in two mountain regions of Pakistan. Each site included a health facility, and at least two villages – one that was near the health facility and the other that was at a distance to the health facility. Research teams were made of young men and women from the two regions. They were trained for the field work, and quality of data gathering was monitored through regular Skype meetings and review of their data which they send on a regular basis. Research methods included: Community meetings; interviews with village health committees, facility health committee, key informant interviews, focus group discussions with the marginalized and family ethnographies of a marginalized family per village.

This paper is based on the translated data of FGDs with the marginalized and family ethnographies. The preliminary findings show a disconnect between the marginalized and health system,. The marginalized were unaware of the presence of any community health committee in their village, they did not know whether the health facility they accessed had a health committee, and they did not know if they had a complain where they could register it. The paper concludes that the marginalized have no role in the governance system of the public as well as the private sector in the concerned area.

KARAMALIANI, Rozina, Aga Khan University, Pakistan

Innovation in Researching Health of the Marginalized in Northern Areas of Pakistan

Co-Authors: Kausar Saeed Khan, Community Health Sciences, Aga Khan University

Issue/Problem: In Pakistan, natural science paradigm dominates in health research with its decontextualized analysis of health outcomes, where marginalized are not focus of the study. Human or social sciences research on the other hand tend to focus on situation of marginalized groups and population in the country but that too is methodologically limited to certain qualitative tools such as interviews and focus group discussions. That too is extractive and does not provide the space for marginalized to assert their agencies. By using participatory and visual analysis techniques, the study used four innovative practices in researching health of the marginalized in northern areas of Pakistan.

Objectives: Objectives of this paper are to (a) identify and describe four innovations in research in studying health of the marginalized, especially in context of Pakistan; (b) describe and analyzes challenges faced while using innovative practices; and lastly (c) discuss possible contribution of innovative practices that can lead to equitable action in context of improving health of the marginalized in Pakistan

Results: The four innovation that the study brought to study of marginalized were : (a) marginalized were identified by the marginalized; (b) participatory reflection and analysis tools used during focus group discussion and key informant interviews allowed reflection and analysis by the marginalized of their health conditions; (c) family ethnographies enabled marginalized families to explore social determinants of health that impacted their outcomes; and (d) village dissemination plan for the 40 villages was developed from where the data was collected, which could not be conducted.

However, these innovations also brought obstacles during research (a) in shape of disagreement among researchers about the research approach taken for collecting data and (b) analysis of findings and (c) inadequate resources for conducting village dissemination.

Lessons:

- The mainstream research in Pakistan tries to predefine who are marginalized. This study goes beyond and away from this conventional approach by focusing role of the marginalized in research
- Sources of marginalization can be diverse and are often rooted in the context itself. The researchers must allow meaning making by the marginalized to understand these sources.

Main Messages:

- Innovation is not always a technical fix, rather it is context specific, and hence should be shaped by it.
- Researchers have to be reflexive of their political positioning in research and the issue(s) that is/are to be explored

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Analyse de la surveillance des maladies transmissibles dans la zone à risque élevé de la maladie du virus Ebola en RD Congo

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Le système de surveillance nationale des maladies infectieuses est essentiel pour garantir une détection rapide des épidémies. En général, le système de surveillance des maladies ne fonctionne pas bien dans les pays fragiles en raison d'une pénurie extrême de ressources. L'accessibilité difficile des patients aux établissements de santé et la pénurie d'outils de communication sont autant des causes de l'identification tardive des épidémies et de la sous-notification. Cependant, la RD Congo a réussi à contenir favorablement toutes les épidémies de la maladie à virus d'Ebola (MVE). A travers cette étude, le Ministère de la Santé Publique de la RD Congo a conduit, de décembre 2015 à juin 2016, une évaluation du système de surveillance des maladies transmissibles dans les zones à haut risque de la MVE. Au total, 15 divisions provinciales de santé (DPS) comprenant 30 districts sanitaires, 31 hôpitaux de référence, 82 centres de santé et 72 agents de santé communautaires ont été évalués. Les résultats obtenus ont montré que la plupart des centres de santé n'avaient pas de médecin et, même dans les hôpitaux de référence généraux, un seul médecin était affecté à chaque zone. Au total 51% d'hôpitaux de référence et 26% des centres de santé avaient reçu la formation sur la «Surveillance et riposte intégrée des maladies» tandis que la formation à la surveillance communautaire était relativement élevée dans la zone de santé (83%) et au niveau du centre de santé (60%). La capacité à gérer les rumeurs dans la communauté était bonne dans 40% de centres de santé. Au niveau de la zone de santé, la collecte des déchets biologiques était bien assurée comparativement aux centres de santé et aux hôpitaux de référence. Quant à l'approvisionnement en eau, 1/4 des centres de santé seulement en était disposé et des dispositifs d'hygiène des mains n'étaient disponibles que dans 57% des centres de santé. Comme moyen de communication, 35% des centres de santé étaient joignables par téléphone tandis que 64% d'entre eux disposaient d'un vélo pour le déplacement. De cette étude, il s'est dégagé qu'une forte coordination nationale et la surveillance communautaire comme processus actif de participation communautaire à la détection, au reportage, à la riposte et à la surveillance des événements de santé dans la communauté est l'un des atouts pour une réponse rapide à l'épidémie dans un pays à ressources limitées comme la RD Congo.

KOCSIS, Emily, CSIH MentorNet, Canada

CSIH MentorNet global health mentorship program: An evaluation of students and young professionals experiences

Co-Authors: Michelle Amri, CSIH MentorNet

Issue/Problem: In 2011, the Canadian Society for International Health (CSIH) created MentorNet, an international, global health mentorship program that connects students and young professionals (SYPs) with experienced mentors across diverse disciplines relevant to global health. Using a module-based curriculum, MentorNet cultivates a unique learning community, whereby mentors remain engaged with the next generation of global health leaders, and SYPs are provided with the competencies required to respond to global health challenges.

Objectives and Methods: Building on a previous study that evaluated SYP learning during the program's pilot year, this study seeks to understand how MentorNet impacts the skills and knowledge of SYPs from across four program cohorts (2012-2016). Using evaluation surveys disseminated upon completion of the program, the study analyzes SYP self-reported answers to three strategically-selected questions related to their knowledge of global health, contacts in the field, and awareness of professional opportunities in global health. SYPs responded by indicating how much they agreed/disagreed to each statement with respect to their participation in MentorNet.

Results: Of the SYPs (n=56) studied: 76.8% (n=43) of respondents either "agreed" or "strongly agreed" with the statement that "I am better informed about global health and the issues involved in this sector", 62.5% (n=35) of the SYP respondents either "agreed" or "strongly agreed" with the statement that "I have more personal contacts in the field of global health", and 58.2% (n=32) either "agreed" or "strongly agreed" with the statement that "I have learned about opportunities available in global health."

Lessons to date: Evidently, MentorNet is a valuable program for SYPs interested in global health research and practice as it: strengthens SYP's understanding of the global health sector, increases personal contacts in the field, and educates on opportunities available. Given MentorNet's effectiveness in training and educating students and young professionals, consideration should be given to expanding MentorNet or developing similar programs.

Main Messages: By connecting current and future global health leaders, MentorNet creates a space for SYPs and mentors to share, learn, and collaborate. This unique learning opportunity not only enhances the capacity of participants to engage in high-quality global health research and practice, but also provides a platform to strengthen the global health community. By improving SYP's global health knowledge, connections, and awareness of professional opportunities, the program offers a model structure for similar mentorship programs and other such initiatives that aim to build the competencies of SYPs entering the field of global health.

LAUZIÈRE, *Julie, Université de Sherbrooke, Canada

La sécurité culturelle – un concept à explorer pour des services de santé mieux adaptés

Co-Auteurs: Dave Bergeron, Université de Sherbrooke; Isabelle Gaboury, Université de Sherbrooke

Enjeu : À travers le monde, il existe d'importantes disparités de santé entre les peuples et divers sous-groupes de population. Parmi les facteurs qui peuvent expliquer ces iniquités de santé se trouvent la culture et le système de santé. Le défaut de prendre en compte la culture dans la prestation de services de santé est susceptible d'en limiter l'accès, en particulier pour les populations marginalisées, contribuant ainsi aux iniquités de santé que le système tente d'atténuer. Devant ce constat, le concept de sécurité culturelle a été proposé par des infirmières maories pour attirer l'attention sur l'importance de considérer l'influence du contexte plus large, y compris le contexte sociohistorique, culturel et politique, dans la prestation de soins de qualité.

Objectif : Cartographier la littérature sur la sécurité culturelle dans différents courants de littérature et examiner l'utilisation du concept en santé mondiale.

Méthodes : Dans le cadre d'un examen de portée, 10 banques de données (santé, sciences sociales) ont été sondées à l'aide du mot-clé « cultural safety ». Seuls les documents en anglais ou en français ont été retenus. La littérature a été cartographiée suivant le type de publication, l'origine, l'utilisation du concept et les groupes de population concernés.

Résultats : Un total de 1065 documents a été identifié ; 628 ont été examinés après retrait des doublons (n=434) et des articles en d'autres langues (n=3). Une analyse préliminaire des documents identifiés montre que la moitié était de nature conceptuelle, des opinions ou des recensions des écrits. Près de 9/10 documents traitait de la sécurité culturelle dans un contexte autochtone et près de 1/6 documents en traitait en lien avec la formation ou l'enseignement, ce qui est cohérent avec l'origine du concept. Un nombre limité d'écrits montrent l'utilisation du concept auprès d'autres groupes de population, en particulier des minorités ethniques, linguistiques ou sexuelles.

Leçons tirées à ce jour : Jusqu'ici, le concept a surtout été utilisé pour analyser l'expérience de soins des Autochtones dans des pays industrialisés. Néanmoins, la sécurité culturelle a le potentiel de contribuer à l'amélioration des services de santé pour d'autres groupes de population.

Principaux messages : Le concept de sécurité culturelle appelle à considérer la culture et le contexte dans la planification et l'implantation des programmes de santé. Une plus grande considération de ces éléments pourrait permettre de mieux collaborer avec les groupes marginalisés en vue d'optimiser leur accès à des services de santé de qualité.

LEE, *Youngseo, University of Saskatchewan, Canada

Improving health literacy for newcomers in Regina: A community-based participatory research project

Co-Authors: Leanne Baumgartner, FMR II; Youngseo Lee; Rejina Kamrul, MD, CCFP, FCFP; Neelu Sachdev; Kelechi Eguzo, MD, GPO, MPH

Issue/Problem: Evidence suggests that immigrants face disparities in access to and utilization of health services, often due to low health literacy, poor language skills and lack of infrastructure to address their unique issues in healthcare. Nobody should be left behind in the changing world, including newcomers to Canada.

This research seeks to explore ways for improving the health literacy (HL) of immigrants, and to evaluate the usefulness of a local health literacy publication (Newcomer Pamphlet-NP). Research questions include:

1. What are the health-related experiences of immigrants in Regina regarding challenges faced in accessing healthcare, and how can that be improved?
2. How useful is the NP in addressing the challenges, and how might it be improve?

Methods/Methodology: This was a mixed-methods community-based participatory project. Focus group discussions and demographic surveys were conducted on convenience sample of immigrants and refugees accessing services at Regina Immigrant Women's Center. Data was analyzed using descriptive statistics and inductive analysis.

Results: Twenty-six persons participated in the study (male=4, female=22). The median age was 38 years (range=23-67). 87% (20/26) had high-school diploma.

Common themes about HL were 'health information source' and 'access barriers'— "waitlist is long" (#1); "don't know where to look to seek help" (#10); "it's easier [in home country] to see a specialist" (#14); "When I visit the doctor ... I [record] video, ...I play it back to my husband, and he explains what the doctor says" (#26).

All participants found content of NP relevant and informative. Delivery of information as publication is preferred over other methods of communication. Suggested methods of distribution were online version (app, Facebook); buses, wallet card, place of worship, etc.

Lessons to date: Findings support existing research on challenges faced by newcomers to Canada. Most immigrants shared the same concept of health. Common sources of health information included online, friends and community service organizations. The NP is a helpful tool in addressing challenges of health literacy in Regina. An online/App version is suggested.

Main messages:

1. Newcomers to Canada face unique challenges that significantly affect their health literacy. Some include: lack of health information source, and language and cultural barriers.
2. Printed information about healthcare (e.g. NP) is helpful for immigrants, and should be widely distributed both on/offline

MA, Steven. SickKids Centre for Global Child Health, Canada

Elucidating gaps in global resources for mental health

Issue: Mental health problems present a massive burden for individuals and societies worldwide. As a key cause of disability, and a major contributor to the global burden of disease, it is imperative to address this public health priority. Global governance presents an effective structure to galvanize support for the mental health of populations. Unfortunately, communicable diseases and more apparent manifestations of illness have overshadowed mental health on the global health agenda.

Methods: This study qualitatively analyses the institutions of Health 8 (H8), comprising the World Health Organization (WHO), Bill and Melinda Gates Foundation (BMGF), United Nations International Children's Emergency Fund (UNICEF), United Nations Population Fund (UNFPA), Joint United Nations Programme on HIV/AIDS (UNAIDS), Global Fund to Fight Aids, Tuberculosis and Malaria (GFATM), Global Alliance for Vaccines and Immunization (Gavi), and the World Bank. Through charting the budgetary allocations of these preeminent actors from 2012 onward, this study elucidates substantial gaps in mental health resources on the international stage.

Results: It is found that only 39 million USD from a total H8 budget of 21 894 million USD were earmarked for mental health initiatives in 2014/2015. Distressingly, this represents a proportional spending of less than 0.2% from eight of the most powerful actors in global health.

Lessons: These findings serve as a call for action on improving the global governance of mental health to urge the development of novel funding mechanisms and international treaties. Collective impetus from diverse stakeholders is required to address this imbalance of resources, as we stand to remember that there is no health without mental health.

Main Messages: Mental health remains a neglected global public health priority. Vast inequities exist in the distribution of H8 resources for mental health initiatives. Improved global governance structures are necessary to rectify these gaps, and to ultimately support healthier, more productive populations.

MACDOUGALL, Arlene, St. Joseph's Health Care London, Canada

Extending the CREATE psychosocial rehabilitation toolkit to Kenyan mental healthcare settings: a feasibility study

Co-Authors: Terry Krupa, School of Rehabilitation Therapy, Queen's University; Rosemary Lysaght, School of Rehabilitation Therapy, Queen's University; Regina Casey, Douglas College; Elizabeth Price, Lawson Health Research Institute; Richelle Bird, Western University; Mitchell Canes, Schulich School of Medicine and Dentistry, Western University; Marlene Le Ber, Brescia University College; Oana Branzei, Ivey School of Business, Western University; Victoria Mutiso, Africa Mental Health Foundation; David Ndetei, Africa Mental Health Foundation; Sean Kidd, Department of Psychiatry, University of Toronto

Issue/Problem: Serious Mental Illness (SMI) is a leading cause of disability worldwide, yet the majority of people with SMI (PWSMI) in low and middle income countries do not receive care and are marginalized. To effectively and sustainably address these gaps our team (Community REcovery Achieved Through Entrepreneurism - CREATE) developed a low-cost, culturally sensitive, evidence-based, recovery-oriented Psychosocial Rehabilitation (PSR) Toolkit that includes psychoeducation and self-management strategies. Our pilot site in Machakos, Kenya engaged employees with SMI as part of an innovative social business model paired with the PSR Toolkit with promising results. The current study expands to PSR Toolkit to the (1) Machakos Level 5 District Hospital and (2) Mathari National Teaching and Referral Hospital (Nairobi, Kenya).

Objectives: This study assesses the feasibility of implementing the PSR Toolkit in two hospital settings, and evaluates the effect of the PSR Toolkit group-intervention on patients' and family care providers' attitudes towards recovery, illness management and quality of life (QOL).

Methods: Using a mixed-methods repeated measures design, 48 patients and 48 family care providers (three groups of eight patients and family members per hospital site) are participating in 12 Toolkit group sessions at one of the two hospitals, facilitated by 12 trained Kenyan mental healthcare staff (six per site) and three peer co-facilitators. One of the Machakos groups is run out of the rural outreach clinic (level 3) and two at the Level 5 Hospital. Pre- and post-intervention tests assess patient-related outcomes and perceived impacts of the Toolkit on patients, care providers, and facilitators.

Global Health Significance: The study aims to build capacity within Kenyan mental healthcare providers and PWSMI in recovery-oriented psychosocial rehabilitation where little such capacity currently exists.

Results: Expected completion dates for the Machakos and Mathari sites are August and September 2017, respectively. One of the Machakos groups has completed the intervention, and a second group is well underway. Based on our pilot results, we expect to report on the feasibility and effectiveness of the intervention, and changes to patients' mental health status and QOL.

Lessons to date: Community input and support are necessary for the success of low-cost, community-based rehabilitation.

Main messages: The CREATE PSR Toolkit is a recovery-oriented intervention aimed at closing the treatment gap and marginalization of Kenyan PWSMI. This study evaluates the expansion of the Toolkit to two hospital settings in order to improve patient recovery and to provide innovative low-cost tools to local care providers.

MAGACO, Amilcar. National Institute of Health, Mozambique

Anthropological Assessment of Attitudes Towards Cholera Interventions, Vaccines, and Potential OCV Uptake in Nampula City 2016

Co-Authors: Rachel Demolis, Agence de Medicine preventive; Carlos Botao, National Institute of Health; Celestino Sinai, National Institute of Health

Introduction: In Mozambique, cholera first appeared in the capital Maputo in 1973, spreading to the entire country in the last two decades. Epidemics occur mainly from December to June, coinciding with the rainy season. In 2015, a cholera outbreak in Mozambique was officially declared on January 27 and on May 18, with 8,835 cases and 65 deaths registered. In the city of Nampula, the third largest city in Mozambique, a total of 1,473 cases were reported.

Objective: To anticipate key community-based issues that need to be addressed for the implementation of the cholera immunization campaign in Nampula.

Methods: A qualitative and quantitative anthropological study consisted of individual interviews, focus groups, and rapid assessment questionnaires. Overall, 137 interviews were carried out, 80 of which were selected for analysis. In addition, 143 questionnaires were completed. The interviews were transcribed and analyzed collaboratively using the computer assisted qualitative data analysis software, Nvivo. Quantitative questionnaires were collected via the data collection tool ODK and analyzed using the SPSS statistical package. The research was part of this survey, and was used to inform community leaders and members with experience in cholera episodes, health professionals, and activists at the provincial, district, and neighborhood levels.

Results: A total of 143 individuals participated in the study, of which 63.3% were female and 36.6% male. The vast majority of participants were Mozambicans. Barriers to the introduction of oral cholera vaccine (OCV) include previous difficult immunization experiences, and the emergence of conflicts and violence associated with past cholera interventions (chlorination of wells) that target health professionals, community leaders, and community health activists. Despite this, 95% of participants expressed an interest in receiving the OCV, and 83% declared their intent to immunize their children, preferably by a health professional. The recognition that cholera is a severe and highly lethal disease were facilitators for introducing the new vaccine.

Conclusion: Mistrust and persistent rumors from various sources compete to disrupt the cholera vaccine campaign. The violence aimed at health personnel as well as the perception of political malice towards this phenomenon created barriers that would hamper the implementation of the OCV in Nampula. Despite these identified barriers, the study population showed great interest in receiving this vaccine, which would be administered by health professionals.

MARTINS, Janet, Nacional health institute, Mozambique

Evaluation of the Impact of an Intervention at the Maternal and Child Care Management Level: The Case of Scheduled Appointments

Although there has been improvements on the access to maternal and child health, the maternal mortality rate in Mozambique is the cause of 1 in 4 deaths in young mom's (mothers) (reported by the demographic health survey 2011).

The health service for young mothers are an important instrument to achieve the PESS 2014-2019 goal of reducing the child and maternal mortality rate.

Statistics of health survey(2011), revealed that in Mozambique, 90.6% of the pregnant woman, attend antenatal appointment, and only half complete the 4 antenatal visits, Under pressure health service provider pay less attention to each individual and neglect procedures relevant to identify risk cases.

That being said, there is a need to identify and test new management intervention areas on the national health system, of low cost and easy adoption to contribute for the solution, and challenges on the given health services.

The project has the opportunity to improve the efficiency and quality of the maternal and child health, using antenatal appointment system, where by the nurse schedules the appointment, and the patient chooses the hour of the appointment. With the goal of reducing appointment waiting time, increase the number of appointments, increase the time of the appointment, comply with the major procedures in each appointment, increase the patient satisfaction and the health service providers, increase the number of institutionalized child birth.

It was conducted an experimental study in 5 sanitary units, divided in treatment and control.

By using surveys before/after the introduction of new model.

In parallel, it was measured the waiting time on pre-natal patient appointment, since their arrival at the unit; duration of the appointment.

The results show substantial reduction on the waiting time in the intervention areas. Before the intervention there was a high concentration of patient on the first hours, 70% of patient would arrive at 7am and 90% until 9am. With the introduction of appointment scheduling model the patient arrives 20 min before the scheduled time, and only 10% arrive after it, therefore the waiting time was reduced from 4 to 2 hours.

The Nurses, adopted the scheduled appointment model, however there still in the process of change and assimilation, so they attend patients that are 1 hour late. the study brought systematic knowledge about the shortfalls and operational difficulty of the model, , showing evidences to expand the new model of schedule appointment for all national health service.

MCFARLANE, *Shamiel, McGill University, Canada

interventions to reduce social isolation among the elderly in low resource settings: a scoping literature review

Co-Authors: Anne Andermann, Family Medicine Centre, St Mary's Hospital and Faculty of Medicine, McGill University

Issue/problem: Social inclusion of the elderly is essential for improving access to care, and health outcomes, in this growing segment of the population. There are currently 740 million people over age 60, rising to 1 billion by 2020. Social isolation affects between 5%- 40% of the elderly population, throughout all socio-economic classes, making this an important emerging global and public health challenge. Studies demonstrate the use of community outreach and development programs along with long-term care facilities in promoting social inclusion but few have demonstrated the role of primary health professionals in minimizing isolation.

Objectives/Methods: A scoping review of the scientific literature using the Ovid MEDLINE database with key word searches was performed by researchers in the Department of Family Medicine, McGill University. The aim was to identify effective interventions, especially those adapted to low-resource settings, that are proven to reduce social exclusion and improve access to services and health outcomes of isolated elderly persons. Abstracts were scanned for relevance according to pre-defined inclusion/exclusion criteria, and retrieved articles analyzed using a pre-established template.

Results: Individual and group interventions were developed to increase social inclusion, from reminiscence therapy to facilitating transportation, but these were conducted in middle-high income economies. A case study by Zhang et al regarding the long term needs for ethnic minority elders in Yunnan China, found misunderstanding of the need for long term care institutions and that public resources should be targeted to village-level support systems. The misunderstanding being what worked for urban cities would translate to success rurally. Resources were needed at the grassroots level to enhance primary care access and furnish health professionals with tools needed to combat social isolation. Preliminary results did not reveal, exclusively, interventions which catered to low income economies or that involved partnerships with primary care professionals beyond clinic settings.

Lesson to date: While interventions which promoted active (social clubs) rather than passive interactions (home visits) had meaningful impacts on health and quality of life in middle-high income societies, there is little evidence relating to low resource settings. More research is needed on the role of primary care professionals in aiding their patients beyond the realm of the clinic, to promote social inclusion.

Main Message: Interventions are mainly catered to developed countries with resources to promote social inclusion. Understanding the needs of primary health professionals and the elderly will facilitate changes at the community level and later, on a national stage.

MEAGHER, Rachel. Canadian Red Cross, Canada

Improving health information systems (HIS) in Red Cross field hospitals

Co-Authors: Haytham Qosa, Canadian Red Cross; Sébastien Jouffroy

Issue/problem: To deliver in the last mile, and leave no one behind, a health information system (HIS) is a critical tool to inform service delivery during global emergencies, to better meet the needs of the most vulnerable. The Canadian Red Cross (CRC) is part of a global Red Cross network of emergency field hospitals and clinics (Health Emergency Response Units – ERUs) that require health information to respond appropriately to emergencies. CRC is active in ongoing work at the international level to develop an improved, comprehensive HIS for use in all ERUs, globally.

Objectives and Methods: The objective was for CRC to develop an HIS for interim use, to ensure quality health information pending availability of the international tool. Methods included undertaking a review, consulting experts and obtaining experience from the field.

Results: Beginning in 2015, the CRC team conducted a comprehensive review to determine which data and indicators should be collected in emergency field settings. This included compiling standards from WHO, UNHCR and MSF, and consulting experts to develop indicators. An Excel-based pilot HIS was created to record data on outpatient consultations, admissions, antenatal care, labour and deliveries, radiology, surgical procedures, diagnostic test results, deaths and discharged patients. Forms, as well as core datasets, were shared with the international HIS working group.

The most recent (October 2016-January 2017) CRC experience from Hurricane Matthew in Haiti, contributed lessons from mobile clinics. The HIS used specifically for this operation captured data on 65 reasons for consultation (more than twice what was originally captured), doubled the number of age categories, and recorded GPS coordinates of mobile clinic sites, among others. This allowed the field team to better understand the distribution of cases and disease trends, and more accurately report to the Ministry of Health.

Lessons: The CRC-HIS has benefited from input from multiple sources to ensure optimal data-gathering and responsiveness. It can produce graphs and basic statistical outputs for quick decision-making in the field. To ensure reliability and accuracy, an accompanying manual can be consulted for detailed explanations. The CRC-HIS will be piloted starting with the next emergency deployment to inform any final revisions.

Main Message: The CRC-HIS will provide a more robust system to capture local data for optimal decision-making and service delivery in the field, and contribute to global efforts to standardize HIS across Red Cross ERUs

MEENA, Umme, United States Agency for International Development, Bangladesh

Quality of ANC services in Satellite Clinics in Rural Bangladesh

Co-Authors: Sheikh Billah, ICDDR,B; Abdullah Khan, ICDDR,B; Marufa Khan, Save the Children; Imteaz Mannan, Save the Children; Joby George, Save the Children

Issue: USAID supported MaMoni Health System Strengthening Project (MaMoni HSS) aims to address the gaps in moving policy into action, health system weakness, poor quality of services and inequity of health care coverage in certain districts of Bangladesh. This study was aimed to assess the preparedness of Satellite Clinics (SC) in providing quality of care for ANC.

Objectives and Methods: An assessment of ANC services in SC was conducted in 2 districts of Bangladesh to identify the gaps in readiness of SC for provision of ANC services and to assess the extent of quality of care in those settings. During two months of data collection (August to September 2015), 85 satellite clinics were assessed, 594 cases of ANC consultations were observed, 4 focused group discussions (FGD) with pregnant women and 9 key informant interviews with the FWVs were conducted.

Results: Study findings reveal that SC services are often unavailable and irregular since location and schedule of satellite sessions are subject to frequent changes. Mostly it takes place at someone's home, therefore, provision of adequate spaces for conducting the ANC, functionality of the toilet for conducting urine test and overall support of the household owner are the most prioritized factors while selecting a site for SC. Individual privacy is a major concern while conducting the pre-natal examinations and there is limited scope of one-to-one counselling for the pregnant women. FWVs perceives that provision and availability of supplements and medicines are key driving force for seeking ANC in SC.

Structured observation found that ANC in 1st trimester is extremely low (4%). Blood pressure was most measured component of ANC (93%), urine was tested in 65% cases and 76% were advised to take IFA during pregnancy. One in every five women received counselling on at least one danger signs of pregnancy. Both observation and FGDs with women found that counselling is only done in groups and quality of counselling is poor and incomplete. Only one-fourth women in third-trimester are counselled for having skilled birth attendants during delivery and counselling about immediate newborn care is rarely done (~2%).

Lessons to date: By improving the quality of counseling and necessary commodities for ANC is necessary to improve quality of ANC.

Main messages: Strategic relocation with basic amenities- examination area with toilet facilities, and regular supervision would help to improve the quality of care in outreach settings.

MEENA, Umme, United States Agency for International Development (USAID), Bangladesh

What is the quality of sterilization services in rural Bangladesh?

Co-Authors: Masum Billah, ICDDR,B; Abdullah Khan, ICDDR,B; Marufa Khan, Save the Children; Imteaz Mannan, Save the Children; Jebun Rahman, Jhpiego Corporation; Joby George, Save the Children

Issue: Utilization of long acting permanent methods have been consistently down for three consecutive years in Bangladesh between 2013 and 2015

Objectives and Methods: The study assessed the quality of care of sterilization services in 3 districts of Bangladesh to determine the following:

- Whether the facilities were prepared to provide services according to national standards
- What kind of limitations providers faced in providing sterilization services
- Whether quality of care affected the experience of the clients

The study assessed 18 health facilities in 3 districts between 2015 and 2016 where sterilization services are provided. Facility preparedness was assessed in all 16 facilities. Through structured case observations 133 cases (95 tubectomy and 38 vasectomy) were observed by experienced assessors. Out of the 133 cases, 119 clients were interviewed using a structured questionnaire three months after the procedure. In addition, 24 key informant interviews and 4 focused group discussions were conducted.

Results: Most facilities were found to be ready to provide services. Key gaps included lack of privacy during counseling and physical assessment, adequate tubectomy equipment in commensurate with the number of clients present on that day, oxygen cylinder for emergencies, and appropriate recovery area.

During the observation of the 133 cases, assessors also marked that the autoclave procedure was not appropriate.

Post-operative procedure were found to be the critical gap in the process. The recovery area was not clean (0% found appropriate), follow up examination was minimal (around 8%), vital signs were not measured (3%), advice on general care was given in two thirds of the cases before discharge.

Follow up interview with the 119 clients revealed that the counseling before during and after the procedure was grossly inadequate. Many clients reported symptoms of complications that they associated with the surgery: headache (42%), lower abdominal pain (40%), high fever within 1 week (37%), swelling of wound (28%), etc. Providers' and Managers' interview revealed minimal on-site supervision and clinical feedback as a main concern.

Lessons: There are significant gaps in quality of care of sterilization services. Post-operative care is the area needing the most attention.

Main messages: Following a dissemination, the project is working with the Ministry of Health and Family Welfare, Bangladesh to ensure:

- Revision of clinical guidelines and recording forms
- Recruitment of 300 clinical supervisors for the entire country and ensuring their clinical competence
- Inclusion of messages on follow-up visits in the pre-discharge guideline and takeaway IEC materials.

MEH, *Catherine, Western University, Canada

Determinants of maternal mortality: A comparison of geographic differences in the northern and southern regions of Cameroon

Co-Authors: Amardeep Thind, Western University; Amanda Terry, Western University; Piotr Wilk, Western University

Issue/problem: The global decline (by 44%) in maternal mortality has not been seen in Cameroon. Instead, Cameroon lost ground on MDG 5 with an unyielding level of maternal deaths and is further challenged to meet the ambitious SDG 3. With a predominantly young population, about 60% of which are under age 25 years, a high fertility rate of 5.1 children per woman, and a third of women having their first child before age 18 years, high maternal death rates may persist or steadily increase. Geographic disparities may influence maternal mortality. Yet, it is not known if the North and South, the most distinct parts of Cameroon, differ on determinants of maternal mortality.

Objectives and Methods: This study assessed differences between the North and South of Cameroon on determinants of maternal mortality in women of childbearing age (15-49 years). Cameroon Demographic and Health Surveys (2004 and 2011), which provide nationally representative health indicators and an eligible sample of 18,665 women, were used. Participants were living or deceased women who had given birth. Deceased women were identified through the Direct Sisterhood Method which ascertains maternal deaths among survey respondents' siblings. Select respondent characteristics were ascribed to deceased siblings. The outcome was maternal mortality. Data was analyzed using multivariable logistic regressions.

Results: Age and parity were associated with maternal mortality in the North (n=5620), and South (n=13,055). Distance to facility, education, community wealth and community education were only significant in the North while domestic violence, ethnicity, and type of residence were unique to the South. After adjusting for all covariates, associations remained for parity in both regions. Education, particularly, primary and secondary/higher in the North and secondary/higher education in the South, was significant. Age, domestic violence, and Beti/Bassa ethnic group remained significant only in the South whereas distance was only significant in the North.

Lessons to date: Cameroon still has difficulty collecting information on maternal mortality. Though this study found determinants with countrywide significance, it does ascertain that the North and South of Cameroon differ on determinants of maternal mortality.

Main messages: Regional differences in maternal mortality determinants exist in Cameroon and these should inform maternal health policy. Findings highlight the need to target domestic violence, ethnicity and residence type in the South and distance to facility in the North. Age, parity, and education are national priorities. Strategies should aim to improve sociocultural and socioeconomic conditions of the women of Cameroon.

MONETTE, *Erynn, McMaster University, Canada

Refugee care in Lebanon: Palliative care efforts and access

Co-Authors: Elysee Nouvet, Humanitarian Health Ethics

Since the introduction of palliative care by the Ministry of Health in 1995, Lebanon has been in the process of developing a care system for terminally ill patients. Several challenges have been associated with this, and implementation of the discipline has been slow. On top of providing care for its own citizens, Lebanon has experienced the additional challenge of caring for sick refugees from Syria and Palestine. This literature review aims to analyze the state of the Lebanese healthcare system, particularly in reference to palliative care, and the challenges associated with access for refugees. It also aims to identify the need for refugee palliative care services worldwide, and justify research in this area. This information directly speaks to the sub-theme of health in marginalized populations after periods of crisis, as it reviews action taken to offer health support to refugees and suggests actions to improve these efforts. The databases PubMed and Google Scholar were used to gather eleven peer-reviewed journal articles, one book chapter, and a UN meeting report. The most relevant of these were reviewed and condensed into this report. Issues such as the privatization of healthcare services, social and cultural views, and the increasing numbers of elderly and cancer patients in Lebanon were cited as contributors to the challenge of offering palliative care to residents. In light of these issues, research is warranted into the social and cultural views of refugees concerning palliative care in order to develop guidelines for future evidence-based research. Databases listing available humanitarian services should be created to improve the referral system in refugee communities. Additionally, the possibility of introducing education systems concerning palliative care should be explored for both healthcare professionals and neighborhood residents in order to highlight the benefits of including palliative care in treatment plans. With these results in hand, the Lebanese system can be improved and provide a model of care for other countries experiencing refugee crises.

Key Messages:

1. Many challenges face refugees in seeking healthcare, including the cost of private healthcare, an inadequate referral system, sociocultural barriers associated with local perceptions of death, and financing prolonged treatments.
2. Palliative care should be included in healthcare packages offered to refugees.
3. Research into the sociocultural perceptions of palliative care among refugees is needed to provide better, more culturally relevant care.

MWEMBO TAMBWE-A-NKOY, Albert, SCOGO, Ecole de Santé Publique, Faculté de médecine, Université de Lubumbashi, Democratic Republic of the Congo

Cartographie des maternités viables à Lubumbashi en 2014

Importance de la question : L'objectif de cette étude était d'identifier les maternités viables dans le district sanitaire de Lubumbashi en 2014 en vue de mieux organiser les références contre références.

Méthodologie : C'est une étude descriptive transversale réalisée dans le district sanitaire de Lubumbashi pendant 10 jours en septembre 2014. Se référant aux normes nationales définies par le PNSR relatives aux soins obstétricaux de qualité nous avons élaboré notre guide d'observation permettant d'évaluer la viabilité des maternités de Lubumbashi.

Pour évaluer les infrastructures et les équipements dans les maternités, un score de 100 a été considéré. La maternité est viable si le score équipement et infrastructure est ≥ 60 .

Pour catégoriser le personnel, un score personnel du personnel d'un total de 8. Le personnel était suffisant lorsque le score personnel était ≥ 4 . Le score de 19 points au total pour évaluer la bonne utilisation du partogramme a été défini. Une maternité avait utilisé correctement le partogramme dans le cas où le score de remplissage du partogramme est ≥ 9 .

Resultats : Dans le district sanitaire de Lubumbashi, 43,3% des maternités ne sont pas viable. Donc ne réunissent pas le minimum pour assurer les soins de qualité aux couples mères enfants. Dans l'ensemble, 66,1% des maternités avaient un personnel soignant insuffisant. Les infrastructures et équipement de maternités sont de mauvaise qualité dans 45,9 % des cas. Et Cette observation est plus faite au niveau du centre de santé que d'autres catégories de maternités. Presque dans 40 % de maternité le partogramme était mal utilisé.

Conclusion : La qualité des soins obstétricaux reste faible à Lubumbashi. Il s'avère important que la régulation des maternités tienne compte des normes définies et mette en place un système qualité en soins obstétricaux périnatales

NAEEM, *Afnan, Dalla Lana School of Public Health, University of Toronto, Canada

A scoping review of the post-arrival health needs, issues, and concerns among refugee women in Canada

Issue/problem: Worldwide displacement numbers are on a rise, particularly the result of the Syrian civil war, which has displaced millions. Canada has a long humanitarian tradition of resettling refugees, and has so far resettled approximately 26,000 Syrian refugees. It is crucial to effectively and efficiently respond to the needs of some of the issues that this population faces based on the experiences and needs of prior individuals. Women are a highly vulnerable and often marginalized group among the refugee population, who may require particular needs addressed. This scoping review examines current literature in the Canadian context in order to explore the needs, concerns, and issues that arise among refugee women, post-resettlement. A scoping review was conducted using various databases, including literature in the Canadian context from 2001 to 2016. Grey literature was obtained from the 2015 North American Refugee Health Conference. A total of 21 articles were used. Inclusion criteria: peer-reviewed, focused on the Canadian context, published between 2001 and 2016, focused on refugees, focused on women, published in English, focused on post-arrival or the resettlement phase. Exclusion criteria: non-differentiation between immigrants, migrants, and refugees, and studies that focused on pre-arrival or pre-settlement.

Results: Five themes emerged from the literature collected, including: reproductive health, maternal health, diet & nutrition, trauma, barriers to access & health care services.

Lessons: More research needs to be conducted with refugee women in the Canadian context, research that is representative and uses mixed methods. Themes found in this review along with the Inter-Agency Standing Committee's (IASC) intervention pyramid can be used for program planning purposes in local communities or at a larger systems level. Program planners who aim to address the health and well-being of refugee women in their communities, should aim for topics that emerged from this review, in particular: PAP smears, contraceptive use, post-partum depression, vitamin D deficiency, navigation of the food environment and meal prep, trauma, navigation of health and social service system, and/or introduction to the Canadian healthcare system and its functions.

Main messages: Cultural perceptions were an underlying theme of the majority of literature. Themes were characterized and prioritized from a capacity building standpoint using the IASC intervention pyramid for humanitarian emergencies. Studies and research surrounding refugee women's health in Canada is either highly qualitative such as semi-structured interviews, or strictly quantitative such as hospital data and chart reviews. Barriers to access is most common issue cited in Canadian literature.

NAJAFIZADA, Maisam, Memorial University of Newfoundland, Canada

Implementing health-related SDGs in Afghanistan

Issue/problem: Almost a year and a half have passed since the endorsement of the global goals by the United Nations, yet countries are to integrate the goals into their national policies. Therefore, knowledge on country adoption of the Sustainable Development Goals is yet to emerge. One of the ways to foster integration of health-related SDGs nationally is to understand in-country institutions that have taken on the task of coordinating global goals for health and identifying resource and capacity gaps to improve the process.

Objectives and Methods: The objective of this paper is thus three folds: (a) mapping country-wide institutional arrangements for SDG implementation, (b) understanding the roles of involved institutions, (c) identifying challenges and knowledge gaps to improve the process of SDG implementation at the national level. An environmental scan is conducted to understand the process of SDG nationalization in Afghanistan.

Results: The findings indicate a three-phase process of country adoption of SDGs in Afghanistan: nationalization, alignment, and implementation. Nationalization entails contextualizing targets and indicators based on the national situations, establishing country baselines for nationalized indicators, and setting annual targets for the indicators. The aim of alignment is to ensure that the identified targets and indicators are reflected in the national strategies, policies, and plans. In addition, tools and guidelines to monitor, evaluate, and report the targets and indicators should be developed and activated by the end of this phase. The implementation phase is about regular monitoring, evaluation, and reporting of the goals until 2030. A major challenge to implementation includes a lack of capacity and resources in the leading agencies, an absence of baseline data for some indicators, a failure to recognize the role of private sector, and a focus on data management rather than programmatic change.

Lessons to date: The findings indicate that the SDG implementation has brought together isolated government and non-governmental sectors around issues that help improve the lives of people. Yet, the implementation has focused on the technicality of reporting on the indicators and targets rather than focusing on intersectoral and interdisciplinary policy and programmatic changes to improve health and wellbeing of the people.

Main Messages:

- The global goals have attracted the attention of all development stakeholders on issues important to improving the lives of people.
- SDG implementation should go beyond data management to designing intersectoral and interdisciplinary programs to improve the lives of people equitably.

NAQVI, *Syeda Farwa, University of Calgary, Canada

Analysis of HIV/AIDS health promotional coverage in canadian newspapers through the lens of disabled people

Issue: With the global epidemic of HIV/AIDS still not reversing as quickly as hoped, the focus has been towards health promotion as a preventative measure. Global health aims to address equity between various cohorts through dispersing health promotional information. Newspapers are one medium through which HIV/AIDS-related health promotional material is made available to the public. Disabled people are one group that depend on health promotional campaigns to receive important messages and participate in effective health prevention, as they face unique barriers to achieving health, including risks involving HIV/AIDs.

Objective: Purpose of this study was to ascertain the coverage of disabled people within the newspaper coverage of health promotion campaigns in Canada, with a particular focus on HIV/AIDs as a global epidemic.

Methods: A historical analysis from 1980-2017 of the coverage of disabled people within the coverage of health promotion campaigns in over 300 Canadian newspapers was performed.

Results: In short of the 336 newspapers articles that contained the terms “HIV” or “AIDS” together with “health promotion” and “campaign” , not one article contained the term “disabled people”, and only two articles contained the term “people with disabilities” both of which were not linked to health promotion nor HIV/AIDS. At the same time, significant content was present in the articles that could potentially have mentioned disabled people.

Lessons: We suggest that our finding is another example of the invisibility of disabled people in the coverage of topics that impact disabled people especially in global epidemics like HIV/AIDS. Our study design could be employed by others to see whether this invisibility of disabled people also exist on a global scale and it could also be expanded to other sources. Global health promotional information must strive to reach all audiences, including disabled people, and media sources can be used as tools to disperse such information.

Main Message: Disabled people face unique challenges in regard to HIV/AIDS. However the newspaper coverage of HIV/AIDS health promotion ignores disabled people causing them to be left behind. In order to create health equity, the social exclusion of people with disabilities needs to be addressed.

NARA, *Ruth. International Development Research Centre / Univeristy of Ottawa, Canada

Understanding the reproductive health needs of displaced Congolese women in Uganda

Globally, there are approximately 125 million people who require humanitarian aid and over 75% are women and children. In 2015, 65.3 million people were forcibly displaced, and 40.8 million were internally displaced. Low and middle-income countries host the overwhelming majority of these displaced people which burdens the already limited infrastructure and services. There are now increasing numbers of displaced populations settling in urban centres, and little is known about urban refugees and conflict-affected populations and their reproductive health needs and services. Chronic endemic conflict in the Democratic Republic of Congo, combined with an overarching lack of development, and the systematic use of rape as a weapon of war has forced many to immigrate. Uganda hosts approximately 47.1% of all the Congolese refugees in neighbouring countries is considered one of the most hospitable places in the region to seek asylum. Nonetheless, women and girls in refugee camps and urban centres in Uganda are at risk of sexual and gender-based violence. While work there has been done on the reproductive health of refugees, more work is required on the reproductive health of conflict-affected populations in rural and urban spaces. Therefor this study assesses the reproductive health needs of displaced Congolese women in camp-based and urban-based settings in Uganda. For study purposes, reproductive health needs are defined as maternal health and delivery care, contraception, and abortion/post-abortion care. Objective of this project aim to understand and explore the state of reproductive health of displaced Congolese women of reproductive age in the Uganda; document displaced Congolese women's opinions and perceptions about available services, access, barriers to and utilization of services, and perceptions of how service delivery can be improved; and identify avenues for improving service delivery and accessibility at the policy, systems, and institutional levels. This multi-methods qualitative study includes interviewing key informants, facilitating focus group discussions and in-depth interviews with displaced women. Data collection will begin June 2017, and findings from this project will contribute to the literature on reproductive health rights and services of refugees in Uganda, which may be used to inform future programs and policy. Further, data gathered will help in understanding the reproductive health needs and rights of conflict-affected, migrating populations to increase and enhance sustainable urban governance approaches that address the health needs of such vulnerable groups.

NASIRI, *Khalidha, York University, Canada

Building the capacity of health institutions to lead policy dialogue and improve health equity: A review of evidence from sub-Saharan Africa

Co-Authors: Georges Danhoundo, York University, Global Health Program

Issue/Problem: Although the Accra Agenda for Action (2008) and the Paris Declaration (2005) on aid effectiveness emphasized country ownership, there are still major factors that impede the ability of sub-Saharan African countries to display ownership in the health sector. One key factor is the limited capacity of governments to institutionalize health policy dialogue as an iterative process. The objective of the present research was to analyze the conditions that allow for governments to lead effective health policy dialogue in sub-Saharan Africa and how it contributes to improving policy, decision-making processes, and health outcomes.

Methods: A systematic review of peer-reviewed articles on health policy dialogue in sub-Saharan Africa published between January 1, 2000 and March 15, 2017, without methodological restrictions, was conducted.

Results: The findings reveal that well conducted health policy dialogue can facilitate country ownership and improve aid effectiveness. Effective health policy dialogue has proven to be deliberative and evidence-based, provides an opportunity to reach consensus on polarizing issues, contributes to better defining the issue of interest, engages various sectors and stakeholders, considers different options in decision-making, clearly designs a path to the implementation of outcomes, and strengthens social accountability. Government-led health policy dialogue is hampered by power imbalances, limited resources and management capacity, and donor influence.

Lessons: In sub-Saharan Africa, many global health policies are poorly implemented due to the fact that front line policy implementers lie at the bottom end of the policy-making process; that is, their involvement in policy discussions is generally limited. A climate that facilitates effective government-led health policy dialogue ensures the development and implementation of inclusive national health plans and policies and ultimately results in increased country ownership and global health aid effectiveness. At the global level, improved donor alignment with national priorities strengthens the policy dialogue process thereby improving health equity.

Main Messages

- We review evidence to analyze the conditions for effective health policy dialogue and how it contributes to improving health outcomes in sub-Saharan Africa.
- Policy dialogue is an institutionalized, iterative process that includes policy design, implementation, review, monitoring, and revisions.
- Effective health policy dialogue has proved to be evidence-based, all-inclusive, deliberative, participatory, and increases country ownership and aid effectiveness.
- Power imbalances, limited resources and management capacities of sub-Saharan African countries, and donor influence hamper the health policy dialogue.
- Country leadership in conducting a comprehensive policy dialogue is a key driver in producing successful health outcome

MAMADOU DIOUKHANE, El Hadji, Plan International

Analyse de la contribution des organisations communautaires de base (OCB) selon leur profil dans la lutte contre la tuberculose au Sénégal

Co-Authors:, Magalie Nelson-Personna ,Plan International; Mamadou Ndiaye, Plan International; Fatoukine Wathie, Plan International; Moussa Sarr, Plan International; Sidi Assalama, Plan International Senegal

Enjeu: Au Sénégal, Plan International en tant que Récipiendaire Principal de la société civile coordonne la mise en œuvre du volet communautaire de la subvention de lutte contre la Tuberculose du Fonds mondial. Cette subvention vise essentiellement à contrôler la propagation de la tuberculose, par le renforcement du système de santé à travers l'amélioration des services cliniques et de laboratoire, l'augmentation de l'accès au diagnostic et au traitement au niveau communautaire et des approches innovatrices de sensibilisation à la maladie. Quatre cent quarante-quatre (444) organisations communautaires de base (OCB) sont engagées dans la mise en œuvre. Ces organisations présentent des profils différents : groupements économiques, groupements de promotion féminine (GPF), associations de PvVIH, de malades et anciens malades tuberculeux, d'agents de santé communautaire, de jeunes etc. La contribution de ces différentes catégories d'OCB à la détection des cas de tuberculose est analysée pour orienter la stratégie et renforcer la lutte contre la tuberculose au niveau communautaire.

Objectifs et Méthodologie : Dans une démarche qualité, une évaluation des performances des OCB par une analyse approfondie des résultats obtenus au cours de l'année 2016 a été faite. L'objectif était d'identifier les plus performantes des OCB et de définir les caractéristiques propres à ces organisations pour tenter ensuite de les lier aux résultats. Les conclusions partagées avec l'ensemble des organisations non gouvernementales partenaires lors de réunions des coordinations ont été la base de l'élimination, la reconduction et la sélection des OCB de cette année.

Résultats : Les OCB d'agents de santé communautaire représentant 43% des OCB ont contribué pour l'orientation de la moitié des cas présumés et 59% des confirmés. Les OCB de femmes représentant 15% des OCB ont orienté 9% des cas présumés et 8% des confirmés. Les PvVIH et les associations de malades et anciens malades tuberculeux représentant 1% ont contribué pour 1% des cas présumés et 2% des tuberculeux.

Leçons à date : Les OCB ayant un lien préexistant avec le système de santé et les GPF contribuent plus à l'orientation des cas présumés. Les groupes vulnérables comme les PvVIH et les malades et anciens malades TB ont besoin d'être renforcés de sorte à profiter de leur sensibilité à la lutte contre la TB.

Principaux messages : Une approche d'inclusion des associations de malades et anciens malades doit prendre en compte des méthodologies de renforcement de ces associations et définir avec elles les stratégies pour une contribution effective au dépistage de la tuberculose.

Odhiambo, Jackline, Partners In Health, United States of America

Two birds with one stone: producing operational research through research capacity building in Rwanda

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Issue: Sub-Saharan Africa has 25% of the global burden of disease but produces less than 2% of annual health research publications globally. More than 90% of the lead authors of the limited research production from Africa are from high and middle-income countries. Increasing the capacity of Africans to lead and publish health research is crucial for building national health research systems and prioritizing locally relevant research.

Partners In Health/Rwanda (PIH/Rwanda), in collaboration with the Rwanda Ministry of Health (RMOH) and the University of Rwanda (UoR), has prioritized local research capacity building in Rwanda since 2012. PIH/Rwanda implements an annual Intermediate Operational Research Training (IORT) to build core research skills from research idea to a scientific publication. The training uses a learning-by-doing methodology with intensive hands-on mentorship to cultivate research skills. Rwandan staff from PIH/Rwanda, RMOH, and UoR are eligible to apply for IORT in a competitive selection process. Competencies covered include protocol development, study design, research ethics, data collection and analysis, manuscripts writing and research publication. Program data on trainee demographics and research outcomes are collected. Trainees complete pre and post training evaluations for short-term research capacity outcomes. Long-term capacity outcomes include trainee research related activities after training completion. We present data from three cohorts of trainees between 2014 and 2016.

Results: 96 candidates applied for the IORT course and 37 (38%) were selected into the three training cohorts. 19% of trainees were female. Trainees, mostly in pairs, completed 20 research projects: 12 are published or in press in peer-reviewed journals, five are under review, and three are under-development. Trainees were lead authors in all publications. Trainees also presented projects at 16 local conferences and four international conferences. In the short-term, the training improved research skills (93%), analytical skills (80%), critical thinking and writing skills (85%), and bridged the gap in research production and leadership (38%). In the long-term, trainees transitioned into training mentorship roles (5%), enrolled in further research training (19%), co-authored (27%) and led (11%) new published research projects.

Lessons: The program built research capacity of the next generation of Rwandan research leaders while establishing strong mentorship relationships and a local research network. The pedagogical approach, intensive mentorship, defined and time-specified deliverables, and institutional support with funding and protected research time were key to the program's success. Mechanisms for long-term funding for capacity building, for expanding local mentorship pool, and for measuring long-term capacity outcomes are needed.

OJO, Adebowale, University of KwaZulu-Natal, South Africa

A content analysis of Twitter use by health ministries in sub-Saharan Africa

Issue: The dissemination of information pertaining to healthy living has been recognised as one of the elements crucial to the attainment of universal health coverage. A country's ministry or department of health among other functions are saddled with the responsibility of disseminating timely health information to the populace with the aim of promoting healthy behaviours. Social media sites such as Twitter are serving as platforms for disseminating information, debating issues, promoting ideas facilitating behavioural change and dispelling false information among others. While a number of African countries ministry or department of health have established their presence on social media sites, it is not clear the extent to which they use these sites for health information sharing and public engagement.

Objectives and Methods: The objective of this study is to analyse how the ministry or department of health in selected sub-Saharan African countries are using Twitter for information sharing, public engagement, and health promotion. The study adopts a qualitative approach, in that a content analysis of retrieved tweets was conducted. Four sub-Saharan African countries ministry of health with an active 'official' Twitter page were purposively selected. The selected countries were Rwanda, Kenya, South Africa and Nigeria to represent Central, East, Southern and West Africa respectively. The NCapture tool of the NVivo software was used in extracting tweets from the Twitter page of the selected countries. Ten percent of the retrieved tweets were randomly selected totalling 980 tweets, which were subjected to content analysis.

Results: Tweets were analysed to ascertain if they represented one-way communication, or facilitated public engagement or encouraged followers to take certain actions. Preliminary findings reveal Twitter is basically being used as a medium for monologic communication with minimal interactive public engagement.

Lessons to date: While Twitter is being used by health ministries, its use is limited to one-way communication. Health ministries across Africa could leverage the large user base existing on the various social media platforms to reach out to the populace in encouraging healthy behaviours.

Main messages: Social media could serve as a platform for disseminating health information for the purpose of public engagement as well as promoting healthy behaviours. This is key towards attaining universal health coverage, especially in Africa. However, only a few African countries are leveraging on social media sites. The few countries utilising social media sites are not yet exploring its use to full potentials.

Ojo, Olajide, Wecare College of health technology Iperu-remo, Nigeria

Women in Nigeria have traditionally been known to cook with firewood because they lived in traditional mud houses where cooking is mostly done outside the sleeping or living huts/mud houses. However, with civilization and modernization a lot has changed women now cook with kerosene, saw dust, gas or electricity. Some women still use firewood because of economics and especially when kerosene is adulterated. These forms of energy have caused and continue to cause health threats to women as well as environment.

About four million premature deaths annually are from non-communicable diseases including stroke, ischemic heart disease, chronic obstructive pulmonary disease (COPD) and lung cancer are attributed to exposure to air pollution. In addition, Women and children are mostly affected by this phenomenon as more than 50% of premature deaths due to pneumonia are found among children under five (WHO, 2012). This scenario is common in developing countries among the people living in low- and middle-income countries such as Nigeria, where 69% of her population still cook and heat their homes using solid fuels (i.e. wood, crop wastes, charcoal, coal and dung) in open fires and leaky stoves (Every preemie scale, 2016)

The resultant effect of such inefficient cooking fuels and technologies produce high levels of household air pollution with a range of health-damaging pollutants, including small soot particles that penetrate deep into the lungs. In poorly ventilated dwellings, indoor smoke can be 100 times higher than acceptable levels for fine particles. Exposure is particularly high among women and young children, who spend the most time near the domestic hearth.

In view of this, a pilot study with the purpose of identifying health and environmental effects of cooking with solid fuels among women in Ibadan, Nigeria will be conducted. To achieve this aim, non-probability sampling methods will be used in sampling the population of interest (women). Interviews with semi structured questionnaire will be used to elicit information from 75 selected respondents across low, medium and high density residential areas of Ibadan.

The findings from this study are expected to assist in developing clean energy advocacy, community education, training of community educators who will sensitize women to adopt clean energy for cooking or heating purposes and to minimize incidences of respiratory illnesses among women and children, specifically in Ibadan, Nigeria and other parts of the world where this practice is still prevalent.

OMENKA, *Charity, University of Montreal, Canada

What does qualitative research tell us about the facilitators and barriers to tuberculosis diagnosis and treatment in Nigeria?

Co-Authors: Christina Zarowsky, University of Montreal

Problem: Despite progress in tuberculosis (TB) control globally, it continues to be a leading cause of death, claiming 1.5 million in 2014, 190,000 of which were due to drug resistant strains. Out of the estimated 9.6 million cases globally in 2014, 28% were in Africa, with Nigeria and South Africa making up the bulk of these numbers. The mixture of high incidence rates of both TB and Human Immunodeficiency Virus (HIV) infections, and a high TB/HIV co-infection rate (23%), adds new levels of complications to diagnosis and treatment.

Nigeria is 4th in the world for people with tuberculosis with an estimated 2.9% multi-drug resistance in new cases. However, Nigeria had one of the lowest case detection rates (CDR) (15%). Only about 53% of notified cases were enrolled into care. The low CDR and treatment rates are below the WHO STOPTB targets, highlighting the need for Universal Health Coverage (UHC) and an understanding of patient contexts, as strategies to improve TB management in Nigeria.

A synthesis of qualitative research is particularly useful in exploring questions about why interventions work or do not, and in what context; the barriers and facilitators to accessing healthcare, and patient behaviours and experiences.

Methods: A three-stage thematic meta-synthesis of qualitative studies was used to identify barriers and facilitators to tuberculosis case finding and treatment in Nigeria. A purposive search of three databases- Medline, Scopus, Web of Science and All EBM Reviews (including the Cochrane database) was conducted. The date of publication was limited to 2006 to June 2017. A line-by-line coding of the article results text using the NVivo software.

Results: Key descriptive themes on access to diagnosis and treatment emerged as financial capacity, community and family influences, education and knowledge, attitudes and stigma, health system factors (including coverage, costs and human resource), gender norms, and other costs of care. These were summarized three analytic themes: individual mindset and agency; family and community influences; and health system characteristics.

Main Messages: As TB management in Nigeria currently depends on individual patients presenting to the hospital for care, this requires an understanding of patient TB care-seeking agency and behaviours, as well as health system barriers. This metasynthesis has identified a number of related factors that shape patients' TB care-seeking behaviour that can inform future interventions. Strategies such as free provision of services, community health education, access to health financing were shown to facilitate diagnosis and treatment.

OUEDRAOGO, *Mariame, University of Ottawa, Canada

Utilization of key malaria and pregnancy complications control measures among women in Jimma zone, Ethiopia

Co-Authors: Jaameeta Kurji, University of Ottawa; Lakew Abebe, Jimma University; Ronald Labonté, University of Ottawa; Sudhakar Morankar, Jimma University; Kunuz Haji Bedru, Jimma Zonal Health Office; Gebeyehu Bulcha, Jimma Zonal Health Office; Muluemebet Abera, Jimma University; Marie-Hélène Roy-Gagnon, University of Ottawa; Manisha Kulkarni, University of Ottawa

Issue/Problem: Despite their known effectiveness to reduce malaria morbidity and mortality, insecticide-treated net (ITN) access and use by pregnant women remains inadequate. Antenatal care (ANC) provides an entry point for women to access ITN and messaging on malaria prevention and treatment. In Ethiopia, minimal research has been investigating variations in the coverage of ITN in relation to ANC attendance and identifying their respective determinants.

Objectives and Methods: Recognizing that poor ITN coverage can negatively impact maternal and child health, we aim to assess ITN access and use as well as ANC attendance in three districts of Jimma Zone, Ethiopia. A total of 3784 women who gave birth in the preceding year participated in a baseline cross-sectional survey. Information was collected on socio-demographics and various attitudes and practices associated with safe motherhood. A simple logistic regression model accounting for clustering at the health center level was used to examine the relationship between ITN uptake and ANC attendance. Adjustment for confounding will be subsequently performed to confirm this relationship.

Results: The average age of the participants was 27 years. Women tended to be married (97%), housewives (77%), and uneducated (55%). An ITN possession proportion of 52% was estimated. Of the women who owned a net during their last pregnancy, 55% reported to have always slept under it. Indoor residual spraying (IRS) was low, with only 25% of participants saying that their house had been sprayed within the year preceding our survey. We estimated overall ANC attendance to 85% and that first ANC visit mostly occurred in the second trimester (83%). Lack of necessity (48%), distance to health facility (23%) and unavailability of transportation (14%) were determined as key reasons for not attending ANC. The regression analysis suggested that the odds of owning and using ITNs are 1.64 [1.31-2.07] higher for women who attended ANC.

Lessons to date: ITN uptake during pregnancy and IRS coverage remain relatively low in Jimma Zone, suggesting that research efforts still need to be directed towards scaling up access to these malaria control measures. Promoting ITN ownership and use as part of ANC services should be emphasized.

Main messages: Our preliminary analysis indicates that women who visited ANC are more likely to own and use ITNs. Identifying the determinants of ITN uptake and ANC attendance and timing is essential for countries like Ethiopia to reach their goals of eradicating malaria and improving maternal and child health.

PENSA BRANCO, Michelle, SafelyFed Canada, Canada

Not every little bit helps: impacts of untargeted breastmilk substitute distribution in disasters

The untargeted distribution of breastmilk substitutes, including infant formula, foods marketed for children 36 months and feeding bottles, is a significant challenge for emergency planners. Despite long-standing guidance to prohibit the donation of breastmilk substitutes in emergencies and ensure that breastmilk substitutes are provided only after assessment and with on-going support, donations and blanket distribution remain common in emergencies.

While some donations are heart-felt attempts to help the vulnerable, industry donations have also been used to create markets for products that did not previously exist as well as to off-load expiring products no longer saleable in the country of origin. The short- and long-term impacts of lost breastfeeding are felt in every community, but are particularly acute in low- and middle-income countries who already bear so much of the weight of excess infant mortality.

This presentation will highlight some of the strategies employed by NGOs and governments to reduce inappropriate use of breastmilk substitutes in emergencies, including the 2010 Haiti Earthquake, the 2017 Philippine government decree banning donations and the IYCF-E response by the grassroots SafelyFed coalition to halt donations and ensure appropriate distribution of breastmilk substitutes in the European refugee crisis. It will include specific recommendations for media advocacy and organizational policy in order to comply with the IFE Core Group Operational Guidance as well as the International Code on the Marketing of Breastmilk Substitutes.

RAZAVI, *Donya, McMaster University, Canada

Analysis of stakeholder participation in priority setting in three districts in Uganda: who is in and who is out?

Co-Authors: Lydia Kapiro, McMaster University; David Okumu, Makerere University School of Public Health

Issue: Stakeholder participation is relevant in strengthening priority setting (PS) processes for health worldwide because it allows for inclusion of alternative perspectives and values which can enhance the fairness, legitimacy, and acceptability of decisions. Low-income countries operating within a decentralized system recognize the role played by sub-national administrative levels such as districts in prioritization processes for health. In Uganda, decentralization is a vehicle to facilitate stakeholder participation. However, there is a paucity of literature on discrepancies between mandated structures for participation, as required in Uganda, and actual participation at the district level for a full range of stakeholders, especially vulnerable groups.

Objectives: To examine district level decision makers' perspectives about participation of different stakeholders, including challenges related to their participation. We further seek to understand the leverages which allow these stakeholders to influence the PS process.

Methods: This was a qualitative study involving interviews and document review. A total of 27 district level decision makers, from three districts, were interviewed.

Results: Respondents identified the following key stakeholders: politicians, technical experts, donors, NGOs, cultural/traditional leaders, and the public. Politicians were found to have the strongest influence over PS, followed by technical experts and donors, then NGOs, and finally cultural/traditional leaders and the public. The main leverages for politicians were control over the district budget and support of their electorate. However, the potential for competing interests between political priorities and evidence-informed priorities was a challenge to their participation. Expertise was a crosscutting leverage for technical experts, donors, and NGOs. While financial and technical resources were leverages for donors & NGOs. Cultural/traditional leaders' leverages included cultural knowledge and influence over their followers. The public's leverage is indirect and exerted through their electoral power. Respondents made no mention of participation for vulnerable groups. The public, particularly vulnerable groups are left out of the PS process for health at the district.

Lessons: The strength of a stakeholder's leverage affects their level of influence over the PS process. Power imbalances between the identified stakeholders shape the extent to which they can influence PS. Therefore, stakeholders holding less power are systematically excluded.

Main messages:

- Decision making about resource allocation in health is both a technical and political process. Different stakeholders influence the PS process with varying success based on their leverage.
- The variable strength of stakeholders' leverages can lead to low participation for the less powerful like the public and systematic exclusion of vulnerable groups.

REDDEN, Kara, McGill University, Canada

Interventions to support international migrant women's reproductive health in Western-receiving countries: a systematic review and meta-analysis

Co-Authors: Jessica Safarian, McGill University; Claudia Schoenborn, Université Libre de Bruxelles; Clare Shortall, Doctors of the World, UK; Anita Gagnon, McGill University

Women constitute roughly half of all international migrants who have resettled in Western, industrialized countries. The reproductive health outcomes of international migrant women (those born outside the receiving country) differ in comparison to receiving country-born women, depending on migrant group defined by country of birth or immigrant status. Effective interventions to support the reproductive health of international migrant women have yet to be identified systematically. We sought to determine the effectiveness of interventions provided to international migrant women resettling in Western-countries that directly or indirectly affect their reproductive health. We conducted a systematic review of studies between 2010 and 2016 evaluating interventions directly/indirectly affecting the reproductive health of international migrant women in Western-receiving countries. We searched Medline, Embase, PsycINFO, Global Health, Social Work Abstracts, CINAHL, Joanna Briggs Institute, Cochrane Library, Web of Science and ProQuest Dissertations and Theses, ISRCTN, and grey literature; and we contacted experts. Studies were considered for review if: > 80% of study sample was foreign born; effects of an intervention were compared among migrant groups; and, if interventions were provided to both men and women, outcomes of women were reported separately.

Sixteen studies representing 5080 migrants were identified for inclusion. Interventions consisted of linguistically tailored (e.g., translated brochures, Spanish touch-screen modules) or culturally adapted (e.g., fotonovela, use of cultural narratives, themed-poetry) existing/routine care or new interventions. All interventions, used separately or combined, improved one or more outcomes (e.g., condom use, cervical or breast cancer screening uptake) when compared to routine care, a different intervention, or no care. After assessing all 16 for bias, the subset of studies categorized with a low and unclear risk of bias assessment (n=11) showed similar results to the full group of 16 studies. Those with a low or unclear risk of bias were meta-analyzed. Meta-analysis showed that interventions increased rates of preventive health activities including mammography, condom use, and Pap test completion by almost 18% (95% CI 7.61, 28.3).

The small number, and generally low quality of the studies identified suggest that more robust research and reporting on the effectiveness of interventions supporting international migrant women's reproductive health is needed.

Culturally- and linguistically-adapted care practices congruent with target populations of international migrant women are effective in improving reproductive health preventative activities. Beneficial interventions were also found to incorporate a multi-strategy approach to deliver information, personal exchanges with facilitators in the community and ways to increase access to care.

REDDY, *K Srikanth, McGill University, Canada

A conflict of commitments? multi-sectoral perspectives on WHO FCTC implementation in Kenya, Malawi and Zambia

Co-Authors: Raphael Lencucha, McGill University; Jeffrey Drope, American Cancer Society/Marquette University; Ronald Labonte, Institute of Population Health, University of Ottawa; Peter Magati,, International Institute for Legislative Affairs, Nairobi, Kenya; Fastone Goma, University of Zambia; Richard Zulu, University of Zambia; Donald Makoka, Centre for Agricultural Research and Development, Lilongwe, Malawi

Issue/problem: The tobacco epidemic is a major public health threat globally, spiraling upwards primarily in LMICs including African countries. The Framework Convention on Tobacco Control (FCTC), a codified international norm operates in global regulatory context to implement strong tobacco control measures in the region and beyond. To date, 43 of 47 Sub-Saharan African countries have ratified the FCTC, however, perceived conflicts between international (primarily economic agreements) commitments and the FCTC across sectors remain a challenge to FCTC implementation in the region.

Objectives and Methods: Exploring the proposition that norm divergence at the international level perpetuates policy divergence within governments, this comparative case study uses the “norm” lens to examine how perceptions of different stakeholders about FCTC and its relationship with other international norms may shape FCTC implementation. This study was conducted in three African countries: Kenya, Malawi, and Zambia. These countries present a continuum of FCTC implementation, whereby Kenya is one of the most advanced countries in Africa, while Malawi has not signed the FCTC. Using purposive and snowball sampling, we conducted fifty-five key informant interviews (Zambia=23; Kenya=17; Malawi=15) with participants from government, non-governmental and intergovernmental organizations. Data analysis involved deductive coding of interview transcripts and notes to identify the reference to international norms (i.e. commitments, agreements, institutions), coupled with an inductive analysis that sought to interpret the meaning ascribed to these norms by the participants. Finally, we attempted to situate the qualitative findings in the wider political, economic and social contexts of the three countries.

Results: The study exposed wider knowledge of FCTC and its regulatory provisions among the health sector, but the awareness about content and obligation of FCTC is yet to penetrate non–health sectors who perceive that FCTC implementation largely conflicted with the country’s trade/economic-related commitments. The perceived political and economic realities continue to dominate tobacco policy in these countries. The reasons for this perceived conflict seems to include a combination of: 1) a genuine misunderstanding of the relationship between international commitments, 2) the power of economic interests to shape policy discourses, and 3) a structural divide between sectors in the form of bureaucratic silos.

Main message: Tobacco control norms are enmeshed in a web of multilateral commitments at both global and regional levels. Regional agreements seem to play an important role in considerations of FCTC implementation. Further research is required to examine the relationship between regional organizations as forums for agenda-setting and FCTC implementation.

RIEDER, *Amber, McMaster University, Canada

The development and validation of the International Mobile Psychiatric Assessment for Children and Teens (IMPACT) in rural Kenya

Introduction/Issue: ~14% of the world's total disease burden can be attributed to mental, neurological, and substance use (MNS) disorders. Children suffer heightened vulnerability, especially in low- and middle-income (LMIC) countries, where MNS disorders are exacerbated by poor living conditions. A model of task-shifting is proposed to reduce the paucity of unmet psychiatric needs in countries like Kenya. The International Mobile Psychiatric Assessment for Children and Teens (IMPACT) was developed in response to the overburdened psychiatric system in Kenya and globally. The objective of this study is to apply a task-shifting model, where non-experts are trained to assess children and adolescents using a comprehensive and highly structured interview on standard mobile phones and tablets. The IMPACT was developed for administration in regions with scarce human resources, and where expertise in psychiatry and mental health, are limited.

Methods: 197 rural school children (equivalent to grade 7-12) and their caregivers from Machakos, Kenya were interviewed using the IMPACT on mobile tablets. The IMPACT was administered by non-expert local community members. Cohen's Kappa, sensitivity, and specificity, of the IMPACT were examined in comparison with the gold standard in the region, the MINI-Kid. The MINI-kid was administered by trained and experienced graduate students from McMaster University. Agreement between DSM-5 and ICD-10 diagnoses were examined.

Results: There was a high agreement between the non-expert administered IMPACT and the MINI-kid, with Kappa scores ranging from 0.67-0.88, sensitivity ranging from 0.66-0.92, and specificity scores ranging from 0.96-0.99.

Conclusions/Lessons: The IMPACT showed high agreement in comparison with the MINI-kid. The IMPACT is the first structured diagnostic interview with automated algorithmic output, using the latest criteria of the Diagnostic and Statistical Manual (DSM), 5th edition and ICD-10 codes. Additionally, the IMPACT is the first offline 'mobile' assessment for tablet/mobile phone to be used to assess the mental status of children and adolescents in resource scarce and hard-to-reach regions.

Main message: The IMPACT is a relatively valid and reliable, globally accessible, measure of childhood psychiatric illness promoting its use for clinical practice and epidemiological research settings, especially in LMIC.

SANOGO, *Ashken, Université d'Ottawa, Canada

Analyse de l'effet de l'assurance maladie obligatoire sur l'état de santé des populations vulnérables au Gabon

En Afrique, l'accès aux soins de santé est limité par la pauvreté, qui fait partie des principaux déterminants sociaux de la santé. Accéder à la santé permet aux personnes de travailler pour justement sortir de cette pauvreté, et d'éviter les dépenses catastrophiques qui sont le lot de plusieurs personnes dans les pays en développement.

Le financement du système de santé par l'allocation et la dépense des fonds alloués à la santé de façon efficiente y a un rôle important à jouer. C'est dans cette optique que tous les États membres de l'Organisation mondiale de la santé ont pris l'engagement en 2005 de parvenir à la couverture sanitaire universelle (soit par un financement par l'impôt, soit l'assurance maladie, ou les deux à la fois). L'assurance maladie obligatoire améliore l'accès aux soins de santé qui ont impact positif sur l'état de santé des individus et des populations mais le plus souvent cela ne se traduit pas positivement dans les indicateurs de santé.

Le Gabon, pays membre de l'OMS a pris l'engagement en 2005 de parvenir à la couverture sanitaire universelle et a développé un mécanisme d'assurance maladie obligatoire dans ce but.

Notre question de recherche sera : Quel est l'effet de l'assurance maladie obligatoire sur l'état de santé des Gabonais économiquement faibles ?

L'objectif principal de notre étude est donc d'examiner l'effet de l'assurance maladie obligatoire de la Caisse Nationale d'Assurance Maladie et de Garantie Sociale du Gabon sur l'état de santé des Gabonais économiquement faibles.

Les objectifs spécifiques sont les suivants :

- Examiner la proportion de personnes vulnérables couvert par la Caisse Nationale d'Assurance Maladie et de Garantie Sociale du Gabon : devis descriptif longitudinal qui a pour but de décrire l'évolution de la proportion de Gabonais considérés comme économiquement faibles et bénéficiaires du régime de couverture de la CNAMGS depuis le début de l'adhésion en 2008 jusqu'à ce jour
- Examiner l'effet de l'assurance maladie obligatoire sur l'accès aux soins de santé reproductive par les femmes, à la trithérapie pour les infectées VIH, aux antipaludéens et tuberculeux pour les malades du paludisme et de la tuberculose : le devis proposé est un devis quasi expérimental. Plus précisément, un devis à série temporelles interrompues.
- Examiner la mesure dans laquelle les soins reçus par la population cible respectent les critères de qualité établis par le système de santé : un devis observationnel transversal avec une approche constructiviste (méthode qualitative) a été retenu

SPAGNOLO, *Jessica Maria-Violanda, School of Public Health, IRSPUM, University of Montreal, Canada

Implementing a mental health training in Tunisia: general practitioners' impressions of the program

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Issue: While the 2010-2011 Tunisian revolution resulted in the ousting of the President in reign since 1987, and thus a renewed sense of hope, difficult living and working conditions persist: the unemployment rate remains at 15.30%; recurrent violence causes severe economic difficulties; and most Tunisians believe that society is marked with sadness and despair. In this crisis, the prevalence of anxiety, depressive, and substance use disorders, as well as youth suicide, is on the rise, creating a need for proximity mental health services given the lack and uneven distribution of specialists. For this reason, a training based on the Mental Health Gap Action Programme (mhGAP) Intervention Guide (IG), developed by the World Health Organization, was offered to general practitioners (GPs) working in the Greater Tunis Area of Tunisia as a pilot project between February-April 2016. We aim to explore GPs' impressions of the training, part of a larger project seeking to evaluate its impact on clinical outcomes using a randomized controlled trial. Even though the mhGAP-IG has been implemented in over 90 countries, scarce literature on its appreciation is available, useful information especially before scale-up. A satisfaction questionnaire was used to evaluate GPs' impressions of the training. Questionnaires were analysed in SPSS Statistical Software (version 24), and comments were analyzed by thematic analysis.

Results: Overall satisfaction of the training was rated between 85-100%. However, trainees highlighted several limitations, such as the need for additional and ongoing mental health training. More specifically, additional training would allow for current topics to be further developed, such as those on substance use disorders, suicide, and the administration of psychotropic medication. In addition, a longer training would permit the inclusion of relevant content previously omitted, such as youth mental health.

Lessons: Post-Tunisian revolution, notable increases in specific mental health conditions were registered. While a training was implemented and appreciated, trainees have expressed the need to improve the program before country-wide implementation. While these improvements are specific to Tunisia, obtaining feedback on the mhGAP-IG training is crucial in any country where it is implemented, as unmet clinical needs may be detrimental to expected outcomes/sustainability and scale-up.

Main messages: (1) Periods of crises can cause undesired, contextual challenges, such as the rise of specific mental health conditions. (2) While a mental health training program was implemented to address the growing treatment gap in Tunisia, unmet clinical needs may be harmful to the success of a complex intervention.

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Improving global reporting of recruitment and results in studies of pregnant populations

Co-Author: Prof. Theresa Gyorkos, McGill University

Issue/Problem: One of the hallmarks of global health research is its relevance and generalizability to target populations in different countries. Recruitment selection of a study population and the reporting of results from that study population can be of considerable global health interest. Using standard definitions for exposures and outcomes is one way to ensure optimal comparability, uptake of research results and the establishment of a reliable cumulative evidence base over time.

Objectives and methods: The objective was to determine if a common definition was being used for 'trimester' in published studies where pregnant women comprised the study population. A systematic review was conducted in Medline where the search terms included: 'trimester' in the title/abstract with the following additional specifications: the article reported results from a clinical trial in humans; it was in English; and it was published between January 1, 2017 and 31 May 2017.

Results: A total of 8 articles were identified -- from North America, Europe and Asia. Only two, both recruiting women in their first trimester of pregnancy, provided a specific definition for trimester in terms of the number of weeks of gestation. All others referred to trimesters, in either describing recruitment or in the reporting of results, without specifying the relevant number of gestational weeks included. One study reported gestational age, in weeks, in non-mutually exclusive categories. One study reported data disaggregated by trimester, but the trimesters had not been defined.

Lessons: A review of recent published clinical trials (in scientific peer-reviewed scientific journals) that recruited pregnant populations, reveals a lack of application of standard definitions for 'trimester' in both research practice and reporting. This restricts comparability across studies and limits research uptake. It also affects the quality of evidence used to inform health policy.

Main messages: Researchers and authors should consider discipline-specific definitions, norms and best practices in the conduct and reporting of their research. Peer reviewers and editors have the responsibility of ensuring that manuscripts contributing new evidence to the accumulated evidence base follow discipline-specific definitions, norms and best practices.

TATARYN, Myroslava. Handicap International, Canada

Inclusive Health in Syria: Health for ALL

In emergencies, people with disabilities are often excluded from the humanitarian response and face additional barriers in accessing appropriate services. As a result, people with disabilities have worse health and socioeconomic outcomes than people without disabilities, including poorer health, lower education achievements, less economic and social participation and higher rates of poverty (WHO, 2011).

While emergencies increase the vulnerability of people experiencing disability, it is important to understand the multi-faceted and dynamic nature of vulnerability and how it is linked to access to services. In order to ensure all persons have meaningful and equitable access to health, it is crucial to understand how personal, demographic, and socio-economic factors combine with environmental factors create exclusion (or inclusion) and vulnerability (or resilience).

As such, the intersection of disability with age, gender and other factors cannot be overlooked. Women and children are already disproportionately burdened and at risk in situations of displacement and emergencies – 14 times more likely to die, 2.5 times more likely to be out of school. If that woman or child is a person with disabilities, the risk of marginalization skyrockets – and requires a major shift in the way that actors in humanitarian and fragile settings plan and execute their work. The WHO Action Plan 2014-2021: Better Health for All People with Disabilities (2015) is explicit about the fact that “women with disability often face additional disadvantages when compared with men with disability and women without disability. Indigenous persons, internally displaced or stateless persons, refugees, migrants and prisoners with disability also face particular challenges in accessing services.”

While Article 25 of the UN CRPD reinforces the right of persons with disabilities to attain the highest standard of health care, without discrimination, these rights are most often ignored in emergency settings. Handicap International’s experience of implementing a range of disability-inclusive and disability-specific services in over a dozen countries facing humanitarian crisis has shown us that in most humanitarian contexts disability inclusion is still perceived as a “nice bonus” rather than a contribution to the realization of rights enshrined in international law.

Unless substantive changes are made to humanitarian project planning, funding, implementation, monitoring and evaluation, people with disabilities - especially women with disability - will continue to be excluded from humanitarian programs. In fact the WHO Action Plan (2015) argues that “health disparities will be reduced by making existing health care systems more inclusive at all levels and making public health programs (including those for a healthy lifestyle, promoting improved diets and encouraging physical activity) accessible to persons with disabilities throughout the life course.”

As such, inclusive health programming as practiced by Handicap International - is designed with an intersectional perspective in mind and is based on a human rights-based approach that recognizes that every human being is entitled to the fundamental, inalienable right to health, without distinction of sex, ethnicity, disability, language, religion, political or other opinion, national or social origin, birth or other status, even in emergency contexts. The poster *Inclusive Health in Syria: Health for ALL* presented at the CCGH conference provides a concrete example of the needs for inclusive health programming in protracted conflicts and of Handicap International’s intervention aimed at assist the populations most in need in the Syrian crisis context.

Handicap International’s inclusive health programming falls solidly in line with the 2030 Agenda for Sustainable Development. Agenda 2030 emphasizes that the Sustainable Development Goals (SDGs) will not be achieved unless and until human rights and dignity are ensured for all individuals, everywhere, leaving no one behind (WHO, 2017).

TAYELE, Pierre, Centre de coopération internationale en santé et développement, Democratic Republic of the Congo

Évaluation de l'impact du coaching sur la qualité des diagnostics et des prescriptions des infirmiers en milieu dépourvu des médecins

Introduction : Les formations et les supervisions classiques n'ont pas permis, des années durant, à améliorer la qualité des diagnostics et des prescriptions des infirmiers des centres de santé (CS) dans les milieux pauvres dépourvus de médecins. La formation sur site et le coaching (accompagnement technique en situation réelle) pourraient constituer une solution à ce problème.

Objectif : L'objectif de cette recherche opérationnelle était de mesurer la qualité des soins avant et après la formation sur site et le coaching des infirmiers des CS.

Matériel et méthode : Cette étude à la fois prospective et rétrospective a porté sur les consultations des infirmiers de 58 centres de santé appuyés par le Projet d'appui au système de santé de Kinshasa (PASSKIN), financé par l'AMC. 3240 fiches de consultations récentes ont fait l'objet d'une revue documentaire dont 1740 avant l'intervention et 1500 après. 58 consultations de malades par les infirmiers ont été observées avant l'intervention et 50 après. Ont été exclu de l'étude tous les CS dont les consultations étaient l'exclusivité des médecins. La conformité des diagnostics et des traitements était apprécié par des médecins enquêteurs expérimentés en fonction des ordinogrammes. Chaque CS avait reçu au moins deux à trois visites de coaching de 2 à 4 heures entre septembre 2015 et janvier 2017, après avoir été formé sur site. La première enquête a eu lieu en juillet 2015 et la seconde en février 2017.

Résultats : Le nombre moyen d'infirmiers formés à l'utilisation correcte du recueil d'ordinogramme est passé de 1,5 à 4,2 par CS. Le pourcentage des CS qui utilisaient régulièrement cet outil a également augmenté (92% contre 38%). En moyenne, le pourcentage des patients correctement pris en charge est passé de 54,01% en 2015 à 73,5% en 2017. Le pourcentage des CS qui se sont distingués avec plus de 80% de patients correctement pris en charge était huit fois plus élevé après formation sur site et coaching (46% contre 5,45%).

Conclusion : La formation sur site a permis d'atteindre un plus grand nombre d'infirmier des CS. Le coaching en situation réelle a permis d'améliorer considérablement et à court terme la qualité de leurs diagnostics et leurs prescriptions au bénéfice des populations qui ne peuvent s'offrir les consultations des médecins. Cette expérience pilote peut être repiquée dans tous les pays où les infirmiers sont autorisés à consulter et prescrire.

THOMAS RICHE, Claudia, GHESKIO, Haiti

Building Haitian nursing research capacity - By Haitian nurses for Haitian Health

Co-Authors: Barbara Lei Toffler, Nursing Education Collaborative for Haiti; Jodi Tuck, McGill University

Issue: The voice of Haitian nurses has been largely absent from the published literature and the vast majority of research to understand nursing care issues in Haiti has been published by non-Haitians. This is largely due to the lack of educational opportunities to develop nursing research skills.

Objectives: To enable Haitian nursing professionals to become transformational leaders in their own community and begin building. To build interest and capacity of Haitian nurses to engage in research activities to advance nursing practice in Haiti.

Results (effects/changes): The Nursing Education Collaborative for Haiti- Coopérative des Infirmières en Éducation pour Haiti (NECH-CIEH) is not-for-profit organization that has developed a membership of Haitian nurses from across the 10 geographic departments aimed at meeting the educational objectives of Haitian nurses. In response to the demand of Haitian nurses to develop nursing research skills, the organization has developed ongoing collaborations with Haitian, American and Canadian Universities.

This oral presentation will summarize and highlight the results of several nursing research projects to date including: "Hand Hygiene knowledge and Practices of Haitian Nurses" and "Surgical Wound Care at a public Hospital". It will also look at current projects including "Staffing Realities in the Surgical Units of Four Haitian Hospitals." and "Haitian Women's soap project will also be summarized. NECH-CIEH uses a workshops and ongoing collaborations to prepare and train Haitian nurses to identify and formulate research questions, design methodologies, and collect data and further advancing their skill set and research-mindedness. Next steps include further development of skills data analysis skills and further develop skills for publication.

Lessons to date:

1. The simultaneous application of acquired research skills is essential.
2. Pairing Graduate students with a Haitian Nurse research Assistant is key to success until there are academic programs in Haiti to develop nursing research skills.

Main messages: Haitian nurses are motivated to engage in nursing research. Haitian Nurses ask different questions than do non-haitians.

WATSON, *Leah, Duke Global Health Institute, United States of America

Validation of a mental health assessment for Kenyan parents

Co-Authors: Eve Puffer, Duke University Department of Psychology and Neuroscience; Duke Global Health Institute; Bonnie Kaiser, Duke Global Health Institute

The increasing burden of mental health disorders worldwide requires strategies to locally validate mental health assessment measures, in order to inform mental illness prevention and treatment. A current challenge is the lack of mental health assessment research in low-resource contexts. Research on mental health assessment and intervention is scarce in settings such as Sub-Saharan Africa, and has largely focused on validation of measures developed in high-income countries. This study aims to help fill this gap by evaluating mental health measures developed and adapted for the Kenyan context.

The objective of the study was to validate mental health assessment items for Kenyan parents, as part of a broader study on mental health and family functioning. Cross-sectional data was collected via semi-structured interviews and surveys from a sample of 33 parents from two communities near Eldoret, Kenya. Based on the interview data, which provided a locally-determined assessment of presence of emotional problems, each study participant was designated a mental health “case” or “non-case.” Survey items were either adapted from existing mental health assessments or developed based on local qualitative research. Responses to survey items were compared between cases and non-cases to establish which items best discriminated between individuals with and without mental health problems.

Out of 48 items evaluated, 28 were identified as best discriminating between individuals with and without mental health problems; these included 23 items adapted from existing measures and 5 items developed for the Kenyan context. The successful adapted items included all 9 items from the Patient Health Questionnaire and all 7 items from the General Health Questionnaire subscale for depressive symptomology.

This study’s measure adaptation and development processes improved on the process of establishing measure validity in the setting by evaluating items against results of a clinical interview conducted locally, ensuring relevance in this context. Survey items that discriminated between individuals with and without mental health problems were from both adapted and new measures, suggesting that integration of both types of measures may improve local assessment of mental health.

This study aimed to validate a mental health assessment comprised of both adapted and culturally-developed items for a sample of Kenyan parents. Results yielded 28 items that effectively identified individuals with mental health problems based on context-specific clinical judgment. The success of new and adapted assessment items in the study suggested that local item development and adaptation processes improved ability to assess mental health in the Kenyan setting.

WHELAN, *Mairead, University of Calgary, Canada

Evaluating the sustainability of Bio-Sand filter technology in Maasai households: Findings from a pilot intervention study in rural Northern Tanzania

Co-Authors: Jennifer Hatfield, University of Calgary; Lise Hovden, Norwegian University of Life Sciences; Jeffery Mclean, University of Calgary; Marissa Nahirney, University of Calgary; Elias Nyanza, Catholic University of Health and Allied Sciences; Karin Orsel, University of Calgary; Tina Paasche, Norwegian University of Life Sciences; Frank van der Meer, University of Calgary; Jeremiah Seni, Catholic University of Health and Allied Sciences; Sheri Bastien, Norwegian University of Life Sciences

Issue/Problem: Water scarcity and water quality are significant issues for rural Tanzanians. Available water is often contaminated with fecal matter. This project is investigating water sanitation alternatives for the Ngorongoro Conservation Area's (NCA) most vulnerable population, the Maasai people. To investigate low-cost, low-tech water treatment options in rural areas, 110 Bio-Sand filters (BSF) were introduced into Maasai households in the NCA from May-October 2016. Follow-up assessments occurred in May 2017, approximately one year after initial BSF roll-out.

Objectives:

1. To explore the perceived benefits and challenges of the BSF with a focus on sustainability in global health projects;
2. To engage in dialogue with the community to identify potential strategies and ensure sustainability.

Methods: In-depth interviews, approximately 45 minutes in length, were conducted with 18 households owning BSFs. One think tank was organized to discuss the BSF with 12 community stakeholders, including traditional leaders and birth attendants, BSF owners, and school teachers.

Results: Households who had BSFs installed reported reduced incidence of diarrheal episodes and that the BSF saved resources, time, and money previously spent on boiling water. Interviews revealed that many people preferred the smell, taste, and clarity of the filtered water. As such, some BSF-owning households report feeling strained by extraneous demands for their water. A major theme was that many other people in the community wanted a BSF, but did not know how to build their own or where to buy one. Issues with the BSF included maintenance difficulties and breakage, coupled with a limited number of trained technicians to provide support in such cases.

Lessons to Date: There is a perceived improvement in the quality of life among the households using the BSF. An expansion of the project is needed to bring these benefits to more community members, and relieve houses already owning BSFs from the provision of filtered water to their neighbours. For future scale-up of the BSF project, community members suggested that there is a need to train more technicians and increase access to maintenance services. To ensure sustainability, a social entrepreneurship model in which people are trained to build and sell their own filters should be explored.

Main messages:

1. The BSF is perceived as an effective method to access clean water in Maasai households;
2. The pilot project should be expanded to accommodate more households;
3. Future projects need improvement on household education, technician training, and access to Bio-Sand filters.

WINN, *Anika, University of Calgary, Canada

Health care professionals perspectives on caring for pregnant refugee women in Calgary, Alberta

Issue: Female refugees can be a vulnerable population, often having suffered through traumatic events that pose risks to their health, especially during pregnancy. Pregnancy can be an entry point into the health care system, providing health care professionals the opportunity to gain women's trust, connect refugees with resources, and optimize the health of mother and child.

Objectives:

1. What are the challenges that health care providers face when caring for pregnant refugee women, as well as facilitators for care?
2. How did the changes to federal funding to refugee health care between June 2012- April 2016, affect provision of care to pregnant refugee women?
3. How has the Syrian refugee crisis, and subsequent influx of refugees into Calgary (November 2015-present), affected provision of care to pregnant refugee women?

Methods: We conducted 10 semi-structured interviews with health care providers at a refugee health clinic and major hospital in Calgary. Interviews were recorded and transcribed, and two researchers were involved in an inductive data analysis process.

Results: Health care providers described several barriers when caring for pregnant refugees, including language barriers, cultural barriers and difficulty navigating the health care system. Providers managed these barriers through strategies including using a team-based approach and ensuring continuity of patient-centered care. The federal funding cuts added additional challenges, as many refugees were left without adequate health coverage and the system was complicated to understand. Health care providers developed creative strategies to maximize coverage for their patients including paying out of pocket or relying on donations to care for uninsured refugees. Finally, the recent Syrian refugee influx has increased the demand on service providers and further strained already limited resources.

Lessons to Date:

1. A central clinic model for providing health care for refugees can help ensure that relevant expertise is concentrated and refugees receive appropriate care while adapting to a complex system in a new environment.
2. The current system for health care provision for refugees is complicated, tedious and not well understood by many health care professionals. Initiatives should be taken to make the system more streamlined and accessible to all service providers.
3. Health care professionals require an increase of government funded support to provide comprehensive and ongoing support to refugees, especially during periods of increased service demands.

Main Messages: Health care providers caring for pregnant refugee women face complex cultural and system-level barriers, and used multiple strategies to address these barriers.

WU, *Daphne, University of Waterloo, Canada

Effectiveness of behavior change communication strategies on improving knowledge, attitude and practices towards vitamin A-fortified oil in Tanzania

Co-Authors: Sue Horton, University of Waterloo; Nadira Saleh, Mennonite Economic Development Associates; Nazir Yusuph, Tanzania Communication and Development Center

Issue/Problem: Vitamin A deficiency (VAD) is a public health problem, particularly affecting pregnant women and children in developing countries. In Tanzania, one-third of children aged 6-59 months and 37 percent of reproductive-aged women are estimated to be vitamin A deficient. In order to reduce the prevalence of VAD in Tanzania, the MASAVA project was implemented to support small and medium enterprises to fortify unrefined sunflower oil with vitamin A for local consumption in the regions of Manyara and Shinyanga from August 2014 to September 2017. To increase awareness about the health benefits of vitamin A and promote the consumption of the vitamin A-fortified oil, behavior change communication (BCC) campaigns were conducted from February 2016 to March 2017.

Objectives and Methods: The purpose of this study is to evaluate the impact of the BCC interventions on knowledge, attitude and practices of consumers of the vitamin A-fortified oil. Interviews were conducted with 308 representatives of households in the two regions in December 2014 before the implementation of the BCC interventions, and in April 2017 after 14 months of interventions.

Results: After 14 months of interventions, knowledge of the benefits of consuming foods fortified with vitamin A improved from 15.7% to 71.7%. Among those who have heard about fortification, 82.3% of women reported hearing the information from clinic shows, followed by radio broadcasts, and cultural shows. For men, radio were the most common source of information reported by 55.6% of all men interviewed, followed up by clinic shows and community brochures. Among those who heard the fortification messages, 48.3% reported using the fortified oil at least three times a week, and 10% were not using the oil at all. The primary reason for not using the oil was that it was not sold in stores near the respondents' homes.

Lessons to date: BCC interventions are effective in improving knowledge and consumption of fortified oil. The sources of information differ between men and women. Clinic shows are effective in reaching women, whereas radio broadcasts are more effective in reaching men.

Main messages: BCC interventions, particularly community events and mass media, are effective in improving knowledge, attitudes and practices towards fortified oil. Besides creating motivation through knowledge generation, behaviour change is also influenced by the opportunity to perform the action, created by making the fortified oil available in stores near the respondent's homes.

ZAKKAR, *Moutasem, University of Waterloo, Canada

The complexity of health indicator communication and representation

Issue/Problem: Designing and implementing policy interventions to achieve the SDGs require several types of health indicators, including public health indicators, risk factors, healthcare outcomes, and performance indicators. While the literature is abundant with studies on evidence-based policymaking and knowledge translation, there are some topics that have not got much attention from researchers, including the complexity of communicating and representing health indicators for policymakers and laypeople and the potential undesirable outcomes of this communication.

Objectives and Methods: In 2016, Dr. Moutasem Zakkar and Dr. Kamran Sedig at the University of Western Ontario conducted a study to examine the use of information visualization to represent the social determinants of health and health equity indicators in Canada, and the benefits of such representation for health policymaking.

The study developed an online visualization tool that represented a set of indicators about the social determinants of health. This tool can be accessed at www.healthvisualization.ca. Health indicators were obtained from published research studies in peer-reviewed journals.

The study used the user experience evaluation methodology, which aims to collect the subjective feedback of the users of IT artifacts.

Participants were health unit managers, epidemiologists, health data analysts, and university professors in Canada. Participants explored the tool for some time, and then they were interviewed using a semi-structured interview method. Qualitative data analysis software to analyze the interviews.

Results:

1. There are some challenges that make health indicator communication a complex task, including the inherent complexity of healthcare information and the diversity of audiences.
2. While information technology provides innovative tools to communicate and represent health indicators, there might lead to undesirable outcomes.
3. Laypeople might misinterpret some of the visualized health indicators. Misinterpretation occurs when information is seen out of its context of production and use.
4. Information quality is very important to knowledge producers and knowledge users. Quality criteria include validity, credibility, and the context of information.

Lessons to Date:

1. Communicating and representing health indicators are complex tasks.
2. Information technology provides innovative tools to communicate and represent health indicators. However, these tools might lead to undesirable outcomes.

Main Messages

1. Collecting the data required for achieving SDGs requires not only the appropriate capacity but also the political will.
2. Information technology provides innovative tools to communicate and represent health indicators. However, these tools might lead to undesirable outcomes. Therefore, some practices could be followed to reduce the likelihood of those undesirable outcomes.