

**Background:** Technical expertise gained from trainings supported through international collaborations and partnerships is imperative to address key areas for attainment of the sustainable development goals in Africa. Makerere University College of Health Sciences (MakCHS) hosts over 300 students and faculty under Global health education programs annually. There has been no documented evidence on how best MakCHS should consolidate partnerships so as to enhance quality of training and patient care.

**Aim:** To assess perceptions of host institutions on methods to enhance knowledge sharing during global health education programmes.

**Methodology:** This was a cross sectional descriptive study, qualitative in nature at MakCHS. An interview guide was used to collect data among key informants and focus group discussions. Thematic analysis was used to draw conclusions. Written informed consent was sought from all participants and ethical approval was obtained from Makerere University School of Biomedical Sciences.

**Findings:** The methods mentioned by the various participants from MakCHS to enhance knowledge sharing from global health education programs include: Increased access to virtual mobility like online courses and periodic webinars with partner institutions on various tropical and emerging diseases, institutionalizing global health education programmes, encouraging collaborative research among local and international students and establishing a monitoring committee for such platforms.

**Interpretation:** There is need to devise a mechanism of periodic knowledge sharing among local and international students to enhance collaborative learning across the globe.

Limitations Analysis was difficult for there are no systems to monitor global health programme, several Universities recruit their own coordinator instead of working with already established structures.

Strength; The study findings are a true representation of the participants' views.

**Funding:** Medical Education for Equitable services for all Ugandans.

**Abstract #:** 2.009\_GOV

### Community health system strengthening: A case of health hut system transfer in Senegal

Moussa Mbodji<sup>1</sup>, Devina Shab<sup>2</sup>, Stephen Omunyidde<sup>3</sup>; <sup>1</sup>National Manager, Program Sante Sante Communautaire II (PSSC II), World Vision Senegal, <sup>2</sup>Program Management Officer; World Vision USA, <sup>3</sup>Program Management Officer; World Vision USA

**Background:** Senegal's health system is a pyramidal structure with tertiary hospitals at the top, followed by intermediate regional hospitals, public health facilities and health centers of the districts. Health Huts (HHs) at the base are the foundation in providing primary health services to communities, particularly in remote areas. USAID-funded Program Sante Sante Communautaire II (PSSC II) led by Child Fund, World Vision (WV) was mandated to establish or strengthen integrated health services, improve quality standards and sustainability of HHs in Fatick, Kaffrine, Kolda, and Kedougou regions. This study demonstrates contributing factors pertinent to successful HHs transfer from project management to local community management and supervision.

**Methods:** The process of HH transfer is part of health system decentralization aiming for empowerment of local communities through the transfer of health competence. By involving and empowering local communities in providing services, community health system is strengthened in terms of both capacity development and improvement of access to health services. A HH transfer analysis was conducted to evaluate the community participation, quality of integrated community health services, functionality challenges and sustainability factors. Qualitative data from 338 HHs located in Fatick, Kaffrine, Kolda and Kedougou regions and 60 communities serving 260,478 people were analyzed.

**Results:** 51 of 338 HH were transferred from project to community management, while maintaining the quality and access to information, services and products. The 51 HHs have fully functional health committees and are still viable 12 months after official transfer. Over 80% of HHs were offering minimum and/or specific packages of services recommended by MOH. By December 2014, 70% of newborns received essential care and 70% of the 287 deliveries were performed by midwives in HHs.

**Conclusion/Recommendations:** Process of HHs transfer identified gaps and helped in taking actions aimed at strengthened compliance with MOH standards. Empowerment of communities contributed to improvement of health governance while allowing them to understand importance of health system self-management with involvement of all stakeholders. This can be achieved through facilitating regular meetings with local authorities, monitoring activities and identifying HHs management issues, while advocating for resources to support HHs and providing adequate supportive supervision to HHs.

**Abstract #:** 2.010\_GOV

### Two million hands on deck to achieve the Health SDG: Entry points for improving governance in Africa's health sector

Mahesh Shukla; Management Sciences for Health, Arlington, VA, USA

**Background and Purpose:** Governance, one of the six health system building blocks, has been less often used as a lever to improve performance because of its perceived complexity and sensitivity. SDGs when compared to the MDGs lay emphasis on improving governance. Governance will be instrumental especially to achieving the ambitious health goals since poor governance is constraining further improvements. Governing bodies at different levels provide an entry point for governance reform.

The latest Mo Ibrahim Foundation's report shows progress in governance has stalled in Africa. To achieve their health goals, African policymakers need to work on improving governance in general and in the health sector specifically. Entry points for doing so are not readily obvious.

**Methods:** Review of strategic plans and publications of the ministries of health in all 55 countries in Africa to identify governing bodies at different levels in their health sector.

**Findings:** Our document scan revealed that there are more than 150,000 governing bodies in Africa's public or government health sector at national and subnational levels. These range from community health councils to health center committees to hospital boards to district and provincial health councils to committees and boards at national level working for the ministry of health. We estimate these

governing bodies comprise one million governing roles involving health officials and representatives of health workers, communities, civil society organizations and private sector. Our country estimates were validated by ministries of health in Benin, Burkina Faso, Liberia and Nigeria and the ministry's partner organization in Kenya.

**Going Forward:** Research shows that governing bodies have a potential to contribute to improved health services and health status of populations but often do not get necessary support. To realize their promise, they need to be supported in terms of clear mandates, authority, and resources. Revitalizing them, clarifying their responsibilities, authority and resources, and establishing a system of governance orientation and ongoing education will add capable hands to deck to achieve the sustainable health goal. USAID-funded Leadership, Management, and Governance Project has created a suite of tools, models, approaches, and governance learning resources for the orientation of these one million trustees.

**Funding:** United States Agency for International Development.

**Abstract #:** 2.011\_GOV

### Hand hygiene knowledge and practice of haitian nurses

C. Thomas Riché<sup>4,5</sup>, G. Poitevien<sup>2</sup>, I. Bois<sup>3</sup>, R. Valcourt<sup>4,5</sup>, M.G. Debrosse<sup>1,5</sup>, M. Thompson<sup>6,5</sup>, N. Mainsou<sup>3</sup>, B. Toffler<sup>5</sup>, F. Juste<sup>5</sup>, J. Tuck<sup>5,6,7</sup>, S. Knowlton-Soho<sup>5</sup>, D. Hastings<sup>5</sup>, O. Du Moulin<sup>1</sup>, N. Sobler<sup>2</sup>; <sup>1</sup>GHESKIO Centers, PaP, Haiti, <sup>2</sup>Université Quisqueya, PaP, Haiti, <sup>3</sup>DSI/MSPP, PaP, Haiti, <sup>4</sup>Zanmi Lasante, PaP, Haiti, <sup>5</sup>NECH- CIEH, Teaneck, NJ, USA, <sup>6</sup>DFPSS/MSPP, PaP, Haiti, <sup>7</sup>McGill University, Montreal, Canada

**Program/Project Purpose:** Hand washing is widely accepted as one of the most effective public health interventions for reducing healthcare associated infections. However, in Haiti's low resource context, there are many challenges that impact upon a nurse's ability to perform effective hand hygiene at the recommended times during care delivery. It is important to understand the current practice to determine where efforts can be best applied to improve practices. The objective of this project was to evaluate the hand hygiene knowledge and practices of Haitian nurses across all 10 regions of the country.

**Structure/Method/Design:** The WHO's "Hand Hygiene Knowledge Questionnaire for Health-Care Workers" was modified for contextual issues and a French version was used to evaluate nursing knowledge and practices. Additionally, observational data was collected by two Haitian nurses assessing hand washing technique. The project received ethical approval from the Haitian Ministry of Health (MSPP) as a quality improvement project.

**Outcome & Evaluation:** A total of 101 hand hygiene observations were recorded and 568 questionnaires were completed by nursing staff (57% nurses, 35% auxiliary nurses and, 5.6% midwives) in 12 hospitals representing each of the 10 regions. Findings revealed 99% used water and soap (when available) to wash their hands. Only 4% washed their hands for the recommended minimum of 40 seconds and only 2% dried their hands (related to lack of resources). Identified challenges included: absent or irregular access to water, lack of interest to perform hand hygiene, and absence of soap or hand sanitizer. The questionnaire revealed that only 57% of all participants were able to answer >50% of the 29 knowledge-based questions correctly. Nurses had

the strongest result with 67% achieving a passing grade. Ongoing education on hand hygiene in the last 3 years had a significant effect ( $p < 0.001$ ) on the knowledge of the nursing staff.

**Going Forward:** The Haitian context brings many resource and infrastructure challenges. Future steps include developing interventions aimed at improving the practice of hand hygiene in a low resource setting.

**Funding:** Funding for the project was provided by the Puffin Foundation and NECH-CIEH.

**Abstract #:** 2.012\_GOV

### Increased risk of hepatotoxicity and hyperuricemia in elderly Taiwanese multidrug-resistant tuberculosis patients taking pyrazinamide

D. Truong<sup>1</sup>, G. Peng<sup>1</sup>, L.C. Chien<sup>2</sup>, A. Lin<sup>1</sup>; <sup>1</sup>Touro University California, College of Osteopathic Medicine, Global Health Program, <sup>2</sup>Taipei Hospital, Department of Health and Welfare, Taiwan International Healthcare Training Center

**Background:** Multidrug-resistant tuberculosis (MDR-TB) cases in Taiwan has increased 3-fold between 2009 and 2013. In 2012, Taiwan had a 10 times higher rate of TB compared to western countries. Current standard of care, a stepwise drug selection process that is stopped until liver transaminase levels normalize, increases risk of developing drug resistance to the anti-TB regimen.

We assessed patients taking ethionamide with pyrazinamide (PZA), a combination that a prior study has shown to worsen hepatotoxicity under short term use. We hypothesize that older patients on PZA (>60 years old) are more susceptible to developing hepatotoxicity during long term MDR-TB treatment. The goal of this study is to help establish favorable treatment regimens for patients to prevent additional disease burden and treatment interruption.

**Methods:** All patients in the study were diagnosed between 2012–2014 with MDR-TB at Taipei Hospital ( $n = 14$ ). Data was collected through a retrospective study of patients' medical records. Data for each patient included: age, hepatitis B and C status, history of smoking or alcoholism, date and result of renal and liver function tests (BUN, Cr, UA, total bilirubin, ALT, and AST), and anti-TB drug regimen at the time of each lab test. Time to hepatotoxicity was defined as the days from onset of PZA treatment until hepatotoxicity.

**Findings:** Older patients had higher rates of hepatotoxicity (> 60 years: 42% (3/7) patients developed hepatotoxicity. < 60 years, 14% (1/7) developed hepatotoxicity). 84% (11/13) of patients taking PZA had elevated UA. Average treatment time for all patients was  $606 \pm 39.6$  days versus patients with hepatotoxicity  $702 \pm 34$  days. Average age of all MDR-TB patients was  $59.9 \pm 5.65$  years ( $n = 14$ ) whereas patients with hepatotoxicity averaged  $77.5 \pm 7.88$  years ( $n = 4$ ).

**Interpretation:** Our data suggests that patients > 60 years had an increased risk for hepatotoxicity while taking PZA and ethionamide. High rate of hyperuricemia suggests PZA avoidance for elderly patients with gout or arthralgia. Avoiding PZA for patients > 60 years may shorten treatment duration. The lapses in treatment increases the risk of developing further drug resistance and worsens prognosis.

**Funding:** None.

**Abstract #:** 2.013\_GOV