

nearby laboratories referred samples to for analysis. These achievements were met with some challenges however, with insecurity and infrastructural challenges being most prominent. The lack of involvement in an EQA program by the diagnostic centre and the poor terrain between referring laboratories and the diagnostic centre also posed another challenge. The nonexistence of a national policy and legislation on GenXpert was also a challenge.

Going Forward: Our experience demonstrates that establishing a successful MTB/RIF Assay centre requires government buy-in and commitment to the cause to ensure sustainability.

Funding: Centre for Disease Control & Prevention.

Abstract #: 1.061_HRW

Investing in Nigerian HRH development through innovative in service training mechanisms: Partnership for Medical Education and Training (PMET)

E.A.C. Onu¹, V.A. Enejoh¹, T. Madubuko¹, A. Olutola¹, A. Nwandu²; ¹Centre for Clinical Care & Clinical Research Nigeria, ²University of Maryland School of Medicine-Institute of Human Virology Baltimore, MD, USA

Program/Project Purpose: Gaps exist in knowledge and clinical skills of health care workers in the management of emerging infectious diseases like HIV, Malaria and hemorrhagic fever. Previously, these gaps are addressed through in service trainings conducted by consultants and in expensive venues mostly funded by donors. In September 2012, we institutionalized these trainings within existing Government owned tertiary institutions aimed at establishing sustainable regional training hubs that support HCWs in the catchment areas with skills that meet identified gaps.

Structure/Method/Design: Eight training institutions were strategically identified. Selection was based on 1. Presence of experienced and trainable faculty in at least 3 core clinical departments. 2. Identification of an adequate training space/environment for at least 25 trainees. 3. Presence of a functional Infectious Disease Clinic to serve for practicum sessions. Institutional buy-in was sought as an important step towards ownership. Facilities were equipped with required training tools while training and retraining of the faculty were conducted in both the core content and training methodologies. Training needs were determined for HIV training courses such as Prevention of Mother to Child Transmission of HIV, Paediatric Anti-Retroviral Therapy, TB/HIV co management and Adult Anti-Retroviral Therapy.

Outcome and Evaluation: Through the award, 91 Master Trainers in the training institutions have been trained and added to the National pool of trainers. In the two years of the project, 2,177 HCWs were trained in 119 training encounters at less than 20% of the usual cost of conducting trainings. Three of the training institutions have developed plans for corporate registration of training institutes to provide both HIV and Non HIV trainings, in addition to other subjects of interest such as research.

Going Forward: Training programs should be institutionalized to reduce cost associated with in-service training of human resources.

Health institutions are moving towards significant ownership and responsibility over the capacity gaps of health care workers in their catchment areas.

Funding: PEPFAR through CDC.

Abstract #: 1.062_HRW

Investing in the Future of Nigeria's Health Work Force: strengthening human resources for health through sustainable pre service HIV/AIDS training systems at nursing, midwifery & health technology training schools in SE Nigeria: a case study

T. Madubuko¹, E. Onu¹, A. Olutola¹, A. Nwandu^{1,2}; ¹Center for Clinical Care and Clinical Research Nigeria, Abuja, Nigeria, ²University of Maryland School of Medicine

Background: Center for Clinical Care and Clinical Research Nigeria (CCCRN), in collaboration with local teaching institutions in Nigeria, sought to more closely align USG-funded HIV/AIDS efforts with the national programs through a program called Partnership for Medical Education and Training (PMET). The goal was to enhance capacity at the pre service training level in the management of HIV disease, by revising the HIV training curriculum to emphasize role specific core competencies that in turn ensure “practice ready” graduates.

Methods: Multiple advocacy and consensus building meetings for all stakeholders were held, followed by a comprehensive training needs assessment of five schools of nursing and 4 schools of midwifery, 3 schools of health technology in the South East of Nigeria. Pre service faculty were assessed for teaching/mentoring, knowledge and skills to identify capacity gaps as well as presence or absence of ongoing HIV related education for faculty and students using structured questionnaires and key informant interviews. The required infrastructure for effective implementation of these trainings in the institutions was also assessed.

Findings: This resulted in the following interventions - Curriculum review, Training of Trainers for faculty, refurbishing of the identified training halls and libraries, provision of teaching and training materials and books. The completed documents from the curriculum review of the nurses and community health officers were formally submitted to the respective regulatory bodies for adoption/authorization and provisional concurrence for their implementation was also sought. A total of 37 faculty received training to implement the new curriculum, 28 participants trained on training of trainers on managerial competence for health care providers and a total of 3,108 undergraduate students from the 12 institutions benefitted from the revised curriculum between 2013 to 2014. Pre and post test results indicated a significant increase in knowledge. Regular quarterly technical assistance visits to the institutions further helped to strengthen the programme.

Interpretation: Strengthening pre-service education in nursing/midwifery and health technology schools helps to provide a “practice ready” workforce that can assist in bringing the HIV/AIDS pandemic under control. The success of the program can be attributed to collaborative and participatory nature of the process with clear understanding and cooperation by all stakeholders.

Funding: Center for Clinical Care and Clinical Research Nigeria (CCCRN).

Abstract #: 1.063_HRW

Uptake and utilization of tuberculosis preventive therapy in a Peruvian Peri-urban Shantytown

M.M. Iberico^{1,2}, Rosario Montoya^{2,3}, Betty Valiente^{2,3}, Carlton Evans^{2,4,5}; ¹Kaiser Permanente, San Francisco, California, ²Innovation For Health And Development (IFHAD), London, United Kingdom, ³Innovación Por la Salud Y Desarrollo (IPSYD), Asociación Benéfica PRISMA, Lima, Perú, ⁴Universidad Peruana Cayetano Heredia, Lima, Peru, ⁵Imperial College of Science, Technology and Medicine, London, UK

Background: Isoniazid preventive therapy (IPT) for tuberculosis (TB) is a safe, effective intervention for preventing active TB disease. When this study was conducted, the Peruvian TB program offered free IPT for TB patient contacts <20 years old. Despite this, uptake and adherence rates were very low. Little research had been done to understand why, so we decided to conduct a qualitative study of barriers and facilitators to IPT in order to identify opportunities to improve access.

Methods: We purposively selected 30 TB affected families living in the district of Ventanilla, Peru and conducted qualitative interviews with the household member most responsible for the care of individuals <20 years old living in those homes (caretakers). We posed questions covering the themes of: TB symptoms, contagion and prevention; and the freely available IPT program. Focus groups were also conducted with physicians, nurses and field workers in Ventanilla to elucidate barriers to and opportunities for improved IPT access.

Findings: The analysis of the household interviews revealed that caretakers almost always expressed TB transmission in terms of saliva through sharing eating utensils, lacking understanding of airborne transmission. Many also believed that taking IPT could weaken healthy children. Despite this, caretakers almost universally expressed that they would follow advice to use IPT if delivered by a physician or nurse, overriding personal reservations. In focus groups nurses and physicians expressed fears that IPT could cause development of drug resistance, and concern that their time was too limited to discuss IPT.

Interpretation: In conclusion, public health education does not appear to have corrected misperceptions concerning saliva vs. airborne transmission of TB and, despite a TB program with free IPT access, there was little knowledge of its existence. Despite this, the esteem caretakers expressed for physicians and nurses in the IPT program suggested that a simple, non-time-intensive intervention of simply emphasizing IPT as a necessary and preventive treatment available for free may have a very high impact on uptake and adherence of IPT. Finally, health care provider education regarding IPT's safety and the low time burden of emphasizing IPT will be critical to the success of expanding IPT access.

Funding: Fulbright Scholar Grant, Boonshoft Physician Leadership Development Program Scholarship, IFHAD.

Abstract #: 1.064_HRW

Introduction of team based learning (TBL) approach in preclinical and clinical learning: students view and its impact in preclinical medical students

A. Igiraneza¹, F. Hategekimana², Dr.J.L. Ugirashebuja³, Prof.J. Gashegu⁴; ¹University of Rwanda, college of medicine and health sciences, school of medicine and pharmacy, medical students' association of Rwanda, Kigali, Rwanda, ²University of Rwanda, college of medicine and health sciences, school of medicine and pharmacy, medical students' association of Rwanda Kigali, Rwanda, ³University of Rwanda, Butare University teaching hospital, Huye, Rwanda, ⁴University of Rwanda, college of medicine and health sciences, school of medicine and pharmacy Huye, Rwanda

Program: While the School of Medicine at University of Rwanda aims at becoming a Centre of excellence in training and development of health professionals, there still a substantial use of inadequate learning methods among undergraduate medical students which affects both academic assessment and post-graduate district hospital performance. Medical students employ superficial readings and memorization focusing only on given syllabus materials. This study evaluated the impact of a newly introduced team based learning (TBL) learning approach with regard to academic outcome.

Methods: This comparative study compared/weighed benefits of the TBL approach among undergraduate medical students who were exposed to it and those with no prior exposition. Data collection tools such as testimonials from medical students enrolled in undergraduate program at University of Rwanda and research papers done in other accredited universities. Two-hundred medical students exposed to the TBL approach in 2013-2015 academic years and 200 others who did not ever use the system in their studies were interviewed. In addition, 16 papers describing the impact of TBL in different universities including the Deakin University Master of Nursing Practice and St. Luke's College of Nursing were analyzed.

Outcome: First, data analysis showed that 85% of students exposed TBL did further research on the TBL topic in comparison to 12% of their peers without any prior exposure to it. Second, integration of fink and Michaelsen method showed to increase students' participation at a rate of 100%. As from this research, documented papers demonstrated that TBL approach increased students' success at an average rate of 84%. The 90% of exposed with 75% of non-exposed students preferred TBL approach introduction in their learning.

Going Forward: It was recommended that integrating TBL approach in all medical studies assignments is crucial to success and performance of future healthcare professionals trained at school of medicine, university of Rwanda; And that further researches on TBL need to be performed to see the probable benefit in other faculties and education levels.

Funding: Medical students association of Rwanda.

Abstract #: 1.065_HRW

How the interdisciplinary leads to the innovative in global health: learning from the Global Health Case Competition at the University of Florida