Annals of Global Health, VOL. 83, NO. 1, 2017
January–February 2017: 94–109

Source of Funding: PEPFAR through the NIH.

Abstract #: *1.023_WOM*

Health, Information, Perception and Demographic Variables as Correlate of Gender Equality in Science Technology Engineering and Math (Stem) Education in South-West Nigeria

M.A. Iroaganachi[1], *C. Nkiko*[2], *A. Eni*[2]; [1]*Covenant University, Ota, Ogun, Nigeria,* [2]*Covenant University, Ota, Nigeria*

Background: With the level of efforts and interventions by researchers and organizations around the world towards gender equality in Science Technology Engineering and Math (STEM), the number of women participation is still very low. UNESCO Institute for Statistics (2015) revealed that female representation is only about 30% of the total population in STEM while in Africa it is about 17% (Ekine, 2013). This statistics, raises the question of what could be responsible for the resistant disparity? Could it be that girls at the foundational level do not have adequate career information about STEM and all it entails? What are their perceptions of Mathematics and sciences, are there some demographic issues? There is need to discover what the real causes of gender disparity in mathematics and sciences are from the junior secondary school, a period that precedes the choice subjects that form student's career paths. This will provide an empirical basis for effectively bridging the gender gap in STEM in Nigeria thereby building and releasing the necessary latent human resources to sustain development and compete in the global economy as well as ensuring inclusivity of girls and women.

Ekine (2013) affirmed that a country's ability to secure good health, fight diseases, protect the environment, produce food for its people, and develop new industries and technologies is dependent on the scientific knowledge and skills of its people. Consequently, more women are needed in STEM to be active participants in scientific development particularly in health related issues, application and decision-making thus, ensuring that scientific initiatives are implemented to adequately address the needs and preferences of both sexes especially those of women. It is against this background that the study seeks to investigate Health, Information, Perception and Demographic variables as correlate of gender equality in STEM education in South-West Nigeria. On the long run, findings from a study such as this would highlight specific deficiencies associated with attracting and retaining girls in Mathematics and Science and proffer solutions to the problems.

Methods: Survey.

Findings: In view.

Interpretation: In view.

Source of Funding: Covenant University.

Abstract #: *1.024_WOM*

Video Analysis System as a Tool to Improve the Quality of Basic Emergency Obstetric and Neonatal Care through Simulation Training in Bihar, India

A.T. Janjua[1], *J. Dyer*[2], *H. Spindler*[1], *J. Sterne*[2], *S. Cohen*[2], *M. Morgan*[1], *A. Christmas*[3], *M. Bharat Shah*[3], *A. Das*[3], *D.D. Walker*[1]; [1]*University of San Francisco, San Francisco, USA,* [2]*PRONTO International, Seattle, USA,* [3]*CARE India, Patna, India*

Background: Limited-resources and expertise precluded satisfactory quality of care during childbirth in Bihar, India. UCSF and PRONTO International collaborated with CARE India to integrate on-site basic emergency obstetric and neonatal care (BEmONC) simulation and team-training into an ongoing mobile mentorship model in 320 primary health centers (PHCs). The feasibility and effectiveness of video analysis was evaluated for monitoring the uptake of evidence-based practices (EBP) and teamwork and communication (T&C) used in simulation. The aim of this analysis is to provide ongoing programmatic feedback to the nurse midwife mentors (NMMs).

Methods: Altogether 120 Nurse-Midwife Mentors (NMMs) were trained in techno-managerial aspects of teaching, team building, behavior change communication and advocacy. The goal was to enable them through repeated PHC visits, in mentoring Auxiliary Nurse Midwives for the management of childbirth and relevant complications. The NMMs video recorded every simulation through a video camera and then debriefed as a part of mentoring. The recorded videos were labeled to ensure confidentiality and delivered to the project headquarters through an encrypted USB drive. Selected videos were coded using Studiocode video analysis software by a technically competent team of Hindi (local language) speaking video analysts. Coded data was then analyzed to provide feedback/training recommendations to the NMMs.

Findings: A total of 10,000 videos will be collected and contents of 4,000 videos spanning ~88,000 minutes will be analyzed. To date, simulations and debriefs have been completed in 240 PHCs, during three rounds spanning 8 months. A total of 1,490 simulation videos and 154 debrief videos were coded, analyzed, and used for programmatic feedback.

Interpretation: Throughout the first three of this four round project, the analyzed videos provided guidance in: 1) measuring the use of EBP and T&C; 2) programmatic decision making; 3) addressing technical issues; and 4) giving comprehensive feedback to NMMs to guide mentoring and facilitation. While the transferring, coding and analyzing large video files were labor intensive; they still appeared to be less costly than direct observation. Thus large-scale video monitoring system seemed feasible and useful tool for program implementation and evaluation in resource-limited settings.

Source of Funding: The program is funded by the Bill and Melinda Gates Foundation (BMGF).

Abstract #: *1.025_WOM*

A Multi-Center Study of Automated Breast Ultrasound System for the Diagnosis of Breast Cancer in China

M.-M. Jia[1], *X. Lin*[2], *P. Liu*[3], *Y. Chen*[4], *L. Bao*[5], *S. Wang*[1], *X. Zhou*[1], *W. Feng*[1], *A. Li*[2], *Y. Qiao*[1]; [1]*National Cancer Center/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China,* [2]*Sun Yat-sen University Cancer Center, Guangzhou, China,* [3]*Tianjin Medical University Cancer Institute& Hospital, Tianjin, China,* [4]*Xin Hua Hospital Affiliated To Shanghai*