

HUMAN RESOURCES AND WORKFORCE

The ‘Gestalt’ effect: The added-value of integrating leadership, management, and governance training for postpartum family planning service providers

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Background: In many developing countries, health practitioners are responsible for managing health facilities. While formally trained in clinical knowledge and skills, their leadership, management, and governance (L+M+G) skills are often learned on the job. While there is general agreement that L+M+G skills are important, there is little evidence of the value-added of L+M+G or its effect on clinical service delivery improvements. This abstract presents new evidence of the effects of strengthening L+M+G on an existing postpartum family planning (PPFP) intervention.

Methods: The USAID-funded Leadership, Management & Governance (LMG) Project implemented a quasi-experimental, three-armed study in six urban tertiary public hospitals in Yaoundé, Cameroon. The Leadership Development Program Plus (LDP+), an L+M+G program that imbues L+M+G practices for team-based problem solving- convened hospital teams to identify and address management issues affecting postpartum family planning (PPFP) service delivery. The three arms were as follows: Arm 1 (2 hospitals) received the LDP+, PPFP Clinical and Counseling Capacity Building, and Commodities, Arm 2 (2 hospitals) received PPFP Clinical Capacity Building and Commodities, and Arm 3 (2 hospitals) had access to commodities only. Pre-post FP service delivery outcomes were collected at all six hospitals. Focus group discussions (FGDs) and key informant interviews (KIIs) were conducted with hospital teams and other staff to explore the L+M+G barriers and facilitators to integrating PPFP in MNCH departments.

Findings: Preliminary results show that facilities with LDP+ intervention have larger increases in number of women adopting a FP method compared to control hospitals. Interviewees reported that the LDP+ increased PPFP service delivery by improving management of commodities and human resources, promoting transparent communication, and motivating staff to engage in the improvement process. Interviewees reported improvements in hospital leaders/managers’ attitudes and practices towards PPFP provision, while highlighting other barriers (norms around fertility, family size, birth spacing) to increasing uptake of PPFP.

Interpretation: Our findings suggest that integrating L+M+G into clinical service delivery interventions may improve service delivery results. Specifically, our results indicate that L+M+G can improve the uptake of PPFP in low-resource settings through effective management of commodities, human resource management, and transparent communication.

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Abstract #: 2.001_HRW

Utilizing process map-driven protocols as educational tools: Developing hypertension protocols for management of preeclampsia in Botswana

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Background: At Scottish Livingstone Hospital (SLH) in Botswana, medical providers are trained to recognize signs of hypertensive disorders in pregnancy (HDIP). However, management of HDIP is not standardized, leading to delays in diagnosis and treatment.

The objective of this study was to develop and introduce protocols to standardize the admission process and delivery indications for HDIP. The protocols were developed using a novel method of process map-driven protocols, and the second objective was to demonstrate proof of concept for this method.

Methods: 1. Protocol Development: Process maps of existing clinical practices related to HDIP at SLH were created with the medical officers. The protocols were then created by simplifying the process maps and then integrating up-to-date clinical guidelines. Two protocols, titled “Indications for Delivery” and “Indications for Admission,” (Figure 1.) were developed. 2. Educational Training: Two educational sessions consisting of didactics with case-based scenarios were held at SLH in May, 2015. All participants completed pre- and post-intervention knowledge application tests (maximum score of 8 points), with the protocols as reference. Satisfaction surveys also were administered.

Findings: A total of 24, including 4 midwives and 20 medical officers and interns, participated. The median score was 6.0 (5.0–7.0) for the pretest and 7.0 (6.0–7.0) for the posttest. The pre- and post-intervention scores were not significantly different ($p = 0.07$); however, participants with the lowest pretest scores showed the most improvement on their pre-eclampsia knowledge application tests. All participants reported that they wanted more process map-driven protocols.

Interpretation: Process map-driven protocols improved clinical decision-making for hypertensive disorders in pregnancy in Botswana; providers were highly satisfied with process map-driven protocols as a method to standardize and improve care. This proof-of-concept supports generalizability and is encouraging for the development of future educational and clinical protocols for obstetrical care in developing countries.

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The development of a difficult intravenous access algorithm in Guayaquil, Ecuador: Trials and triumphs

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Project Purpose: Students and professors from the Brigham Young University (BYU) College of Nursing traveled to Guayaquil, Ecuador in 2014 to perform a qualitative study related to the hospital's process of managing difficult intravenous (IV) access in this large hospital. The objectives of the study were (1) Determine the need for a difficult IV access algorithm. (2) If the need existed, donate intra-osseous (IO) equipment and training materials to the hospital. (3) Plan and organize a skills training program for the hospital. The results of the research identified the need for an alternative IV access method and algorithm to follow when IV starts were challenging. The following May, 2015, the group presented the hospital with a generous donation of intra-osseous supplies from the Teleflex™ company. The team of two professors and 20 nursing students taught physicians and nurses the use of the equipment. Additionally, the BYU team worked with the hospital's lead physicians and nurses and assisted in the development of a difficult IV access algorithm for them to put into practice.

Method/Design: This was a non-experimental, descriptive study using structured interviews. Fluent Spanish-speaking nursing students conducted the qualitative interviews in the Luis Vernaza hospital. Participants were a convenience sample of hospital physicians and nurses. The interviews were recorded, translated into English, and transcribed. Using qualitative data analysis (Miles and Huberman, 1994 methods), recurrent themes from the interviews were identified.

Outcome & Evaluation: Data analysis confirmed the need for a difficult IV algorithm and the necessity of IO access as an alternative method for IV access. It was determined that great strides in the care of hospitalized patients in Guayaquil, Ecuador could be achieved with the implementation of these items. The training was provided and the algorithm initiated. While the training and implementation were both highly successful, there remains a lack of commitment from the physicians and nurses to use the IO equipment as directed in the algorithm. Continued skepticism from the healthcare providers regarding the effectiveness of the IO device continues to be a problem.

Going Forward: The BYU College of Nursing visits this hospital annually and will regularly provide follow-up training on the IO device/equipment. Moreover, the team will evaluate the need for new supplies and additional education. It is imperative for the BYU team to follow up and provide continued face-to-face training to maintain sustainability of the use of the IO supplies the difficult IV algorithm.

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Developing global health awareness in students through participation in an international health sciences conference

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Program/Project Purpose: The College of Health Sciences (COHS) at Sam Houston State University (SHSU) and the Medical School of the Universidad de Iberoamerica (UNIBE) partnered in the First Annual International Health Sciences Conference

conducted in San Jose, Costa Rica, September 2015. The purpose of the student focused conference was to enhance global health awareness, collaboration, and responsibility between health science students at SHSU and medical students at UNIBE. Focus areas included: educational initiatives; designs for health and sustainability; evidence-based practices in nursing; correctional public health; global sport management; preventive health, lifetime fitness and wellness; medical exchange programs; service learning; and nutritional health.

Structure/Method/Design: Project goals: increase international health science educational opportunities between students and faculty, and broaden the scope of global health in Latin America countries and the USA. Project outcomes: provide students with a language immersion experience, integrate international health opportunities, provide international research, and service learning opportunities.

Twenty-three students and 21 faculty represented SHSU. Sophomore, Junior, Senior, and graduate students were selected by faculty. Freshman were randomly selected to attend the conference. Program faculty specialist were invited to present. One-third of the presentations were co-presented by faculty and students, and 90 percent of the poster sessions were faculty/student collaborative research activities. UNIBE medical students served as conference hosts. Future conferences will be held annually on a rotating basis between the universities.

Outcome & Evaluation: Both universities regarded the conference as a success. Both student groups expressed their commitment to engage in study abroad, service learning, language immersion, and research opportunities. Faculty stated their willingness to sponsor research, study abroad experiences, service learning projects, and global health activities. Focus group results: extend conference dates; conduct additional tours of community centers, schools, clinics, and hospitals; include service learning activities; engage in international research; conduct pre-conference student social; and incorporate conference into a study abroad experience.

Going Forward: The goals and outcomes were achieved. Lessons learned: increase concurrent presentations, provide additional student collaborative activities, schedule conference in summer, implement conference registration fee, and extend reach of student and faculty participants.

Funding: Expenses were paid by UNIBE and the COHS.

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Improving access to education and support for community health nurses in rural Guatemala through telehealth

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Program/Project Purpose: The population of the Trifinio region in rural southwestern Guatemala experiences high rates of poverty and lack of access to adequate education, healthcare and clean water. The Trifinio Human Development Project includes a clinic and community outreach program and was implemented in 2011 to address these vulnerabilities. Local community health nurses