

What do healthcare providers know about human papillomavirus (HPV) and cervical cancer? a cross-sectional knowledge assessment in Debre Markos, Ethiopia

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Background: Cervical cancer is the most common cancer among women living in sub-Saharan Africa. Ethiopia has a high incidence of cervical cancer (35.9 per 100,000 women), with 7,095 women diagnosed annually and 4,732 dying every year from the disease. Low provider awareness and poor understanding of appropriate prevention, treatment, and screening interventions pose challenges to addressing this problem. To gauge the extent of this information gap, the study explores variation in healthcare providers' knowledge about HPV and cervical cancer at Debre Markos Referral Hospital, a tertiary public facility located in Ethiopia's Amhara region.

Methods: We conducted a survey of 140 randomly selected healthcare providers stratified by professional group. The verbal, in-person survey was conducted in English after participants gave verbal informed consent. The survey contained demographic questions and questions about cervical cancer and HPV infection risk factors, symptoms, treatment options, transmission routes, screening techniques, and prevention methods. A total knowledge scale (alpha = 0.85) and several sub-scales were generated by summing correct responses. The data were analyzed using bivariate tests of association and multivariate linear regression.

Findings: Our respondents were 40% female. Approximately 36% were nurses, 22% students, 19% physicians, 12% midwives and 11% health officers. The vast majority (98%) had heard about cervical cancer and 70% stated that it was a major health issue in Ethiopia. Knowledge of symptoms, screening methods, treatments, and risk factors were all relatively weak, e.g., 45% of respondents were unaware that either early sexual intercourse or smoking were cervical cancer risk factors. A third of respondents gave incorrect responses to questions about the protective effect of HPV vaccination.

Nurses and health officers scored significantly lower than physicians on overall knowledge. Younger respondents were significantly more likely than older providers to be aware that cervical cancer was a major health problem; to know the risk factors associated with it; and to know how it is treated. There was no significant difference in overall knowledge by gender.

Interpretation: Our findings suggest the need for refresher in-service training on cervical cancer risk factors and screening methods targeted at older healthcare providers, particularly nurses and health officers.

Funding: None.

Abstract #: 1.013_HRW

Social business impacting health and development in Israel's negev desert: a case study of Al sanabel women's catering cooperative

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Program/Project Purpose: The emergence of the social business model as a framework for economic and social empowerment has given rise to creative new methods to tackle community development. Through the lens of an organizational case study, we explore the model of a particular business and its suitability to address multifaceted social issues. Al Sanabel, otherwise known as the Hura Women's Catering Enterprise, is a socially minded business based in the Bedouin township of Hura in Israel's Negev Desert. As a business, it prepares and distributes fresh meals to thousands of school-children daily. As a social organization, it empowers women through employment and education, reinvests in community projects, and promotes healthy diets for Bedouin children.

Method: We employ several methods to explore the factors that underlie the long-term feasibility and impact of Al Sanabel's model. Interviews with employees of Al Sanabel and community leaders provide a range of perspectives from both inside and outside of the organization. Field observations and photography of the catering facility and the schools provide cultural and physical context for our analysis.

Outcome & Evaluation: Al Sanabel produces and delivers 7,000 fresh meals daily to Bedouin school children. Since 2011, it has been producing profits that have been inserted back into the community. One major factor in its success is the organization's ability to embrace the inherent tension between social and business objectives. Al Sanabel often faces situations in which it must choose between immediate social impact and long-term financial solvency. This choice is only made possible due to its mantra that successful business is necessary for a successful social mission. The organization's clear founding principles and long term goals provide a space in which this necessary interplay can occur.

Going Forward: This case study sheds understanding on why Al Sanabel is successful as a social business and preliminary findings suggest that it is meeting its social goals. However, its applicability as a general model in the field of sustainable development needs to be further explored by assessing the outcomes of its social missions and the particulars of the specific context in which it operates.

Funding: None.

Abstract #: 1.014_HRW

Spreading the health: international public health academic and community partnerships in Panama

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Program Purpose: The main program purpose is to develop regional partnerships in Latin America, with Panama as a hub, for academic and research activities in global health. For the past decade a major Florida institution of higher learning has developed a program in Panama, Central America and has offered international interdisciplinary academic and practice training at Panamanian schools. Reaching the Americas through partnerships of the

academic and practice sectors at the centrally located country gained international, and local support.

Structure/Methods/Design: The University of South Florida established ten years ago a coordinating program at the City of Knowledge to develop international academic and community partnerships, student international field experiences, certificate programs, study abroad groups, research training and projects and implementation at the population level, international conferences, workshops, seminars, and continuing education of professionals provided an academic forum to reach the Americas as a hub for global health. The program provides local and international faculty and students an opportunity for knowledge exchange in research, public health topics, and specific clinical training. A key component of the program has been conducting hands-on training and population-based research in at-risk and vulnerable communities of Panama, including indigenous groups.

Outcome and Evaluation: Multiple academic and practice partnerships in Panama and other countries in the Region were formed, hundreds of students (>500) and thousands of health professionals trained (>1,000), new forums for health academia were formed, and research on chronic and infectious diseases implemented. Schools became an effective outlet to “spread the health”, providing access to communities for health education, outreach, and interventions, graduate student practice settings in public health research, and faculty research on HPV, violence, nutrition, hygiene, environment, tropical disease, and cancer among others.

Discussion and Future Directions: Growing globally in health academic and research for inter-professional development is a challenging endeavor. Gaining support from partners in other academic and practice (schools, hospitals, health centers, community agencies, international non-governmental institutions) provide the basis for successful training and research. Community settings provide an appropriate channel to conduct training, research, and community health interventions at international sites.

Abstract #: 1.015_HRW

Assessing barriers to accessing surgical care in Ethiopia: a provider perspective

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Purpose: Dessie Referral Hospital (DRH) is a public hospital serving 2 million people in the South Wollo Zone of Ethiopia. This study seeks to describe the volume of surgical procedures performed at DRH, characterize resources at mid-level health clinics, and assess barriers to surgical care experienced by providers.

Methods: The study had two components: a retrospective hospital records review and a provider survey. Surgical logbooks and patient records for all adult surgical cases in 2013 were reviewed at DRH. Data on patient characteristics, surgical procedure, and complications were recorded. Provider surveys were distributed to 21 community health centers within the catchment area of DRH assessing the

availability of diagnostic tools, procedural materials, and medications. Providers tracked surgical case referrals during a 30 day period in 2014 and identified reasons surgeries were not received.

Findings: Of the 3587 adult surgical procedures performed in 2013 at DRH, 250 charts were randomly selected for review (179 male, 71 female). The median age was 42 (range 18–86 years). Obstetric/gynecological procedures accounted for 37% of surgeries, 8% were orthopedic, 8% were laparotomies, 6% were appendectomies, and 6% were thyroidectomies. Documentation of complications and mortality was consistently absent. Of 21 surveys distributed 8 were returned, documenting 146 total surgical referral cases (92 male, 54 female). Of patients with a surgical diagnosis, 37.2% received surgery (48% female, 52% male). The most common barriers to surgery were family objections and financial ability. There was an average of 2.8 health officers, 10.3 nurses, and 18 total providers per center. Physicians and imaging were never available at any of the centers. Electricity, antibiotics, pain medications, and antipyretics were always available at all centers, but some centers had limited access to clean water, nasogastric tubes, rectal tubes, and suturing materials. Most or all centers reported difficulty diagnosing intraabdominal tumors, gallstones, cholecystitis and renal stones.

Interpretation: Data analysis was constrained due to incomplete record keeping and low survey responses. Familial objections, financial resources, and lack of imaging equipment constituted the largest barriers to surgical care.

Funding: Massachusetts Medical Society and Boston University School of Medicine funded this project.

Abstract #: 1.016_HRW

Global health competencies inclusion strategy in medical training in Mexico

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Background: Global health (GH) competencies for residency programs are a growing interest in medical education worldwide. However, GH and its inclusion in resident’s training is an isolated subject to faculty directors of medical schools and for the Ministry of Health (MoH) in Mexico, facing healthcare challenges translated as a mismatched between academic institutions, MoH and vulnerable communities.

Methods: A non-systematic literature review of GH training in medical residency was performed. Three questionnaires were developed for interviews using qualitative methods for professionals involved in GH. A PolicyMaker4 exercise was conducted in order to analyze the political arena in Mexico for the strategy.

Findings: 46-articles of interest were selected among 139 obtained according to authors’ criteria. 9-interviews were achieved with professionals working in the field. The final product obtained was a seven - objective strategy, with goals to complete and actions to fulfill. It provides a platform to introduce students, professors and different stakeholders that will make feasible the inclusion of GH in Mexico.