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## Understanding diversity and culture in caring for our veteran population

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**Program/Project Purpose:** The purpose of this program, a nursing course designed to care for veterans, is to help students 1. gain a greater appreciation for those who currently and formerly served in the military; 2. learn that culture within the veteran population varies according to branches of the military and service timeline; and 3. recognize that veteran diversity impacts healthcare needs. Students prepare to meet the needs of our Veterans through course activities and assignments that address the diversity of the veteran culture. Through interacting with veterans and families from various branches and periods of military service, students learn that diversity impacts the type of healthcare needed and offered.

**Structure/Method/Design:** Through didactic and clinical learning activities, students have the opportunity to learn about military culture. In order to fully understand the veteran, their culture, and associated health care, students interact with veterans and healthcare personnel face-to-face to gain insight into the diversity of veterans. Individuals that students learn from include (but are not limited to) chaplains; veterans from most major U.S. conflicts; veterans suffering from multiple healthcare issues; Army, Air Force, and Navy nurses and medics; as well as Holocaust survivors and concentration camp liberator.

**Outcome & Evaluation:** Through varied activities and interactions, students gain a greater appreciation of veteran culture. Students learn that veterans are a unique and diverse population and, depending on the conflict, have similar and distinct health care concerns. Students come to understand that military culture affects how men and women view healthcare and seek treatment. They learn that nurses must become veteran advocates because veterans are less likely to express concerns about emotional or healthcare needs, leading to health problems going unnoticed until severe.

**Going Forward:** Upon completion of this course, students commit for future practice to take time to ask veterans about their experiences in the military, specifically when and where they served. Students will continue to learn about the most common health concerns of returning veterans. Students will be observant and keep communication open in order to identify problems before they become severe.

**Abstract #:** 1.020\_NEP

#### Impact of medical plurality on care engagement and treatment outcomes among people living with HIV in Limpopo, South Africa

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**Background:** Medical plurality, the concurrent existence of multiple medical systems, is particularly important in the South African context. The traditional health sector continues to serve as a significant component of health seeking practices for patients living with HIV, yet collaborations with biomedicine for HIV care remains a challenge. This study utilized an in-depth survey to document the engagement of individuals living with HIV, with alternative health sectors: traditional medicine, herbal medicine, and faith healers.

**Methods:** The participants in the study were both male and female patients living with HIV between the ages of 18 and 65, who had been on ARTs for at least one year. Every participant was a patient at either the Fhulufhelo HIV Clinic or the Thohoyandou Health Center in Limpopo, South Africa. After listening to a brief explanation of the study and its purpose, patients had the option of volunteering to take a survey, which inquired about their adherence to ARTs, engagement with traditional health sectors and their understanding of HIV. Verbal and written consent were obtained from every participant and the survey data from every participant was included in the statistical and thematic analysis.

**Findings:** The analyzed sample (n=102) consisted of 71.6% female and 28.4%males. 25.2% admitted to ever using herbal medicine. 21.4% admitted to ever using traditional medicine. 32% admitted to engaging with faith healers. 34% of the participants had an unsuppressed viral load (n=35). Of the patients that were unsuppressed, 46.3% of them were among the participants who had ever engaged in any of the alternative sectors. While 22.2% of those unsuppressed had never engaged in these alternative sectors.

**Interpretation:** This research suggests engagement with alternative health care sectors is associated with unsuppressed viral loads. This study is important as it may encourage the development of interventions to support better individual and population health outcomes and collaboration between biomedical providers and traditional healers. One limitation was the relatively small sample size (n=102), in comparison to the total population of people living with HIV in the Vhembe District of South Africa.

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# Surgical repair programs for children with non-critical congenital heart disease in low- and middle-income countries: a scoping review

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**Background:** Congenital heart disease (CHD), the presence of a clinically significant structural heart defect at birth, has a similar incidence globally. However, the lack of quality health systems, available resources, and established programs makes management of CHD more challenging in low- and middle-income countries (LMICs) compared to high-income countries. This scoping review examines current surgical care programs in LMICs for CHD and the outcomes of individuals with non-critical CHD.

**Methods:** This scoping review follows the standard methodology outlined by Arksey and O'Malley (2005). Database literature searches of MEDLINE and Global Health were conducted and variations of two main search terms were utilized: 1) congenital heart disease and 2) low- and middle-income countries. The date range used for the present search was from January 1, 2000 to June 15, 2015 and only articles published in English were chosen. A search of Cochrane library confirmed that no systematic review was previously conducted on the topic.

**Findings:** 55 studies were chosen for inclusion after screening and review. Review of relevant studies suggested that a number of factors lead to inadequate care for individuals with CHD in LMICs, including poor healthcare infrastructure, lack of public education and lack of healthcare worker education on CHD, financial challenges of countries and individuals, and poor governmental and non-governmental organization coordination. Ventricular Septal Defects (VSDs), Atrial Septal Defects (ASDs) and Tetralogy of Fallot (TOF) were described as common forms of CHD in LMICs.

Interpretation: Based on this scoping review, it is recommended that a country- or region-specific triage model for non-critical CHD should be developed to prioritize sending patients for surgical repair at Centres of Excellence. The basis of the non-critical CHD cases that could form the basis of the triage models include VSDs, ASDs and TOFs since they are easier to treat in a low-resource setting. Models would require pre- and post-operative medical management, likely in the patient's home country, with capacity building and infrastructure supports, in order to maximize the number of patients treated. Critical CHD cases would unfortunately require a complicated, expensive and resource-draining care model involving surgery and potential complications.

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**Abstract #:** 1.022\_NEP

## Factors associated with HIV testing among female entertainment workers in Cambodia: a cross-sectional study

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**Background:** In Cambodia, women account for over half of all HIV infections and female entertainment workers, of which there are an estimated 35,000, are now considered a high-risk group for HIV. Entertainment venues such as karaoke bars and beer gardens, have been identified as an important location for prevention activities including HIV education and community-based testing. This study aims to identify factors associated with recent HIV testing among female entertainment workers in Cambodia.

**Methods:** For this cross-sectional study, data was collected during April and May 2014 as part of the evaluation of the Sustainable Action against HIV and AIDS in Communities (SAHACOM) Project implemented. Two-stage cluster sampling was used to select participants from the two provinces. A structured questionnaire was developed using standardized tools. A multivariable logistic regression model was constructed to control for the effects of potential confounding factors.

**Results:** Data were collected from 667 female entertainment workers of which 81.7% reported ever having had an HIV test and 52.8% report having had an HIV test in the past 6 months. In our model that controls for condfounding factors, respondents who were tested for HIV in the past 6 months were more likely to live in Phnom Penh (aOR=2.17 95%CI 1.43-3.28, p<0.001), to have received any form of HIV education in the past 6 months (aOR 3.48 95%CI 2.35-5.15, p<0.001), to report condom use at last sex with a non-commercial partner (aOR 0.48 95%CI 0.26-0.88, p=0.02), to agree that "Getting tested for HIV helps people feel better" (aOR 0.31 95%CI 0.13-0.81, p=0.02) and to disagree that "I would rather not know if I have HIV" (aOR=2.15 95%CI 1.41-3.30, p<0.001).

**Interpretation:** Health behavior messages regarding condom use with non-commerical partner and HIV testing attitudes may be important areas for future interventions involving female entertainment workers in Phnom Penh.

**Funding:** This study was funded by United States Agency for International Development (USAID) in Cambodia.

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## Assessment and management of arterial hypertension, diabetes, and obesity in the medically underserved town of Chimbo, Ecuador

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**Project Purpose:** Initially approved in June 2014 as a prevalence study within the Fundación Natividad de Los Andes (FNDLA), the project has grown to include participation from Loyola SSOM's International Service Immersion (ISI) program and the local health clinic. The project is in place to address the need for health screenings and proper management of chronic diseases in Chimbo, Ecuador. It aims to provide a sustainable system to identify and monitor patients unknowingly suffering from hypertension, diabetes, and obesity while also promoting lifestyle changes through community outreach. A longitudinal study was initiated in June 2015; groups of medical students will travel to Chimbo each January and June for follow-up and recruitment of additional participants.

Structure/Method/Design: The following are established priorities: identify through screening and monitor individuals unknowingly suffering from diabetes, hypertension, and obesity; educate about lifestyle modifications to address the high prevalence of chronic diseases; and encourage sustainability through local support. Participants are recruited by door-to-door canvassing. Student volunteers are selected through Loyola's Center for Community and Global Health via application. To promote sustainability, subsequent student cohorts will identify willing residents of Chimbo to serve as local health advocates. These advocates will be educated and allotted necessary materials to provide enrolled participants with monthly monitoring of blood glucose, blood pressure, and weight.