

refugee and UNHCR supervised by. Rest of the refugees called undocumented Myanmar nationals (UMNs) lives in cluster settlements. While registered residents have access to basic services, those UMNs do not. They have limited access to maternal and newborn health (MNH) services. A study was conducted to ascertain existing MNH situation of UMNs.

Methods: Cross sectional descriptive study was carried out in 2015. 23,466 households covering 105,600 populations from three sub-districts of Cox's Bazar were screened and 279 UMN women and 1858 Bangladeshi women having one under 1 year old child was randomly selected from both rural and urban areas.

Findings: UMN respondents, went to unqualified private practitioners, was 58.8%. 34.1% made four ANC visits and 16.5 % did not receive any. 61.6% UMN women received Tetanus Toxoid. Respondents who had no knowledge about any danger sign related to pregnancy and delivery, and newborn danger sign were 10.4% and 9.7%, respectively. 71.7% UMNs had no knowledge about transmission of HIV/AIDS. 84.6% UMN respondents gave birth at home, among them 43.7% were conducted by untrained Traditional Birth Attendants. 48.7% did not seek immediate health check-up after home delivery. 33.5% of home delivered newborns' cord was cut with delivery kit blade. 35.8% newborn was dried and 10.8% wrapped immediate after home delivery. Almost half of the babies were bathed within one hour of birth. 74.9% of UMN mother initiated breast feeding within 30 minutes. 53.7% of UMN respondents used contraceptives and half of them used injectable methods.

Interpretation: The study revealed that knowledge and health seeking behavior on MNH services of UMN women was poor. The majority sought health care from unqualified practitioners. Coverage of ANC visit and postnatal check-up was low. Deliveries assisted by medically trained personnel were very low among the UMNs. The immediate newborn care was not up-to the level. Contraceptive use of women was not satisfactory.

Funding: The study was funded by Swedish Development Cooperation (Sida).

Abstract #: 1.079_NEP

A cluster randomized controlled trial to evaluate the effects of a community health worker based approach to promote cardiovascular risk factor control in India: study design and rationale

Aditya Khetan¹, Raghunandan Purushothaman², Melissa Zullo³, Rishab Gupta⁴, Sushil Agarwal⁵, Sri Krishna Madan Mohan^{1,6}, Richard Josephson^{1,6}; ¹University Hospitals Case Medical Center, Case Western Reserve University, Cleveland, OH, USA, ²University of Arkansas for Medical Sciences, Little Rock, AR, USA, ³Kent State University, Kent, OH, USA, ⁴All India Institute of Medical Sciences, New Delhi, India, ⁵SEHAT, Dalkhola, India, ⁶Harrington Heart & Vascular Institute, Case Western Reserve University, Cleveland, OH, USA

Background: The increasing burden of cardiovascular disease (CVD) in low and middle income countries is largely driven by the increasing prevalence of hypertension, diabetes and tobacco

use. We hypothesize that the utilization of community health workers (CHWs) to screen for and manage these three determinants of CVD in an integrated manner would be an efficient approach to favourably affecting public health.

Methods: We have designed and set up the infrastructure to implement a 2 year community based cluster randomized controlled trial in an underserved region of West Bengal, India. Participants will include around 1200 adults, aged between 35-70 years, with atleast one cardiovascular risk factor. They will be recruited through home based screening into a total of 12 clusters, which will be randomized to either a control or intervention arm before screening. After the screening, CHWs will follow up with participants enrolled in the intervention arm for a period of 2 years through home visits. The control arm will receive usual care in the community.

The CHW arm will follow a behavioural strategy focused on modifying the individual's lifestyle, increasing knowledge of CVD, promoting smoking cessation, increasing physician seeking behaviour and promoting medication adherence.

The main project office is based in Cleveland, Ohio at University Hospitals/CWRU, and the local site office is located in Dalkhola, West Bengal at a local non-profit set up for the study. IRB approval was obtained both in Cleveland as well as India.

Outcome evaluation: The two year primary outcome of the study will be the absolute reduction in systolic blood pressure amongst hypertensives, absolute reduction in fasting blood glucose amongst diabetics and absolute reduction in average number of cigarettes smoked per day amongst smokers.

Going Forward: We believe this study infrastructure serves as a useful model for international collaboration. It builds on unique local resources, attends to important domestic requirements, and will ultimately provide an evidence based approach that will help manage the increasing burden of CVD.

Funding: The study is being funded by Marwari Yuva Manch, West Bengal, India.

Abstract #: 1.080_NEP

Need for continuing medical education for liver disease management in Mongolia

Y.A. Kim¹, A. Le¹, J. Estevez¹, D. Israelski², O. Baatarkhuy³, T. Sarantuya⁴, S. Narantsetseg⁵, P. Nymadawa⁶, H. Le¹, M.F. Yuen⁷, G. Dusheiko⁸, M. Rizzetto⁹, M.H. Nguyen¹; ¹Division of Gastroenterology and Hepatology at Stanford University, California, USA, ²Center for Innovation In Global Health at Stanford University, California, USA, ³Department of Infectious Diseases at Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia, ⁴Internal Medicine Department at United Family Intermed Hospital, Ulaanbaatar, Mongolia, ⁵The Third State Central Hospital of Mongolia, Ulaanbaatar, Mongolia, ⁶Public Health Branch, Mongolian Academy of Medical Sciences, Ulaanbaatar, Mongolia, ⁷Division of Gastroenterology and Hepatology at Queen Mary Hospital, Hong Kong, ⁸Royal Free Hospital and University College London School of Medicine in London, United Kingdom, ⁹Department of Gastroenterology at the University of Torino, Torino, Italy

Background: Mongolia is a low middle income country with enormous burden of viral hepatitis and consequently liver cancer. Antiviral hepatitis therapies are newly available or becoming available in Mongolia, and a nationwide training workshop was held to educate physicians on managing liver disease and these new therapies.

Methods: We administered anonymous surveys to 121 physicians using the automated response system over a 2-day national training workshop for physicians in 9/2015. Physicians were surveyed on: baseline knowledge, case study questions, perceived familiarity with liver disease management, and rating for future educational efforts. Multivariate logistic regression was used to estimate odds ratio (OR) relating physician factors with higher provider disease knowledge (>50% correct answers) and with self-perceived comfort with managing antiviral treatment.

Findings: Of the 121 attendees, most physicians were female (87%), young (79% age <50), sub-specialists (76%), practiced in urban vs. rural areas (61% vs. 39%), and represented all major provinces. The questionnaire response rate was 36–79%. The mean score on the baseline knowledge questionnaire was 58% (SD 20%). Odds of higher test scores (>50%) were seen in those who indicated higher self-perceived comfort with HCV treatment (OR=3.63; 95% CI=1.14–11.53); no other predictors such demography, experience, and practice setting were significant. Of the case study questions, 41.4% and 33.2% correctly answered HBV and HCV questions more focused on therapy management, respectively. Despite these answers, most indicated they were comfortable with initiating and monitoring HBV and HCV treatment (80.7% and 63.1%, respectively). Those who practiced in urban settings were more likely to feel comfortable with initiating HCV treatment (OR=3.49; 95% CI=1.15–10.57); no significant predictors for comfort with HBV treatment were identified. Physicians rated many educational efforts as helpful, including in-person conferences and live video conferences (Figure 1).

Interpretation: Physicians were eager to learn more as indicated by the high ratings for future education ideas. The absence of predictors for knowledge of and comfort level with treating hepatitis indicate that educational efforts need to be broadly applied to all physicians and are especially needed when new therapies are introduced to developing countries.

Funding: Funding was provided by Gilead Sciences, Inc. and co-sponsored by the Mongolian Ministry of Health, Ombol, LLC, and Stanford University.

Abstract #: 1.081_NEP

Factors related to preparedness of participants engaging in global health experiences

A. Gatebe Kironji¹, Jacob T. Cox¹, Jill Edwardson², James Aluri¹, Bryn Carroll¹, Dane Moran¹, Nicole Warren³, Chi Chiung Grace Chen²; ¹Johns Hopkins School of Medicine, Baltimore, MD, USA, ²Johns Hopkins Medicine Department of Obstetrics and Gynecology, Baltimore, MD, USA, ³Johns Hopkins School of Nursing, Baltimore, MD, USA

Background: Most US medical schools now offer global health experiences (GHE). Such experiences privy participants to many benefits including building a foundation for careers in global health

and working with underserved populations. However, very little is known about how to best prepare participants for these GHE. We sought to identify factors that increase preparedness.

Methods: We designed an anonymous web-based questionnaire with 5-point Likert item/scale and multiple-choice responses. Participants were asked about prior global health experiences including details about the type of pre-departure training (PDT) and post-experience debriefing (PED) they received. The survey targeted Johns Hopkins School of Medicine and Nursing students. Results obtained were pooled and analyzed using bivariate and multivariate regression models.

Findings: Of 519 respondents, 55% reported prior GHE. Of those with GHE, 52% had received PDT, which 80% found to be helpful. Moreover, 77% of those who received PDT felt prepared for their global health experiences. PDT topics covered included: safety 94%, culture 89%, health precautions 82%, ethics 46%, language skills 46%, leadership 34%, clinical skills 25%, and research skills 25%. On bivariate analysis, participation in a prior GHE alone was not associated with preparedness; however, participation in PED, perceived helpfulness of PDT, and inclusion of safety, health precautions, clinical skills, culture or leadership topics in the PDT curriculum were associated with preparedness for GHE. On multivariate analysis, participation in PED (OR:3.6, 95% CI:1.3–9.8), perceived helpfulness of PDT (OR:12.4, 95% CI:4.4–34.7) and inclusion of more than one topic in the PDT (OR:8.5, 95% CI:2.2–32.5), were independently associated with increased preparedness.

Interpretation: Our survey of nursing and medical students showed that participation in PED and with PDT that includes safety, clinical skills, leadership, and/or health precautions were associated with participants feeling more prepared during their GHE. Our findings are limited by a response rate of less than 50%. With the lack of a standardized global health curriculum and PDT, findings from this study can inform educators with curricular content they can use to enhance GHE for students.

Funding: None.

Abstract #: 1.082_NEP

Bridging the gap between sports/physical activity and prevention of non-communicable diseases through a human rights based approach

K. Koutsoumpas; School for Global Inclusion and Social Development, University of Massachusetts Boston

Background: The prevalence of non-communicable diseases (NCDs) is considered to be a threat towards achieving the newly formed post-2015 Sustainable Development Goals as well as to be a global public health priority (WHO, 2015).

One of the leading causes and behavioral risk factors for death worldwide through NCD's is the pandemic of physical inactivity (Kohl et al., 2012). As a response in this connection, numerous scientific-evidenced guidelines and calls for action have been issued by a variety of health organizations and academic institutions, mainly from the global north, documenting the impact of physical activity on disease prevention and management (Vuori et al.,