

(UI 81.2–83.6%; 2,169,714 Ghanaians); building intermediate orthopedic capacity at 10 target hospitals would improve access from 74.6 to 81.6% (UI 78.9–82.7%; 1,875,062 Ghanaians); and building advanced orthopedic capacity at 2 target hospitals would increase access from 59.4 to 68.2% (UI 59.6–73.6%; 2,357,221 Ghanaians).

Interpretation: Availability of low-cost resources could be better supplied by improvements in training and organization of orthopedic care. However, there is critical need to advocate and provide dedicated funding for orthopedic care. These initiatives might be particularly effective if aimed at hospitals without sufficient capacity that serve a large proportion of the population.

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Abstract #: 2.069_NEP

Novel lay-provider first-responder trauma course improves prehospital care in rural Peru

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Background: The World Health Organization predicts that by 2030 road traffic injuries will be the fifth leading cause of death and the third leading cause of disease burden worldwide. While middle-income countries represent half of the world's vehicles, they have 80% of the world's road traffic deaths. The majority of these deaths occur pre-hospital, however many LMICs lack formal Emergency Medical Services. As an ongoing project, prior research established that over 70% of trauma patients arrive to centers of care in Cusco, Peru via non-EMS methods. The goal of the current project is to improve prehospital patient care by piloting a novel lay-provider first-responder trauma course in rural communities surrounding Cusco, Peru.

Methods: A novel first-responder trauma course was developed based on recommendations from the World Health Organization and tailored to specific disease patterns represented in trauma patients arriving to hospitals in Cusco, Peru. Course content utilized an illustrative flipbook and focused skills sessions targeted at lay-providers that can be easily translated into other languages. Surveys were administered before and after course administration to collect baseline data and assess course efficacy.

Findings: Of the 40 community members that participated in the two pilot courses, 60% had never taken a first-aid course. Pre- and post-course surveys demonstrated significant knowledge acquisition in the following first-responder techniques: basic airway opening maneuvers, placing patients in the rescue position, applying splints to fractured extremities, appropriate wound care, hemorrhage control, spinal immobilization, and patient transport. Following the course, participant comfort providing first-aid rose from 37% to 100%. Interactive and hands-on skills practice was effective at both teaching and acquiring new first-responder skills.

Interpretation: By utilizing existing patient transportation trends in rural Peru, the current project has successfully developed and implemented a low cost trauma first-responder course to improve

prehospital patient care. Future project goals include expanding training capacity, transitioning to in-country leadership, and correlating course implementation with an ultimate reduction in patient morbidity and mortality in the Cusco region of Peru.

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Abstract #: 2.070_NEP

Is eve teasing a public health problem? Public sexual harassment in rural India and its association with common mental disorders and suicide ideation among young women ages 15-24

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Background: Eve teasing is a culturally specific phenomenon in south Asia that entails sexual harassment in public spaces by men against women. We characterized eve teasing in rural India, developed a measurement tool, and estimated its prevalence and association with common mental disorders (CMD) and suicide ideation (SI) among young women.

Methods: Mixed methods were used including focus group discussions and qualitative and quantitative data gathering with a novel questionnaire. Current CMD was measured using the SRQ-20 with a 7/8 cut point and SI was measured with a single 'yes/no' question in the SRQ-20. Females ages 14–26 were recruited through purposive sampling in nine villages for an initial pre-test (N=89). We administered the finalized questionnaire (ETQ-MH) to 198 women ages 15-24 using a randomized cluster sample of 19 villages and house to house probability sampling.

Findings: Eve teasing was described as staring, stalking, passing comments, and inappropriate physical touch. Perceived consequences included restricted mobility, victim blaming, and family problems. The ETQ-MH instrument garnered moderate to high internal reliability for key measures (Cronbach's alpha: .65 to .84). Nearly 30% of participants reported eve teasing victimization, 21% screened positive for a CMD, and 27% reported suicide ideation in the past 30 days (N=198). CMD was significantly associated with eve teasing victimization, but only among participants who also reported adverse childhood events (ACEs) (OR 4.5 (CI: 1.18–11.43) p=0.003). Eve teasing was significantly associated with SI among participants who reported ACEs, including controlling for CMDs (OR: 3.1 (CI: 1.119–8.472) p=0.032).

Interpretation: This is the first study to assess the association between eve teasing victimization and mental health outcomes in a community setting. Eve teasing may negatively impact the mental health of young women, especially victims of child abuse. Our findings support evidence from other studies that gender disadvantages may explain the disproportionate risk of suicide for young women in south Asia. This is particularly important as suicide is now the leading cause of death among young women globally. Furthermore, culturally relevant manifestations of gender disadvantage must not be overlooked in the research.

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Abstract #: 2.071_NEP

One community at a time

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Program/Project Purpose: Mental health conditions continue to be one of the leading causes of disability worldwide. This is largely because adequate mental health care is not readily accessible in many parts of the world, including in many parts of the U.S. These disparities in access to care are the result of a complex interplay between availability of mental health care providers, affordability of care, and additional factors that influence the perception and acceptability of mental health care (e.g., stigma, culture, policy). Solutions that work must address this complexity. The purpose of this program was to develop a community partnership model to reduce mental healthcare disparities that address the complexity of challenges faced by underserved communities, locally and globally.

Structure/Method/Design: Funded through a grant from the USDA, we have developed a model for reducing mental health care disparities around the world one community at a time. We used rural towns (<2500; designated as Mental Health Care Professional Shortage Areas) in the U.S. as laboratories for the mental health care disparities problem worldwide. Our innovative model emphasizes working within the local cultural context to a) build community capacity to make a difference by mobilizing existing resources, b) collaborate with local medical providers, and c) determine sustainable ways to increase access and acceptability to mental health care (including telemental health).

Outcome & Evaluation: Through the collection of qualitative and quantitative data from patients, medical providers, and staff at end-user sites, we evaluated the feasibility of the model. Five years after its implementation, we interviewed members of the communities in which the model was used to determine principles that facilitated sustainability. Key findings of both the feasibility and sustainability study will be presented.

Going Forward: The application of this model has implications for addressing global mental health disparities. We have increased the scale of the project globally as we are implementing the model in Brazil and are in discussions with other global partners in Portugal and Australia; demonstrating how local solutions can have global impact.

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Abstract #: 2.072_NEP

Hepatitis C Treatment Outcomes in Kigali, Rwanda

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Background: Existing research on hepatitis C virus (HCV) treatment outcomes in sub-Saharan Africa is very limited. This study

was undertaken to determine the HCV sustained virologic response (SVR) 24 weeks after treatment completion and the frequency and severity of adverse events in patients undergoing HCV therapy in Kigali, Rwanda.

Methods: The study was a retrospective review study of all patients \geq 18 years old treated for HCV with ribavirin and interferon combination therapy at King Faisal Hospital in Kigali, Rwanda from January 1, 2007 to December 31, 2014. Patient's paper and electronic charts were reviewed for data collection. Approval for the study was obtained from the University of Maryland Institutional Review Board and King Faisal Hospital K-Ethics and Research Committee.

Findings: The study included 69 patients; 52% were male, and the median age at the start of treatment was 48 years (range 25–69). The majority of patients had HCV Genotype 4 (61%) and <2% of patients had genotypes 1, 2, 3, or 5 (33% unknown genotype). Sustained virologic response 24 weeks following completion of treatment was 32%. 57% relapsed after six months, and 12% of patients had unknown outcomes. The most frequent side effects included headache (56%), fatigue (51%), and non-abdominal pain (49%). The most common adverse laboratory values were neutropenia (94%), thrombocytopenia (39%), and anemia (30%). Three patients (4%) died following treatment (causes of death unknown).

Interpretation: Sustained virological response of patients in this study was lower than in other studies conducted in sub-Saharan Africa. Cytopenias were the most frequent side effects and were consistent with other studies. More comprehensive studies on HCV care and treatment outcomes with the new direct acting antivirals will need to be completed as these drugs become available in Rwanda.

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Abstract #: 2.073_NEP

Challenges and strategies for implementing mental health measurement for research in low-resource settings

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Background: The gap between need and access to mental health care is widest in low-resource settings. Health systems in these settings devote few resources to the expansion of mental health care, and mental health is missing from the agenda of most global health donors. This is partially explained by the paucity of data regarding the nature and extent of the burden of mental illness in these settings. The accurate and comparable measurement of this burden will be essential to advocating for, developing, and implementing appropriate policies and services for mental health in low-resource settings. This study surveys the unique challenges associated with measurement of mental health in these settings globally, and proposes a framework for use by future implementers.

Methods: We reviewed the literature on mental health measurement in low-resource settings, focusing on studies that have attempted to adapt valid, reliable assessment tools from high-resource settings and implement them in low-resource settings. We also collected case studies from researchers in the field who have direct experience in this area.