

management of head injury patients will reduce the incidence of head injuries and improve mortality in South East Nigeria.

**Funding:** None.

**Abstract #:** 2.045\_NEP

### Needs assessment in a rural haitian community: Assessing the socioeconomic and cultural determinants of health

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**Background:** International healthcare initiatives must evolve from individual programs that target single diseases to systems of care that address the needs of the whole person. Since 2001, the World Health Student Organization (WHSO) at Wayne State University School of Medicine has sent medical students and physicians to Central and South America on medical relief trips. WHSO annually sends three teams to Morne, L'Hopital, Haiti to provide sustainable healthcare and facilitate continuity of care. A needs assessment was developed to evaluate the community's healthcare needs.

**Methods:** Needs assessments may be structured as focus groups, traditional surveys, or both. Questions generally diverge into three categories: demographics, healthcare access, and healthcare delivery. Considering the short-term nature of our relief trips, a 15 minute assessment was developed that focused on the above three themes. Participants were chosen randomly from a triage waiting area, consented, and then completed the survey via Creole interpreters. 34 surveys were completed by men and women age 18 and older. This study was approved by the Haitian Ethics Committee and the Wayne State University Institutional Review Board.

**Findings:** Results include age, marital status, years of education, household size, number of children, availability of running water and electricity, occupation, income, perceived health problems, methods of accessing their healthcare systems, and barriers to obtaining needed care. The most common perceived problems were gastrointestinal disease, headache, fever, abdominal pain, and anemia. Respondents thought a nearby clinic, clean water, more medications, more money, and electricity would be most beneficial for their health. Barriers to healthcare access included lack of monetary funds and long travel times.

**Interpretation:** International relief work struggles to provide efficacious care to lower-and-middle income countries, which may be due to a lack of understanding of cultural and socioeconomic factors that affect healthcare delivery. The needs assessment is the first step to identifying these key factors, in an effort to ultimately deliver community requested healthcare in a culturally competent manner. WHSO aims to avoid "creating a problem then prescribing a solution", and instead partner with the community and Haitian organizations to provide healthcare the community values.

**Funding:** None.

**Abstract #:** 2.046\_NEP

### Barriers to contraceptive use among adolescents in Nicaragua

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**Background:** Nicaragua has the highest rate of adolescent pregnancies in the Western Hemisphere and contraceptive use among adolescents is low. Low contraceptive use tends to relate to attitudes towards contraception rather than lack of access.

**Methods:** We conducted a convenience sample of adolescents (15-19 year olds) who were living in or attending school in two neighboring semirural communities in Nicaragua. The main areas of focus of the written survey were sexual activity, contraceptive use, and attitudes toward contraception.

**Findings:** The response rate to the survey was 52.2% (N = 291). 43.3% of survey respondents reported previous sexual intercourse. Of respondents reporting sexual intercourse, only 23.2% reported always using contraceptives. Females were more likely to report never or rarely using contraceptives (46.5% vs. 21.4% of males,  $p < .01$ ). Only 6.7% of non-users reported lacking money to buy contraception, and only 7.8% reported infrequent contraception availability at clinics. In contrast to the low rates of contraceptive use, 84% of males and 74% of females responded they are "not interested in having a child at this moment" and 90% of respondents reported that using contraception is "very important." Reasons for non-use varied considerably by gender. Male non-users frequently reported that female partners did not want to use contraception (40.0%). Female non-users reported fear that their parents would know they were sexually active (47.1%) or that pregnancy was "God's decision" (41.2%). Another frequently reported reason was fear that contraceptives would cause permanent infertility (32.4% of females vs. 23.6% of males). 89.3% of non-users cited at least one social or educational barrier to contraceptive use, whereas only 30.7% reported a physical access barrier ( $p < .001$ ).

**Interpretation:** Low rates of contraceptive use in semi-rural Nicaragua are primarily related to social and educational barriers and not a lack of physical access.

Male and female respondents report substantially different reasons for non-use, suggesting large gaps in partner communication. High levels of interest in avoiding pregnancy suggest that a targeted intervention could overcome the identified social and educational barriers and increase contraceptive use among adolescents.

**Funding:** None.

**Abstract #:** 2.047\_NEP

### Examining depression and quality of life in patients with Thalassemia in Sri Lanka

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**Background:** With the decline in mortality rates in thalassemia due to improved treatment strategies, research has begun to focus on psychological morbidities and quality of life among patients. Similar to other childhood chronic diseases, psychosocial health and daily functioning are affected by the comorbidities of the disease and its treatment. While there is published research in this area from other countries, there is little information specific to the patient

population in Sri Lanka. Our project aimed to assess psychiatric morbidity and quality of life in these patients, and the correlation with demographic and illness-related variables. Data on the psychosocial parameters in these patients could enhance management of the disease and inform more comprehensive treatment interventions.

**Methods:** A cross-sectional descriptive study was conducted at the National Thalassemia Unit at the University of Kelaniya Teaching Hospital in Sri Lanka, the only adult treatment facility for thalassemia in the country. Patients with thalassemia major, minor or intermedia (E $\beta$ ), above 12 years of age, and in stable medical condition (n=120) were recruited. Participants were assessed using a general demographic questionnaire, the Beck Depression Index and the WHO Quality of Life BREF. Statistical analysis was conducted using linear regressions, Chi squares and ANOVAs. Ethics approval was obtained from the Faculty of Medicine at the University of Kelaniya and written consent was obtained from all participants.

**Results:** Lack of family support, longer clinic admission, and the female gender were significant determinants ( $p < 0.05$ ) of higher depression scores and reduced physical health quality of life in our patient population. In addition, psychological and social quality of life were positively correlated with levels of peer support ( $p < 0.05$ ). However, there was no association between type of thalassemia and depression scores or quality of life.

**Conclusions:** Overall, study results show that several factors influence depression and quality of life among patients with thalassemia in Sri Lanka, with gender playing an important role. Development of psychosocial interventions that address these factors and the gender differences could be highly useful in improving function and reducing disability in this population.

**Funding:** University of Toronto (MAA & Dr. Elva May Rowe Fund).

**Abstract #:** 2.048\_NEP

### Gynecologic needs among a population of survivors of torture in New York City

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**Background:** The United States has an estimated 400,000 residing survivors of torture. The Program for Survivors of Torture (PSOT) at Bellevue Hospital is the only comprehensive torture treatment center in New York City. PSOT offers both medical and mental health treatment to its clients, who are ethnically diverse. There has to date been no comprehensive assessment of the gynecological needs of this population. This study affords a novel opportunity to investigate reproductive health needs of women who have experienced torture.

**Methods:** This is a cross-sectional descriptive study conducted through structured interviews. All women enrolling in PSOT were eligible for inclusion. Data was collected in a REDCap database and analyzed using Stata v14. Outcomes were evaluated using descriptive statistics. Outcomes of interest include obstetric history, contraceptive knowledge and use, and prevalence of prior gender-based violence (GBV) and female genital cutting (FGC).

**Findings:** The majority (71.4%) were French-speaking West Africans. All participants reported prior experience of GBV; perpetrators were more likely to be from outside the family (64.3%), but violence from an intimate partner (35.0%) or family member (33.3%) was also common. Prior sexual violence and history of FGC was reported in 66.7% and 25.0% of subjects, respectively. The mean gravidity was 2.1 pregnancies (SD = 1.1) and, of those who have been pregnant (64.3%), 77.8% reported having received antenatal care at some point in pregnancy. While 85.7% reported any prior pregnancy-related complications, 57.1% of them reported seeking medical attention. Current contraception use was only reported in 15.4%, even though over half of women expressed a desire to delay pregnancy (spacers). Moreover, among all spacers, current use of contraception (28.6%) is lower than past use (78.6%). Participants had a better basic knowledge of traditional contraceptive methods (77.5%) compared to modern ones (56.1%).

**Interpretation:** This is the first comprehensive review of gynecologic needs of survivors of torture in NYC. Prior history of GBV is common. It appears that while many have had prenatal care, overall knowledge and use of contraception in this population is very low compared to the general population.

**Funding:** Transportation reimbursement was provided to participants from PSOT program funding.

**Abstract #:** 2.049\_NEP

### Community barriers to emergency care utilization in rural Uganda: Review of current literature and proposed research

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**Program/Project Purpose:** In Africa, capacity development has resulted in significant improvements in health indicators. Timely emergency care (EC) has potential to further these gains. Estimates project that EC can prevent 41% of deaths and 39% of disability in sub-Saharan Africa. Impact however, is contingent on widespread access and utilization.

Karoli Lwanga Hospital, in rural southwest Uganda, operates an Emergency Department in collaboration with an NGO, Global Emergency Care Collaborative. Despite high-quality care, unacceptable levels of preventable morbidity and mortality occur since patients often delay care seeking. Understanding of sociocultural barriers to EC is needed to foster appropriate utilization of services, particularly as availability increases.

**Structure/Method/Design:** A narrative literature review was performed. PubMed, Scopus and Goggle Scholar were searched with keywords of: Barriers, Emergency Care and Uganda. Studies related to accessing healthcare in rural Uganda and bordering countries were included if ED care was specifically addressed. Citations used in the resulting studies were also reviewed.

**Outcome & Evaluation:** Knowledge of barriers to EC is limited, and most literature specific to rural Uganda focuses on obstetric and pediatric emergencies, making generalizations imperfect. However, this review suggests that cost and transportation are not the sole