

lack of health system resources, limited health literacy, or social pressure to bear children.

**Methods:** To investigate the beliefs and motivations regarding RHD and reproduction, we conducted a mixed methods study of 75 women living with RHD in Uganda. Qualitative transcripts from three focus groups were analyzed using qualitative description and health behavior models. Quantitative survey data were analyzed using means, medians, and frequencies.

**Findings:** The focus group participants ranged from 22–59 (median 35) years of age, with a median of two children. Several themes emerged from the focus groups, including pregnancy as a calculated risk, black-and-white recommendations from physicians, reproductive decision-making controlled by male partners or in-laws, the financial burden of RHD, and considerable stigma against RHD patients. The survey participants' age range was 15–55 (median 33) years, most were unemployed or homemakers (63%), and had few children (40% had no children). All survey participants were told by a physician that their hearts were not strong enough to support a pregnancy. 58% were on warfarin, and only 12% were using contraception while taking warfarin. All survey participants felt that society would look poorly on a woman who cannot have children due to a heart condition.

**Interpretation:** Health programs targeting RHD in Uganda must pay special attention to women of reproductive age in order to better serve their needs in a manner that is both medically effective but also culturally sensitive. There are opportunities for improved family/societal education programs and community engagement, leading to better outcomes and patient empowerment.

**Source of Funding:** Medtronic Global Health Foundation.

**Abstract #:** 2.005\_NCD

### **Emotional Distress Screening Tool as a Predictor for Medical Utilization and Disability: A Retrospective Analysis of Refugees Resettling in Syracuse, NY**

*C.D. Lupone, P. Cronkright; SUNY Upstate Medical University, Syracuse, New York, USA*

**Background:** Major depression, PTSD, and anxiety disorders rank among the most common disorders in refugees, challenging clinicians and public health professionals. The Refugee Health Screener – 15 (RHS-15) is a validated screening instrument for emotional distress and is used as a diagnostic proxy for PTSD, anxiety, and depression, however the clinical and social utility of the tool is lacking.

**Methods:** Refugee resettlement guidelines require a health screening in the domestic medical exam (DME) within the first 90 days in the US. As part of a process-improvement at Upstate Medical University, the RHS-15 was integrated into the DME. **Aims:** Determine the prevalence of emotional distress in newly resettled adult refugees; relation of the RHS-15 score with utilization of medical services during the first year of resettlement; and determine the predictive value of RHS – 15 for refugees seeking disability. A retrospective chart analysis of adult refugees aged 18 – 64 whom received a DME between 6/2013–4/2015 was conducted.

**Findings:** A DME was provided to 392 refugees aged 18 – 64 years and 91% (356) completed the RHS-15. Refugees originating from the Middle East (Iraq/Afghanistan) had the highest prevalence of emotional distress (49.3%) and Ukraine had the least (16.7%).

RHS-15 scores were reported as negative (0–11), positive (12–15), and highly positive (>16). Adult refugees with negative, positive, and highly positive RHS-15 scores attended 3.1 (SD = 2.2), 4.4 (SD = 2.6), and 5.7 (SD = 3.8) mean visits to a primary care physician, respectively ( $p < .000$ ); and 1.6 (SD = 2.5), 2.8 (SD = 3.3), and 4.4 (SD = 4.7) mean visits to non-primary care services (excluding OB), respectively ( $p < .000$ ).

11% (43/392) of refugees considered themselves disabled from unlimited work duty. Refugees who considered themselves disabled were 5.1 times more likely to score a positive RHS-15 score ( $\geq 12$ ) compared to refugees without disability (95% CI 2.1–8.8). Negative predicted value equaled 96% while positive predicted value for the screening tool equaled 19%.

**Interpretation:** RHS-15 scores can predict medical utilization in the first year of resettlement. Disability is highly associated with increased emotional distress. The RHS-15 screening tool has negative but not PPV as a predictor for a resettled refugee seeking disability from unlimited work duty.

**Source of Funding:** None.

**Abstract #:** 2.006\_NCD

### **Addressing Long-term Primary Care and Mental Health Concerns in Marginalized, Underdeveloped Communities**

*C. Madden<sup>1</sup>, R.C. McKersie<sup>2</sup>, M. Fried<sup>3</sup>; <sup>1</sup>Himalayan HealthCare, New York, NY, USA, <sup>2</sup>Greater Lawrence Family Health Center, Lawrence, MA, USA, <sup>3</sup>Moreen Fried, LCSW, Fairbanks, USA*

**Program/Project Purpose:** When Himalayan HealthCare (HHC) was founded in 1992, the remote mountain communities of Northern Dhadig District were suffering from extreme poverty and neglect. Though located only 60 km northwest of Kathmandu, the villages have no road access and some require a three-day walk with passes of 14,000 feet. There was no funding from the Nepal government, which was preoccupied with civil war and political instability, or from international organizations which focused aid on Western Nepal. HHC found mortality and morbidity rates above the national average, prevalent alcoholism and domestic violence and only 15 children enrolled in school in the village of Tipling.

**Structure/Method/Design:** HHC takes a tri-pronged approach to improving quality of life through healthcare, education and income-generation opportunities. Our interventions include:

- Support for village clinics to provide long-term medical and dental care, nutrition, family planning, patient referrals and more;
- Mental health outreach, including social work intervention related to domestic violence;
- Literacy training;
- Women's empowerment programs on disease prevention, nutrition and domestic violence prevention;
- Vocational training for local youth and professionals to become doctors, dental hygienists, medical technicians, health providers, carpenters, weavers and more;

- Public health outreach to construct efficient cook stoves and latrines to prevent common diseases;
- School stipends for orphans and particularly vulnerable youth; and
- Loans, materials, access to markets and other support for micro-enterprise.

**Outcome & Evaluation:** Among other outcomes, the under-five mortality rate has been reduced from 225/1000 in 1993 to 31/1000 in 2013—well below the national average—and there were 300 children in school in 2012.

**Going Forward:** Following a magnitude 7.8 earthquake in 2015, HHC is continuing its core programs while rebuilding health clinics, schools and other structures to world class standards. As part of school reconstruction, we plan to create a teacher training institution to serve as a model for education reform in rural Nepal. Ultimately we hope the HHC approach to community development can be replicated in other marginalized developing communities.

**Source of Funding:** Traditionally, HHC has received funding from medical treks, our handicraft business, individual donors and partner organizations including Rotary Foundation and GlobeMed. Since the earthquake, we have also received grants from AmeriCares, World Food Programme, Brother's Brother Foundation, GlobalGiving and dozens of family and community foundations.

**Abstract #:** 2.007\_NCD

### **It's kind of a shameful thing': Stigmatization and Diabetes in Majuro, Republic of the Marshall Islands (RMI)**

J.P. Marriott<sup>1</sup>, A. Sy<sup>2</sup>, T. Tomeing<sup>3</sup>, S. McIntosh<sup>4</sup>, M. Demment<sup>4</sup>, T.D.V. Dye<sup>1</sup>; <sup>1</sup>University of Rochester, Rochester, New York, USA, <sup>2</sup>University of Hawaii RTRN, Honolulu, USA, <sup>3</sup>Ministry of Health, Republic of the Marshall Islands, Majuro, Marshall Islands, <sup>4</sup>University of Rochester, Rochester, USA

**Background:** Diabetes in the Republic of the Marshall Islands (RMI) is ranked among nations with the highest diabetes rates in the world. Poor adherence to preventive advice and medical and social complications are common. While various factors and mechanisms are responsible for diabetes prevalence on Majuro, the capital of RMI, diabetes stigma may serve as a barrier to prevention of diabetes and complications in Majuro. This analysis examines the role of diabetes stigma with diabetic experiences in Majuro.

**Methods:** We conducted a Rapid Qualitative Inquiry (RQI) that included qualitative discussions with 37 people. The interviews focused on non-communicable diseases (NC) in Majuro, circumstances and causes, and prevention of NCDs. Iterative data analysis was conducted through field debriefings with three field team researchers, and content analysis thematic coding using DEDOOSE was conducted with two coders.

**Findings:** Participants note that community members with diabetes often feel “ashamed” and “embarrassed,” such that some avoid taking medication so not to appear “weak.” Some attribute this stigma to local norms (“it's like a habit we're born with, so we're always ignoring and deny things”). As a result, this stigmatized view of diabetes may result in care delays; (“they will wait and

wait to go to a doctor”). In particular, younger people seem particularly sensitive to diabetes stigma (“If you're young and you get it you don't want people to know”).

**Interpretation:** Diabetes is a major concern in RMI. Stigma associated with diabetes acts as a barrier preventing people from seeking necessary medical treatment until severe treatments for the disease, such as amputations, become necessary. Social stigma should be included in messaging and interventions to prevent and control diabetes in Majuro.

**Source of Funding:** CDC's Prevention Research Centers Program, Cooperative Agreement #1U48DP005026-01S1 and Racial and Ethnic Approaches to Community Health.

**Abstract #:** 2.008\_NCD

### **Barriers in Seeking De-Addiction Treatment in Patients with Hazardous Use of Alcohol in a Tertiary Care Centre in lower middle income country**

V. Mathew<sup>1</sup>, N. Chacko Kunjumon<sup>2</sup>, J.P. Ruben<sup>3</sup>; <sup>1</sup>St. John's College of Nursing, Bangalore, Karnataka, India, <sup>2</sup>St. John's College of Nursing, Bangalore, India, <sup>3</sup>St. John's National Academy of Health Sciences, Bangalore, Karnataka, India

**Background:** Alcohol is one of the leading causes of death and disability globally. Almost 4 per cent of all deaths worldwide are attributed to alcohol. It is suggested that only one in fourteen of the in-need alcohol dependent population are accessing treatment each year. This suggests that problem drinkers experience varied barriers in seeking deaddiction services. This study attempts to evaluate various barriers in seeking deaddiction services in a lower middle income country.

**Methods:** This was a descriptive and cross sectional study design. The setting was in departments of medical, surgical and gastroenterology wards a tertiary care hospital .45 consecutive patients with hazardous alcohol use as screened by AUDIT score of > 6 were selected . A semi structured profoma and the Barrier questionnaire was used to collect the baseline variables and the barriers in seeking de-addiction treatment.

**Findings:** The main barriers in seeking de-addiction treatment was the patient's denial ( mean % = 77.11) and the desire to continue drinking ( mean% = 71.61). The other important barriers were stigmatization from the society followed by to avoid personal disclosure, lack of awareness and misconceptions, bad experience in the past, poor social support and financial problem .There was statistically significant association between age, marital status, age of starting alcohol use and age of onset of problem drinking with barriers and a negative correlation between age, age of onset of problem drinking and age of onset of dependence with barriers.

**Interpretation:** We found significantly important barriers in hazardous alcohol users seeking deaddiction services. We can focus on these barriers during counseling the patient for motivating them to seek deaddiction services. These factors can be used in allaying fears about seeking deaddiction services through public awareness and other means of communication. Thus, motivating people to completely abstain from using alcohol in hazardous pattern.