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Background: Saint Vincent and the Grenadines (SVG) is an Eastern Caribbean country with a high rate of Alcohol Use Disorders (AUDs) but inadequate community mental health resources to address them. This study sought to gauge attitudes toward and knowledge of alcoholism among church leaders in SVG in order to investigate their potential role in community alcohol interventions.

Methods: We gathered data through 30 semi-structured one-on-one interviews with church leaders in three towns: Barrouallie, Kingstown, and Calliaqua. Transcripts from interviews were qualitatively coded for themes relevant to the topic of alcoholism in SVG, and final themes were reached via consensus among the investigators using a grounded theory-based approach.

Findings: We found that church leaders in SVG have considerable knowledge regarding alcoholism on both personal and societal levels. Church leaders were divided on their permissiveness around drinking but almost unanimously deemed alcohol a major problem in SVG. However, they largely believed that drinking tends to be a problem only for people outside the church, especially the youth and the poor. Clergy also believed that their churches’ unique strengths, in particular longstanding community connections, would increase their effectiveness at addressing alcohol problems in partnership with local organizations.

Interpretation: SVG church leaders’ consistent concern about drinking problems in their communities and their commitment to community outreach suggest that they are an abundant and energetic resource for addressing AUDs in SVG. However, their impact may be hampered by churches’ differing views on drinking, the perception that drinking problems only affect non-church members, non-church members’ possible reluctance to seek help from churches, and a misinformed approach to tackling drinking.

Source of Funding: Arnhold Global Health Institute at Icahn School of Medicine at Mount Sinai.

Abstract #: 2.003_NCD

The Prevalence and Risk Factors of Depression: A Comparison Study of Garment Factory Workers in Bangladesh

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Program/Project Purpose: Poverty-level wage labor is rising overseas as western corporations outsource for cheaper and abundant labor. The workplace health, safety and wellbeing of these workers is neglected. In developing countries evidence on the prevalence and risk factors of mental health conditions is limited. Our study aim was to determine the prevalence of depression and report its associated risk factors in such a population—Bangladesh’s female garment factory workers.

Structure/Method/Design: Our study surveyed 591 individuals—308 garment workers and 283 as a comparison group (tailors, beauticians, store workers, et cetera). Data collection occurred in February 2016 with the assistance of the Centre for the Rehabilitation of the Paralysed, a local organization, which provided translators who helped in the administration of the surveys. The primary outcome was the Patient Health Questionnaire 9 (PHQ9) depression score of 10 or greater.

Outcome & Evaluation: The garment workers’ average age was 27.8 years, 80.1% were married, 99.4% working full-time, and 38.3% lacked education. The comparison group’s average age was 32.7 years, 76.0% married, 71.2% working full-time, and 46.6% lacked education. The prevalence of depression was 23.5% (20.9% among garment workers and 26.4% among others), which did not reach statistical significance. However, part-time employment (Odds Ratio: 2.36, 95% CI: 1.01-5.51), chronic pain (OR: 1.67, 95% CI: 1.02-2.78), two or more traumatic life events (OR: 6.43, 95% CI: 2.85-14.55) and dysuria (OR: 2.50, 95% CI: 1.02-6.15) were significantly associated with moderate-to-severe depression. Furthermore, moderate-to-severe depression rates were lowered by 11% for every 1000 taka more earned.

Going Forward: Corporations that outsource labor should be made aware of the increase rates of depression and its monitory correlation and provide better wages and working environments. Screening and treating these at risk groups and creating awareness domestically and internationally on mental health should be a priority.

Source of Funding: CRP-Canada University of Texas Health Science Center at San Antonio.

Abstract #: 2.004_NCD

Characteristics and Motivations of Women of Reproductive Age in Uganda with Rheumatic Heart Disease: A Mixed Methods Study

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Background: Rheumatic heart disease (RHD) is a leading cause of premature morbidity and mortality in low- and middle-income countries (LMICs). Women of reproductive age are a vulnerable group of patients with RHD, due to greater risk of cardiovascular complications and mortality during pregnancy. Warfarin can prevent some of these complications (e.g. stroke) but can also cause fetal abnormalities. Yet, in an international study, <5% of women with RHD of childbearing age were using contraceptives, and one in five pregnant women with RHD were taking warfarin despite known teratogenicity. It is unclear whether this suboptimal contraception and anticoagulant use during pregnancy in LMICs is due to
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**

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**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 years who 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 (≥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**

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**Program/Project Purpose:** When Himalayan HealthCare (HHC) was founded in 1992, the remote mountain communities of Northern Dhading 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;