Outcomes & Evaluation: In May 2014, GO and MEME created the materials, available in English, Chichewe (Malawi), and Kinyarwandan (Rwanda). Medical and public health graduate students assisted in quality improvement efforts at partner sites from July-September 2014. In order to test and refine the materials, focus groups were conducted among nurses at QECH and the distribution of booklets was evaluated at PIH's Butaro Hospital. Initial feedback has been positive — nurses and patients have commented that the booklets are useful and content and images are clear and understandable for low-literate patients. In Rwanda, the booklets are being used as a tool to teach patients about treatment and early evidence has suggested that they have facilitated conversations across the ward.

Going Forward: No previous models exist of educational materials targeting low-literate cancer patients in sub-Saharan Africa. As a result, a challenge has been balancing the level of detail necessary to adequately describe cancer, treatment, and self-care recommendations in an understandable way for a low-literate audience. Materials are being revised based on preliminary results from the pilots. Pending funding, a more robust impact evaluation will be conducted in order to further assess the effectiveness and ease of use of the materials in low-resource settings. Going forward, GO is committed to building on existing partnerships in Boston, Malawi, and Rwanda and hope to expand this initiative in 2015 to include other patient populations.

Abstract #: 02NCD020

Cultural considerations for adaptation of an internet-based intervention for depression prevention in Mainland China

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Background: Internet-based interventions to prevent depression during adolescence have been implemented in Western countries, but there is a lack of information about their feasibility in other countries. Project CATCH-IT (Competent Adulthood Transition with Cognitive-Behavioral, Humanistic and Interpersonal Training) is an internet-based intervention targeting teens at risk for developing depression. The intervention involves working through a set of modules using Cognitive Behavioral Therapy (CBT), Interpersonal Therapy (IPT), Behavioral Activation (BA), and Resiliency Theory. Two previous studies of the intervention in the U.S. showed high levels of user engagement and favorable outcomes on lowering depressed mood and strengthening protective factors for depression. This study explores cultural adaptation of the intervention and what changes, if any, are suggested by a sample of the intended Chinese user for use in Mainland China.

Methods: A small pilot study using the English version of CATCH-IT was conducted in Wuhan, China with adolescents from the Wuhan School of Medicine in April 2013. Students with advanced English proficiency completed 2 modules per week over the course of two months. At the end, participants completed a feedback survey, in which they evaluated the format (ease of use and discomfort) and socio-cultural relevance for adolescents and emerging adults (Internet program rationale, content and coping skills helpfulness) for each component of the intervention. Twenty students (14 female, 6 male) were surveyed with an age range of 19-23 and an average age of 21. In April 2014, 3 Chinese psychiatrists evaluated CATCH-IT and completed a questionnaire to provide feedback and recommendations. Data obtained were collected and analyzed for recurrent themes.

Findings: All students deemed the intervention helpful for dealing with stress and down moods. Both groups suggested module stories to include themes relevant to the average Chinese adolescent such as pressure for academic excellence, filial piety, and balancing school and social life. Psychiatrists agreed on the retention of CBT and BA modules for an adaptation, however were split on use of IPT in an adaptation. All participants recommended complete translation of the content into Mandarin and the majority suggested more interactive features and less text. All participants agreed that the internet serves well as a delivery model, however dissemination through schools was recommended in the Chinese setting rather than a primary care setting.

Interpretation: This study suggests that an internet-based intervention to prevent depression in adolescents would be useful in China. The results support cultural adaptation of superficial facets of the intervention like language and visuals, and also deeper aspects like IPT and delivery model. Development of a Chinese adaptation should build upon the findings from this study and work to maintain fidelity.

Abstract #: 02NCD021

Evaluation of a community health worker training program on hypertension and diabetes in Limpopo Province South Africa: Retention of knowledge and application within the community one year later

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Background: The loss of health care providers from due to AIDS-related deaths and out -migration is producing severe health care professional shortages in South Africa (SA). The South African Nursing Association (SAN) estimates that the patient-nurse ratio for all of SA is 417:1. Given this high ratio, health care leaders from the Department of Health (DOH) in SA have task- shifted activities traditionally in the domain of professional nurses to community health workers (CHWS). With the increased use of CHWS, there is an increased emphasis on their education and training, especially in the management of chronic health illnesses, hypertension and diabetes.

Methods: To evaluate the retention and application of knowledge by CHWS 12 months after participation in a training program. Subjects: Twenty-four CHWS who were employed by a DOH community-based clinic in Limpopo province. Methods: Self-administered questionnaires and a word-web created by the participants was used to collect the data. Data was analyzed using descriptive statistics (frequencies and percentages) Findings: Of the original twenty-four participants, 100% returned to participate in the study.

Findings: Analysis of the data from the training on diabetes revealed that at almost every visit: 96% worked with a person with diabetes, 92% counseled a patient on diabetes, 94% talked with a diabetic patient about taking their medications, 63% inspected a patient's feet, 83% made a referral to a hospital/clinic, and 96% used the diabetes action plan. The knowledge retention and application scores were high for the hypertension content as well. On almost every visit, 100% worked with someone who had hypertension, 96% counseled a person on improving their diet, 96% talked with patients about refilling medications or taking BP meds, 75% referred a patient to hospital or clinic, and 96% used the hypertension action plan. However, only 30.4% measured BP on almost every visit.

Interpretation: One year after completion of a training program the CHWS retained knowledge and applied it in the care of their patients with hypertension and diabetes. The 100% retention rate after 12 months affirms the commitment of the participants and increases the likelihood of project sustainability. Challenges: Lack of equipment to take blood pressures did not give the CHWS the chance to practice or gather important data for the medical team. Going Forward: Future research studies will be expanded to include home visits to observe the CHWS interacting with their clients as they apply knowledge from the training, funding for BP monitors, and the collection of patient level data to directly link education and training to outcomes for individuals and communities.

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Abstract #: 02NCD022

Prevalence of and risk factors for peripheral neuropathy in Rakai, Uganda

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Background: Peripheral neuropathy (PN) is a common and potentially debilitating neurologic complication of HIV infection. Systematic studies of PN in sub-Saharan Africa are lacking. This study aimed to identify the prevalence of and risk factors for PN in rural Uganda.

Methods: A sample of participants in the Rakai Community Cohort Study were selected for this study. Eligible participants were >18 years old, HIV-positive (HIV+), antiretroviral (ARV) naïve, and had CD4 counts either between 351 and 500 cells/mm3 or 3. Age- and gender-matched HIV-negative (HIV-) participants were also selected. Written informed consent was obtained from all participants who then underwent a detailed neurological evaluation including assessment of demographic characteristics, subjective PN symptoms, and a neurological examination by a trained medical officer. PN was defined as > 1 sign on examination (e.g. decreased pinprick or vibration in the fingers or toes, distal weakness, or reduced/ absent ankle reflexes) and > 1 subjective symptom (e.g. paresthesias, numbness, or pain in the hands or feet). PN risk factors were determined by comparing characteristics of participants with and without neuropathy using t-tests for continuous variables and chi-squared tests for categorical variables. This study was approved by the Johns Hopkins University and Uganda Virus Research Institute Institutional Review Boards.

Findings: 538 participants were enrolled: 200 HIV+ participants with moderate immunosuppression (CD4 count 351-500), 107 HIV+ ARV-naïve participants with advanced immunosuppression (CD4 count < 0.001) than those with moderate immunosuppression. PN was more prevalent among HIV+ than HIV- participants (24% vs. 8%, $p < 0.001$) and showed a trend toward statistical significance among HIV+ participants with advanced immunosuppression versus those with moderate immunosuppression (30% vs. 20%, p=0.05). In addition to HIV status and level of immunosuppression, older age (mean: 38 years vs. 35 years, p=0.03) was also a significant predictor of PN, but BMI (p=0.45), alcohol use (p=0.78), and prior isoniazid use (p=0.06) were not. PN severity was worse in HIV+ than HIV- participants as assessed by the Modified Total Neuropathy Scale (p=0.003).

Interpretation: PN is prevalent in rural Uganda and is more common in HIV+ individuals, with a trend toward increased prevalence in those with advanced disease. PN prevalence also increases with age. This highlights the need for early diagnosis and treatment of HIV to prevent this potentially debilitating complication and the necessity of close monitoring for PN as the HIV+ population ages.

Abstract #: 02NCD023

Effect of parity on the epidemiologic profile of Malawian women presenting for obstetric fistula repair: A cross sectional study

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Background: Obstetric fistula remains a debilitating condition in low-income countries. Previous descriptive studies of fistula patients report a majority as being young and primiparous at the time of fistula formation. The population of women who are multiparous at the time of fistula formation has rarely been described. Our objective is to describe the patient population presenting for obstetric fistula repair at the Fistula Care Centre at Bwaila Maternity Hospital in Lilongwe, Malawi and to identify potential risk factors that may contribute to fistula formation, particularly among multiparous women.

Methods: We completed a cross-sectional analysis of baseline data from women who presented for obstetric fistula repair between September 2011 and September 2014. After providing informed consent, these women completed an admission form that included questions about their demographics, obstetric history, and physical exam findings. Women with non-obstetric fistula and those who did not know their number of deliveries were excluded from the analysis. The primary outcome of the study was to compare the demographic characteristics of women who had obstetric fistula form during their first pregnancy versus during a subsequent pregnancy. Chi-square, Fischer exact, and Mann-Whitney tests were used. IRB approval was obtained from the Malawi National Health Sciences Research Committee and the University of North Carolina IRB.

Findings: During the study period, 513 women presented to the Fistula Care Centre, of which 459 (89.5%) had obstetric fistula and were included in the analysis. Of these, 195 patients (42.5%) were primiparous and 258 (56.2%) were multiparous at the time of fistula formation. The median parity for multiparous patients at the time of fistula formation was 3 (IQR 2-4). Multiparous patients were more likely to be currently married (68.9% vs 53.4%, p=0.001), to have a liveborn infant at that delivery (29.7% vs 15.9%, p=0.001), to labor less than 24 hours (55.8% vs 40.0%, p=0.001), and to have a Caesarean