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Background: In Uganda, some of the highest rates of HIV prevalence are found in fishing communities along Lake Victoria, making these communities a priority for research and interventions. Understanding factors associated with HIV status is necessary in order to identify the highest risk groups, and to inform the development of tailored efforts to decrease HIV risk in these communities. With this aim, the present study examined factors related to HIV positive status in fishing communities in Uganda.

Methods: Participants were recruited for participation based on their occupation, residence, and language ability. 300 (132 males, 168 females) individuals living in one of three rural fishing communities in Wakiso District, Uganda were enrolled and completed a cross-sectional interviewer-assisted questionnaire. Participants provided written informed consent and all study procedures were approved by IRBs in Uganda and the U.S. Measures included sociodemographics, HIV testing history, sexual and alcohol use behavior, history of physical, sexual, and emotional abuse, depression (CES-D), and alcohol use disorders (AUDIT). The main outcome of interest was HIV status. Data was analyzed using logistic regression in SPSS version 20.

Findings: 22.6% of the sample reported being HIV positive and 9.7% reported not knowing their HIV status. Compared to those with no history of sexual abuse, participants reporting having ever experienced sexual abuse from a partner in the past were more likely to be HIV positive (OR 1.71, CI 1.05-2.79). Higher scores on the AUDIT (OR 1.11, CI 1.04-1.18) and greater frequency of participant and partner alcohol consumption prior to sex in the prior 30 days (OR 1.38, CI 1.06-1.79) were associated with being HIV positive. Meeting criterion for depression (OR 1.55, CI 0.94-2.56, $p = 0.08$) and reporting having ever met a sexual partner at an alcohol establishment (OR 1.73, CI 0.98-3.06, $p = 0.06$) were marginally statistically significant predictors of HIV positive status. Gender, condom use, and other forms of abuse (physical, emotional) were not statistically significant predictors of being HIV positive.

Interpretation: The findings provide support for the importance of alcohol use in the acquisition of HIV in high risk fishing communities in Uganda, potentially through multiple pathways. Factors related to emotional and mental health, including depression and a history of sexual abuse, may further increase one's risk for HIV, and should be considered in public health interventions, though the cross-sectional nature of the data limits this interpretation.

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Abstract #: 02CD026

Prevalence of skin diseases in school-aged children in rural Ghana

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Background: Skin diseases are prevalent in African schoolchildren and can significantly impact health and wellbeing. Determining the burden of skin diseases in specific regions and communities can guide prevention and management strategies (Hogewoning, Amoah, Bavinck, et al, 2013). Since 1992, the Ghana Education Service has

mandated that health education and surveillance, conducted by community health nurses (CHN), be an integral part of school health to complement academic education and improve the odds of a child's success in school. The aim of this study was to partner global health students (GHS) from an American College of Nursing with CHN from the Ghana School Health Education program to describe the prevalence and nature of skin diseases in schoolchildren in the Ejisu-Juaben district of the Ashanti region of Ghana.

Methods: This descriptive study was conducted during a 5-day global health research immersion, supervised by a nursing faculty with proficiency in dermatology. 8 CHN and 11 GHS, predominantly from nursing programs, attended two educational sessions about common skin diseases in African children presented by the faculty and the Medical Director for the regional hospital. GHS were teamed with CHN to perform visual, head-to-toe assessments on randomly selected classes of school-aged children (6-12 years old) from 3 school zones in the district. Skin abnormalities were identified and photographed for later quality review. Children with abnormalities were referred for follow-up care as needed.

Findings: Preliminary results from 2 of the 3 school zones identified abnormal skin conditions in 325 of 719 (45.2%) children assessed. Fungal infections (64%) and bacterial infections (18.1%) comprised the majority of abnormal skin conditions; the remaining conditions were viral (6.5%), inflammatory (10%) and other dermal infestations (5.8%).

Interpretation: Skin abnormalities in this region of Ghana are common and, although similar in type, were more prevalent than reported in other African regions. A strength of this study was that it capitalized on existing public health resources and the observational skills of nursing students. A study limitation was the unvalidated dermatologic assessment skills of CHN and GHS, which potentially reduced assessment accuracy and the identification of atypical conditions, mixed pathology and more rare skin abnormalities. Assessments may have been further compromised by the challenging conditions in the classrooms including poor lighting and minimal privacy. The results of this study support the need for more attention to prevention and management of skin diseases in children and the need for more dermatologic training of CHN in rural Africa, which may be fulfilled in part by GHS with appropriate preparation and supervision.

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Abstract #: 02CD027

Assessing leishmaniasis in East Pokot Kenya: An epidemiological survey and community evaluation

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Background: While there is evidence that visceral leishmaniasis (VL) is prevalent in some parts of Kenya the level of community awareness, knowledge and interactions, disease incidence and health systems capacities are unknown. Several surveys were conducted in the remote East Pokot district, Kenya to address these issues. Understanding this is crucial for developing evidence-based interventions for hard-to-reach populations.

Methods: Population based cluster surveys were conducted during January-March 2012. Based on the latest population Census, a sample of 448 households was targeted for this study in 18 villages (clusters) comprising 7,650 households. Criteria for participation included age above 2 years, residence in VL risk area for at least 6 months and no recent (within 2 years) history of VL. Incidence of VL

was assessed using the rK39 rapid test. The health system's capability to diagnose, treat and control VL was assessed using a health facility checklist and key informant interviews (KIIs) in two health centers, five dispensaries and one hospital selected purposively by ownership and location. Written and verbal consent was obtained from all participants. Ethical approval was granted by Northeastern University Institutional Review Board and the Kenyatta National Hospital/University of Nairobi Ethics and Research Committee.

Findings: 1,324 participants were screened for VL using the rk39 in 2012. The mean age was 25.28 (SD 18.46). 778 (58.8%) were males and 546 (41.2%) females. Only 46 (3.5%) respondents had been previously tested. 23 were rk39 positive for VL (1.74 (95% CI, 1.10-2.60) cases per 100 persons) in 11 of the village clusters. The knowledge, attitudes and practices (KAP) survey reached 446 respondents (194 males, 252 females; mean age 37.78 (SD 13.32), range 18-75 years) in the general population and 26 KIIs. 93.5% of the general population was aware of VL. 91.3% (300, 67.3%)

indicated their source of VL information as relatives/friends/neighbors and 104 (23.3%) health personnel. All KIIs were aware of VL but only 5 (19.3%) had attended any training and 8 (30.7%) reported that their organizations were involved in disease control. Of the 8 health facilities assessed, none had capabilities to treat VL, 2 had prior experience in using rK39 and two had staff trained on VL management. Availability of VL services, information on treatment options among community members, cost and inaccessibility were the most widely reported barriers indicated by KIIs.

Interpretation: This was the first time population screening of VL using rk39 rapid diagnostic test conducted in East Pokot District. One limitation is that the rk39 is not 100% accurate in VL diagnosis. An effective program using community strategies to control significant levels of VL in this hard-to-reach population is needed and is feasible given high levels of awareness.

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