

interest in learning improved storage (47.1%) and disposal (49.3%) techniques. Variation in responses shows that education on what can be a poison and on improved storage habits may be important future research topics tied to new policies and interventions as part of the BCCDP.

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### Assessment of diarrheal rates in a population of children in the Indian Himalayas: A student initiative

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**Background:** The Spiti Valley is a highly underserved isolated desert mountain valley in the Indian Himalayas. Following a needs assessment identifying gastrointestinal diseases as a major health concern, sustainable programs were implemented at a local boarding school (Munsel-Ling School) in 2006 by the University of British Columbia (UBC), however, the long term impact of sanitation interventions in the community have not been rigorously addressed. This study evaluated the effectiveness of health education by assessing diarrheal rates, handwashing practices, and helminths infections by comparing it to data collected in 2011.

**Methods:** This cross-sectional study was conducted at Munsel-Ling School in India. Students 6-18 years of age at the school were recruited if they were participating in the annual health screens. Students who did not meet the aforementioned criteria were excluded. Students were also excluded if language barriers were present. 258 students completed a standardized survey that evaluated hand washing practices, helminthic infections and drinking water sources (independent variables). The survey also included the modified Bristol Stool Scale for Children to identify children with diarrhea and dysentery (dependent variables). The analysis divided students into 3 cohorts (grades 3-5, 6-8, and 9-10) and a univariate logistic regression was performed. Ethics approval was granted by the UBC Behavioural Research Ethics Board (BREB) [certificate number: H14-00823]. Written assent was obtained from both the student and principal if the participant was under the age of 14. Written consent was obtained from students 14 years and older before the survey was administered.

**Findings:** 51.9% of students reported episodes of diarrhea within the past 14 days using the modified Bristol Stool Scale for Children and WHO definitions and 17.4% reported dysentery. Predictive factors include age, cohort, and unsafe water sources. The oldest cohorts experienced significantly less diseases, with diarrheal and dysentery risk decreasing 11.8% and 8.9% for every year increase in age, respectively. Students who drank unsafe water had a 65% and 138% increased risk of diarrhea and dysentery. Handwashing before meals and toileting decreased diarrheal diseases risk by 78.3% but is not predictive for dysentery. Additionally, helminth infections were reported amongst 8.9% of the students. Diarrheal rates assessed amongst 126 students in 2011 reported 46.6% and 42.7% prevalence within the past 7 and 30 days respectively, and helminthes infections at 22.5%. Children are at an increased risk of malnutrition with diarrhea in many developing countries. It is anticipated that Munsel-Ling school will continue to deliver education surrounding good hygiene behaviour. Finally, the annual preventative anti-helminth treatment was shown to be beneficial in reducing the rates of self-reported helminth infections.

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### The association between sexual behavior and disclosure of HIV test results in Central Kenya

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**Background:** Globally, there are 35 million people presently living with human immunodeficiency virus (HIV). Young adults below 25 years disproportionately account for almost 50 percent of all new infections. Although overall HIV testing has increased, a majority of those tested are unaware of their serostatus, which may lead to transmission of HIV virus to unknowing sexual partners. This paper examines the association between sexual behavior and disclosure of HIV test results, in a rural setting in Central Kenya (Othaya constituency). Sexual behavior is conceptualized as condom use, number of sexual partners and relationship status.

**Methods:** 302 eligible participants were recruited for a cross-sectional study approved by the Ohio University's Institutional Review Board and the African Medical Research Foundation's (AMREF) Ethics and Scientific Review Committee in Kenya. Eligibility requirements included: 18 years and above, male or female, diverse ethnic and socioeconomic backgrounds and ability to understand English or Kikuyu (local dialect). Sampling of different clusters from six sub-locations in Othaya was undertaken. Each eligible person was explained the informed consent process and then administered the survey in private after the informed consent was signed. Descriptive statistics and logistic analyses were conducted to examine the association among study variables.

**Findings:** In the unadjusted analysis, among women (compared to those who had not had a sexual encounter in the past 30 days) who practiced safe sexual behavior, they were 10.13 times more likely to share their HIV test results ( $p < 0.001$ ), while the association was not statistically significant for those practicing unsafe sexual behaviors. The association remained the same and became stronger for those practicing safe sexual behaviors when adjusted for possible confounders (OR= 12.03;  $p < 0.001$ ). Among men, in the unadjusted analysis, those who practiced unsafe sexual behaviors were 7.95 times more likely to share their HIV test results ( $p=0.02$ ), while the association was not statistically significant for those practicing safe sexual behaviors. A similar but stronger association was observed in the adjusted analyses for those practicing unsafe sexual behaviors (OR=38.76,  $p < 0.001$ ) and not significant for those practicing safe sexual behaviors.

**Interpretation:** Based on the findings, a concentrated effort is needed focusing on men in that region to encourage safe sexual behaviors and minimize HIV transmission. Previous interventions have focused on females who readily receive HIV prevention information and services via Prevention-of-Mother-to-Child-Transmission programs and during prenatal and antenatal clinical visits. More needs to be done to increase male involvement in HIV testing and counseling programs to enhance safe sexual behavior, HIV testing and disclosure of results.

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### Cultural norms, knowledge and attitudes regarding abortion in rural Ghana

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