**Outcome and Evaluation:** The overall trends in the data suggest an increase in knowledge of prevention and transmission of Trachoma from the pretest knowledge. Further testing will help to determine the long term effectiveness of the educational program (this trip occurs annually). The effectiveness of the program was increased due to well-established relationships with local community leaders and by targeting the education program to a specific patient populations.

**Going Forward:** The overall effectiveness of the educational project will be measured in a follow-up survey on a yearly basis. This will help us to understand the long-lasting effects of the education project and modify our projects accordingly.

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**Impact of chlorination of a gravity operated water distribution system on clinical incidence of diarrhea and fecal contamination in rural Honduras**

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**Background:** The Global Health and Health Disparities Program at Virginia Commonwealth University (VCU) has a clean water initiative in the remote mountainous village of La Hicaca, Honduras. In 2014, chlorination of a cistern-based gravity operated water distribution system was initiated. The purpose of this study was to investigate the impact of water chlorination on the incidence of diarrheal illness and fecal bacterial contamination of the water system.

**Methods:** In June 2014, faucet water samples from twenty-eight cistern-supplied homes were obtained and cultures for E. Coli were performed. In June 2015, thirty-three adult residents of La Hicaca completed study questionnaires (representing 67% of all homes). Faucet water samples from 18 cistern-supplied homes were again cultured. A T test was used to compare mean numbers of bacterial colonies in samples from 2014 (pre-chlorination) and 2015 (post-chlorination).

**Findings:** The mean number of E. coli colonies between June 2014 and June 2015 decreased from 1,723 colonies/100 mL (SD 1,541) to 96 colonies / 100 mL (SD 179) (p = 0.0002). In 2015, two-thirds of samples contained no E. coli; whereas, E. coli contamination was universal in 2014. Eighty-two percent of residents reported fewer episodes of diarrhea in the past year and 18.2% reported diarrhea in the preceding 30 days. More than half (58%) of respondents preferred the taste of chlorinated water; a minority preferred the taste of unchlorinated water in the preceding 30 days. More than half (58%) of respondents preferred the taste of chlorinated water; a minority preferred the taste of unchlorinated water in the preceding 30 days. More than half (58%) of respondents preferred the taste of chlorinated water; a minority preferred the taste of unchlorinated water in the preceding 30 days.

**Interpretation:** Chlorination of the water distribution system effectively reduced, but did not eliminate, E. coli contamination.