

Results: A total of 543 heads of household were interviewed. The average age of respondents was 42 years with equal male to female and rural to urban ratios. An average of 48% of respondents reported on a graduated scale that it was “very difficult” to obtain basic healthcare, and that it was more difficult in rural areas (55%). Reasons for not accessing healthcare included fear of exposure to Ebola in hospitals (33%), closure of hospitals (22%), and healthcare workers refusal to see patients presenting for care (20%). There was an overall decline in facility use by 30% with obstetric care, prenatal care and pediatric care down by 45%, 40% and 30% respectively. There was a slight increase in healthcare seeking at pharmacies for pediatric care and in use of traditional birth attendants and midwives for obstetric care.

Interpretation: Access to basic healthcare was severely affected during the Ebola outbreak in Liberia. Although hospital closures/limited functioning were a large factor in inability to provide care, other factors such as fear of exposure to Ebola within healthcare facilities played a role in reduced access. Obstetric, prenatal and pediatric care were especially difficult to access during this time. Strategies to preserve healthcare system function and public impression of these facilities will be critical, should future outbreaks occur.

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Prevalence and correlates of depression in a high emigration town in Oaxaca, Mexico: Findings from a binational student research training program

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Background: Depression is the most common mental health disorder and a leading cause of disability worldwide. Residents of high emigration towns in Mexico often live with prolonged separation from family members; limited economic opportunities; and, for returned migrants from the United States, histories of stress, fear, discrimination, and guilt that may place them at increased risk for depression.

Methods: Our binational research team of Latino/a, Mexican, and American students conducted a household-based health and migration survey in a high emigration town in rural Oaxaca, Mexico, in January 2014. All residents aged 15–65 were eligible for the survey; participants provided verbal consent. Participants were screened for depression (CES-D short form) and substance use (WHO ASSIST), and reported their migration history and chronic health conditions. Logistic regression was used to determine correlates of screening positive for depression.

Findings: Of the 463 residents who completed our survey, a majority (61.9%) were female and the average age was 38.5 (SD: 14.9). Over half the participants (60.0%) reported some history of migration: 54.5% had internal migration experience and 28.5% were returned migrants from the United States. Two thirds (67.0%) reported talking regularly with family in the United States. A third (36.1%) met the CES-D screening criteria for depression.

In bivariate analyses, history of internal migration was associated with a positive depression screening ($p=.019$), but history of U.S. migration was not. In multivariate logistic regression analyses, female gender (AOR: 3.44, 95% CI: 2.08–5.67), talking with family in the United States (AOR: 1.85, 95% CI: 1.17–2.93), lifetime alcohol use (AOR: 2.80, 95% CI: 1.74–4.50), and having another chronic health condition (AOR: 2.45, 95% CI: 1.55–3.88) were independently associated with screening positive for depression.

Interpretation: Although we were limited by the lack of validated depression scale for this population, survey findings showed a very high prevalence of depression. These findings indicate a need for culturally appropriate mental health services, especially for women, that can be integrated with health services for other chronic conditions and alcohol abuse prevention. U.S. and Mexican migration policies that facilitate family reunification might also mitigate psychological distress experienced by members of high emigration communities.

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Sustainable university-based water quality program in the developing world

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Background: Point-of-Use (POU) ceramic filter systems have been shown to be reliable sources of safe drinking water. However, the long-term effectiveness of these systems has been questioned because of a lack of sustainability due user loss, filtration integrity, cost, replacement part accessibility, and use and cleaning complexity. Using data collected from work of the Institute for Latin American Concern - Water Quality (ILAC-WQ) Program, which provides (POU) Ceramic Candle water filtration systems to households in rural, developing communities throughout the Dominican Republic, this study presents quantitative longitudinal data supporting the efficacy of our program model for sustaining a POU filter program.

Methods: A University-Based Service-Learning Program has been developed which provides long-term sustainable access to clean drinking water for Dominican families. Student participants from Creighton University work with ILAC, an organization that has a 40 year history of providing healthcare to rural Dominican communities. Student participants annually visit households in 25–30 communities, sampling filtered water to later test for microbiological purity, interviewing users for maintenance knowledge, and conducting physical examination of filter condition. Participants educate the household on proper usage and provide necessary repairs and replacement parts. Under the infrastructure of ILAC-WQ, households can notify community staff of breakages and need for more filters and an incoming team will be notified.

Findings: Data collected from the 17 communities, each visited at least 5 times from 2009 to 2015, shows no decline in filter usage. There is a statistically significant increase in filter users when comparing means of the first 3 years to that of the last 4 over all communities. Data show an increase in average filter functionality from 74.7% to 93.6%, and in average filter potability from 84.5% to 97.8% over this 7 year time period.