Faculty Name  Alford, Kristen
Dept. Social Work

Project Title  Water and health: Contextualizing and evaluating water filter distribution in Liberia (Phase 1)

Project Abstract  According to the 2013 Liberia Demographic and Health Survey, 86 percent of urban households and 56 percent of rural households had access to improved sources of drinking water. Although major efforts are underway through the World Bank Urban Water Supply Project to increase access in urban areas, rural areas continue to face challenges in accessing clean drinking water. Lack of access to improved sources of water can be tied to child diarrheal rates. Data from the 2013 Liberia Demographic and Health Survey demonstrated that 26 percent of children from homes with no access to improved water sources had experienced diarrhea in the past two weeks compared to 20 percent of those children who had access to improved water sources.

Although access to clean drinking water is not the only answer to improving health among Liberians, particularly among Liberian children, it is an important piece of the puzzle. Sawyer, Inc. is currently distributing 100,000 hollow fiber water filters to households in Liberia. They are collecting data at the time of distribution and at subsequent points over the next four years to determine short and long term changes in health over time. They are contracting with faculty from the Clean Water Institute, Geography, Mathematics/Statistics, and Public Health to analyze the data and evaluate the effectiveness of this evaluation plan.

This project will involve gathering the background and contextual information for our larger work (e.g., developing an extensive literature review on water filter distribution effectiveness, health trends in Liberia and West Africa) as well as analyzing preliminary data from the Sawyer initiative. The preliminary data will mainly be pre-filter rates of diarrhea among adults and children along with missed days of work/school and health care utilization. The literature review and preliminary review of the data will be used for an annual report for Sawyer as well as possible other venues for presentation/publication.

Project Outcome  This McGregor project is part of a larger 4-year collaborative initiative between the Clean Water Institute, Engineering, Mathematics and Statistics, and Geography. These departments are contracting with Sawyer, Inc to provide a comprehensive program evaluation of the effectiveness of water filter distribution in Liberia. The contribution of public health will be to understand the broader current state of public health in Liberia, the effectiveness of other past water filtration distribution programs, and to analyze the short-term and long-term changes in health of program recipients following the distribution of the filters. Data from this project will also be available for faculty to use in publications and presentations.