Evaluation of availability, access, use and quality of water in Umuenechi Village, Nibo, Anambra State, Nigeria 24 months after the installation of a 200-foot borehole

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Project Background
- 1.1 billion people lack access to clean water, and about 2.4 billion people are without improved sanitation facilities (WHO 2012).
- Lack of safe water and basic sanitation and hygiene cause a wide range of diseases.
- Roughly 2 million people die from diarrheal diseases each year; children less than 5 years of age carry most of this mortality burden.
- The provision of clean safe water, improved sanitary facilities and healthy hygienic behavior reduce disease burden (Fewtrell, 2005).
- Millennium Development Goal (MDG) #7 aims to halve the proportion of people without safe access to safe drinking water and proper sanitation by 2015.
- In alignment with this goal, WaterforLife: Nigeria (WFLN) provided a borehole in St. Joseph Catholic Church, Umuenechi village, Nibo, Anambra State, Nigeria on August 24th, 2010.
- 24 months after this borehole was installed, this evaluation of the project was conducted.

Project Goal
The goal of this project is to assess the degree to which the provision of a borehole provides safe and sustainable water to meet the needs of the community.

Specific Aims
- Assess quality of the water provided by the borehole and compare to other water sources and stored household water;
- Characterize the population using the borehole;
- Identify financing options in order to ensure sustainability of the borehole;
- Develop a stewardship plan with the community to ensure the sustainability of the borehole.

Populations/Communities Served
- The project site is in a rural setting; Umuenechi village (Nibo town, Awka South Local Government Area (LGA), Anambra State, Nigeria).
- Study population is Umuenechi villagers, and neighboring communities that also use the borehole (an estimated total of 5,000 people).
- The predominant language spoken in this area is Ibo.
- This population are mainly poor people with a low standard of living.

Project Timeline
- February – May 2012: Establish project goals, refine proposal, assemble team, and develop instruments
- June-August 2012 travel to project site and data collection
- September 2012: Conduct preliminary data analyses, develop draft report
- October-December 2012: Complete data analyses and present recommendations to WFLN for future project improvements

Progress to Date
- Conducted 4 focus group discussions with men, women, young girls and young boys representing different groups of water users.
- Administered 40 household surveys.
- Interviewed 8 key informants, including the parish priest, community leaders and residents.
- Tested 25 water samples for fecal coliforms

Next Steps
- Perform in-depth analysis of collected data
- Identify the best financing option for project sustainability
- Distribute final report to project collaborators

Project Partners
- Christine Moe PhD, Stanley Foster MD & Amy Kirby PhD; Hubert Department of Global Health, Rollins School of Public Health, Emory University.
- WaterforLife: Nigeria
- Dr. Rob Quick & Dr. Ciara O’Reilly, Waterborne Diseases Epidemiology Branch, CDC.
- Emory Global Health Institute
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