One of the main objectives of the applied research component of SWASH+ was to test the dominant belief that school water, sanitation, and hygiene interventions would reduce absenteeism and illness among school-aged children, leading to improved prospects for long-term productivity. As SWASH+ continues into its fourth year, it is critical to examine this belief and ask how the program can continue to make powerful impacts in schools, and by extension in communities.

Research

The final round of data collection for the main impact evaluation was conducted in mid-2009 and preliminary data analysis was begun in September. While these data are still incomplete, Emory University feels that the findings have important implications and should be shared, though it should be stated that these are not ready for publication or broad circulation.

Findings

While the results put into question the original dominant paradigm that school WASH investment leads to reductions in absenteeism and illness, it suggests an alternative paradigm that will likely influence SWASH+ ongoing efforts to influence other partners at scale. Some interpretations are highlighted below:

**Impact and Sustainability** are inextricably bound. At the final evaluation approximately 30-35% of schools had chlorine residual and 22% had soap for hand washing. These numbers are 4-10 times higher than for the sustainability assessment conducted in 2008, however they are indicative of limits to the potential impact of the intervention. A subsequent analysis will be conducted to determine whether there is an impact within this subset of schools. Given the relatively small cost of water treatment and soap, compared to the cost of training teachers and providing basic inputs, improving sustainability (whether through accountability, improved technology, or subsidy) may be a very cost-effective strategy.

**Questions**

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Anecdotal information and preliminary data suggest that latrine investments do not automatically result in improved latrine maintenance and behaviors. Project staff documented multiple cases where new sanitation facilities were quickly in poor states of cleanliness through a combination of poor attention to cleaning regimens, children not using facilities properly, and lack of community respect for school facilities. In some cases these facilities become unattractive for use by children and potential exposure points to disease. SWASH+ will soon examine data to determine if schools with better latrine maintenance benefit more from improvements in latrine infrastructure.

**Absenteeism** is affected by a number of WASH-related and other factors—from household to environmental and political. This appears to be particularly true in the changing social setting of free primary education. Pupil surveys and qualitative assessments indicate that illness is a minor cause of absenteeism, compared to other causes. It also suggests that absenteeism may not be a sensitive measure of educational benefit in this context. Other measures relating to concentration, attention, or performance may be needed.

Recent research on point of use treatment suggests that the impacts are dependent on sustaining behavior change at scale, not just having effective technologies. SWASH+ has objectives to make investment in the sector as effective and sustainable as possible, and to encourage the introduction of results-based monitoring and evaluation systems that encourage accountability for these key factors needed to get to impact.

**Impact:** Do School WASH interventions reduce absenteeism?

Proper sanitation is important to prevent the spread of disease, however, it is one of several factors in schools, primarily water supply and sanitation hardware. However there is less attention to the less obvious elements such as handwashing, water treatment, latrine cleanliness, and other personal hygiene issues such as anal cleansing and menstrual management.