WATER AND SANITATION BASELINE SURVEY in Chong Khneas, Siem Reap Province, Cambodia

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ABSTRACT

Context: Poor sanitation, lack of access to clean water and high burden of disease are chronic health problems besetting most of the poor communities in remote areas of Cambodia. A large number of households floating in Tonle Sap Lake appeared to be more vulnerable. Majority of them depend heavily on the river as their source of water for domestic use and also as dumping site for their household wastes. The high incidence of diseases associated with contaminated water and poor hygiene is alarming. It gives an urgent call for the much needed combined water and sanitation intervention to reduce the health risks that endanger the lives of poor adults and children in these floating communities.

Methods: This baseline assessment looks into the existing water and sanitation condition and hygiene practices among the households in seven villages in Chong Kneas, Siem Reap province. Majority of these villages are floating in Tonle Sap Lake and moves randomly depending on the water level. The respondents were 121 women and 2 men coming from 123 households. All of them have children less than 5 years old. A questionnaire translated in Khmer was the primary data gathering tool. Two interpreters assisted in interviewing Chong Khneas VII respondents who were mostly ethnic Vietnamese. The data collected were analyzed using frequency count, mean and percentage.

Water samples from the lake and from RACHA floating water station were submitted for microbiological analysis and the results were compared to determine the capability of the large-scale BWFS filtration system in removing microbiological contents and making the water safe for drinking.

Results: Majority of the floating households depend largely on surface water during dry and wet seasons. Each household consumes an average of 8.7 liters drinking water per day. Average quantity of water used per capita per day was 35.13 liters. Some households have portable water filter but most of them stopped using it because the flow of water is slow and it becomes dirty easily when water from the river is put directly into it. Others found it defective, easily broken and hard to maintain. The filter cannot supply enough drinking water for the family hence, bottled water is still needed. The households indicated that they buy drinking water from private vendors even at a higher price because they believed the water is clean, good quality and delivered to their houses. When asked how much they are willing to pay for clean water, they indicated that a price of 20-30 Riel per liter is reasonable for them. If RACHA water station sells water at 20 Riel per liter, 89.4% of the households are willing to buy from there. The households preferred 20-liter or bigger volume. However, the distance of the floating station from their village and lack of transportation hinder them from accessing the water source. Other barrier includes the misconception of some villagers that water from the river is clean when collected early morning and taken far from the village; and that RACHA water is not different as it comes from the same source. There was high percentage of children less than 5 years old (90.2%) and adults (75.6%) who got sick during the last 12 months. Common diseases among children less than 5 were respiratory tract infection (RTI) (81.1%) and diarrhea (54.1%). Of those children who got diarrhea during the last 12 months, 61.7% suffered from this disease in the last two weeks prior to the interview. Among adults, RTI (40.9%) also ranks 1st, diarrhea (25.8%) ranks 2nd and Typhoid fever (18.3%) ranks 3rd. Diarrhea morbidity was
Conclusion: Water and sanitation are currently community issues that need to be addressed. Generally, portable household water filter does not address fully the household need for clean and safe drinking water. The need of the community for clean water is high which can be addressed better by a large-scale water filtration system. The sanitation practices among the floating communities were still very low which poses an eminent health risk among children and adults. This situation is marked by extremely high incidence of diarrhea and other diseases among children less than 5 years old. Expenditure for treatment is an added financial burden among the poor families. Proper handwashing during five critical moments was not practiced by most of the people. Water and sanitation awareness campaign needs to be conducted in the floating communities to make them understand that drinking clean water and simple handwashing with soap and water is the most cost-effective way of reducing health risks among children and adults. Setting up water depots in far-off villages could increase access to clean and cheap water by the villagers. Sanitation needs to be integrated into various health messages in the community and in schools. It is also important to correct some misconception among the people and to create enabling environment for behavior change in the community.
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