

Promoting household water treatment through local health workers in Vietnam

BACKGROUND

Safe drinking water is essential to good health and quality of life. In resource-poor settings such as Vietnam, water often comes from unsafe sources and carries dangerous pathogens. The World Health Organization (WHO) estimates that worldwide 1.5 million people, mostly children, die each year from diarrheal diseases.¹ Unsafe water is a leading cause of these deaths. Despite significant progress, only 42 percent of Vietnam's rural population has access to clean water.² Severe diarrhea continues to be widespread in certain areas, with more than 850,000 cases treated by local health workers in 2010.³

PATH recently completed an innovative pilot project designed to assist the private sector in the distribution of proven and effective household water treatment and safe storage (HWTS) products for low-income people. In other regions and industries, commercial markets have proven to be a viable model for selling products to the very poor by supplying low-income consumers with a variety of household goods, including soap, food, and basic commodities. This pilot project evaluated whether HWTS products, such as a fast-moving consumer-good chlorine product, could be provided in the same way. In earlier research, we learned that although chlorine products are easy to use, portable, and affordable, there are barriers to use, including low awareness of the products, lack of knowledge about proper use, lack of trust in product quality unless promoted by health authorities, and an unacceptable chlorine taste. Simple household drinking water containers that would help to keep water safe are also widely available, but populations are often not aware of the importance of safe water storage.

"If Aquatabs' smell can be improved, then I can sell more and the stipend will not be important because I can also earn money from other health programs."

—Health collaborator in Can Tho



Young boy with a free storage container provided by the project.

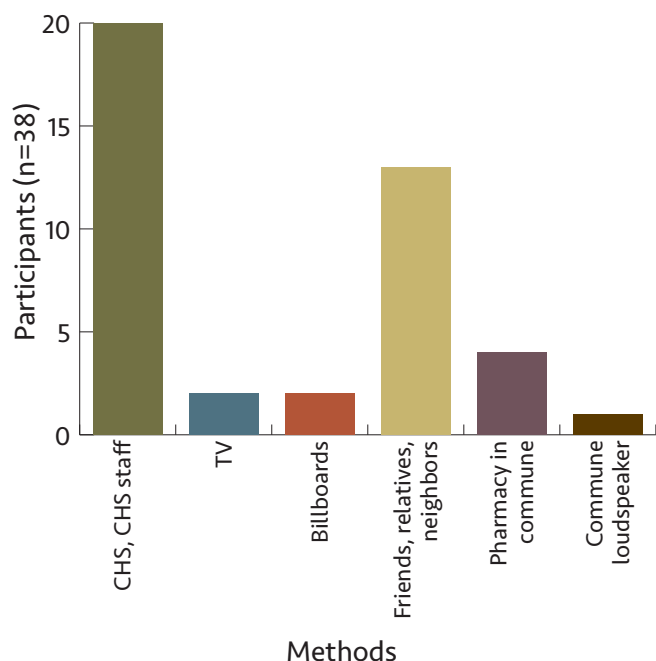
The pilot was conducted in partnership with Medentech Ltd., the manufacturer of Aquatabs® water purification tablets; Zuellig Pharma Ltd., a regional distributor; and District Preventive Medical Centers in the southern Vietnam province of Can Tho. The pilot tested how uptake and correct and consistent use of Aquatabs were affected by the following:

- The use of trusted health sources as direct sales people.
- Provision of free storage containers.
- Different approaches to create demand.

ACTIVITIES

- PATH trained 29 full-time health collaborators and 42 part-time commune and village health collaborators on water, sanitation, and hygiene (WASH) issues, as well as interpersonal communication skills. They were paid a monthly stipend for seven months to serve as the direct sales force in 21 communes of Vinh Thanh and Co Do districts (total population of 250,000) in Can Tho province.
- A new version of Aquatabs that was approved by WHO and Vietnam's Ministry of Health, with less smell and taste than the original version, was initially distributed for free and later sold door to door by health collaborators.

Figure 1. Sources of information among people surveyed who were aware of Aquatabs, but had not tried them.



- PATH organized social marketing events prior to household visits in each commune that targeted 200 low-income households and those with young children in 21 communes. Attending households were educated about proper HWTS practices and how to treat water with Aquatabs. They were also provided with a one-month free supply of Aquatabs for trial. In half of the communes, PATH also provided free 20-liter containers for safe storage of treated water. Approximately 2,200 containers were given out during the project.
- Following the social marketing events, the trained sales force of health collaborators started household visits selling Aquatabs, which continued for the duration of the pilot—seven months. During household visits, health collaborators also delivered educational messages on safe water and proper storage.
- Collaborators shared best practices and received additional sales training throughout the pilot and were provided with sales flipbooks and identification badges to help build their credibility in the community.
- Aquatabs billboards were placed at commune health stations and elementary schools to increase awareness of the product.
- Loudspeaker announcements throughout the communes served to remind households of proper HWTS practices.
- In collaboration with UNICEF, Lien Aid, and the National Center for Rural Water Supply and Sanitation, PATH helped produce and broadcast a national TV spot and organized a large event in the two districts featuring local celebrity and WASH Goodwill Ambassador, Xuan Bac, to promote proper HWTS practices and reinforce educational messages delivered during household visits by health collaborators.

- Abt Associates and local partners conducted an evaluation at the conclusion of the pilot to determine community uptake of Aquatabs and triggers and barriers to purchase and use, as well as current knowledge, attitude, and practices around HWTS.
- PATH accompanied collaborators in the field and coached them on sales approaches, analyzed monthly sales data from all parties, and conducted an analysis to determine the financial sustainability of the distribution model.

KEY FINDINGS

After analyzing monthly sales reports submitted by collaborators and District Preventive Medical Centers and combining that with conclusions from the evaluation, we learned that:

- Although overall uptake of Aquatabs was marginal in a random sample from the population (<1 percent reporting current use), awareness of proper HWTS practices and Aquatabs increased over the course of our intervention.
- Nearly 25 percent of households approached by collaborators in the pilot chose to purchase Aquatabs after receiving their initial free supply.
- Word-of-mouth marketing by commune collaborators, family, and friends is more effective at increasing awareness than billboards or loudspeaker announcements (Figure 1).
- The biggest deterrent to consistent Aquatabs use is its chlorine smell and taste, despite the reduced smell of the newer version of the product.
- Households associate Aquatabs with medicine because of its tablet form and fear the long-term effects of using tablets to treat water despite endorsements from WHO and the Ministry of Health.



Woman and child leaving a social marketing event with their free storage container.



Distributing information and education materials to school children in Can Tho.

- People who have completed primary school or higher are more likely to have a positive view of chlorine products, which reinforces the importance of education and communication efforts for improving HWTS knowledge in the community.
- Collaborators reported that they had the most difficulty convincing the richest and poorest households in the region to purchase Aquatabs. The richer rural households tended to prefer more sophisticated treatment methods, while the poorer ones had other financial priorities.
- The pilot's most successful collaborators were part-time health workers, female, and between the ages of 50 and 59 (as determined by comparing sales data for each person).
- Collaborators that were deemed by households to be the most trusted health sources were those who interacted more regularly with the community.
- Sales data showed almost equal sales in communes that received free storage containers and those that did not, which indicates that it was not commercially viable to provide free storage containers as the costs do not justify the benefits for the project. However, nearly all surveyed households reported having a storage container of some sort prior to the pilot, although not necessarily one recommended for safe storage. In areas where a smaller percentage of households have storage containers available, provision of storage containers may have more of an effect on the sale and uptake of the product.
- Typically in Vietnam, health collaborators work almost exclusively in their own villages; however, in the pilot, health collaborators conducted household visits outside of their villages, which may have negatively impacted their door-to-door sales due to their unfamiliarity with the communities outside of their village.
- The collaborators' incentive structure was weighted heavily toward stipends, which may have discouraged collaborators from relying on the commissions earned per unit of Aquatabs sold. However, most collaborators reportedly participated in the pilot because of the health benefits to their community. When asked whether they would continue selling Aquatabs once the pilot concluded

and stipends ended, the most successful collaborators (as determined by overall high sales volume and closing rates) indicated that they were willing to continue.

CONCLUSIONS

Despite the challenges identified, the pilot results demonstrate that WASH education and product distribution through local health collaborators can have a positive impact on the community. While the project was able to recover the product cost, but not the additional marketing or distribution costs, it was successful enough on many fronts that the partners would consider carrying this model forward with assistance from the public sector. Based on our findings, modifying the incentive structure for health collaborators to focus more on increasing product sales could mitigate distribution costs and encourage health collaborators to sell more product. Introducing a new product requires a substantial investment in awareness-raising activities, something that private-sector partners are unable to undertake for a low-margin product such as Aquatabs. Adding local testimonies to personalize educational and promotional materials and involving health workers could improve community knowledge and product use since family, friends, neighbors, and local health workers are trusted sources of information. Also, adding more health collaborators could increase product supply. If the public sector decides to carry this model forward for Aquatabs or other products providing a health impact, then subsidizing social marketing efforts, encouraging health

"In my opinion, the social marketing events at the commune level and IEC [information, education, and communication] event at the district level have changed the awareness and opinion of people about safe water, and there are also obvious changes in water treatment practices. As a result of improved living standards, the people have become more interested in health care. They are also influenced by information provided on the media about problems in environmental pollution. I've seen families buying water filters, or installing solar water treatment systems."

—Dr. Tran Dinh Nam, Vice Director of
Vinh Thanh District Medical Center

stations to lead the distribution process, and providing endorsements for these products are a few ways that the public sector, civil society, mass organizations, and nongovernmental organizations can contribute.

“The consumers are the most important. The distribution network will run automatically when the consumers have awareness and demand. To reach more households, Aquatabs could also be distributed through drugstores or health care service providers based in villages and communes.”

—Dr. Tran Dinh Nam, Vice Director of
Vinh Thanh District Medical Center

References

- 1 Prüss-Üstün A, Bos R, Gore F, Bartram J. *Safer Water, Better Health: Costs, Benefits and Sustainability of Interventions to Protect and Promote Health*. Geneva: World Health Organization; 2008.
- 2 Vietnam Ministry of Agriculture and Rural Development. *Report on Results of Implementation of the National Target Program for Rural Water Supply and Environmental Sanitation From 2006-2010, and Contents of the Program for 2011-2015*. Hanoi: Ministry of Agriculture and Rural Development; 2011.
- 3 Vietnam Ministry of Health, unpublished data, 2010.



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MAILING ADDRESS
PO Box 900922
Seattle, WA 98109 USA

info@path.org
www.path.org

STREET ADDRESS
2201 Westlake Avenue
Suite 200
Seattle, WA 98121 USA