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Keeping a focus on diarrheal disease control in Vietnam

Vietnam is seeing major gains after making child health a priority over the past several years. The country has already successfully reduced the number of children under age five who die each year and is on track to achieve Millennium Development Goal (MDG) 4—reducing child mortality by two-thirds by 2015. Over the past two decades, Vietnam has made significant progress in controlling diarrheal disease, with fewer hospitalizations and reduced malnutrition and mortality. However, more recently the country's public health leaders believe that progress has slowed and coverage of key interventions has fallen.

Refreshing national guidelines

Beginning in late 2008, PATH and Vietnam's Ministry of Health (MOH) convened a working group of technical experts to review current policies, disease burden data, and the evidence for new interventions to prevent and treat diarrhea. This expert group's efforts led to the development of the MOH's new *Guidelines for Management of Diarrhea in Children*, which update the national prevention and treatment strategy by combining new interventions like zinc and low-osmolarity oral rehydration solution (ORS) with proven interventions including proper nutrition, hygiene, and breastfeeding.

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The new guidelines emphasize the role of health workers, as well as the education they provide to parents on prevention and treatment behaviors in the home, such as handwashing with soap and appropriate hygiene, as well as oral rehydration therapy (ORT). Trainings to be rolled out nationwide will cover these topics, clinical protocols, and an overview of the pathogens that cause diarrheal disease in Vietnam—including rotavirus, cholera, enterotoxigenic *Escherichia coli* (ETEC), and Shigella. To help sensitize health care workers to the new guidelines, PATH is providing technical and financial support to the MOH's training and education division.

A pilot project in Binh Dinh province, located in South Central Vietnam, is assisting provincial health authorities in implementing the new guidelines at the local level. Included in this project is the provision of zinc treatment—donated by Nutriset—which is being distributed for the first time in Vietnam to health facilities throughout the province, coupled with community outreach to build awareness and demand. An assessment of the pilot project will inform efforts as the guidelines are implemented nationwide. Vietnam's experience could ultimately serve as a model for similar diarrhea control efforts throughout the Mekong region.

Vietnam's leadership in evaluating rotavirus vaccines

Vaccines against the primary causes of severe diarrhea will be an important addition to control programs in the very near future. In particular, rotavirus vaccines that have become available in recent years already are showing dramatic impact in countries where they have been introduced.[2,3] Vietnam played a leading role in determining rotavirus vaccines' efficacy in developing-country settings, participating in a pivotal clinical trial that helped inform the World Health Organization (WHO) recommendation that rotavirus vaccines be introduced in all countries worldwide.[4]

Vietnam's National Institute of Hygiene and Epidemiology was among the institutions from seven countries that joined with PATH, the US Centers for Disease Control and Prevention, WHO, vaccine manufacturers, and the GAVI Alliance to evaluate vaccine efficacy among low-income, high-burden settings of Asia and Africa. More than 2,000 infants in Bangladesh and Vietnam enrolled in the study. The vaccine was shown to reduce severe disease by nearly half among impoverished communities in Asia.[5]

Water

Despite strong improvements in key social indicators (e.g., child mortality, the incidence of communicable diseases), water and sanitation and related diseases remain a major health problem. Polluted drinking water and swampy conditions substantially increase the risk of diarrhea, cholera, dengue fever, and malaria outbreaks. More than 70 percent of Vietnam's 85 million people live in rural areas. While a large majority of rural communities have access to improved water sources, great disparities remain in access to clean water.[1]

Vietnam's National Center for Rural Water Supply and Sanitation recently drafted a framework for a national action plan on household water treatment and storage (HWTS), recognizing that understanding knowledge and behaviors is crucial to developing interventions to improve the quality of drinking water and minimize diarrheal disease in Vietnam. In response and with the goal of increasing trial and adoption of point-of-use HWTS, PATH's Safe Water Project has undertaken a market research study of current behaviors among middle- to low-income populations in Vietnam.

Our study partner IMS gathered both qualitative and quantitative data through consumer interviews. Virtually all surveyed households claimed to treat their water, mostly via boiling. However, upon closer, qualified observation, only 64 percent boiled their water correctly. Results indicate that wealth, urbanization, households with children under the age of five, and overall age of the consumer drive point-of-use HWTS usage. Going forward, PATH will take the recommendations from the study and target segments of the population in safe water marketing efforts.

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