# 3 Hygiene Improvement Project: Why WASH matters

Renuka Bery, Julia Rosenbaum, and Eleonore Seumo, Hygiene Improvement Project/Academy for Educational Development Elizabeth Younger, Hygiene Improvement Project/The Manoff Group

### Context

Diarrhoea and other infections are caused or spread by unsafe water, sanitation and hygiene. At one time or another, most people living with HIV or AIDS will have diarrhoea. The immune systems of these people are weakened and they are therefore at greater risk of having diseases related to poor hygiene. They are also more likely to suffer from complications if infected. Diarrhoea reduces a person's ability to absorb medicine and nutrients from food, reducing life expectancy and a person's quality of life. Finally, diarrhoeal disease in people living with HIV adds to the burden of the people who care for them in homes and clinics. Family members then have an increased risk

of diarrhoeal disease, further weakening the families overall who are already struggling to meet the challenges of HIV.

Surprisingly, most HIV programs do not deal with water, sanitation and hygiene (WASH) issues in any significant way when designing home-based care and other activities. People who care for those with HIV and AIDS at home receive training in many aspects of care and support. This training sometimes includes principles of basic hygiene and water, but with little detailed information on how to help household members deal with daily problems that can improve WASH practices in the home. Because of this, the USAID/Hygiene Improvement Project (HIP), led by the Academy for Educational Development (AED),

designed a project to improve water, sanitation and hygiene practices in HIV programs in Ethiopia and Uganda. While this effort focused on home-based care, HIP is working to put these practices more fully into HIV programs including prevention of maternal-to-child transmission of HIV, counselling and testing, supporting orphans and vulnerable children.

In addition, the Hygiene Improvement Project identified a hygiene practice that is highly risky but rarely discussed - managing menstrual blood within the home. Before the widespread use of medicines against the virus, most HIV-positive women stopped menstruating as they grew weaker. However, menstrual blood can have a much higher viral load of HIV and also carries risks of other infectious diseases such as hepatitis and gonorrhoea. Caregivers should protect themselves from HIV or other infectious diseases when handling menstrual blood.

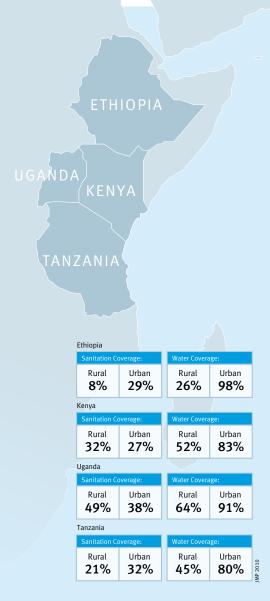
# Use a potty if latrine is not accessible

## Information on HIV and AIDS

HIV stands for Human Immunodeficiency Virus, meaning: only **H**umans can contract this virus which weakens the Immune system because the Virus reproduces inside the cells of the immune system. AIDS stands for Acquired Immune Deficiency Syndrome. A person does not have AIDS immediately after being infected with HIV. A person can have HIV for many years with few or no signs of disease. However, without treatment, HIV will eventually wear down the immune system to the point where the person develops AIDS and is less able to fight off serious, deadly infections.

HIV is spread by having unprotected vaginal (or anal or oral) sex and sexual contact with someone who has HIV. HIV can also be passed on through blood, for example, through infected needles. Infected women can pass HIV to their babies during pregnancy or delivery, as well as through breast-feeding. About one out of four HIV-infected women who are pregnant will pass the infection along to their babies.

Hugging and sharing a bed, utensils, cups and toilet seats do not spread HIV or cause AIDS.



# **Acknowledgements**

The authors would like to acknowledge USAID for supporting HIP to develop WASH-HIV integration programs in the four countries: Ethiopia, Kenya, Tanzania and Uganda. We further thank our partners in all the countries: ministries of health and water, national HIV/AIDS programs, NGOs, community groups and the families who contributed to making these experiences rich and valuable for others around the world facing similar challenges.



**Evidence base** 

make a menstrual pad

There are only a few hygiene studies on those affected by HIV. However, research on hygiene in general has shown that improving hygiene practices means that, over time, there will be far fewer cases of diarrhoea, influenza, respiratory infections, skin infections and worm infections. Handwashing with soap reduces the number of cases of diarrhoea over time by around 40% (Curtis & Cairncross, 2003), safe water treatment and home storage by 30-50% (Fewtrell et al., 2005), and proper disposal of faeces by 30% or more (USAID, 2004). John Lule et al., (2005) undertook research on WASH and diarrhoea disease in HIV households in Uganda. This study showed that when there was simple water purification and safe water storage used by persons with HIV, the number of times they had diarrhoea decreased by one-fourth (25%), and the number of days with diarrhoea by one-third (33%). When soap and a latrine were present, the number of days of diarrhoea was reduced.

# HIP's approach

The Hygiene Improvement Project (HIP) reviewed national policies and HIV programs in different countries and found that while WASH is generally accepted in HIV programming, it was not treated in enough detail. To fill this gap, HIP has worked to improve water, sanitation, and hygiene practices within on-going HIV programs.

Changing behaviour is difficult and not always successful as people have different reasons for practicing or not practicing a behaviour. Often behaviour change uses top-down approaches that just tell people to change their behaviours. Instead, the HIP approach is to discuss the options of different improved practices and identify any potential problems and solutions that the family might experience. Then the facilitator will help the household member agree to try one or two new practices for a few weeks. This process is called 'negotiating improved practices'. Gradual change is easier. With this in mind, HIP uses an approach of the Academy for Educational Development called *Improving Behaviours* through Negotiating Small Do-able Actions. The idea is to identify small, easy steps that move people from a current hygiene practice toward the ideal practice. Small do-able actions must be considered possible by the target group where they live and with current resources, while also having a personal and public health impact.

Before getting people to try these small do-able actions, however, HIP had to identify current practices and the small steps that people would find acceptable to move towards the ideal. HIP conducted formative research in Ethiopia, Uganda, and Tanzania and fed the findings from this to Kenya, with adaptations to the local situation.

# Trials of improved practices: research

The Hygiene Improvement Project used a research approach called trials of improved practices, developed by subcontractor, The Manoff Group. Trials of improved practices help in understanding current practices and finding small do-able actions within a country's cultural, socioeconomic, and environmental setting. After congratulating people for their current safe WASH practices, researchers invited household members to try a set of improved WASH practices. They discussed the benefits and problems in practicing them and suggested solutions. Using this research, HIP made a menu of options for household members to improve WASH practices — small steps to move people closer to the ideal practice. The small, do-able actions below are for faeces

management. Households work on one or two practices at a time. People may not be able to do all the actions in this list at the same time. It is often easier to start with one or two practices and when these become automatic, to add one or two more. For example, if a household is using locally available materials such as branches and grasses for the walls and door of the latrine, it might be easy to make the latrine bigger. But if the family already has a latrine with brick walls, that might be more difficult to change, so perhaps the family could install a pole in the latrine to help someone who is weak to use it.

Table 1. Small do-able actions for faeces management

Current practice needing improvement	Small do-able actions
<ul><li> Open defecation</li><li> Plastic bags used for defecation</li><li> Buckets store faeces for hours</li></ul>	All family members use latrine or potty, day and night
Difficulty using poorly constructed latrines	Construct larger latrine with support poles/stools to help weak people who have HIV or AIDS
Faeces in potty dumped inappropriately	Bedridden and children use potty and faeces are disposed of in latrine immediately after defecation     Wash potty with soap and water
Bed-bound person soils bed and lays in excrement for hours	Use plastic sheeting under sheet to protect bed
Animal faeces found in household compounds	Keep animals out of house
Caregivers do not protect hands from client faeces	<ul> <li>Wash hands after using latrine or disposing of faeces; place handwashing station next to bed-bound person</li> <li>Caregivers protect hands with gloves/plastic bag when touching patient's faeces</li> </ul>

# **Negotiating small do-able actions**

HIP trains outreach workers to follow the steps below to implement small do-able actions that households can implement one or two at a time.

- 1. Assess the household member's current hygiene practices.
- Identify existing safe hygiene and sanitation practices to reinforce and congratulate householder/caregiver on these practices.
- Identify a few practices to be improved and negotiate (discuss and come to a mutual agreement on) options with caregivers of the person with HIV to try out before the next visit.
- 4. Find out from household members how the improved practice worked and identify the benefits and solve problems that prevent the person from continuing the improved practice. Support continuation of the good practices.

# **Country activities**

With funding from USAID, HIP staff members work in four countries in East Africa: Ethiopia, Uganda, Tanzania and Kenya. Each country program is slightly different, but all have elements of the program components described below:

### Reviewing national policies and guidance

HIP reviewed existing HIV policies and guidelines to improve the WASH-related language. Often the words used are correct but not specific enough for people to change their behaviour effectively. So instead of saying, "Always use clean and safe water," HIP suggests rewording guidelines: "Treat drinking water with a proven treatment method and store water in a narrow neck container with a tightly fitting cover. Serve water by pouring it from the container (or use a container with a tap or transfer water to a covered pitcher). If water cannot be poured, use a ladle and store it by hanging it on the

edge of the container on the inside or on the wall above the container."

### Establishing a community of practice

The Hygiene Improvement Project (HIP) formed a community of practice in each country – a group of development partners already working on HIV or community WASH. They met regularly to discuss gaps in the program, share experiences, and develop HIV materials on water, sanitation and hygiene to use in their projects. Members of the community of practice were pioneering organisations that integrated WASH into existing HIV programs. At workshops in Ethiopia and Uganda, the members identified ways to put WASH into on-going projects and committed to a cascade approach to training. Cascade training begins with a training of trainers who then train other workers at the next level, who then may train other workers, and so on. The training has different topics, in modules, so groups with two hours could choose one topic while others could have a one- to three-day training course depending on time and resources available.

# Developing country-specific materials

HIP made a Toolkit for both Ethiopia and Uganda and is developing them in Tanzania and Kenya. These materials can be changed to suit the local setting and include manuals, tools, job aids for outreach workers and WASH-HIV indicators.

 The training-of-trainers manual can be adapted to put WASH practices into HIV programs. The whole training can take from 9 to 24 hours, but can be done in a set of shorter sessions.

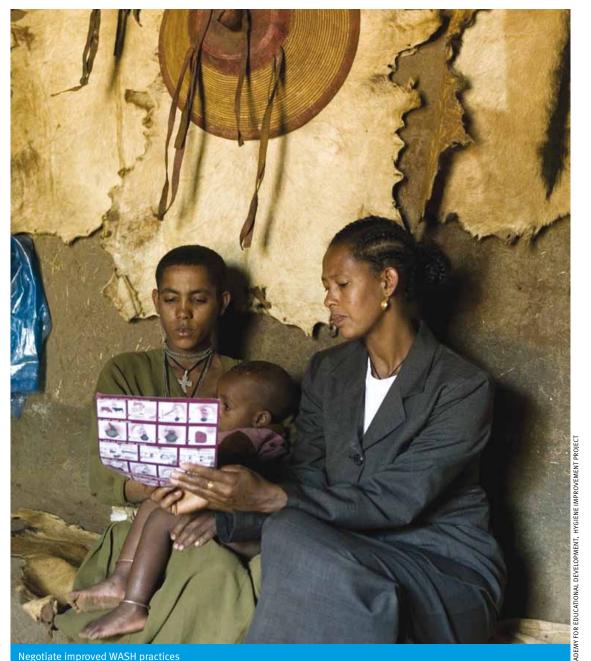
- Assessment tools use pictures that show steps from least desirable to ideal practice.
  The assessment cards help outreach workers decide what people's current practices are within the three key WASH behaviours of proper water treatment/ storage, faeces management and handwashing, plus menstrual blood management. From this tool, workers choose one practice that needs improving. The workers discuss this with the household member and come to an agreement with the household member to make the improvement.
- Job aids (counselling and reminder cards)
  guide the outreach worker through the
  negotiation steps for selecting and
  implementing an improved behaviour
  when talking with the household member.
  The cards help remind the outreach worker
  about all key messages to deliver regarding
  improved practices.
- Monitoring and evaluation indicators
  measure activities and results of the WASH
  activities in reducing diarrhoea and
  improving quality of life.

# Improving practices in Ethiopia

Two months after completing a WASH training, workers in home-based care in one Ethiopian NGO reported that almost 80% of their clients had built tippy taps — water-saving devices made from plastic containers for washing hands. Further, when Tagegn Dessie, 30, who lives with HIV, became too weak to use the latrine, care worker Adisnakew constructed a strap made of rope to help support her. It really helped my legs so I wouldn't collapse when I went to the bathroom, said Dessie. Adisnakew installed a water bottle next to the latrine and attached a piece of soap on a rope in front of the latrine. This made us remember to wash our hands after using the latrine; even my children started washing their hands after going to the bathroom. Before only my husband and I washed our hands.



Home-based care worker washing hands with tippy tap



# Providing intensive assistance during integration

In Uganda and Ethiopia, a training of trainers was held for organisations that support improved home-based care for people with HIV and AIDS. After the training, HIP continued to help the organisations integrate WASH activities into their on-going programs. Depending on the organisation's need, HIP worked to convince senior managers about the importance of the WASH-HIV project, gave technical back-up or were co-trainers during the first "rollout" trainings for fellow staff members, helped integrate WASH into job descriptions, budgeted line items to ensure WASH activities could continue, and so on.

# Integrating WASH into existing HIV policies and programs

At the national level, HIP worked with HIV programs and ministries of health and water to put WASH into policies and tools for home-based care of people who have HIV and AIDS. It helped to review policies and documents, such as the Ministry of Health/ World Health Organization Caregiver Handbook for home-based care in Uganda. In Tanzania, the WASH needs of special groups (for example, those living with HIV and AIDS) were added to the national policy. The HIP team worked with Uganda's Village Health Programme to incorporate WASH into existing training. For non-governmental organisations, HIP found that "indicators of success" helped to ensure WASH activities would continue. For example, putting WASH into job descriptions increased the likelihood that staff would have the time and authority to carry out activities. And, if an organisation had WASH indicators to measure success, then budget and staff time was more likely to be given.

# Strengthening WASH while improving acceptance

To make this project more acceptable, Tanzanian volunteers in home-based care promoted the small do-able actions at the same time as a general behaviour change campaign promoted improved WASH practices for all.

# **Monitoring progress**

Monitoring progress of water, sanitation and hygiene activities in HIV programs was difficult because the communities of practice involved many organisations. It was not easy to monitor the training or the activities at the household level. HIP conducted the first training of master trainers in each country and easily monitored training quality and numbers trained. However, afterwards, monitoring progress within organisations was challenging because the timing of the next trainings was linked to the organisations' internal schedules, which varied widely. Getting information from organisations on numbers trained, households reached, and behaviour change in households was also difficult. For instance, in Uganda a total of 73 "master trainers" and 214 community field workers were trained from various organisations, forming a pool of over 287 resource persons in the country to support WASH promotion. However, the master trainers have continued to train individuals within their respective organisations and data is not available on exactly how many they have already trained or plan to train in the future. In Ethiopia, 80 master trainers from 10 organisations and some freelance were trained, and in turn trained 450 outreach workers, but it is likely that many more outreach and clinical workers have been trained by those trainers that we have not been able to track.

# Lessons and way forward

# Building a community of practice takes a driving, committed champion

Most organisations involved in HIV/AIDS and organisations in water, sanitation and hygiene need to be brought into the community of practice. Working together they can improve policies and develop materials and action programs. HIP was the driver in this effort and recommends that to expand the program, some organisation or individual needs to drive the integration in every setting.

In each case, the country-level communities of practice included organisations from both the WASH sector and the home-based-care HIV sectors. The WASH sector gave technical input and built trust for the process and materials so that senior management accepted the recommendations and materials. WASH organisations also gained an understanding of the special needs and possible ways to assist families affected by HIV and AIDS.

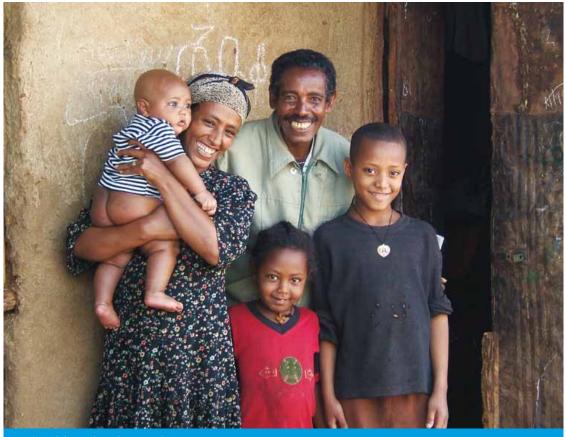
The community of practice model allowed for differing styles of integration to develop at the same time because each participating organisation integrated WASH into its current, on-going program. This strengthened the learning because activities were flexible and could be used in various kinds of HIV programs. Materials were also developed for different types of situations. It is hoped that this model will be able to continue on its own; "outside" financial inputs were minimal and included training an initial group of trainers and developing support materials, but not funding day-to-day field activities.

### Maintaining quality

Many countries have hundreds of workers in HIV/AIDS prevention and support activities, and most need training on how to work on water, sanitation and hygiene to improve behaviour in households. Thus, organisations train their staff who then train other workers. This cascade training frequently decreases in quality when the master trainers from the initial training are not directly involved in fieldwork. HIP found that only a few individuals in each training-of-trainers learned enough about the technical information and training techniques to train others successfully. The best of these trainers need to be used very wisely to make the program a success. Supportive supervision and spot-checking of training activities can help to identify when training is changing for the worse, and therefore, can identify where to strengthen it before the next training.

# Attention to enabling technologies, particularly sanitation hardware

The average pit latrine needs to be improved for people with HIV who are still mobile (not bed-bound). These changes can be: enlarging the superstructure around the pit to allow a caretaker to help the sick person, adding poles or stools to support weaker people over squat holes, or, clearing obstacles like rocks, roots, or holes on the latrine path. A lesson was that attention is needed for the "hardware" in toilets. One strategy for promoting improved sanitation practices is setting up model latrines in key places (like health centres, churches, or markets) to show how simple changes can improve use. Promoting latrines designed for the elderly and others who have difficulty moving can



Family with home-based care worker

also improve the acceptance of latrine improvement for people with HIV, thereby reducing stigma. Often, disability groups can provide technical assistance to construct and maintain these improved latrines.

# Small do-able actions are common across countries

Through work in four different countries, HIP has learned that most small do-able WASH actions are the same across countries. This

means that small do-able actions can be piloted and checked in new country settings with a small amount of research and change or adaption as necessary. Usually the list of do-able activities changes only in small ways in different settings. The list, for example, sometimes includes local water containers or water treatment products available. This can shorten the timeline for starting activities in new countries.

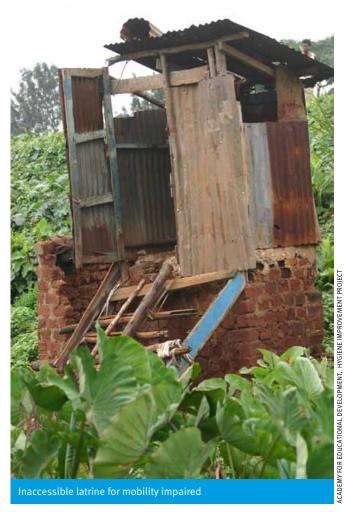


Figure 1. Assessment tool



USAID HIP HYGIENET

### **Conclusions**

Integrating WASH into HIV/AIDS programs is a useful way to meet the water, sanitation and hygiene needs of families affected by HIV and AIDS. Small do-able actions that a household can adopt without added resources or inputs make it possible to change behaviours to improve the lives of people who have HIV/AIDS and the entire household. Program guidelines and implementation tools developed in a few countries serve as a solid base for initiating this integration into on-going programs in other country settings.

# About the project

The USAID Hygiene Improvement Project is a six-year project funded by USAID that aims to reduce diarrhoeal disease prevalence through the promotion of key hygiene improvement practices, such as handwashing with soap, safe disposal of faeces, and safe storage and treatment of drinking water at the household level.

### References

Dry in sun. (;;)

Curtis, V. & Cairncross, S. (2003). Effect of washing hands with soap on diarrhoea risk in the community: A systematic review. *The Lancet Infectious Diseases*, 3 (5), 275-281.

Fewtrell, L., Kauffman, R.B., Kay, D., Enanoria, W., Haller, L., & Colford, J.M. (2005). Water, sanitation, and hygiene interventions to reduce diarrhoea in less developed countries: A systematic review and meta-analysis. *The Lancet Infectious Diseases*, 5 (1), 42-52.

Lule, J. R., Mermin, J., Ekwaru, J. P., Malamba, S., Downing, R., Ransom, R. (2005). Effect of home-based water chlorination and safe storage on diarrhoea among persons with human immunodeficiency virus in Uganda. *The American Society of Tropical Medicine and Hygiene*, 73(5), 926-933.

USAID. (2004). Environmental Health: Technical and Program Background. US Agency for International Development. Accessed at: http://www.usaid.gov/ourwork/global health/home/News/ehaad.pdf.