



Photo: Mike Webb, Tear Fund

HYGIENE BEHAVIOUR

by Paul Dean

PROVIDING A CLEAN WATER SUPPLY and encouraging people to build latrines should surely be enough to ensure good health. In the past people have certainly believed this to be true. However, an evaluation of a water and sanitation programme by the Ministry of Health in Botswana (UNICEF), though it brought many positive benefits, included these interesting results...

- Water that was clean at source was highly contaminated by the time it was consumed in the home.
- Households adopting VIP latrines (page 12) still had a high incidence of diarrhoea.
- Approximately 75% of men with latrines in their compound still urinated in the bush.
- Approximately 75% of children with latrines in their compound did not use the latrine.

It was then discovered that nearly 85% of the households which had built VIP latrines had received no health education information either before, during or after construction. This may help to explain some of these results.

The bicycle in the latrine

Several studies report latrines being used as stores for food, bicycles or other things, rather than as toilets. This may be

because there was no advice about how and why to use the latrine when built, just like the project in Botswana above. Much of the money and energy put into the project, by community members as well as the project team, will have been wasted.

Few people would let a child use a bicycle without first finding out if they could ride it. If I give something to somebody I usually make sure that they know how to use it first – if not, I would teach them.

Understanding why

But that may not be enough either. Sometimes it's important to know **why** we have to do something, as well as **how** to do it. This is especially important when it is difficult to link the results of our actions with their cause.

Understanding that my faeces contain substances that can harm me and those around me, and that I need to dispose of them carefully and wash my hands straight afterwards is not obvious.

In the same way, it may be difficult to understand why I have to clean out the container I collect my water in, why I should not drink from the cup I use to draw water out of the pot, and why I should cover the pot when not in use. The water does not look any different, even if I don't do all these things.

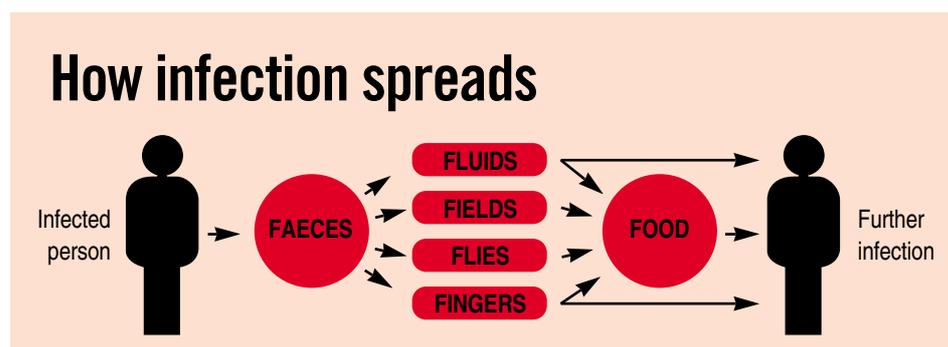
So **knowledge** is not always sufficient to solve a problem. It needs to result in a change in **practice** too, which usually first requires a change in **attitude** to the situation.

The cycle of infection

The UNICEF figures quoted in the article on page 1 show the importance of sanitation and hygiene in breaking the cycle of infection. This is because many of the infections that cause diarrhoea are related to poor sanitation and hygiene behaviour.

The diagram below shows the main ways in which disease is passed from an infected person to a new host. Sanitary disposal of faeces, hand washing after defecation and before handling food and drinking water are therefore very important activities.

Diarrhoea, dysentery, typhoid, many kinds of intestinal worms, bilharzia, scabies, typhus and trachoma (eye infection) can all be reduced through improving personal hygiene and





sanitation. Activities to improve these behaviour patterns should be part of any water and sanitation programme.

Local priorities

But social, cultural and economic conditions may result in people having other priorities which make it hard for them to change their attitudes and practices. Like so many other development activities, hygiene education should be relevant and realistic. It should not be limited just to providing information and promotion of latrines and hand washing. It is important to make sure that education is relevant to people's local concerns and resources.

Discussing how defecating or urinating into or close to water can transmit bilharzia will only be relevant in areas where bilharzia is a concern. Preventing small quantities of water lying around the house in tin cans, tyres and jars can control the breeding of mosquitoes which carry dengue fever – but only in areas where these mosquitoes exist!

Hand washing

Washing hands after using the latrine will be difficult if water is scarce. The use of a 'Mukombe' (*Footsteps 14*) or 'Tippy Tap' (page 20) may help. If no soap or wood ash is available, it has been shown that simply rubbing your hands in soil before washing them is better than just rinsing them in water. Improving water quality by boiling is difficult if time and fuel are in short supply. For most needs, a simple three-pot system or exposure to sunlight (*Footsteps 1*) could be adequate.

Water containers

People should be encouraged to scrub and rinse water containers with clean

water before refilling. Drinking water should be stored in covered jars in the home, using a cup on a handle or a long handled dipper to collect the water. This will prevent fingers touching and contaminating the water. People should never drink directly from the dipper.

Involving everyone

Programmes must also be participatory. This will allow everyone to talk through the problems, priorities and possibilities that exist and allow programme workers to find out local priorities, practices and preferences. It may mean holding meetings and education activities to fit in with local work patterns, farming practices or social activities, rather than for the

convenience of programme staff. For example, in some countries the poorest people are often landless and have to farm the land of others to earn money. They could therefore miss community meetings and be further marginalised if meeting times are not chosen carefully.

Above all, everything should be designed to meet the local situation and result in appropriate changes in **practice**.

Paul Dean worked for seven years in Uganda with Tear Fund and is now a consultant in Rural Infrastructure and Civil Engineering.



FROM THE EDITOR

WE'RE CELEBRATING reaching *Footsteps 30* by including an index and also adding an extra four pages – just for this issue. This allows us to reprint some useful material (with some changes) from Issues 1 and 9 when our readership was small.

In this issue we look at the three related subjects of Water, Sanitation and Hygiene. It is now realised that these three must go hand in hand to achieve real improvements in health. Richard Franceys and Paul Dean have helped to provide articles and practical instructions for each of these three key areas. Issues for both rural and urban situations are considered. We show how to build a water tank for use alongside a home, school, health centre or church. (We know from your letters that some groups successfully followed the instructions on building this tank from *Footsteps 1*.) In a future issue we will give a short article on making cement water jars which are ideal for use in the home.

We also look at how to understand and help change people's attitudes through hygiene education, and there's a quiz to check out people's understanding. We have some useful ideas for low cost latrines, in particular, the use of sanplats. Sam Kayaga of the National Water Supply and Sewerage Corporation of Uganda considers why we have to pay for water supplies. And we've included some ideas for visual effects to enliven health teaching or drama.

Many readers continue to send in good articles on a variety of subjects. These are included whenever possible. However, longer articles which do not fit any of the themes we are looking at are often difficult to find space for. I now have so many such articles that we are using the next issue as a 'follow up' to provide the opportunity of including a mixture of articles from readers.

Isabel Carter