

FACT SHEET

Sustaining Hygiene Behaviours

Abstract

After a programme ends, are hygiene practices continued in the household and community? How do we design projects for sustainable behaviours? Such questions are central to effective programming.

It is not inevitable that behaviours will fade or that as years go by people will revert to earlier, less hygienic practices. However, in water and sanitation programmes, continued access to water and sanitation services is not enough to sustain hygienic behaviours. It is the so-called "software" aspects of the programme that are more important. Thus hygiene promotion and education should not be low-visibility "add-ons" to water and sanitation programming. Sustained behaviours result from giving high priority to hygiene promotion and education.

This priority should begin when the programme is being planned and designed. One element of this includes ensuring a long enough duration for the hygiene intervention with intensity to build accepted and widely-practised behaviours during the life of the programme. In other words, small "demonstration projects" will usually not lead to sustained behaviour. Other elements that contribute to sustaining behaviours include using careful preparatory research, focusing on a limited number of behaviours and ensuring personal contacts. Another important element is differentiating the strategies for different target groups, different behaviours and localities. One uniform approach or "recipe" will probably not work.

The Issue

Improved health is a stated goal of most water and environmental sanitation projects. The idea is that when people use (and maintain) safe water and sanitation facilities as intended, their hygiene and health status will improve. That this may not happen automatically has led many

water and sanitation programmes to promote improved personal and household hygiene behaviours. It is assumed—and indeed it is essential—that these safe hygiene practices continue beyond the end of a project or programme. The health of the population and effectiveness of project is intimately bound to the sustainability of hygienic behaviours.

Given the importance of such hygiene practices, it is perhaps surprising that relatively little is known about how to design programmes for sustained hygiene behaviours. In other words, what are the strategies for hygiene promotion and education in a particular situation, that will help people continue safe practices after an intervention has ended? Without this knowledge, projects tend to be designed based on personal experience and intuition, rather than proven strategies. Specifically,

- Which hygiene behaviours are sustained? Why?
- Which project strategies will ensure that hygienic behaviours continue for months and years after the intervention?

Hygiene practices and behaviours are the things that people do which reduce the chances of becoming ill. Good hygiene practices reduce the incidence of diarrhoea, parasitic infections, skin and eye disease. These hygiene behaviours include: the use of water for personal cleanliness, safe food preparation and storage, environmental cleanliness in and around the household, disposal of solid waste and waste water, removing human excreta from the human environment, and control of animals. Among this large number of behaviours, those that are usually considered to provide the greatest health advantage are handwashing (especially after contact with faeces) and the safe disposal of human excreta (1). Many studies suggest that sanitation and water-related diseases in the developing world could be reduced by 43% if compliance with handwashing after defecation was achieved (2).

What Research Says

In the literature about sustainability of hygiene behaviours, two lessons

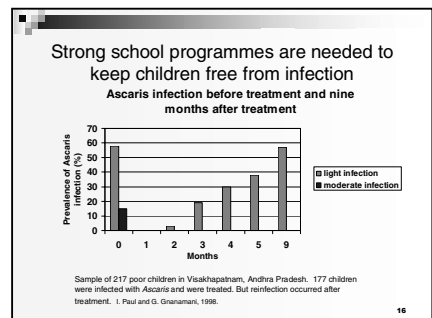
appear frequently in research from various disciplines. These are:

Knowledge is not enough.

Having information can be very different from applying it. With respect to hygiene behaviours, people tend to know more than they practise. This is demonstrated strikingly in a review of 12 research studies about compliance with handwashing hygiene by medical professionals in hospitals in North America and Europe. Usually less than 50% of the time did the health care workers (nurses and doctors) comply with required handwashing practice (3).

Single, one-time interventions are not effective.

Single interventions or treatments that are not supported by follow-up and education may have limited results and not lead to sustainable health improvement. The graph below provides a typical illustration of the limitations of short interventions. It deals with de-worming in school health programmes. The illustration shows that most of the children became re-infected within nine months after a one-time treatment for *Ascaris* infections(4). Rather than single interventions, repeated promotion with follow-up is needed.



A research study examining the sustainability of hygiene behaviours in water and sanitation programmes is currently taking place in six countries (Ghana, India, Kenya, Nepal, Sri Lanka and Uganda). In each country the continuation of hygiene practices is examined 2 to 5 years after an intervention has ended. The focus is on handwashing, latrine use and maintenance, and safe water storage. Although the final round of the study in each country has just been completed, the following tentative findings have emerged (5).

Construction is not enough to ensure sustained hygiene behaviours.

Construction refers to the hardware inputs such as the siting and physical implementation of water points and latrines. All the communities in the study had access to safe water supplies, although there were differences in location of the water sources, access to the water point, distance and time taken to collect water. However, it was consistently found that the location of water points and availability of water during the day and during the year was less strongly related to hygiene practices than other inputs such as hygiene promotion. In some studies, the households that spent more time collecting water or had less consistent supplies, for example, had better hygiene practices. The six studies demonstrated that access to water and sanitation alone does not ensure sustained healthy practices. Thus, making things more convenient is not the whole answer. This finding supports experience in water and sanitation programmes over the past decades which also showed that providing access to water points and latrines does not ensure their use. There is a clear programmatic implication in this. Hygiene education and promotion are not small add-ons or extra luxuries in water and sanitation programming. Promotion and education related to hygiene practices are essential inputs to ensure programme effectiveness.

Knowledge and skills are ahead of practice

People working in health and social intervention programmes are usually aware that knowledge does not automatically lead to application of that knowledge. This was confirmed in these six studies. Knowledge of hygiene practice was high (86%-98% for handwashing and latrine use). This tended to be greater than skills (60%-98% for handwashing demonstrations). Both knowledge and skills were better than practice (30%-78% practised handwashing and used and maintained latrines). The exceptions were some project areas in southern India (Kerala) with a very long intervention where practice matched knowledge. The implication is that repeating and memorizing

messages about good practice does not ensure those practices. Hygiene promotion and education need to be developed with care and with consistent follow-up.

Practices that are firmly in place tend to remain

If hygiene behaviours, such as using of latrines or handwashing, are accepted and generally practised, then these behaviours tend to continue. Behaviours tended to continue unless basic inputs needed for those behaviours were changed (such as water supply, cost of soap). The behaviours that are firmly planted in the household and the community tend to continue years after the intervention has ended. This was shown in studies in India, Sri Lanka, Nepal and Ghana.

This has some important implications for planning programmes. First, programmes should seek to build a high level of practice in a community. Experience has shown that isolated pilot projects do not lead to sustained practice where, for example, a few latrines are constructed in a community. Secondly, investments in changing hygiene practices need to be sufficient to reach many groups and numbers of people in depth. In hygiene promotion, unlike some construction activities, more investment is more effective than less investment.

Length of intervention is important

The length of the intervention is more important than how long ago it ended. Longer interventions were related to better handwashing behaviours in the Indian study ($p < .001$ for handwashing), Nepal ($p < .001$ for latrine use), food covered ($P < .01$ for Sri Lanka). The amount of time spent on the intervention was more important than whether the project ended two or four years ago. This implies that hygiene behaviours, once well established within communities, tend to continue. It also implies that hygiene interventions should continue beyond one year, and beyond the time of physical implementation of water points or latrines. Too often, once construction is completed, the community and household are left alone. However, longer hygiene interventions with follow-up will have

strong impact in supporting hygienic behaviours.

Hygiene promotion and education should be intensive

The intensity of the hygiene promotion and education is important in leading to sustained practices. More intensive hygiene activities involved more groups such as water and sanitation committees, women's and youth groups, local leaders, schools, project field staff. More intensive hygiene activities also use different channels to reach people such as community meetings, home visits, contacts in classes, traditional media. More intensive hygiene promotion leads to improved practices for handwashing (Uganda, India, Ghana) and latrine use and maintenance (Kenya and India).

Personal contact is needed

In some countries funds for hygiene promotion are mainly spent on materials and mass activities, usually known as *I.E.C.* (Information, Education and Communication). However, personal contacts are essential to create and sustain some hygiene practices. The studies in Ghana and India showed that for the behaviours that are more difficult or new (that is, they are practised by fewer families), then personal contact through home visits were needed. Home visiting led to better availability and location of water and soap for handwashing and use of a separate cup for drinking water. This can have budgetary implications.

Keep focus on a small number of hygiene practices

Promoting too many practices does not lead to changing or sustaining healthy behaviours. This principle is a cornerstone of social marketing. In social marketing, a few key behaviours are targeted using attractive information based on what specific groups of men, women and children do, want and think. For example, in a successful programme in India, fathers were specifically targeted with the idea that having (and using) a latrine would build the prestige of the family and increase property value. Further information about this can be found in the FACT SHEET on hygiene promotion in this collection.

Different strategies are needed for different starting levels

Hygiene promotion and education should not be based on one uniform approach for all behaviours. Of course hygiene practices show great variety. Some are already practised by many people, others are only the behaviours of a few. Some require little financial input, others much more. Some are rather closer to past behaviours while other new practices require a big change.

Where the starting level is lower, different strategies are needed than when a practice is already fairly well known and accepted. To aim for sustained behavioural change, the initial strategy should have a good fit with the situation. In part this is because it is easier to motivate people where more families in an area already practise a behaviour such as having and using a latrine. Experience in Mozambique and Kerala has shown that, where acceptance is initially low, a supply-driven approach may be necessary to establish a platform from which more demand-oriented programming may develop (5). Previous knowledge and practice in Uganda and Nepal was also related to how well hygiene behaviours were sustained (6). Our experience is that initiating a latrine-with-promotion programme can be very challenging where less than 1 in 10 households have a latrine.

We may define the *starting level* as the expressed demand that is shown by the proportion of those who already have a facility or practise a particular behaviour at the beginning of a planned intervention. If we are aiming at sustained practices, then it is important to recognize that different entering levels imply different timelines, expenditures and strategies. For example, where less than a certain level/percentage of the households practise on-site defecation at the beginning of a programme intervention, then more emphasis is needed on demand creation, social marketing or mobilization.

References

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This Fact Sheet was developed by Kathleen Shordt, IRC (May 2003)

¹ Research teams are associated with the following organizations: the Volta Rural Water Supply and Sanitation Project in Ghana, the Socio-Economic Units Foundation in Kerala India, NETWAS (Network for Water and Sanitation) in Kenya, NEWAH (Nepal Water for Health) in Nepal, COSI in Sri Lanka and WaterAid in Uganda. The research is supported by the European Union and the Netherlands Directorate General for Development Cooperation. The IRC International Water and Sanitation Centre and London School of Hygiene and Tropical Medicine provide technical support.