A WELL FACTSHEET

E

Author: Ann Maria Mooijman, December 2003
Quality assurance: Christine van Wijk and Sandy Cairncross
Edited and produced as a PDF document: May 2020

After introducing the reasons for and meaning of hygiene promotion, this fact sheet presents an overview on the evaluation of hygiene promotion programmes. Readers will also find one example and some key documents and contacts.

I

Unhygienic environments place children at risk of death. Some 1.5 million deaths of under-fives a year are caused by diarrhoea[1], deaths which can be avoided if diarrhoea in this age group is prevented or appropriately treated[2]. Diarrhoea also stunts children's physical and intellectual growth and is a huge cost factor. Overall, 2.2 million people died because of diarrhoea in 2002. Hygiene promotion is an important instrument to reduce diarrhoea.

> Peru's 1991 cholera epidemic cost the national economy US$ 1 billion in public health expenses and loss of tourism and exports in just 10 weeks. Much less would have been needed to provide the clean water supplies, improved sanitation and hygiene promotion that would have prevented the epidemic in the first place.

W i E

Whether hardware facilities are available or not, the best way to protect people, and in particular children, from diarrhoeal diseases is a more hygienic environment and behaviour.

In the 1990's, Steven Esrey found that:

- safer excreta disposal led to a reduction of child diarrhoea of up to 36%,
- better hygiene through handwashing, food protection and domestic hygiene brought a reduction of 33%,
- improved water supply led to a reduction of only 15-20%

He also showed the importance of synergy between technical solutions and improving behaviour.

A recent review study[3] showed that washing hands with soap can reduce the risk of diarrhoeal diseases by 42–47%. Interventions to promote hand washing might save a million lives a year. The result of these studies is encouraging for governments, donors and NGOs willing to undertake more hygiene promotion programmes.

---

1 *Black, R., Morris, S., and Bryce, J. (2003). "Where and why are 10 million children dying each year?", The Lancet, Vol 361, June 28, 2003.*
2 *Jones, G., et al. (2003). "How many child deaths can we prevent this year?", The Lancet, Vol 362, July 5, 2003.*
3 *Curtis, V., and Cairncross, S. "Effect of washing hands with soap on diarrhoea risk in the community: a systematic review.", The Lancet Infectious Diseases, Vol 3 nr. 5, pp 275-281, 2003*

There are also other powerful arguments for improved hygienic conditions. They can lead to[4]:

- Heightened personal dignity and national pride
- Savings in health costs
- Higher worker productivity
- Better learning capacities of school children
- Strengthened tourism
- Increased school attendance, especially by girls

?

According to UNICEF (1999), hygiene promotion is a planned approach to preventing (especially) diarrhoeal diseases through the widespread adoption of safe hygiene practices. It begins with, and is built on what local people know, do and want.

Effective hygiene promotion reduces the main risky hygiene practices and conditions for women, children and men. It does so in a measurable way, to a significant level, in a pre-set period and with available resources. This is not only important for the development of hygiene education materials, but also for the design and evaluation of the promotion programmes and facilities.

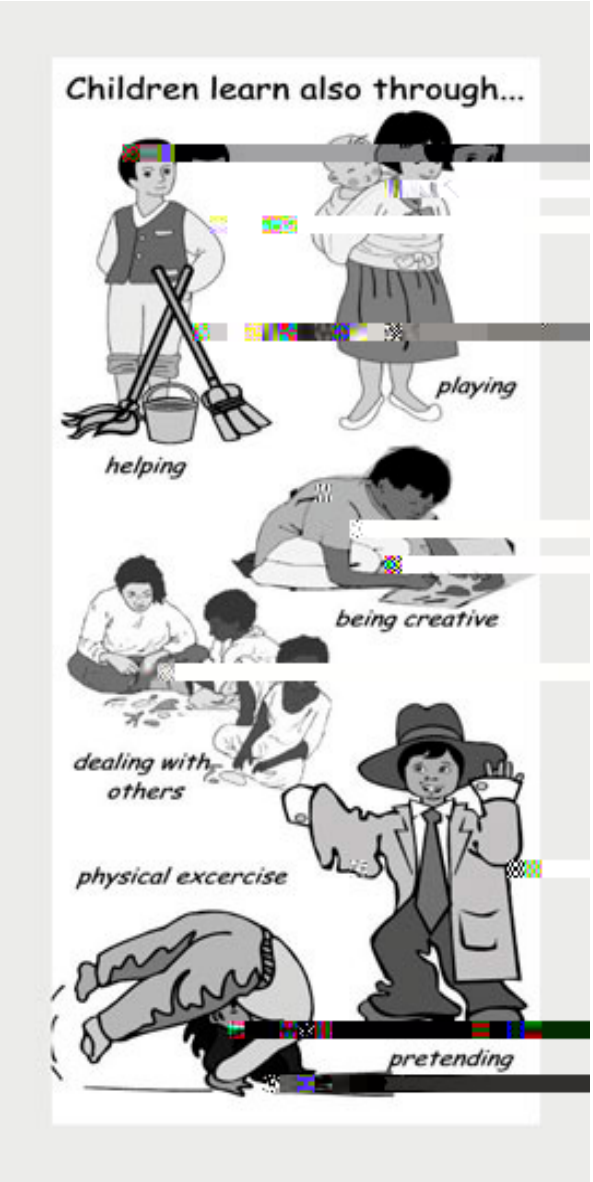
H :

1. Target a small number of risk practices.
2. Target specific audiences.
3. Identify the motives for changed behaviour.
4. Hygiene messages need to be positive.
5. Identify appropriate channels of communication.
6. Decide on a cost-effective mix of channels.
7. Hygiene promotion needs to be carefully planned, executed, monitored and evaluated.

[4] *Based on the brochure "Sanitation for All", UNICEF Division of Communication, New York, USA, January 2000.*

H

Most hygiene promotion is developed for adults. Young children do not possess the same skills, knowledge and ability to learn complex concepts as older children (or adults), and they learn differently.



?

In general, evaluations of hygiene promotion programmes are carried out for the following reasons:

- To show the beneficiary communities the impacts and improvements made so far and identify hurdles still to be taken (evaluation as motivator)
- To show programme managers and staff the strength and weaknesses of the programme and show where adaptations are necessary (evaluation for programme improvement)
- To show policy makers the impact of the programme with the aim to get them more involved; through allocation of more resources, expansion of the programme or the lifting of hurdles in the legislation (evaluation for advocacy purposes)
- To get objectively measured information for sharing with peer experts (evaluation as scientific justification)

- To show donors the impact of the funds provided or to raise funds for future similar activities (evaluation for fund raising and justification of the use of funds)

Because of the complexity of the different expectations and the different target groups, it is important to design a hygiene promotion evaluation systematically.

B

A hygiene promotion programme consists roughly of three phases:

1. an assessment and planning phase;
2. an implementation phase; and
3. an evaluation phase.

Undertaking an initial assessment with a baseline study is an essential condition for the proper planning and evaluation of hygiene promotion programmes. The study helps to *analyse the existing problems concerning hygiene and sanitation in the programme area*, while taking into consideration the *different age-groups, sexes, ethnic groups and social classes*.

Typically such an analysis exists of the collec (a)-0.7 (l)1.8 (y)-16.3 x7 (l)-4.g3.9 8g phan impla

3.

Purpose. In general, an evaluation aims to show systematically:

1. How successful the project or programme has been in promoting improvement or changing hygiene practices with the given human and other resources; and
2. How the project or programme can be improved to overcome weaknesses detected.

In order to address the two above points it is important to define what is going to be investigated. Sometimes limitations in time, staffing or budget would require a prioritising of the issues to be evaluated. In general, information collection on the following is desirable:

- Hygiene practices. The most important information needed is on the current hygiene behaviour and the community's perception on what are 'good' and 'bad' practices. The most important practices to be studied are: (1) methods of human excreta disposal (2) hand washing, especially with soap (3) food preparation and storage (4) water source choice and protection (5) water handling and storage in the home. The locally prevailing health problems/diseases and the priority concerns of local people, and the baseline data collected, will determine which specific practices are investigated.
- Physical conditions: The presence and conditions of water supply, sanitation and hygiene facilities all influence to what extent people can practice better hygiene. Physical conditions such as lack of drainage or hard-to-clean latrine slabs can also bring new health risks.
- Variation between households and communities. Many hygiene conditions and practices have gender-specific roles and values associated with them. The same goes for age-specific practices and differences in views, conditions and practices of different ethnic and religious groups and social classes.
- Communication channels: the relevance of the messages to both sexes in the different social and age groups, and the effectiveness of ways to get them across such as; word of mouth, messengers, social gatherings, theatre, radio, TV.
- Health statistics: It should be noted that even if reliable health statistics are available, impacts will only begin to show up after a critical mass of behaviour change has been achieved for a sufficiently long time. For faecal-oral diseases, it should be kept in mind that just a small proportion of people with diarrhoea (who may not be typical) seek official medical care.
- Comparing the change in recorded incidence of sanitation, hygiene and water related diseases as a proportion of overall diseases (minus accidents and gynaecological treatment) can give an indication of impact. However, statistics are easily distorted by a wide range of potentially intervening factors, from breakdown of water supplies to change in availability of drugs. Hence, measuring actual conditions and practices (or their indicators) is more reliable and more useful for diagnosing weaknesses in the programme.

E

Once the purpose and focus of the evaluation and information demands have been agreed, the evaluation techniques can be selected. There are a number of methods that have been developed to measure behaviour change which have been widely field-tested. They are best used in combination to check for consistency and to see whether outcomes are reliable. The most common ones are:

- Structured observation of hygiene practices, e.g. observing and recording behaviour during water collection, storage and drawing;

- Structured observation of proxies of hygiene behaviour, e.g. the absence of excreta in yards and on rubbish heaps as an indication of the safe disposal of young children's excreta;
- Questioning of the people who are most likely to know about an issue (key informants), which requires techniques to deal with uninvited interventions from others with less knowledge, who may nevertheless take over for reasons of hierarchy, e.g. husbands or mothers-in-law. Probing techniques are often needed to move from polite answers to the real practices;
- Focus group discussion, which involves a more open-ended, but guided discussion among a group of 6 to 10 people. Skill is needed to keep the discussion on track without dominating it, but this is a very powerful method for discovering issues which an outsider would not think to ask about.
- Pocket voting, where women and men in the different groups are presented with drawings that show the various options and put their vote in the bag or box underneath their own, or their family's practice. Voting is done with tokens in different colours (e.g. blue for men, red for women) in order to allow separate analysis when all votes have been cast. It can be done at some distance or behind a cloth for privacy;
- Microbiology, e.g. tests of stored drinking water or of fingertips to assess contamination;
- Product measurement, e.g. sales of latrine slabs, soap consumption. See also Almedom et al. (1997).

It is often not possible to visit all communities and households. The evaluation can then be carried out in a sample. Samples should be random, that is, every community / household has an equal chance of being involved.

For a random selection, an investigator can draw slips of paper with the names concerned from a bag until the required number has been achieved. An alternative is to lay a grid over a map and choose grids, and communities/households within them, at random, e.g. with the help of a table of random figures.

In stratified sampling, differences which may affect hygiene, e.g. dry or wet environment or housing areas near and far from a protected water source, are identified first. Proportional samples are then taken from each group. For example, the programme may cover six wet and 12 dry areas, from which two wet and four dry areas are chosen at random before drawing the community sample.
For sample size applies in general 'the larger the sample, the better'. However, with increasing size, the statistical value of adding each additional case drops. As large samples are costly, but too small a sample will redu4o,37 (, t)0.8 (h)-4.3 (l v)-21.2 (a6-5.2 (l)812.4 (i9-5.4 (di)-5.6h t)-37.8 (y)334 (di)-5. .9 (i)-4.1 (h a thtic-1.1 (i(x)-6 (a6-5.2S(tic))-2.8 (-1.1 s)-11.9 (e)-1.2 (a)-2.81(c)1.7 (e)-13.) fi9-5. M7 (g7-5.2 (o)-4.5 (s)-14.3 (e co)-4.2 (n

may influence the evaluation outcomes, so it may be advisable to give only general information until fieldwork is complete. Teams also need training on how to deal with interference and practice probing to get beyond biased information.

The evaluation of hygiene promotion is labour intensive and in most cases would need a specially contracted professional study team. Preferably it is multi-disciplinary, equally balanced between women and men, speaking the local language and familiar with the local culture. The team leader should be a good manager, have writing skills and be able to make an assessment and analysis of the information collected. She/he should also be actively involved in the development of questionnaires, observation checklists and other tools.

- Introduction to Evaluation Objectives Description of the Project or Programme What is Hygiene Promotion/ Behaviour Change?
- Introduction to the different evaluation techniques.
- Exercises on interview skills and styles, facilitating group discussions, listening, observing, analysing a focus group Developing a common understanding of terminologies used, such as: clean, hygienic, badly maintained etc. and indicators of cleanliness, etc. to be agreed on by all

- Evaluation dynamics in one sample community (if possible documented by video or pictures)
- Discussion on ‘what works’ and ‘what doesn’t work’ based on the team’s own perception of performance and the objective observation of e.g. a video or pictures.
- A complete sample evaluation in a community using all tools.

of questionnaires, observation guides and other tools based on the experience during the group field practice.

In many cases, will not be ‘readily available’. Sometimes it is useful to use two

I - ?- A B F

The study estimated the cost-effectiveness of a large-scale urban hygiene promotion programme in terms of reducing the incidence of childhood diarrhoeal disease in Bobo-Dioulasso, Burkina Faso. The programme was funded by UNICEF and the Ministry of Health of Burkina Faso with technical support from the London School of Hygiene and Tropical Medicine.

The total cost to the providers was US$ 0.65 per head of population covered or $ 4.54 per 7-person household, after deducting the cost of the international research component. A large part of these costs (63%) consist of overhead costs: administration costs and undifferentiated start-up costs of the project. Most of the remaining costs consisted of the field activities, with roughly equal shares going to house-to-house visits, discussions in health centres, hygiene lessons in schools, and street theatre presentations.

The households who adopted the improved hygiene practices (18.5%) also made costs. They amounted to $8 per household per year. More than 90% of this was expenditure for soap for hand washing. On the other hand, the researchers estimate that these households will be saving almost twice as much ($15 per household per year) in direct costs of less medical care and indirect costs due to a lower loss in productivity from fewer illness and deaths from diarrhoea. For the whole study population, these savings would amount to $2.80 per household per year. Of this total, 93% represented the lost future productivity associated with the deaths of young children.

The researchers concluded that hygiene promotion reduces the occurrence of childhood diarrhoea in Burkina Faso at less than 1% of the Ministry of Health budget and less than 2% of the household budge. It could be widely replicated at lower cost

Source: Borghi, J., Guinness, L., Ouedraogo, J., and Curtis, V. (2002). Tropical Medicine and International Health Vol 7 No 11: 960-969 November 2002

R

F

http://www.wsscc.org/load.cfm?edit_id=150

http://www.unicef.org/programme/wes/pubs/behav/behav.htm

http://www.who.int/water_sanitation_health/Environmental_

sanit/PHAST/phast96-11/96-11index.htm

http://www.irc.nl/content/view/full/1921

Prepared by WEDC
Water Engineering and Development Centre
School of Architecture, Building and Civil Engineering
Loughborough University
Leicestershire LE11 3TU UK

T: + 44 (0) 1509 222885
E: wedc@lboro.ac.uk
W: www.lboro.ac.uk/wedc