

Holistic Hygiene for Human Health



Photo: Manfred Matz, SIWI

More than 5,000 children under the age of 5 die every day from diseases related to unsafe water and inadequate or absent sanitation and hygiene practices.

For decades, access to water and sanitation has been seen as the essential step in reducing the preventable disease burden in developing countries. There is now a belief that a key mistake in the past has been to undertake water and sanitation programmes in isolation, and that reducing the burden of disease is best achieved by programmes that also integrate hygiene promotion.

Hygiene can prevent the spread of infectious diseases at a fraction of the cost of other health interventions. As shown by recent analysis carried out as part of the of the “Disease Control Priorities Project,” for “high burden” diseases (such as HIV/AIDS, malaria, diarrhoeal disease and tuberculosis) hygiene promotion is the most cost effective intervention in terms of disability adjusted life years (DALYs) averted (up to USD 3.35 per DALY

averted due to diarrhoeal disease compared with, for example, up to approximately USD 1,000 per DALY averted by anti-retroviral treatment of HIV/AIDS.

Why is Hygiene Promotion so Important?

Globally, diarrhoea is a leading cause of death and illness. Recent studies show that correct handwashing can reduce diarrhoeal disease by 42-47 percent, while household water treatment can reduce morbidity by about 50 percent and lead to disease reductions of more than 70 percent.

Reducing the burden of diarrhoeal diseases is not the only reason for renewed concern about hygiene. Trachoma is the world’s leading cause of blindness, but is completely preventable through hygiene (face washing breaks the infection cycle). Around 92 million people suffer from trachoma and eight

million are visually impaired or blinded as a result. There is now strong evidence suggesting that hygiene plays a part in reducing the spread of respiratory infections such as colds, flu and also severe acute respiratory syndrome (SARS). According to the United Nations, the number of people living with HIV/AIDS is estimated at 39.5 million, with the majority in developing countries. These people are not only more vulnerable to infection but upon becoming infected with diarrhoeal or related diseases they themselves become a source of infection for other family members.

Improved hygiene, conversely, is a powerful means to reduce the spread of antibiotic resistance. Good hygiene can reduce the incidence of antibiotic resistance by decreasing the frequency that antibiotics are needed and prescribed. Put together, these issues present a powerful argument for increased investment in hygiene promotion. It is clear,

however, that to be effective and sustainable, responsibility for implementing hygiene measures must be shared by the public and the community.

Why the Need for a Holistic Approach?

To promote better hygiene practice, the home and the community must be recognised as the environment where all human activities occur. Most people equate hygiene with simply “handwashing,” and remain unclear on the multiple other aspects involved. In reality, hygiene includes all of the following:

- Hand hygiene and personal hygiene
- Food hygiene (cooking, storing, preventing cross contamination)
- Ensuring safe water at the point of use
- Safe disposal of faeces (both human and animal)
- General hygiene (laundry, surfaces, toilets, baths, sinks)
- Disposal of solid waste
- Control of wastewater and rainwater
- Situations where there is more risk
- Care of those who are infected
- Care of those who are more vulnerable to infection

One key need is to ensure that hygiene issues are viewed holistically from the point of view of the family. Further, the range of actions which they need to undertake in order to protect themselves from infectious diseases. Here, the family must be recognised as the cornerstone. All of these hygiene practices are interrelated, and some activities, like handwashing, are central to them all. Unfortunately, in most countries, the measures which make up home hygiene are dealt with by separate agencies and the hygiene advice that the family receives is often fragmented. For example, advice on household water treatment and storage is given separately and by different agencies than those circulating information on proper handwashing or handling of food. As a result, the community has little concept about how infectious diseases are actually spread and their understanding is almost entirely rule-based. This makes it difficult for hygiene knowledge to be adapted to meet local needs or respond to new threats such as those posed by SARS or avian flu.

While it would be ideal for all aspects of hygiene to be promoted together, in practice hygiene promotion programmes work best if they focus on a small number of activities. The International Scientific Forum on Home Hygiene (IFH) suggests that a programme in which practices are incorporated in stages be adopted. Stage 1 should focus on practices



Recent studies show that correct handwashing can reduce diarrhoeal disease by 42–47 percent. Photo WSSCC.

which carry the greatest risk of transmitting disease, i.e. safe disposal of faeces, handwashing at critical times and ensuring access to adequate safe water at point of use. Once these components are “in place,” stage 2 (food hygiene, refuse disposal, care of domestic animals, etc.) followed by stage 3 (laundry, hand contact surfaces, domestic pets, etc.) can be introduced. It must be borne in mind that the “ranking” of risks may vary from one community to another e.g. in some communities risks associated with poor food hygiene or trachoma may be greater than those associated with poor household water quality.

Developing a Strategy for Promotion of Home Hygiene

Developing strategies to incorporate hygiene practice into the daily life of communities in developing countries is a significant challenge. Although there is growing awareness on the importance of hygiene, this does not necessarily translate into commitment to

action by national and international government and non-government agencies. We need to persuade governments and funding agencies to invest in hygiene promotion. Effective hygiene promotion requires a holistic approach. This, in turn requires a lead agency – and proper infrastructure at national, district and local levels – to establish active and coordinated hygiene promotion programmes.

If programmes are to be successful, it is equally important that there are sufficient numbers of trained field workers who are responsible for, and committed to, hygiene education and motivation at the community and family level. Community workers and/or teachers are best placed to understand the community, and are therefore in a prime position to develop appropriate programmes. It is only by combining their knowledge of local conditions, needs and constraints with an understanding of the means to prevent infection through hygiene practice that hygiene behaviour can be improved.

Communication is another key to hygiene promotion. Messages to the target audience must be pushed in a way that will motivate behaviour change. To this end, a number of approaches are currently being pioneered, including the “Health in your Hands” campaign by the Global Public Private Partnership on Handwashing (www.globalhandwashing.org). This is based on marketing of a small number of simple messages on when and how to wash hands through various communications channels including the mass media and direct communication. Programmes which use participatory approaches involving community health clubs and schools (WASH in Schools) are also being developed.

As part of its work to support capacity building at the local level, IFH has produced a teaching/self learning resource. The resource is written in simple practical language and is aimed at giving community workers an understanding of the holistic approach to hygiene in the home and community. It is intended primarily to give practical support to community workers and teachers at the local level, but can be used by anyone who needs to obtain an overview of hygiene and hygiene practice.

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