

Children's sanitation in emergencies

Diarrhoea is one of the main killers in emergency settlements and its first victims are children. A child's stool can contain six times as many germs as the stool of adults because the level of excreta-related infection among children is frequently higher than in adults and children lack antibodies.¹

In order to tackle the problem of diarrhoea, agencies and communities have to plan for the disposal of children's excreta within emergency settlements. A research project² involving questionnaire surveys and workshops was designed to investigate the problems preventing children from using available techniques of excreta disposal, and possible techniques that would be suitable in emergencies. The research revealed that options for children's excreta disposal depend on two main factors: the age of the child and the phase of the emergency.

Babies under 12 months.

Respondents stated that all solutions provided in emergencies are inappropriate and they cited the most commonly used methods as:

- Control of defecation. This may be an option where the laxative methods used are considered to be healthy and mothers dispose of the infant's faeces safely.
- Open defecation: Safe excreta disposal methods are required and need to be strongly associated with hygiene promotion programmes for the carers.
- Disposable nappies: Because of the high cost, disposable nappies should only be distributed if the carers asks for them, and when facilities exist for their proper disposal.
- Non-disposable nappies. Only suitable if there is a washing place, detergent and sufficient water.

Children from 12 months to three years old. Special excreta disposal for this age group is a good solution in order to help carers, to stress the importance of safe excreta disposal, and to train children to use toilets.

Interviewees cited the following possible options:

- Potties. They should be easy to clean and prevent flies landing on the excreta. Their success depends on the culture of the population.
- Adapted latrines. Children's latrines should be strategically placed in crowded areas, for example, feeding centres.
- Special trench latrines. These may be used where there is a cultural acceptance of communal defecation (e.g. in Ethiopian relief camps in the mid-1980s, special defecation trenches for children were used successfully by Save the Children Fund).³
- To bury faeces: The main constraint of this technique is cultural acceptance and if the soil is rocky, it will be impossible.

Children from three years to 12 years old. In this age group, children will acquire the perception of cleanliness and privacy. Possible adapted latrines should be:

- Light. Door, roof or super-structure can be taken away.
- Child-friendly. Children can be involved by decorating the toilet within the camp.
- Clean. Maintenance must be carried out easily.
- Avoid the fear of falling. A vertical handle can be fixed; the squatting plate can also have a smaller hole.
- No smell: The drop hole has to be covered with a fixed lid and ventilation is required.

Phases of the emergency. It is unlikely that children's excreta disposal can be implemented in the immediate emergency phase. At this stage an initial assessment of the factors influencing subsequent children's facilities is required.

In the intermediate stabilization phase, depending on the findings of the assessment and if the population is ready, safe excreta disposal facilities (nappies, potties, special trench latrines, shovels) for children can be implemented, especially in areas that have

high concentrations of children e.g. feeding centres etc. where otherwise the transmission of excreta-related diseases can become rapid and extensive. A hygiene promotion programme for carers and children should accompany this intervention.

Source: Karine Deniel, (email: k.deniel@laposte.net)

References

1. Sphere Project (2004) *Humanitarian Charter and Minimum Standards in Disaster Response*. Geneva, Switzerland.
2. Deniel, K. (2004) 'Improving children's sanitation in emergencies' MSc thesis, Cranfield University at Silsoe.
3. Wisner, B., and Adams J. (2002) *Environmental health in emergencies and disasters. A practical guide*, World Health Organization Publication.

Africa: forgotten tropical diseases

Researchers have called for a more balanced approach in distributing the money for controlling tropical diseases. 'We urge policy makers and health economists to recognize that although HIV, tuberculosis and malaria are the most serious problems facing health planners, other diseases exist that can be addressed at realistic cost with effective interventions.'¹

The neglected diseases affect more than 750 million people and kill at least 500 000 every year. They include (with numbers affected in sub-Saharan Africa): Ascariasis – the most common human worm infection (173 million); schistosomiasis, also called bilharzia – a flatworm infection (166 million); elephantiasis – a worm infection of the lymph system (46 million); trachoma – leading infectious cause of preventable blindness (33 million); river blindness parasite – symptoms include eye lesions (18 million).

Each of these diseases is a poverty-promoting and often stigmatizing condition occurring primarily in rural areas of low-income countries. Treating all of these forgotten illnesses with a cocktail of four readily available drugs would

cost less than US\$0.50 a person a year, according to the researchers.

Three of the four drugs that the researchers want to distribute would be donated by manufacturers Merck, GlaxoSmithKline and Pfizer. Many of the countries where the most help is needed have people in place to distribute drugs. The only element they lack is logistical support.

References

1. Molyneux, D.H., P.J. Hotez, and A. Fenwick (2005) 'Rapid-impact interventions: how a policy of integrated control for Africa's neglected tropical diseases could benefit the poor', *PLoS medicine*; vol. 2, no. 11.

Contact: Prof. Peter J. Hotez, George Washington University, USA, (email: mtmpjh@gwumc.edu)

Community management in Honduras

AHJASA, the Honduran Association of Water System Administrators, claims that their management of village water systems has reduced the incidence of intestinal disease in people living in one particular village, Ojojona, from over 30 persons a week to three. The story is the same in two other Honduran villages of Santa Lucia and Ajuterique.

The AHJASA has trained over 500 community-based water managers and administrators and more than 2000 plumbers at the national level. This has resulted in an increase in water quality and a significant reduction of the water-borne diseases common in the local communities throughout the country. In undertaking this initiative, it has encouraged the local communities to be much more self-sufficient – setting their own water tariffs and establishing the payment procedures, developing water infrastructure and supporting management systems, and conserving their water sources. This approach has been so successful that this model is now being applied in other countries in Central America such as Guatemala, Nicaragua and El Salvador.

Source: *Global Water Partnership News*, <http://www.gwpforum.org/gwp/library/Honduras.pdf>

Manila: Private sector involvement and the poor

Antonino T. Aquino, currently President of Manila Water Company, Inc. and Managing Director of Ayala Corporation was interviewed by ADB as one of their Water Champions in Asia. He has been with Manila Water since its concession agreement with Metropolitan Waterworks and Sewerage System began in 1997, becoming President of the company in 1999. Here are a few highlights.

'Since a huge portion of our customer base belongs to the poorer sections of society, Manila Water thought of prioritizing water for the poor programmes. And so Tubig para sa Barangay (TPSB) or Water for the Community was born to provide safe drinking water to informal settlements. Over the past eight years, Manila Water has already served about 820 000 people in 517 low-income communities through our TPSB programme. We will aggressively pursue our TPSB projects for the medium term by providing properly connected water systems for poor urban communities. Our target is to serve 100 000 more people from poor communities every year.

'Now, we have one Territory Business Manager for every poor community being served through TPSB. We are now implementing a decentralized approach by providing on-site sewerage treatment plants to medium and high-rise housing establishments and by taking control of existing sewerage systems.

'From 1997, we have already doubled the sewerage capacity. We expect to double coverage to 30 per cent of the population in the next five years. This will cost us US\$64 million with loan facilities from the World Bank, plus \$21 million in equity.'

In March 2004, Manila Water Company Inc. turned over 37 per cent of its equity shares to public hands when it opened on the Philippine Stock Exchange with a \$14.2 share offering. The initial public offering positions the company nicely for an aggressive expansion campaign over the next five years.

Source: *ADB Water champions* <http://www.adb.org/Water/Spotlight/aquino.asp>, Aug 2005

Ethiopian teenage girls suffer from lack of school latrines

A study by WaterAid in Benishangul Gumuz, a remote, drought-prone and marginalized region of Ethiopia, has shown that teenage girls were hit the hardest by a lack of decent school sanitation. In these areas only 4 per cent of the population has access to sanitation. Some schools had no toilets and in others they had to share a latrine with 325 other pupils. Some girls interviewed said that they could not be seen to go to a latrine in their school, especially on menstruation days. Many go home and do not return, dropping out of school.

Many pupils could not keep clean and hygienic, as they didn't have water in their schools either.

The WaterAid team began working here in 2004. It is now working with the local government and piloting ecological sanitation and child-to-child hygiene education, as well as helping to improve school sanitation.

Source: *WaterAid, Ethiopia* [http://www.wateraid.org/what_we_do/case_studies/6481.asp] – case studies, 30 Aug 2005

Training in sanitation marketing

WSP-Africa hosted a sanitation marketing training meeting for WSP staff in 2005, in Nairobi, Kenya, to review knowledge and experiences in using marketing techniques to roll-out large-scale sanitation programmes. Lessons were drawn from the experience in Benin of market research, a sanitation marketing pilot in Tanzania, the experience of 'total sanitation approaches' in Bangladesh and India; sanitation marketing experience in Vietnam, and condom and bed net marketing in Uganda. Proceedings will be published; and countries will be selected for the implementation of these approaches.

For further information contact: Ousseynou Eddje Diop (email: wspaf@worldbank.org)