

Challenges for water, sanitation and hygiene promotion interventions in the immediate aftermath of the tsunami: An Acehese perspective

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Background

The response by the humanitarian aid agencies to a crisis will depend on several factors: the kind of emergency, the severity of the crisis in both the number of affected people and in geographical area, the political and economic situation in the country, the pre-crisis level of services provided and the pre-crisis health status of the affected population. Unfortunately as seen during the recent tsunami, the level of response will also depend on the amount of media coverage and the funding generated from this coverage.

The response to the tsunami disaster of December 2004 was a challenge to those INGOs working in water, sanitation and hygiene promotion for several reasons: the vast geographical area affected, the extent of the damage and the social status of many of the survivors. From Oxfam's point of view this has meant that our approach that has been used in other large-scale emergencies had to be modified to fit the situation in Aceh.

Water

The quantity and quality of the available water depends of course on the nature of the emergency and the topography of the country affected. Whilst flooding will contaminate existing water sources, in a tsunami saltwater will flood coastal wells and in some cases cause irreversible salinisation of the shallow groundwater making the wells unusable. This is true of much of the coastline areas of Aceh.

Agencies are facing a major challenge responding to the increased salinity in the coastal areas of both Indonesia and Sri Lanka. Some sources when pumped for a number of days become usable again but for some the only solution is to find other sources such as siting of wells on higher land, drilling deep boreholes and capping mountain springs. In Aceh, spring protection in the hills could be problematic due to the on-going internal conflict.

Although there is little evidence that dead bodies contaminate water supplies unless the cause of death was from a communicable disease, the psychological affect of bodies dumped or swept into water supplies should not be underestimated. In East Timor, rehabilitated sources previously "polluted" by dead bodies were still being avoided two years later. It is imperative that community members are consulted before water points are installed.

In the past it has always been stressed that in the initial phase of an emergency the quantity of water is more important than quality, to prevent dehydration and a host of

hygiene related infections. In recent emergencies water quality has also been the focus of attention. Because of the high risk of disease outbreaks in camps pumped water needs to be chlorinated though sustaining chlorination at the water point or household level is challenging. This is an issue in Aceh where government authorities have stated they would discourage chlorination in order to prevent the population becoming accustomed to potable water at source; a state that may not be able to be maintained when the survivors return to their place of origin. There is a strong tradition of boiling drinking water in Aceh. What would be the most appropriate method then of treating household water?

Oxfam became quickly involved in capacity building when an engineer was seconded to the Ministry of Public Works. However, not enough attention was given to the fact that the ministry had lost many of its staff as well as equipment and documentation. Local staff, themselves victims of the tsunami, were expected to work at the same pace and for the same hours as the expatriates and nationals from other parts of the country.

Hygiene promotion

Hygiene promotion is generally considered to be more than health education, as it should include elements of community participation and empowerment as well. Helping people to identify environmental health needs and to work together to find culturally appropriate ways to improve these is seen as both a means and an end in itself. In the tsunami response, there was often little need for the traditional community mobilisation. In Aceh, highly motivated young men and women determined to rebuild their lives either sent request letters or phoned the NGOs with a list of community requirements. This meant that responses were more appropriate and effective, as they had been planned with community consultation during the assessment stage.

In the early stages when people were still living in temporary shelters, some hygiene promotion was carried out and hygiene committees were established. Oxfam employed attendants to clean and monitor the public trench latrines. Relatively high living standards and a general awareness of health risks meant that hygiene promotion focused on helping people adapt to using wells and trench latrines instead of the piped water and flush toilets they had had access to before the tsunami.

There has been some discussion among environmental health workers as to whether more should have been done on the hygiene promotion side: was it appropriate to assume that most survivors had a high awareness of health risks? We must be careful not to take away from deeply traumatised people the last vestiges of dignity by assuming that they are not aware of the basic concepts of hygiene. There was in Aceh, little sign of the post-trauma apathy and lack of interest in personal hygiene that has been noted in other emergencies. Aid workers were struck by the amazing ability of Acehnese survivors to adapt to their circumstances and to move quickly into an action phase to rebuild their lives.

As there was less of an emphasis on disease prevention, time was given to ensuring that both men and women's hygiene needs were met in terms of underwear,

toiletries and sanitary towels. A lingerie fair was held for women in each site in order to make distribution more like a normal shop where colours and sizes could be selected in private.

Sanitation

The type of latrine needed in an emergency will depend very much on the environment, the cultural and societal norms of the affected population and the amount of space available to construct latrines. Even if the affected population are too traumatised or debilitated to assist in construction, there must be some degree of consultation in order to take into consideration the needs of vulnerable groups. In Aceh, co-ordination and collaboration between agencies to standardise the design and construction of culturally acceptable, cost effective facilities was a major challenge. People were not used to pit latrines and did not like them; they wanted the pour flush systems to which they were accustomed.

One of the concerns facing agencies in latrine construction was the high water table often found in areas of flooding. Raised latrines were used in some areas until a better solution could be found. Septic tanks are a solution but need desludging. In Aceh there was a shortage of desludgers in the immediate aftermath.

Waste disposal in general can become a major problem especially in over-crowded camps. In Aceh, a great deal of waste was generated by the aid agencies themselves as many donations came packed in plastic or boxes that could not be burnt. This problem was exacerbated by the enormous amount of debris from the tsunami and the fact that any kind of disposal services had collapsed. The waste management problem was not addressed immediately and again there was little coordination in the early stages after the disaster. The whole question of body disposal was problematic because even if there is no risk of disease outbreak, the overwhelming smell and psychological effects need to be taken into account.

Assessments

This was the area where Oxfam excelled; a fact probably due to the response of the community who knew what they wanted. Very rapid assessments were done by a health and engineering team who able to start implementation within 24 hours with an action plan set in motion often by mobile phone on the journey back to the office.. Knowledge of pre-crisis levels of health awareness, health-seeking behaviour community social structures and women's status were supplied by the national staff members. The assessments were effective, efficient and community-driven.

What could we have done better?

In the tsunami countries, despite the poor living conditions for the survivors, no outbreaks of disease were reported by WHO surveillance teams. The reason for this can only be speculated upon: the pre-crisis relatively high living standards, the rapid community mobilisation from the survivors themselves or the response from the aid community. It will be hard to measure the impact of the aid agency interventions although some influencing factors will have been the good reporting of

epidemiological data, the rapid public health response and the plentiful medical facilities that are not available in such abundance in other major disasters.

Despite the fact that there were no outbreaks of water-borne disease, there were areas for improvement and lessons to be learnt:

- ❖ Better coordination; more effective use of resources and less duplication
- ❖ Better logistical management so that items were given out quickly with coordination and agreement between agencies
- ❖ Agreement among organisations on standards and design of latrines, shelter and water provision
- ❖ A uniform approach to household water disinfection: supporting the Ministry
- ❖ More realistic support to ministries