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PEOPLE AND SYSTEMS FOR WATER, SANITATION AND HEALTH

Shooting leaves and diarrhoea

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THIS PAPER EXAMINES some of the cultural views of illness which are believed by many Zambians in rural communities. These traditional views and beliefs have been confronted by the Rural Water Supply Project in the Eastern Province of Zambia as it has implemented its Health and Hygiene Education Program as part of its overall package of activities. The objective of Rural Water Supply Project is to reduce the risk of water borne diseases among rural Zambians in the Eastern province of Zambia by increasing access to safe, reliable water sources and encouraging the adoption of improved health and hygiene practices. With community participation, the project has provided over 560 protected water sources to rural health centres, schools and villages each with a minimum of 200 people who previously lacked a protected and adequate water source.

Cultural views of illness and behaviour change through participatory learning

In the improvement of health and quality of life of poor rural communities, health and hygiene education is only one component of a complex combination of factors which includes safe water supply, sanitation and community empowerment. To make an impact through health and hygiene education, experience has demonstrated that there must be a clear understanding of the knowledge and attitudes of the community, which influence behaviour. The knowledge of rural villagers is founded on traditions and beliefs which can not be ignored when health and hygiene education programmes are being implemented. Our task as educators is to expand on their existing knowledge as a foundation for behaviour change. The didactic learning approach, however, only influences people in a small way. Participatory learning which is grounded in the knowledge and experience of the target population is more likely to have a greater impact in behaviour change. As people see, hear, say and do, they are more equipped to make positive and healthy changes in their behaviour.

In the development of a participatory approach to health and hygiene education within the project, there have been recurring cultural beliefs that have had to be investigated and incorporated in the program because they are of concern to the target population. These beliefs centre on sources of diarrhoea, the influence of witchcraft, disposal of human excrement and hand washing (personal hygiene).

Shooting leaves and diarrhoea

Cultural views of illness dominate vis-à-vis water borne and water related diseases particularly about causes of diarrhoea. For example, when a child has a case of diarrhoea particularly during the months of September, October and November, it is common for the mother to attribute it to the newly shooting leaves on the trees. While this explanation may make little sense to a town-dweller or a foreigner, for the villager it is a plausible explanation.

In a participatory learning process, this information can be used as a starting point for people to consider why their children get diarrhoea at this time of year. Building on the belief that shooting leaves cause diarrhoea, project staff engage villagers in a discussion of their health beliefs as related to water borne diseases. During the months of September, October and November, Zambia experiences the peak summer seasons when the weather becomes very hot and trees shed off their old leaves and receive new ones. There is a critical shortage of water because rivers, shallow wells and dams dry up forcing people to drink the little remaining dirty water in shallow wells and rivers. This water is potentially contaminated since pigs and other domestic animals may drink from the same source. The common houseflies multiply in great numbers and infest houses in preference of cool places. They are another source of contamination. Many people suffer from diarrhoea and skin infections during this period. Through discussion, villagers are able to make their own links so that they understand that new shooting leaves come at a time of water shortage and that often the only available water people drink may be contaminated - this is one possible cause of diarrhoea.

Influence of witchcraft

Many village communities believe that illnesses are caused by witchcraft and that traditional healers can only provide treatment of these illnesses. Viral and bacterial infections have no place in the villagers' understanding because microorganisms cannot be seen with the naked eye. Conversely traditional healers frequently cite witchcraft as the cause of illness. The reasons for using witchcraft to inflict pain or illness on another person are many but are mainly jealousy (e.g. one has a good harvest, has many cattle and a good house) or quarrels between relatives (e.g. where the brother swears never to step a foot at his sister's house). This may result in the sister's child becoming sick or dying and the treatment from the traditional healer would be for both the brother and sister to drink reconciliatory medicine together in the presence of elders. Should a child become sick with a case of diarrhoea, the traditional healers may diagnosis it as a case of being

bewitched and prescribe traditional medicines or rituals. If the child does not recover, the treatment may be changed. In the case of children suffering from water borne diseases, this is time that is wasted and the child's life may be at risk.

The way in which witchcraft causes illness is very complicated to understand. It is said to enter houses with all doors and windows closed during the night. To break up this cloud of strong belief on causes and cure of disease in villages is not easy to achieve. It requires a long time of discussion starting from the viewpoint of the villager. While the aim is not to dissuade the villagers of believing in witchcraft, it is possible for them to understand what are the common causes of diarrhoeal diseases.

Disposal of human excrement – pit latrines

For many years the rural communities have used the abundant bush, where privacy was guaranteed, as a place of defecation. It is not considered to be unclean because pigs and heavy rains regularly clear the area of excrement. There is privacy - no one knocks on the door in the bush – and anonymity. This means that the father or mother in-law, son or daughter in-laws or any other person can enter the bush as needed without worrying that their activity is being noted. Although population growth and deforestation have resulted in the bush environment being restricted, pit latrines as an alternative are viewed unfavourably by most people because of lack of privacy and lack of anonymity.

Using participatory methods, village communities were asked to discuss the issue of excreta disposal. The comments actually highlight the barriers which people face in the use of pit latrines. Some people suggested that they could carry a hoe and bury faeces in the bush because it was cheap to dig a small hole. The problem they identified was the distance and that the person's in-laws may see that they are going to defecate and bury faeces in the bush. This would be shameful. Another person suggested that others in the village might think that she or he is going to dig medicine for a patient, so this is not shameful. On the issue of pit latrines, one participant said that pigs would have no food to eat if pit latrines were used for defecation. Another said that defecating in one place is like the habits of a particular wild antelope *(Fututu)* and no one would like to be accused of being primitive like a wild animal. Yet another participant said pit latrines could cause cholera because flies pick up the excreta from them and deposit it on food.

The issue of excreta disposal is regularly raised during health and hygiene education because numerous projects have promoted the use of pit latrines or made them a pre-requisite to further development activities. Experience has shown, however, that the building of a pit latrine does not mean that it will be used. Unless there is active discussion and people are thoroughly convinced of the need for pit latrines, they will continue to use the bush.

Hand-washing

Hand washing is affected by custom, availability of water and time, and by cultural concepts of cleanliness. The cultural belief of village communities on this matter is that one will wash hands when there is visible dirt on them. Also one will wash hands before meals but not before casually eating seasonal fruits such as mangoes. Hand washing before eating meals has traditionally been done in one basin – all people wash in the same water – regardless of how dirty the water becomes. Using soap for hand washing is considered a luxury but when soap is used, it will be used to clean hands after eating – not before.

While health workers teach about washing hands after urinating or defecating many villagers do not believe the health workers practice it themselves. They sometimes say that health workers only teach "because they are paid to talk". Children's faeces are not considered dangerous and others think that since faeces come from the stomach there is no harm. Hand-washing after using a latrine (versus the bush) is taken as an admission that the person actually touched the faeces – which is very shameful.

While villagers may not practice regular hand washing on a day to day basis, it is customary for all people (mourners) who have attended the burial of a dead person to wash their hands as they leave the graveyard or as they enter the village. In Eastern Province the washing is confined only to the hands; it is done in a large (20 litre) metal container called *shomeka* where everyone washes in the same water. In other tribes the tradition is to do it in a river - some may wash the whole body while others may only wash their hands. The purpose of washing (the corpse before burial and the hands of the mourners) is to cleanse or wash away spirits as one leaves the world of the living (warm world) and enters the world of the dead (cold world). It is believed that if the spirit of a dead person is put to rest without being bathed it will come back to haunt the relatives in the world of the living. On the other hand since the graveyard is the world of the dead, it is said to have spirits which can haunt mourners upon return to their homes (the world of the living) if they do not cleanse themselves.

It is also tradition that food is served at a funeral for all the mourners. On the day of burial adequate food is prepared to cater for the large number of people present. This food may be served before or after burial. Due to shortages of crockery needed to cater for the large numbers of people, often food is served without covering, is eaten from communal dishes, and is prone to contamination from dust and flies. Water for washing hands is provided in one bowl to a group of mourners. The purpose becomes one of having wet fingers so as to handle the food well, rather than proper washing to clean dirt. Village communities consider this time of mourning as a period of denial where cleanliness is considered a luxury and a sign of pride. Consequently, those who manage to cover the food are often said to be proud people. Thus, in times of communal sorrow cleanliness is difficult to observe. In

many instances, cholera outbreaks have arisen from funeral ceremonies because hygienic practices were not observed.

The project has been teaching people a different way of hand-washing where, instead of using a communal basin of water, clean water is poured over the hands of each person using a container of water (a cup or jug). In this way each person washes with clean water and the next person is not contaminated with the dirt of the previous one. The use of soap is being encouraged. While demonstrations by villagers is convincing and households find it easy to adopt this different way of hand-washing, it has caused heated debate when applied to communal gatherings such as funerals. People are very resistant to change traditions – particularly at a community level and behavioural change is a slow and gradual process (Akuoko – Asibey and McPherson 1994). To bring lasting change at a community level, it is imperative that chiefs, headmen and key leaders are involved in the discussion. The safeguarding of the community in general – whether by cleansing unwanted spirits or practising hygienic measures – is the concern of the leaders as they are the appointed guardians. In some way they must seek a path where one activity does not compromise the other. By teaching about routes of disease transmission and engaging people with the knowledge that they have, slowly these changes can be made while maintaining cultural concerns and traditions.

RWS program of health and hygiene education

The Health and Hygiene Education program of the RWS-EP Project has been designed to use the existing Ministry of Health structures so that responsibility for safe water and hygienic practices is firmly in the hands of those that must carry on in the long term. Environmental Health Technicians (EHTs), Community Development Officers and other extension staff based in the rural areas have responsibilities to villages to help secure and maintain safe water supplies. The project works with these officers to reinforce their job responsibilities and provide re-training as needed. In addition, neighbourhood health committees (a bridge between rural health centre administration and the village community), community health workers, traditional birth attendants, village water sanitation hygiene education committees (V-WASHEs), area community organisers and pump menders, who are all a part of the voluntary village community structure, have been included in health training workshops. During these workshops seconded government officers and EHTs based at rural health centres are used as facilitators. The direct involvement of these government employees is meant to ensure continuity of the programme after the end of the project. The knowledge acquired by these locally trained people is expected to flow to the rest of water point users in villages, schools and rural health centre establishments.

There is a high level of illiteracy in many villages, which has necessitated the use of different types of methods of teaching. Audio methods are used in explaining the transmission of germs from faeces to hands, water, food and mouth. Village communities appreciate visual aids such as posters, photographs and flip charts. These are used to stimulate group discussions where participants are able to visualise and discuss poor hygienic practices. Practical demonstrations of hand washing involve children and villagers who show the differences between communal washing and pouring clean water for washing. A project drama group draws the crowd to the meeting places with its characteristic drumming, singing and dancing. The group then performs sketches relating to spread and control of water borne and water related diseases. Asking the participants to tell what lessons they have learned from the drama concludes the drama performance.

Participatory methods such as group discussions, demonstrations and drama have proven to be most popular and preferred in our education campaigns. These methods facilitate the inclusion of cultural views and beliefs as a starting point for conducting health and hygiene education. If behaviour change is the long term goal, it will only be possible if the teaching starts from an understanding of what are the present beliefs and behaviours and the members of the target population are able to make the behavioural changes themselves.

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