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Sanitation in Developing Countries

**Proceedings of a workshop on training held in Lobatse,
Botswana, 14-20 August 1980**



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The Role of Health Education in Sanitation Programs

Winson G. Bomba¹

At first sight, health education and sanitation appear to be two different concepts. In the past, the design of environmental health interventions was characterized by an overwhelming emphasis on science and technology, with special reference to engineering technology. Although adequate attention must be paid to technology, the interaction between social forces and technology has created a simultaneous need for consideration of social, psychological, economic, and political variables in the design and operation of environmental health facilities (Pisharoti 1975).

Experience has shown that health education as a behavioural science has proved useful in bridging the gap between social forces and technology. Consequently, the use of health education as one of the variables in planning and implementing environmental health programs has received increasing recognition in the recent past.

Roberts (1970) suggests that throughout the world, health education is accepted as an integral part and a vital component of all public health and medical care programs. Pisharoti (1975) observed that various expert communities on environmental sanitation have stressed the need to incorporate health education as an integral part of planning their respective environmental health activities. He suggests further that: "Health education is not a

separate programme, but is a part of all health programmes which deal with the public . . . health programmes should be planned and implemented with the close co-operation of the public, and health education will be an integral part of such programmes."

Definition of Health Education

There have been many attempts to define health education. For the purpose of this paper, the definition given by Steuart (1968) seems appropriate: "Health education is that component of health and medical programmes which consists of planned attempts to change individual, group, and community behaviour, with the objective of helping achieve curative, rehabilitative, disease preventive, and health promotive ends."

The principle objective of health education in environmental health programs is to help people to achieve good health through their own actions and efforts. This calls for change in a person's behaviour. A number of approaches have been tried to change a person's behaviour. Only two such approaches will be discussed in this paper.

The Legislation Approach

The use of the law as a means of changing health behavioural practices has been tried in a number of countries with very little

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success. Roberts (1970) observes that: "Experience has shown that unless the people affected by legislation are educated to a point of readiness and acceptance, they become psychologically reactive. They seek evasion and counter the legislation." A similar observation is made by Pisharoti (1975) who points out that: "There are many instances where facilities built for excreta disposal remain unused. Sanitary regulations and rules are made, but adherence to them is often an exception since the police method of inspection and enforcement has not brought any change in people."

The sanitation program in Malawi dates back to 1922 when the colonial government appointed the first sanitary officer whose main duties were to ensure cleanliness in townships (Nyasaland Medical Department 1922). There was still not much done in rural areas.

In 1933, a Native Authorities Ordinance was passed, which gave the duly constituted traditional chief wide powers to issue orders regarding certain sanitary and hygiene measures to be taken by the people in their areas. The implementation of the powers given to chiefs by this ordinance has had negative effects on rural sanitation, particularly with regard to the use of latrines because the chiefs merely imposed the use of the latrines upon their people.

The negative effects of the big push by chiefs for the use of latrines were first reported in the annual report of the Nyasaland Medical Department (1937). The report states that "it is far easier to get the population to dig a latrine than to use it." In addition, the annual report of the Nyasaland Medical Department (1938) states: "While there are reports of the existence of a large number of latrines in many villages and it is today unusual to find a village without at least one latrine; it is unfortunately still true that in many cases, latrines are provided by the population mainly to conform with regulations and not for use."

The chiefs imposed the digging of pit latrines upon the people without explaining their purpose and the rationale behind the accompanying sanitation and hygiene rules. Failure to conform with the orders resulted

in fines or imprisonment. The pit latrine was soon associated with colonial enslavement rather than a means to improve upon the people's health. Obviously, it was the approach, not the principle, that was at fault.

It is interesting to note, however, that health authorities were able to ascertain that as far back as 1938 it was unusual to find a village without at least one pit latrine. This observation, if it can be believed, would imply that a pit latrine was no longer an innovation in most parts of Malawi after 1938.

Observations reported after 1938 continue to cite the presence of pit latrines in villages, although their usage was reported unsatisfactory. The annual medical report of the Nyasaland Medical Department (1948) states "the re-infestation rate (of ankylostomiasis) must be high, as latrines tend to be regarded as objects to show rather than conveniences to use." Austin (1952) points out that "a number of mass treatment campaigns, combined with drives to improve rural sanitation have been conducted in many areas over the past 20 years and latrines are now to be found in most villages."

The other side of the story is not as bad as one would assume when reading reports of this period. Not all pit latrines were left unused. In a survey conducted in Domasi area, Zomba District, in 1950-1951, Austin (1952) summarized one of the findings in this way: "it is estimated that 90% of the dwellings now have pit latrines and it appears that these are fairly well used." Subsequent reports from 1952 up to the time of the country's independence in 1964 speak of the abundance of pit latrines in villages but their use was unsatisfactory.

Educational or Participatory Approach

Soon after independence, the government put a stop to the legislative approach and replaced it with an educational approach with maximum participation of the community.

According to the United Nations Economic and Social Council, there are three basic premises to consider when enlisting community participation: (1) people respect more those laws on which they have been consulted; (2) people identify strongly with programs they have helped to plan; and (3) people perform better in projects they have assisted in setting up. The postindependence approach toward the use of latrines was based on these premises.

Health education, therefore, was to be a major component in all programs encouraging the use of latrines. Consequently, intensive sanitation education programs were launched throughout the country. Extension workers from the Ministry of Health, Ministry of Community Development, Ministry of Local Government, and the Ministry of Agriculture were fully deployed: private organizations, such as mission hospitals, played some part; traditional and political leaders worked hand in hand with government; and village health committees, which were largely composed of ordinary villagers, were formed in most villages to work in close cooperation with various extension workers involved in rural health matters.

Teaching methods included face-to-face teaching situations at village meetings, clinics, health centres, and seminars. Mass media in the form of radio, health talks, posters and handouts, cinema shows, and exhibitions were also used.

Special health campaigns have been launched in special problem areas from time to time. These have taken the form of "health weeks" or "health months." Such campaigns are very common and popular to this day. During a health campaign aimed at promoting the use of latrines in an area, for instance, involvement of the local people constitutes the main activity. Extension workers, local leaders, and village health committee members are fully deployed to teach, assist, and discuss with people any aspect relating to the construction, repair, and use of pit latrines.

Social Aspects Associated with the Use of Latrines

A good educational program on the use of latrines should take into account the social and cultural variables of the community for which the program is intended. This section will review some of the sociocultural variables experienced in Malawi. Although most of these are no longer being practiced by the majority of the people, their inclusion in this paper is intended to stimulate discussion and, hopefully, assist those sanitary workers still experiencing them in their work.

The consensus among most field health workers in Malawi is that resistance to the use of latrines was greatest in those areas with plenty of tall grass and bush. In such areas, people had, over the years, developed a habit of using the bush for defecation. It was allowed to grow in the vicinity of houses and/or villages. The idea of building a pit latrine for the same purpose was not easily understood. To most people, a pit latrine provided excellent privacy, but so did the bush. Moreover, it was much easier for one to disappear into the bush than to get involved in the strenuous job of constructing and maintaining a pit latrine. Matters were made worse by the fact that the health benefits of latrines were not sufficiently understood by the people. The people had to understand germ theory first, before they could fully appreciate the link between health and latrines.

Three educational strategies were adopted in solving this particular problem in the affected areas:

(1) People were taught about the transmission and control of excremental diseases. This enabled them to understand the health benefits of latrines.

(2) Pit latrines were promoted as status symbols. In areas where it was difficult to motivate people to use latrines in order to prevent the incidence of excremental diseases, emphasis was placed on the social prestige associated with latrines, i.e., a modern home has a latrine, progressive people use latrines, a latrine is a sign of progress.

(3) The indirect approach was also employed. People were encouraged to clear the bush and to keep the grass short around their houses and the vicinities of a village in order to reduce the inconvenience of mosquitoes. By keeping grass short to avoid mosquitoes, the community was depriving itself the convenience of immediate bush. Eventually, latrines were used for privacy.

In some areas, resistance to the use of latrines was due to fear of accidents, e.g., children falling into pit latrines. Such fears were based on a few accidents caused by constructional faults, e.g., the latrine holes were too big.

In some communities, particularly in predominantly Muslim areas, adolescent children are not allowed, by culture, to use the same pit latrine with their parents. Most families in such areas would have two pit latrines; one for the children or the children of several families would share one latrine communally.

One of the reasons for prohibiting children from using the same toilet with their parents is that pit latrines are regarded as a very private and secluded part of the home. Only intimate people could share its use. It is common practice in such communities for women to dry their sanitary pads on the pit latrine fences. It is, therefore, considered culturally improper for children to be exposed to these. Another possible reason may be that because traditional etiquette sees defecation as a shameful activity, people preferred to use the bush rather than pit latrines. It could be that similar traditional etiquette would prevent adults, particularly parents, from sharing a "shameful activity" with children.

Another reason for nonacceptance was fear of contracting disease. This reason was cited by field health workers working in one small area of the country. As a result of intensive health education in the area, however, the fears have died and have not been experienced for the past 5 years. The problems originally arose because people in the area believed that: (1) when one's faeces and urine were mixed with someone else's, one was liable to contract certain diseases; (2) air from the pit was dangerous and caused

chronic stomachaches, which were difficult to cure; and (3) when an enemy got hold of your faeces, they could bewitch you.

Surveys were carried out to establish the cause of the fears so that health education strategies could be developed. The investigations revealed that the people believed that elephantiasis and hydroceles were contracted through the mixing of faeces and urine.

The signs and symptoms of the chronic stomachaches, believed to have been caused by the air from the pit, resembled schistosomiasis and ankylostomiasis. The theory was that when one squats over the pit latrine hole, air from the pit gains entry to the stomach during the process of defecation.

The fear of witchcraft was difficult to handle. Through health education to individuals and group discussions, it was explained that if a pit latrine was used by more than one person, it would be difficult for someone's enemy to identify a particular faeces when they are all mixed in a pit.

The other fears were relatively easy to handle. People simply did not know how elephantiasis, hydroceles, schistosomiasis, and ankylostomiasis are contracted. The health education program placed special emphasis on providing information about these diseases. Once these fears were overcome, people were free to use pit latrines.

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