



Framework for conducting health and hygiene education

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THE OUTBREAK OF a cholera epidemic in the province of KwaZulu-Natal (KZN) in South Africa has made it critical for the health and hygiene education to be an integral component of the development of water systems. The current (March 2001) death toll from cholera in KZN is reported as 140, since mid-August 2000, a total of 70,558 people have been stricken (1). No cases have been reported in Emmaus. This paper gives an overview of the framework used to plan and conduct health and hygiene education in the Emmaus community of KwaZulu-Natal in South Africa.

Background to Emmaus Community

The Emmaus community is located within the uThukela District Municipality, which is one of nine District Municipalities in KZN, with a population of about 597,680 people. Of these people, 74% live in rural areas (2). The Emmaus community has a population of 2412 people residing in approximately 201 households.

The uThukela region is favorably located within the Drakensberg mountains where the province's main rivers originate. There are a number of dams supplying water not only to large portions of KwaZulu-Natal but also to other provinces such as Gauteng, however there is a problem in terms of water supply to rural areas. Only 13% of the total population who are living in rural areas have access to the recommended 25 litres per person per day within 200

metres of a dwelling. More than half of the population (56%) has only 5 litres or less of water at their disposal per day. It is not a shortage of water in the region but a shortage of resources to establish the required systems. A majority of people have unsafe and unhygienic pit latrines. Public defecation is common and this exposes communities to infections related to water borne diseases, especially given the current water collection methods utilized.

People living in the project area currently collecting water for all their drinking, cooking and washing needs from traditional sources such as handpumps, springs and surface streams. The handpumps and springs within the community vary in reliability and degree of exposure to contamination. Surface streams are especially vulnerable to contamination by cholera and other diseases.

It was in this context that Mvula Trust through Ireland Aid facilitated the development of a secure water supply system to the Emmaus community. It is hoped that the water system will significantly improve their quality of life and coupled with health education reduce the vulnerability of the community to cholera and other waterborne diseases. The project is at a construction phase.

Planning

In planning for health and hygiene education a team consisting of Department of Health, Department of Water Affairs and Forestry, Mvula Trust, uThukela District

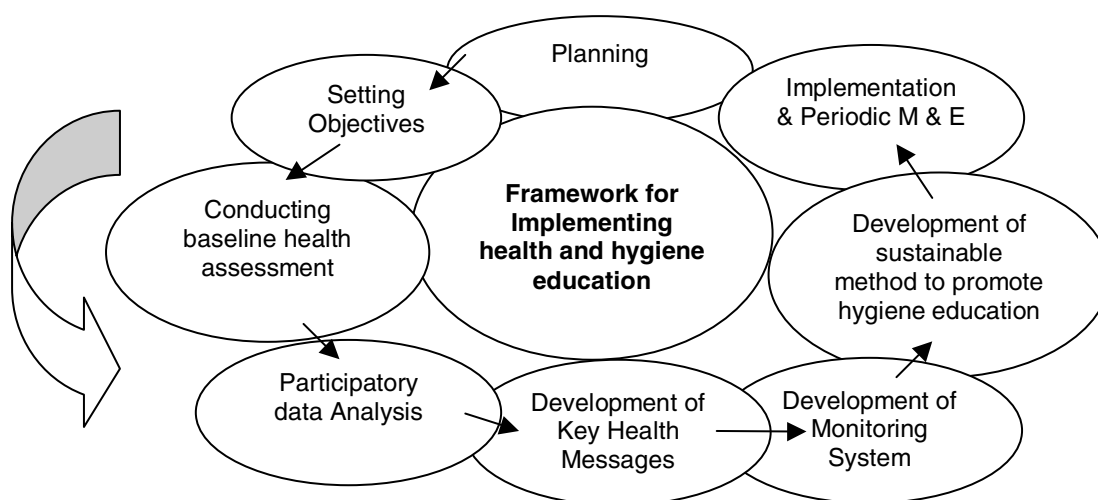


Figure 1. The framework used in implementing health and hygiene in Emmaus community

Municipality and the Water Committee was established. The primary role of this team was to have input on the health and hygiene promotion.

Setting Objectives

The team assisted in developing the objectives of the health and hygiene promotion. The main objective for health and hygiene education was to improve the knowledge, attitudes and practices in relation to sanitation and hygienic practices.

Conduct Baseline Health and Hygiene Assessment

This assessment was conducted using Participatory Hygiene And Sanitation Transformation (PHAST) methodology. PHAST is an innovative approach to promoting hygiene, sanitation and community management of water and sanitation. It is an adaptation of the SARAR methodology of participatory learning, which builds on people's innate ability to address and resolve their own problems. It aims to empower communities to manage their water and to control sanitation-related diseases. It does this by promoting health awareness and understanding, which in turn should lead to environmental and behavioral improvements. Various focus group discussions were held with the local water committee, local health committee, local health workers, local schoolteachers, youth and some community members. The following tools were used to facilitate discussion:

Three pile sorting

Working in focus group discussions participants were given about 20 pictures showing common health/hygiene related activities. They were asked to sort these into 3 piles of behaviors, which could be interpreted as good, bad or in between. The participants then identified the practices, that were common in their communities and which good practices should be strengthened and the bad practices changed.

Contamination routes and barriers

Participants were given a set of cards showing the possible transmission routes and barriers to transmission for oral-faecal contamination. They were asked to identify the ways in which disease could be transmitted from one host to another. Once the routes were identified the participants were asked to determine which barriers would block the routes.

Sanitation & Water ladder

Groups were given a series of pictures depicting different sanitation options. The groups were asked to place pictures in a row ranging from what they believed to be the worst situation to the best. They were then asked to mark the current situation in their communities and the situation they would like to see within a year. They then explored the constraints communities would face in moving from the present situation to the future one, and what they could contribute to make this happen.

Story with a gap

Two pictures were presented to each group, one a non-functioning system and one of a functioning system. Each group was asked which picture was the before picture and which was the after picture. They then discussed why they thought the situation had changed.

Other methods used included a Health Day and quantitative analysis of hospital records.

Participatory Data Analysis:

Once all the focus group discussions were completed each group was asked to analyze the data and interpret it in terms of their own context. The facilitator assisted the group to analyze the data according to the 3 main themes (Knowledge, Attitudes and Practices). The following issues were seen as critical to the community of Emmaus.

Findings

Knowledge levels on health and hygiene

Knowledge in terms of what constitutes bad practices was found to be high in almost all groups. The 3 pile sorting indicated that there was high degree of open defecation and people know that was a bad practice. The use of toilet was seen as important only for convenience purposes and not for health reasons. Handwashing at critical times, before eating, after using toilet and after changing babies nappies was known to all. The safe disposal of wastewater and household refuse was not seen as critical to health. The majority of participants did not have refuse pits at homes.

The knowledge on the principles of a Ventilated Improved Pit Latrine was very low. It was clear that the community does not have an understanding of the concepts and principles of a VIP. In choosing the desired type of toilet all participants wanted a water borne toilet. It was only during discussion of costs associated with water borne sanitation that participants felt that water borne will be unaffordable to the majority of them.

Attitudes towards health and hygiene

There was a belief that once water flows there will be no diseases and therefore the importance of health and hygiene education was not seen as critical. The use of pit toilets was seen as dangerous in terms of witchcraft. The toilet was seen as providing an opportunity for witches to collect faeces for all members of the family. Hence men in particular were hesitant to use the toilet.

There was a strong feeling that culturally the community was hygienic but this was mainly related to the issue of covering food for married males. It was seen as respectful that for all married men food needs to be covered but this was not the case for children and women.

Current Practices

The community had some form of pit latrines that they use but these are unhygienic. However there was a strong feeling that diseases such as diarrhea are common not

because of unhygienic nature of the community but because of stray dogs and chickens that move around the community.

Children under five years of age were reported not to use the toilets. Most of them relieve themselves behind toilets and in open fields. The problem was these children need supervision to use the latrines, which is generally not offered, as parents are busy with household chores.

The anal cleansing materials used are mainly newspapers but it was reported that newspapers are scarce in the area.

Table 1. Number of cases with diarrhoea-related diseases

Disease	Cases
1. Diarrhoea	344
2. Typhoid	2
3. Cholera	Nil
4. Shigella	5
5. Amoebiasis	4
6. Diarrhea with HIV	26

Hospital records

Table 1 indicates the number of cases presenting with water related diseases to the Emmaus Hospital during the period January 1999 to January 2001. It shows that a majority of the cases has diarrhea-related diseases.

Development of Health Messages to be promoted

The focus group discussions also included the task of developing health messages to be promoted in the area. The following messages were seen as critical to be promoted for intervention.

- Safe disposal of children's faeces.
- Washing of hands at critical times.
- Safe storage of water.
- Safe disposal of human waste, wastewater and household refuse.
- Building of healthy latrines particularly the VIP.

Development of a sustainable methodology to promote health and hygiene

The team agreed to use Community Health Workers (CHWs) to conduct health and hygiene promotion. Currently there are five female CHWs in the community employed by the Department of Health. Their primary role is to do house visits and create awareness on a broad range of health and

Table 2. M & E Matrix

Key Performance Areas	Community health/hygiene (water and sanitation related) awareness
Performance Objectives/Outcomes	Increased knowledge , attitudes and practices on hygienic issues covering the following issues: <ul style="list-style-type: none"> • Safe disposal of children's faeces. • Washing of hands at critical times. • Safe storage of water. • Operation and maintenance of VIPs particularly: closing the seat and Cleanliness. • Safe disposal of human, solid waste and wastewater.
Key Performance Indicators (KPI)	<ul style="list-style-type: none"> • Changes in levels of Knowledge :Target=80% • Changes in attitudes • Changes in practices.
Tools for Data Collection.	<ul style="list-style-type: none"> • Compare results of baseline data with results obtained after intervention. <ul style="list-style-type: none"> • Observation of improvements at household level. • Focus Group discussions.
Who Collects	<ul style="list-style-type: none"> • Community Health Workers. • Mvula Trust • Water Committee • District Municipality.
How Often	Monthly and quarterly.
What Action.	Share lessons learnt through publications. Improve on the methodology used.

hygiene issues. Mvula Trust has introduced them to PHAST. They will visit at least one hundred households per month. They will be supported by the Environmental Health Officers (EHOs) and also by the hospital staff.

Development of monitoring indicators and evaluation

Table 2 indicates the monitoring and evaluation (M&E) matrix developed to monitor the project.

Conclusion

The Emmaus Project has provided an interesting case for stakeholders involved in health and hygiene promotion to learn from the framework used and also to share ideas. It has also enabled those involved in the project to have a better understanding of the community of Emmaus.

References

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