



National epidemic diarrhoea task team initiative



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DIARRHOEA IS NOT a disease but a debilitating symptom of a set of diseases caused by viruses, bacteria and parasites. As such, addressing the problem lacks the focus of a single organism disease such as AIDS or TB. However similar interventions are required to address the prevention of diarrhoea, irrespective of the organism.

Until the recent commissioned study referred to below there were no existing estimates on the economic or the quality of life costs of diarrhoea in South Africa. Even estimates of the number of deaths per year in South Africa varied by more than an order of magnitude from 8000 to over 200 000 (Coetzee N and Bourne D, 1996; Wittenberg, D 1996; Grobler D, 1994). Thus diarrhoea is the leading cause of death in South Africa. There are no other causes of death for which national estimates vary so much.

Problems in addressing the national disaster of diarrhoea

The lack of quantifiable information is symptomatic of the lack of focus and urgency that this problem receives at a national level. Diarrhoea is presently not a political issue. It is believed that this is because those who are most directly affected are primarily black rural poor children under five years of age, who did not have a political voice under the apartheid state, and even today still do not receive their fair share of attention. Many more people die from diarrhoea than from crime, political violence, motor accidents, TB and AIDS yet the coverage in the media and the attention paid by politicians and resource providers is similar to that for problems such as malaria or bilharzia which, although serious, cause minimal fatalities.

The problem is historical and is viewed even by the rural population as part of the difficult existence they have always had to face. To obtain a political response, the people most affected must make their suffering a political issue. This will require significant capacity building, through, amongst other avenues, participation in catchment management processes. As this will take many years, there is a necessity for an interim alternative approach.

Another issue blocking action is the problem of taboo. The faecal aspect of the problem 'does not make for very digestible dinner conversations' either with rural people or policy makers. It has taken a long time to overcome the sexual taboo required to fully address AIDS. A similar shift in sensitivities is required regarding defecation to fully address diarrhoea.

Furthermore there is also a lack of quantifiable information on the causes and therefore a lack of appropriate

education at all levels. This in turn leads to a lack of demand from the electorate for solutions such as sanitation (normally at seven or eight on a list of services demanded), hygiene education and catchment management. The supply of water is mainly demanded for convenience reasons and it's perceived positive impact on health, although this has not been quantified. This in turn leads to a lack of political will in addressing the problem.

This paper describes some efforts by a small *ad hoc* group of medical and scientific personnel to attempt to stimulate an appropriate integrated response from a national level. The strategies used include scientific and resource economic studies, networking, work-shopping, lobbying, catchment management with public participation and a judicial catalysis of the media.

Moves to elicit a national response

It has been estimated by medical professionals that approximately 1000 people died in KwaZulu-Natal alone in 1996 (Pegram et al, 1996) from a particularly virulent strain of *Shigella dysenteriae* (type 1 or SD1). This epidemic was catalytic in the setting up of an *ad hoc* group of medical professionals who were appropriately named the Shigella Dysentery Task Team of KwaZulu-Natal (SDTT). The fact that the interventions required to halt the epidemic required solutions from amongst others, the water and sanitation industry led to an invitation to a group of water scientists and managers to join the group. The interventions required to halt SD1 are very similar to those required to limit diarrhoea in general. Thus the group embarked on a twin track campaign to address the SD1 epidemic and diarrhoea simultaneously. Several priorities for action were initiated by SDTT. These are in the economic, education, sanitation, catchment management and water supply spheres.

Quantifying the economic and human cost

A resource economics study on the costs of diarrhoea and epidemic dysentery in South Africa was commissioned (Pegram G et al., 1996). The findings indicated that there are 24 million incidents of diarrhoea of which 3 million incidents receive medical intervention each year in South Africa, that the direct financial costs are at least R4 billion (US\$0.88 billion, 28 May 1997) and that at a conservative estimate there are about 43 000 deaths from all forms of diarrhoea per year. Although this study needs refining and estimates of indirect costs are required, it provides information that can be communicated to politicians, managers and the media on the seriousness of the problem.

Evaluating the impact of interventions (education, water, sanitation)

A four year case study designed to evaluate the impacts of an interactive education campaign, reticulated water supply, ventilated improved pit latrine type sanitation and improvement in the surface water quality was initiated in Mpolweni, a rural site in KwaZulu-Natal. The first stage involves a baseline 66 question survey of a 95 per cent confidence limit section of the population (178 dwellings) and an education campaign including a play and discussions with schools, health groups and mothers of young children. Subsequent stages will include repeating the survey, which also examined the prevalence and incidence of diarrhoea, once reticulation and sanitation have been implemented in this area. The results and lessons learnt will be used, together with other case studies, to form a blue print for addressing the incidence of diarrhoea in other areas of the country.

Strategising the way forward through a national workshop with key role players

More than 100 influential people from political, managerial, medical, engineering and scientific spheres were invited to a workshop on "strategies to prevent epidemic dysentery" held in November 1996 at Howick. Seventy six people attended including Chief Directors from the Department of Water Affairs and Forestry, a representative from the Department of Finance, a representative of the national parliamentary portfolio committee on water, the World Health Organisation and the advisor to the Premier of KwaZulu-Natal. The invitation list included national ministers and head of departments, none of whom attended, again indicating the lack of political weight the subject carries. Various media representatives, including SABC TV, attended.

Scoping papers were presented on Shigella Dysentery, Diarrhoea, and strategies to combat both by leading South Africans and international representatives. Subsequently six focus groups discussed strategy to provide resolutions in the sectors of economics, health, education, sanitation, water supply and research. The resolutions included that:

- A recommendation be sent to the Chairperson of the National Sanitation Task Team (with copies to Chief Directors in the Departments of Water Affairs, Health and Finance and to the President) to establish a national Epidemic Diarrhoea Task Team (*EDITT*) with adequate resources, that would facilitate the "eradication" of diarrhoea to developed country levels, in the shortest possible time and in the most cost-effective and efficient manner. This would most likely be located within the Directorate of Environmental Health with a steering committee comprising representatives from the Department of Health, Department of Water Affairs, Department of Finance, Department of Education and the provincial Departments of Health.

- Representations be made to the Premier of KwaZulu-Natal to convene an interministerial task team with technical support to ensure rapid implementation of effective control measures as a response to the SD1 outbreak and future epidemics.
- An economic cost-benefit study on eradicating diarrhoea be commissioned and the information on the 25 per cent potential saving to the national health budget should diarrhoea and dysentery be eradicated to developed country levels, be taken into account in the long term financial planning and budget allocation of the Department of Finance.
- An efficient national emergency response through inter-ministerial committees with the support of technical and professional experts be identified. This team should ensure that management, surveillance and reporting mechanisms are in place, that health workers are appropriately trained, and that essential drug supplies are procured, stored and distributed to the appropriate level of health facilities.
- An immediate media campaign to raise awareness of diarrhoea and SD1 should commence and strategies to enable individuals to make choices for healthy living be promoted through health education and health promotion policy.
- Existing efforts to implement sanitation be more efficiently integrated and the privacy and convenience of sanitation would be the marketing factor. Greater effort should be made to enhance local capacity by using local labour.
- A long term budget for water supply should be quantified and sources of funding identified. Monitoring and evaluation strategies of water supply schemes should be established.
- Research should be designed to feed into a national strategies for health, education, sanitation, water supply and water resource management: routes of transmission and causative agents; the size of the problem through national surveillance; the development of antibiotics and vaccines.

Establishing a network

It was agreed at the workshop that the people who attended would form the basis of a network with common concerns. This has been subsequently expanded to some 150 influential people.

Using the media

As with human rights, environmental rights need to be brought to the attention of the nation; the issues require saturation coverage in all elements of the media. Greater use of the media (newspaper, television and radio) has been made to effectively to make the message about diarrhoea

and dysentery available to the wider public with noteworthy success. Community debate is being stimulated.

Lobbying

In compliance with the resolution from the above mentioned workshop, the initiative to establish an Epidemic Diarrhoea Task Team is underway. A delegation from the Chief Director responsible for sanitation visited members of SDTT to discuss the initiative. A memo from the Chief Director responsible for sanitation to the Chief Director responsible for Environmental Health has been drafted requesting that the envisaged secretariat be health driven, be located in the Environmental Health Directorate, provide a situational analysis of diarrhoea, provide a cost-benefit analysis for eradication, prioritise intervention strategies, implement research findings, monitor progress and integrate strategies across departments. The integration would be facilitated by a steering committee. In addition input has been made into various policy initiatives [the Consultative National Environmental Policy Process (CONNAPP), Water Law] to include the role that environmental policy can play in addressing the problem.

The provincial lobbying initiative met with limited success. However members of the *ad hoc* group have been involved with initiatives in:

- Medical intervention in the form of drug trials to evaluate the efficacy of Ciprofloxacin in treating children with SD1 and to compare short course and long course treatment.
- Interprovincial professional capacity building where the experiences and lessons being learned by KwaZulu Natal are subsequently being implemented in current *Shigella dysenteriae* outbreaks in Eastern and Western Cape.
- A co-ordinated response to sanitation implementation through an inter-sectoral steering committee (SANTAG).

Integrated catchment management

At a more local level, various catchment management initiatives have been launched in the past year. These have included public participation forums and discussions, during which information regarding waterborne diseases is discussed. It has been apparent that after being informed, the local inhabitants in the catchment rate water borne disease at a much higher level of priority than previously. This route has significant potential but will only yield national results in the mid-term.

Assessment of progress towards the objective, and the next step

On the surface it appears as though little has changed in the past year with respect to eliciting a national integrated response to the preventable ongoing disaster of diarrhoea in South Africa. However, considering that only a com-

bined effort of approximately 150 person days has been invested in the initiative, the return on investment has been high. There have been some successes and certain foundations have been put in place that can be built upon (EDITT initiative, economic and intervention studies, media campaign, workshop with resulting network, national and provincial lobbying and ongoing catchment management initiatives). It is clear though, that this catalytic phase needs to progress to a high level and well funded secretariat phase. In this sense the establishment of EDITT is crucial.

Indications are that the concept of EDITT will be received favourably. It may however be necessary to secure extra funding to that available to government (at least in the short term) and this may be one issue that the *ad hoc* group could concentrate on. The media campaign could probably use the services of a public relations professional who would best operate outside EDITT. The network although promising requires a boost. A proposal has been submitted to the Water Research Commission to further the economic and intervention studies. Finally lobbying of key individuals and follow up of positive responses should be continued by the SDTT until a self sustaining momentum has been set up.

A preliminary straw dog cost-benefit analysis that assumes eradication of diarrhoea in ten years, shows that even during the eradication phase the investment in interventions are only 40 per cent of the present direct health costs. This economic imperative adds weight to the humanistic imperative to save approximately 50 000 lives per year.

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