

CIET

www.ciet.org
building the community voice into planning

Summary Report
SR-BF-bf1-95

Burkina Faso

Diarrhoea among children in Burkina Faso

BURKINA FASO: DIARRHOEA AMONG CHILDREN

Two survey cycles were conducted in six provinces of Burkina Faso's Central Region between December 1994 and June 1995. Some 2,700 households in 20 communities participated. The key to the studies, supported by UNICEF, was to demonstrate *actionable* links between the physical environment, environmentally-aware hygienic practices and human health. Prevalence and duration of diarrhoea were examined more closely to identify their main determinants at household and community levels.

The results of both studies were compared to detect substantial differences over time. As no action was taken between the two cycles, most results were found to be similar. In fact, the second cycle was carried out within a short period as part of the capacity building of the *Technical Committee*, constituted to coordinate and supervise the whole process. Results of the second cycle are presented below.

The Technical Committee was composed of government officials from the Ministry of Economy, Finance, and Planning, Ministry of Health, and Ministry of Social Action and Family. Following a two-month intensive training on Sentinel Community Surveys (SCS) methods, members of the committee were able to actively participate in all the phases of the SCS cycle: design of instruments, selection of sites and field teams, supervision of field work, analysis and report-writing.

Methods

The *Sentinel community surveys* (SCS) methodology is discussed elsewhere in this web site. It was decided to initiate the process in *one* region. A proportional, multi-stage, stratified, last stage random sampling technique was used to ensure its representativeness. The main criteria for site selection were:

- Proportion of urban and rural areas;
- Existence of government facilities (health centres, schools, hand pumps).

The representative panel of 20 communities was to be followed over time to measure impact of actions taken as a result of previous cycles.

Results

Households were asked questions about prevalence of diarrhoea, vaccination against measles, night blindness, and main risk factors associated with diarrhoea. Some 41% used hand pumps; another 33% reported using wells. The great majority of households cover their water containers (82%). The study, however, did not address the tricky issue of protection of water during transportation; water might have been

Key indicators

One in five children under five years had suffered from diarrhoea in the previous two weeks. The average duration of diarrhoea is 6 days. About 44% of children have been vaccinated against measles (with card); 22% without card. Some 2% of children suffer from night blindness

contaminated before reaching the household. This is not compensated by treatment of water at household level as the majority do not treat the water (79%). Only 10% of households use latrines.

Almost half of the women interviewed treat their children with traditional medicine, 22% with modern medicine, and another 13% with Oral Rehydration Salt (ORS)/and other home-made solution. Some 11% reported not treating their child at all. The low percentage of ORS use is probably due to the distance of health centres and shortage of stocks. Three quarter of the women interviewed said they treat their children at home. The presence of a health centre in the community does *not* have an impact on the place of treatment of the child, mainly because most health facilities did not have the required equipment or supplies.

Women seem to be more aware of the benefit of liquids than foods during a diarrhoea episode. More than half of the children interviewed were given *more liquids* whereas only one in five were given *more foods*. On average, respondents start giving food after three days.

The survey suggested a protective effect of three principal types of interventions, two private that do not require any major investment (quantity of food given to the child and initiation of liquids and foods) and one public (improving source of drinking water). These associations are each *independent* of all other co-determinants studied in the survey (such as age of the child, area where the child lives, treatment of water etc.). It is always possible that some other *unknown factors* could explain the associations. However, after excluding the 50-60 most probable co-determinants, within the bounds of scientific probity, the findings are a compelling *starting point* for action.

Quantity of food given to the child. The quantity of food given to the child has a strong impact on the duration of diarrhoea. A child who is given less food during an episode of diarrhoea is three times more likely to suffer from *long* diarrhoea (four to nine days) compared with a child who is given the same or more food.

Initiation of food and liquids. The duration of the diarrhoea episode is shortened when the child is given food *and* liquids soon after the beginning of the episode (the first day). A child whose mother withholds food and liquids the first day is four times more likely to suffer from a diarrhoea with long duration compared with a child whose mother gives food and liquids soon after the beginning of the episode. Considering only those *vaccinated* children, the effect is magnified: a child whose mother gives food and liquids soon after the episode is then 22 times more likely to have a short diarrhoea as opposed to a child whose mother withholds food and liquids.

Sources of drinking water. The sources of drinking water were classified into two categories. Own, or community taps, hand pumps, were categorized as safer (or more easy to protect). Wells, canal, springs, stream, river, lake, or pond were classified as unsafe or more risky. A child in a household depending on unsafe water source for drinking is 36% more likely to suffer from diarrhoea compared with one from a household using safe water.