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WORKING PAPER:

**WHY SOME SWAZI MOTHERS USE
TRADITIONAL HEALERS TO CARE FOR
CHILDREN WITH DIARRHEA**



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WORKING PAPER:

Why Some Swazi Mothers
Use Traditional Healers to
Care for Children with Diarrhea

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Abstract

This paper reports results from a qualitative study conducted to explore why some mothers whose children have been seen at oral rehydration therapy (ORT) centers subsequently consult with traditional healers for the same diarrhea illness episode.

Respondents from selected sites throughout Swaziland included 33 mothers (M) of children < 5, 16 male focus groups (MFG), and 17 female focus groups (FFG). Respondents were presented with a hypothetical case scenario of a mother seeking treatment for a child who eventually dies from dehydration following diarrhea. Questions were asked concerning why the mother did not follow the advice she received at the clinic on the use of oral rehydration salts (ORS) at home and why she subsequently sought care from a traditional healer. Focus groups (FG) discussed their answers to the questions and provided a consensus response, a process facilitated by the FG moderator.

Individual Swazi mothers (42%) and the consensus of 9 of 33 FG [7 (41%) female and 2 (13%) male] suggested that the hypothetical mother consulted a healer because she trusted the use of traditional medicines; she saw no immediate improvement in the frequency and consistency of the child's stools after ORS at the clinic (M = 24%, FG = 2 of 33); she did not trust the use of ORS (M = 18%, FG = 3 of 33); she found the advice provided by nurses to be inadequate (M = 0%, FG = 8 of 33); or she did not trust the nurse (M = 3%, FG = 5 of 33). Four mothers (12%) and 6 FG (18%) had other explanations. Nine of 16 MFG and 6 of 17 FFG blamed the hypothetical mother for the child's death. The consensus response offered most frequently by FFG was that the hypothetical mother's failure to follow instructions was due to her distrust in the use of ORS. This response occurred less frequently in the MFG and in individual mother interviews. Respondents expressed the need for more information and said that chiefs and rural health motivators (RHM) should be used as sources of information.

Responses from all interviews suggest that trust is important in health-seeking behavior for Swazi mothers. Further work is needed to define and implement strategies that will increase mothers' trust in health care providers and their recommendations of modern therapies like ORS. In addition, the Ministry of Health (MOH) should consider expanding its health education strategy to include in the target population individuals who can encourage and support mothers' use of ORS following a clinic visit.

Introduction

Throughout the developing world, diarrhea is a major cause of childhood mortality [1-4], claiming an estimated 3.3 million lives each year [2]. Most diarrhea-related deaths are caused by dehydration, a problem that can be prevented or treated by early and adequate replacement of fluid losses through oral rehydration therapy (ORT). Oral rehydration therapy to prevent dehydration can be accomplished by giving children increased amounts of home available fluids (cereal-based fluids, unsweetened juices, solution prepared with oral rehydration salts (ORS), and even plain water) and continued feeding [5]. When dehydration occurs, patients often need to seek ORT at health facilities, where they can be treated with ORS and monitored before returning home to continue preventive ORT until the end of the diarrheal episode. Correct home use of ORT by caretakers of children is an important element in the prevention of diarrhea-related deaths [6]. In addition, caretakers will need to comply with instructions on other aspects of correct diarrhea management. However, even if ORT instructions are received and understood, compliance can still be low [7], and caretakers may still resort to traditional medicines for the treatment of childhood diarrhea [8].

Childhood diarrheal disease is a problem in Swaziland. In 1989, diarrhea was reported to be the leading cause of hospital deaths among Swazi children < 5 [9], and use of ORT was low. When Swazi female respondents (n = 4,251) ages 15-49 were asked about their preferred first source of treatment for episodes of childhood diarrhea during the Swaziland Family Health Survey (SFHS), almost all reported preference for health facility treatment (53% hospital treatment, 47% clinic). Less than 1% reported preference for consulting a traditional healer for treatment (0.2%) [10].

The SFHS survey obtained information on 723 cases of diarrhea occurring in children < 5 during the two weeks prior to the interview. When asked to indicate the treatment used for the diarrhea, mothers reported using a sugar salt solution (SSS) (65.8%) and ORS (15.1%) most often and only 1.2% reported consultation with a traditional healer [10].

In 1989, Lee followed up 69 rehydrated patients who had been discharged from a Swazi diarrheal disease treatment unit (DTU) [11]. Although ORS or SSS was reportedly administered to 65 (94%) patients before they came to the DTU, 19 (28%) children had also received traditional medicine prior to the DTU visit, and 9 (13%) mothers took their children to a traditional healer after being seen at the DTU unit. The prior use of traditional medicines was strongly associated with poorer clinical status at the time of the DTU visit; 12 (21%) of the 57 Plan A (mildly dehydrated) patients had previously received a traditional medicine, compared with 7 (58%) of the 12 Plan B (moderately dehydrated) patients ($p=0.014$, Fisher's exact test, 2-tailed). These results prompted the MOH to include this issue as part of a national qualitative study of health-seeking behaviors [12]. Findings from the diarrheal diseases portion of that study are reported here.

Background

Swaziland is a small (6,700 sq. miles) landlocked country in southeastern Africa with an estimated population of 706,000 [9] and an estimated infant mortality rate of 110/1000 [13]. The Swazi trace their descent through patrilineal links, reinforced by patrilocality, their primary residential pattern. In this system, a married woman resides with or near her husband and his

relatives. Most Swazi live in homesteads scattered throughout the rural countryside or in cities; the homestead is the principal residential unit [14]. A good road system allows most people access to a health facility. Health services in Swaziland are provided by the government, missions, industry, and private practitioners (physicians in urban areas and registered nurses in rural areas) [15]. In 1986, the MOH reported a total of 1,298 health workers, most of whom were registered nurses (703) working in the formal health care sector and supervised by the MOH. In contrast, there are an estimated 6,400 healers [9,16,17].

The MOH response to diarrheal disease-related mortality was to develop a plan for a national diarrheal disease control program with the goal of reducing diarrhea-related deaths in children [9]. The three-year implementation plan included supplying health centers with ORS; training health workers, traditional healers, and rural health motivators (RHM) in ORT; promoting home use of ORS through radio messages; improving diarrheal disease surveillance; and conducting operational research.

Green's [16] and Green and Makhubu's [17] studies of Swazi healers summarize most of what is known about Swazi concepts of diarrhea and dehydration. Results of these and another social science study [19] suggest that the Swazi recognize two major systems of disease causation: a traditional system that attributes illness to both naturalistic and supernatural causes, and a modern system that incorporates only biologic explanations of illness. Treatment may be sought from traditional practitioners, from physicians or other health workers, or from both. It is also generally recognized that traditional healers and health care workers have expertise in different domains [9,17].

Green's work in Swaziland indicates that childhood diarrhea belongs to a general category of common illnesses (*umkhuhlane*) believed to have natural causes in the traditional system. Loose stools (*umsheko*) are treated with herbal medicines administered orally. If a child's diarrhea responds to this treatment, it is diagnosed as *umkhuhlane*. Diarrhea attributed to "flu" or "bile" is treated by enema or induced vomiting, practices that would likely increase dehydration in a child with diarrhea.

Many Swazi believe that illness can be caused by ancestral displeasure and the withdrawal of their spiritual protection. *Kuhabula* is a type of diarrhea believed to be caused by sorcery [16]. Although the Swazi recognize *kuhabula* as a diarrheal disease, a loose stool is not considered as important as a sunken fontanelle in the diagnosis of the disease. *Kuhabula* is treated with mixed herbal medicines that are burned for therapeutic fumigations or in preparation for "vaccination" with traditional medicines. It is thought that the burning of medicines (and other rituals) will purify the air that has been contaminated by sorcery.

Umphezulu or *inyoni*, another form of childhood diarrhea, is believed to be caused by inappropriate behaviors (breaking of taboos) by the mother while pregnant. Green [16] reports that *inyoni* is treated with purification rituals (thought to nullify the effects of the broken taboos) and by traditional "vaccinations" and herbal decoctions.

Training of traditional healers was adopted as one of the strategies of the MOH's diarrheal disease control program. Hoff and Maseko [18] indicated that efforts to train healers with instructional materials based upon Swazi explanatory models of diarrheal disease met with some success. Dehydration was explained as a condition in which the body is out of balance as a result of excessive loss of fluids. Restoration of harmony and balance, a central theme in the Swazi explanatory model of disease and health, could be restored through the use of ORT. Increased referrals to clinics of children with diarrhea and vomiting were reported by traditional healers after the training intervention. The initial progress in training healers to use a sugar-salt-solution (SSS) was apparently stymied when the national policy was changed to stipulate ORS instead of SSS. Healers reportedly were reluctant to use "unnatural" ingredients (i.e., ORS packets) for fear it would anger their ancestors [18].

Ethnomedical¹ and other behavioral studies have used qualitative and quantitative assessment techniques to develop explanatory models of diarrhea that include illness terms, theories of causation, home treatment practices, and health-seeking behaviors [11, 20-26]. Thorough and in-depth data collection for these studies required considerable length of time at the project site, which delayed availability of the data for programmatic purposes. As a partial solution to this problem, focus group discussions and other rapid qualitative assessment techniques have become a method of choice for the collection of social and behavioral data [27, 28]. This qualitative study used focus groups (FG) and individual interviews to rapidly assess why some mothers whose children were seen at health facilities subsequently consult with traditional healers for the same diarrhea illness episode.

Methods

The 1986 census divided Swaziland administratively into 1,080 census enumeration areas. The 1988 Swaziland Family Health Survey (SFHS) used a two-stage sampling procedure to select a nationally representative sample of women and men from homesteads in 174 enumeration areas. Using the list of enumeration areas from the SFHS, we systematically selected every 10th enumeration area for our study. This resulted in a total of 17 areas.

Focus group interviews were selected because this method allows participation by a large number of respondents in a short period of time and can yield reliable qualitative data on behavior [29-34]. Field notes made during the interviews were also used to describe problems encountered in the field and the contemporary lifestyle of the population as observed during data collection.

Four interviews were planned for each selected enumeration area: two FG interviews (one group of males, one group of females) and two individual interviews with mothers of children < 5. For each area, a map with prenumbered homesteads was obtained from the Department of Economic

¹ Ethnomedical refers to studies of the local population's knowledge and perception of illness, disease, and medicine.

Planning and Statistics. After randomly selecting a homestead in each area, next nearest homesteads were visited until two mothers of children < 5 had been interviewed. Respondents for the FG interviews were purposively selected for participation from nearby homesteads, trade stores, and other sites close to the randomly selected homesteads. Inclement weather precluded completion of one individual interview and one male FG. Men and women other than mothers were included in the study because MOH staff believed that women's spouses influence health decisions affecting their young children [35]. Women other than mothers of young children were included in the FG because they may be called upon as resources by mothers of children < 5. A study of health behaviors among the Basotho, a neighboring ethnic group, supported the inclusion of this type of respondent [36].

The diarrhea-specific questions were part of a larger interview that addressed the sociodemographic characteristics of respondents, their knowledge and practices related to four childhood illnesses, and three preventive maternal and child health activities. Each complete interview required 45 to 60 minutes, and each FG interview also averaged 45 to 60 minutes. Interviews (including the presentation of the diarrhea case scenario) were carried out by a team of six MOH staff members trained and supervised by one of the authors (RPW). Community respondents were interviewed in siSwati; health provider interviews were conducted in English or siSwati. Individual and FG interviews were conducted in 1990 during October (14 sites) and December (3 sites).

The diarrheal diseases portion of the study instrument included an interview discussion guide that was used following the presentation of a hypothetical case scenario about a mother who seeks treatment for a child who eventually dies from diarrhea-related dehydration (Figure 1). The guide and scenario were the same for both individual and FG interviews.

The scenario format was used because health workers serving as interviewers thought respondents would be more comfortable discussing the behavior of a hypothetical person rather than their own behavior or that of someone they knew. The MOH interviewers reported that the Swazi are sensitive about being considered ignorant of modern practices [9], and discussion of the topic would be more acceptable if respondents could answer in the third person.

Figure 1. The Hypothetical Case Scenario

This is a story about a mother who had a child with diarrhea. She took the child to a clinic. The nurse treated the child with ORS and discharged him. The nurse told the mother to continue giving the child ORS at home. She told the mother that the ORS would not stop the diarrhoea but it would replenish fluids in the child's body. On arrival at home, the mother, seeing that the diarrhoea did not stop, took the child to a traditional healer who gave her some herbs (timbita). The mother then stopped giving the child ORS. The child became worse, and the mother was advised to go back to the clinic. On arrival at the clinic, the child died of dehydration.

After reading the scenario to the respondents, the interviewer asked five questions (Figure 2).

Figure 2. The Five Probe Questions

1. What do you think caused this child's death?
2. Why do you think the mother did not follow the instructions given to her at the ORS corner?
3. What would you do if this young mother had been your daughter?
4. What should the health service do to help mothers understand the benefits of using ORS for children suffering from diarrhea?
5. Why do you think this mother took her child to the traditional healer after being told that the ORS would not stop the diarrhea?

All interviews were conducted in siSwati and tape-recorded. Responses were also handwritten on the interview forms by the interviewers. FG participants were asked to discuss their answers to the questions, and then provide a consensus response. Although this process differed from other commonly used FG techniques, it reflects how some African families discuss and make treatment decisions [14, 37]. This consensus process was mediated by the FG moderator. Working in two- or three-person teams, interviewers reviewed the tape recorded and hand written responses, and expanded their initial notes summarizing participants' responses to the five questions.

Codes were developed for frequently repeated phrases in the text that summarized individual or FG answers to the questions posed. The interview texts were coded and translated into English. The coded responses were entered and analyzed using EpiInfo software [38]. For FG interviews, the consensus response of the group to each question was entered and analyzed as a single group response. Frequencies and percentages reported in the tables reflect individual responses for mothers who had been interviewed individually and the consensus responses for the FG. This approach to analysis of textual information is a form of content analysis [39]. Types of responses were compared by interview type (FG, individual interview), and by the gender of respondents. The patterning of responses was also mapped to determine if there were linkages between responses about the cause of the child's death and the behavior respondents said they would have taken had the young woman in the scenario been their daughter.

The study team included two primary health care program managers (one was the Diarrheal Diseases Program Manager) and eight other MOH staff. All team members attended a two-day training session to gain familiarity with the questions and study protocol, and to learn how to 1) moderate a focus group interview, 2) be nonjudgmental during an interview, 3) avoid leading questions during follow-up probes, 4) record respondents' answers verbatim during the course of the interview, and 5) summarize and tabulate qualitative data.

Results

Thirty-three FG interviews (16 male and 17 female) were conducted. One male FG was not completed. A total of 240 individuals participated in FGs. The average group size was 7 (range 4-15), and the mean age of groups of respondents was 34 for male groups (range 20-47) and 27 for female groups (range 22-41). While being a parent was not a selection criterion, most participants in the FG were parents. The average number of children per participant was 6 for the 12 male groups reporting and 4 for the 12 female groups reporting.

Two individual interviews of mothers with children < 5 were completed at each of 16 sites; only one interview was possible at the 17th site (n=33). Ten mothers had attended (but not completed) primary school, 19 had completed middle school, and information was not provided by 4. Twenty-three mothers said they could read siSwati.

The consensus response of 9 of 17 FFG and 6 of 16 MFG attributed the child's death to diarrhea, while the most frequent response among individual respondents was to blame traditional medicine for the child's death [Table 1]. Other causes of death mentioned by respondents included mixing scientific and traditional treatment methods, the mother's carelessness, and the mother's lack of trust in the use of ORS. The MFG attributed responsibility for the child's death more frequently to the mother's carelessness and to the use of treatments from different medical traditions than the mothers did in the individual interviews or in the FFG.

In all of the interviews, lack of trust in the use of ORS was the most frequently cited explanation for the mother's failure to follow the nurse's instructions [Table 2]. The FFG were more likely than individual respondents or MFG to attribute failure to follow instructions to the mother's distrust in the use of ORS. Five FG and five individual respondents reported that the mother in the case scenario did not follow the nurse's advice because the ORS had not stopped the child's liquid stools. Trust in traditional medicine was also reported as contributing to the mother's behavior; mothers in the individual interviews and the MFG were more likely than the FFG to support this explanation. One individual respondent said that the mother in the scenario thought her child had *inyoni*¹.

¹ This response is coded as "other."

Results

When asked what they would have done if the mother in the case scenario had been their daughter or daughter-in-law, respondents in all types of interviews offered several similar responses (Table 3). The most frequently mentioned were the following: 1) they would blame the mother or send her away from the homestead; 2) they could have prevented the child's death by insisting that the mother use ORS; 3) they would advise the mother not to use traditional medicine; and 4) they would sympathize with the mother by either accepting her, feeling pity for her, or having patience with her. Although some mothers in the individual interviews (12%) reported that they would have discouraged the use of traditional medicine for the child's diarrhea, no MFG or FFG reported this. The FFG (8 of 17) said that they would have been supportive of the young mother's use of ORS, thereby saving the child from death. A few of the MFG (2 of 16) and individual mothers (27%) would also have assured that the mother use ORS.

TABLE 1

Question 1: What do you think caused this child's death?	Individual Mothers n=33	Female Focus Groups n= 17	Male Focus Groups n= 16	All Focus Groups n=33
Traditional Medicine	14 (42%)	4 (24%)	1 (6%)	5 (15%)
Diarrhoea	7 (21%)	9 (53%)	6 (38%)	15 (46%)
Careless Mother	5 (15%)	1 (6%)	5 (31%)	6 (18%)
Mixing Treatments	3 (9%)	2 (12%)	3 (19%)	5 (15%)
Didn't trust ORS	2 (6%)			
Other	2 (6%)	1 (6%)	1 (6%)	2 (6%)

Results from 33 individual mother interviews and 33 focus group discussions. Focus group data reflect single consensus responses from each group. Swaziland Health Seeking Behaviors Study, October 1990.

TABLE 2

Question 2: Why do you think the mother did not follow the instructions given to her at the ORS corner?	Individual Mothers n=33	Female Focus Groups n=17	Male Focus Groups n=16	All Focus Groups n=33
Didn't trust ORS	14 (42%)	13 (77%)	7 (44%)	20 (61%)
Trusted traditional medicine	6 (18%)	1 (6%)	2 (13%)	3 (9%)
Saw no improvement in the child	5 (15%)	2 (12%)	3 (19%)	5 (15%)
Didn't trust the nurse	4 (12%)			
Was careless	1 (3%)	1 (6%)	1 (6%)	2 (6%)
Other	3 (9%)		3 (19%)	3 (9%)

Results from 33 individual mother interviews and 33 focus group discussions. Focus group data reflect single consensus responses from each group. Swaziland Health Seeking Behaviors Study, October 1990.

TABLE 3

Question 3: What would you do if this young mother had been your daughter?	Individual Mothers n=33	Female Focus Groups n=17	Male Focus Groups n=16	All Focus Groups n=33
Blame her, send her away	11 (33%)	6 (35%)	9 (56%)	15 (46%)
Assure that she uses the ORS	9 (27%)	8 (47%)	2 (13%)	10 (30%)
Not use traditional medicine	4 (12%)			
Nothing	3 (9%)	2 (12%)	4 (25%)	6 (18%)
Accept her	3 (9%)		1 (6%)	1 (3%)
Other	3 (9%)	1 (6%)		1 (3%)

Results from 33 individual mother interviews and 33 focus group discussions. Focus group data reflect single consensus responses from each group. Swaziland Health Seeking Behaviors Study, October 1990.

When asked how the MOH could help mothers understand the benefits of using ORS, mothers in individual and FG interviews said that mothers' education about ORS must be improved or continued (Table 4). Mothers in individual interviews mentioned that chiefs and rural health motivators (RHMs) should instruct or educate them about ORS. FG respondents also suggested that there should be cooperation between modern and traditional healers.

Table 5 summarizes individual and group responses about why the mother in the scenario sought help from the traditional healer after receiving ORT for her child at the health facility. The most frequently reported responses among mothers in the individual interviews were trust in the use of traditional medicine (42%), lack of visible evidence that the child's condition was improving (24%), distrust in the use of ORS (18%), and distrust of the nurse (3%). Other respondents (12%) said that the mother in the scenario felt that there was "no hope" for the child, that the nurse failed to administer an injection, or that they "don't know." Four types of responses were offered frequently by FG: trust in the use of traditional medicine (27%); inadequate advice provided by the nurse (24%); distrust of either the nurse (15%) or of ORS (9%); and lack of improvement after use of ORS (6%). "Other" focus group responses (18%) included the mother's lack of education, the nurse's failure to administer an injection, the mother's worry about the diarrhea, and the mother's confusion about what should be done.

We classified responses to Question 3 as "productive" or "non-productive" and cross-tabulated them with responses to Question 1, which asked about the cause of the hypothetical child's death, by respondent type. Responses were classified as "productive" if they were judged similar to responses that would be made by modern health workers (e.g., assure ORS use; not use traditional medicine; or accept her—if the response to Question 1 indicated there was an understanding of the cause of death that was consistent with the scientific/modern system). "Non-productive" responses were critical, punitive, or negative (e.g., blame her, send her away; do nothing; accept her—if the response to Question 1 was consistent with the traditional system). MFG tended to agree on more non-productive responses than FFG (88% vs. 53%). However, the responses to Question 4 indicated that most FG and individual mothers supported provision of health education and ORS by health workers. Therefore, there was no apparent link between traditional or modern beliefs about the cause of diarrhea-related death and respondents' suggestions for health-related behavior.

TABLE 4

Question 4: What should the health service do to help mothers understand the benefits of using ORS for children suffering from diarrhoea?	Individual Mothers n=33	Female Focus Groups n=17	Male Focus Groups n=16	All Focus Groups n=33
Continue to educate us (e.g., via chiefs, rural health motivators)	23 (70%)	10 (59%)	11 (69%)	21 (64%)
I don't know	7 (21%)			
Give us ORS for home use	3 (9%)	2 (12%)	1 (6%)	3 (9%)
Cooperate with the healer		1 (6%)	2 (13%)	3 (9%)
Other		4 (24%)	2 (13%)	6 (18%)

Results from 33 individual mother interviews and 33 focus group discussions. Focus group data reflect single consensus responses from each group. Swaziland Health Seeking Behaviors Study, October 1990.

TABLE 5

Question 5: Why do you think this mother took her child to the traditional healer after being told ORS would not stop the diarrhoea?	Individual Mothers n=33	Female Focus Groups n=17	Male Focus Groups n=16	All Focus Groups n=33
Trusted traditional medicine	14 (42%)	7 (41%)	2 (13%)	9 (27%)
Saw no improvement in the child	8 (24%)	1 (6%)	1 (6%)	2 (6%)
Didn't trust ORS	6 (18%)	2 (12%)	1 (6%)	3 (9%)
Was given inadequate advice		5 (29%)	3 (19%)	8 (24%)
Didn't trust the nurse	1 (3%)	1 (6%)	4 (25%)	5 (15%)
Other	4 (12%)	1 (6%)	5 (31%)	6 (18%)

Results from 33 individual mother interviews and 33 focus group discussions. Focus group data reflect single consensus responses from each group. Swaziland Health Seeking Behaviors Study, October 1990.

Discussion

These findings provided clues to the Swaziland MOH about why some mothers who bring a child to an ORT center for the treatment of diarrhea subsequently seek help from a traditional healer. The FG responses were consistent with and complemented those from individual interviews, and most of the data support the need for improving health provider training in health education and addressing fathers and other influential community members as an important part of the process to improve case management of childhood diarrhea.

In the Swazi explanatory model, *umsheko* (loose stools) that do not respond immediately to therapy are attributed to sorcery, requiring traditional treatments from healers [16]. Since ORS does not stop a child's diarrhea, a mother who does not understand how ORT works may visit a healer if the diarrhea continues.

However, the beliefs and attitudes of an individual mother are not the only factors that influence her behavior [12,14,16]. Although a Swazi mother has the primary responsibility for her child, that responsibility is also shared with others, especially the child's grandmother and father. In patrilocal and patrilineal societies, these and other relatives who live in the homestead can influence younger women's treatment choices for their children [14].

A few mothers in the individual interviews said that the woman in the case scenario should not have used traditional medicines for the treatment of diarrhea. Similar statements were not provided by participants in the MFG or FFG [Table 3]. The absence of such statements in the group interviews may suggest that traditional medicine is socially acceptable (especially for *inyoni* or *kuhabula*), and that the use of traditional healers is not likely to result in social sanctions in the event of adverse effects. Death following a visit to a traditional healer, who may offer an explanation of death congruent with people's beliefs (such as sorcery), may be more socially acceptable than death following a clinic treatment that is not in accordance with Swazi beliefs about diarrhea. In an area where traditional beliefs conflict with reliable modern treatments, the use of peer educators is often valuable. Swazi women who have used ORS successfully might be recruited to help develop messages and promote the benefits of ORT. Those messages should specifically address the efficacy of ORS to treat dehydration [11, 24].

In 1985, Green asserted that "traditional medical beliefs and practices are unusually tenacious in Swaziland" [16]. However, data from this qualitative study suggest that some modern health beliefs and practices have been integrated by many Swazi women into explanatory models for diarrheal illness, treatment, and death. Some Swazi respondents attributed the child's death in the scenario to the use of traditional medicine. Other women in individual and FG interviews said that they would be supportive of a mother who would use ORS, and some women and men suggested that the MOH should continue its health education efforts.

To expect a young Swazi mother with relatively low social status within the context of a patrilineal society to make key decisions about the choice of medical treatment during a crisis might be unrealistic. In the SFHS, when asked "who decides whether a family member with a health problem should go to a health care provider," 39% of the female respondents indicated themselves,

15% said their spouse or partner, 11% said both respondent and spouse, 12% said grandmother, 2% other relative, and 22% reported “other” [10]. A better understanding of how treatment decisions are made may be gained by examining normative responses elicited in group settings.

Worldwide, health care providers share responsibility for educating mothers and other caretakers who bring sick children to a health facility. Improving the communication abilities of health workers can help build trust between health workers and patients and hence increase the potential impact of health education messages. The personal, interactive style of successful health workers [41] is similar to that of the traditional healer in that it addresses both the psychosocial and biological concerns of patients. This approach to patient care may account for greater acceptance of health workers by their communities.

Data from our study are compatible with the notion that some mothers continue to use traditional healers and traditional medicines for treating children with diarrhea because they do not trust the advice of the health worker, do not trust the use of ORS, or believe that the child has *inyoni* (a type of diarrhea believed to be caused by sorcery). Through these qualitative responses, we learned that a mother might be confused by the nurse’s treatment unless there is a change in the frequency and consistency of their child’s stools. The advice given at health centers should continue to emphasize that ORS solution will restore a sick child’s harmony and balance, even though loose stools may continue for a few days.

Our FG method of having the group come to a consensus may have limited the variety of responses. However, the FG moderators reported that the range of responses provided prior to reaching consensus was similar in all of the FG. In Swaziland, although the use of healers and traditional medicines is considered a sensitive topic [16], it was discussed in-depth in both the individual and group interviews. We expected that more conservative responses about use of traditional medicines would be expressed in the group rather than in individual interviews. This was suggested in the attribution of the cause of death [Table 1], but was not as evident in the actions the groups agreed they would have taken if the mother in the scenario had been their daughter [Table 3].

The involvement of health workers in the planning of the study also provided an important learning experience for them. They reported that hearing the voices and seeing the expressions of the respondents during data collection had an important effect on their understanding of community perceptions about the treatment of diarrhea. The use of both individual and group interviews enabled us to study the choice of provider from the perspective of the individual mother and from the members of her homestead. Taken together, the collective data provided important information and insights for the Swazi MOH to act upon.

Conclusions

The data suggest the following:

- 1) Trust in health care providers and their methods of treatment appear to be important factors that influence a mother’s compliance with treatment of childhood diarrhea. Health workers can gain the confidence of mothers by

Conclusion

- helping them understand the consequences of dehydration and the benefits of using ORS.
- 2) A mother whose child dies from a diarrhea-related episode may risk being blamed for the child's death by her husband and his relatives, depending on her choice of treatment for her child's illness.
 - 3) While education of individual mothers about ORT is essential in improving the case management of childhood diarrhea, ORT education also needs to be provided to those who influence mothers' behaviors, such as traditional healers, spouses, older women, rural health motivators, and chiefs. Once convinced of the effectiveness of ORT, these individuals can provide support and encouragement to mothers administering ORT to their young children at home and seeking ORS at a clinic in cases of diarrheal dehydration.

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