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Traditional Beliefs and Practices Related to Child Diarrheal and Sexually-Transmitted Diseases: Building a Cooperative Communication Strategy

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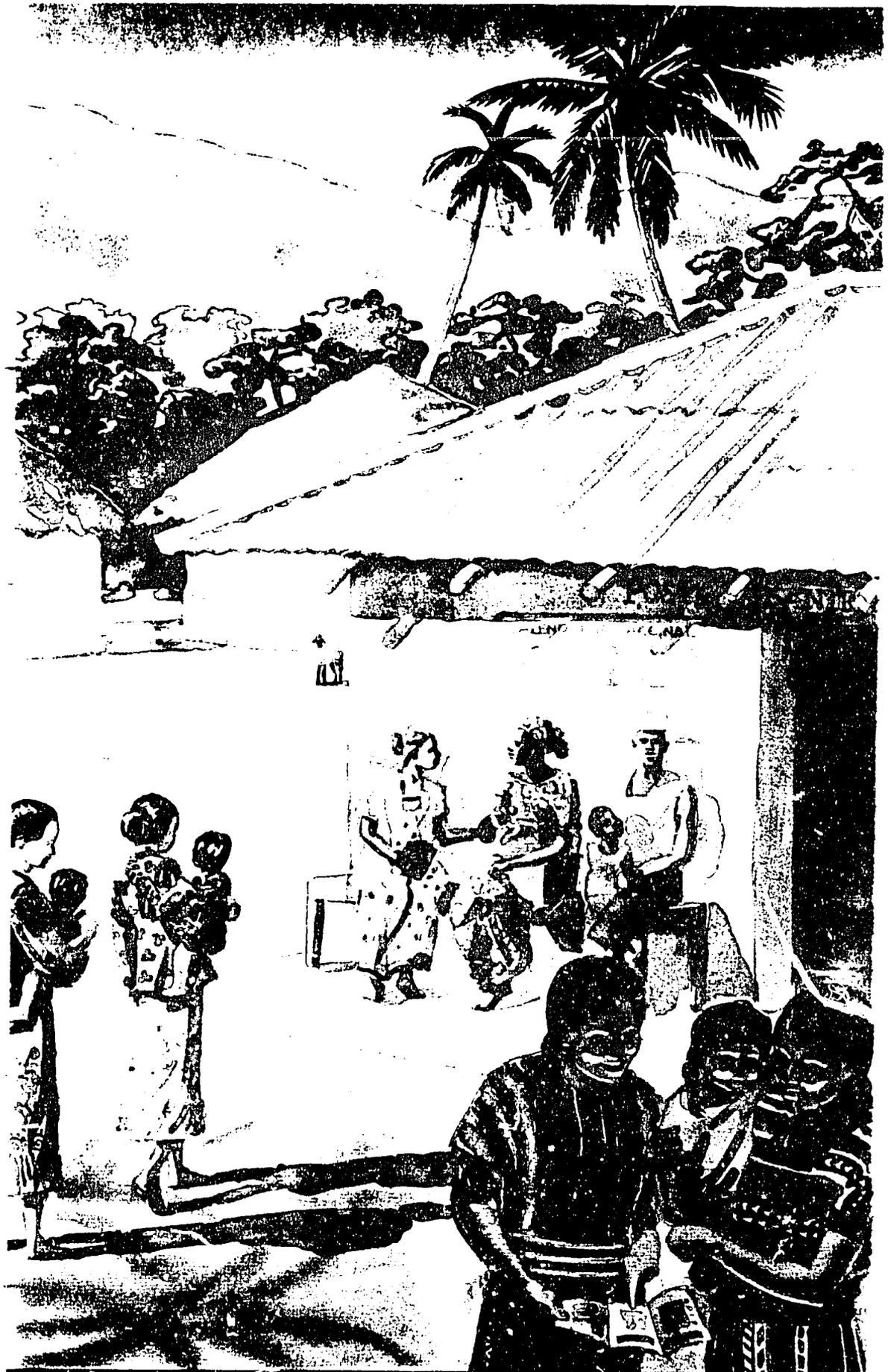
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Traditional Beliefs  
and Practices  
Related to  
Child Diarrheal  
and  
Sexually-  
Transmitted  
Diseases

Building a  
Cooperative  
Communication  
Strategy

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## Executive Summary

### PURPOSE

Using qualitative research methods such as focus group discussions and in-depth and key informant interviews, data were gathered on traditional healers' beliefs and practices associated with diarrhea and sexually transmitted diseases (STDs) in Manica Province, Mozambique. The immediate research objective was to establish an adequate knowledge base to develop a training strategy for traditional healers and improve intersectoral cooperation between the Provincial Health Department of Manica and the Department of Traditional Medicine in the prevention and treatment of mild diarrheas and STDs. A more general goal was to provide a model to guide the development of collaborative programs in other health areas such as immunization, maternal and child health, infectious diseases, or mental illness. A third goal was to demonstrate the value of quick, low-cost ethnomedical research for the development of culturally-sensitive health education strategies and related public health interventions—whether or not there is interest in collaborating with traditional healers.

### FINDINGS

#### General

At the standards of African traditional medicine, Manica healers have complex nosologies (disease taxonomies) based on fine distinctions among symptoms. This requires highly-developed diagnostic skills and implies careful empirical observation. Their *materia medica* is no less complex. As elsewhere in Mozambique and Africa, a majority of the population consults traditional healers. It is estimated that there is one healer per 200 people in Manica.

After delegates from AMETRAMO, the Maputo-based national organization of traditional healers, visited Manica in early 1991, local associations of healers reorganized themselves into

provincial- and district-level branches of AMETRAMO. There is now a president of traditional healers for Manica province and healers from each district within the province (at least the districts accessible to Chimoio) have chosen a president and coordinator to represent their district.

#### Diarrhea

There was a distinction between common or simple diarrhea and more serious diarrheas. The later are characterized by symptoms such as milky or greenish colored stools, blood in the feces, or vomiting. Dehydration as such was not understood. The outstanding symptom of the depressed fontanelle, however, was recognized as a serious condition that is not necessarily connected with diarrhea.

From a public health viewpoint, there is an urgent need to develop communication and cooperation between traditional healers and health authorities in Manica (and probably elsewhere) because most healers were found to oppose essential elements of the government's diarrhea control program, i.e. giving water, sugar, salt—even as separate ingredients—to an infant.

The keys to understanding traditional perceptions and practices relating to diarrhea in Manica Province proved to be (1) contamination and (2) *nhoka*. In highly simplified terms, children's bodies are believed to become contaminated through natural and mystical means, provoking their *nhokas* to react with symptoms such as diarrhea and depressed fontanelle. The *nhoka* is believed to be a Guardian of Bodily Purity that dwells within all people. *Nhoka* is a complex concept linked with modern biomedical concepts of resistance and the immune system. It proved highly useful as a vehicle to explain both dehydration and the role of ORS in cultur-

aily-meaningful and convincing terms and for communicating about other diseases as well, including some locally-recognized STDs.

### ■ Sexually-transmitted Diseases

The goal of an STD collaborative program involving traditional healers is twofold: (1) to reduce the spread of HIV infection; and (2) to reduce the incidence of common STDs because they are co-factors in the spread of HIV, and they themselves constitute a significant health problem in Mozambique. The emphasis is on prevention.

Manica traditional healers recognize two broad categories of illnesses believed to be sexually-transmitted: *siki* and *nhoka*-related. *Siki* is a generic term used to designate the more serious diseases that are considered sexually-transmitted. These diseases are naturalistic in character and they correspond fairly closely to Western biomedical categories. They are etiologically similar to their biomedical counterparts such as syphilis, gonorrhea, chlamydia and chancre. They are believed to have been imported by Europeans during the colonial era. Although very common in Manica, they are still regarded as somewhat foreign, which may partly explain their naturalistic interpretation.

As the name suggests, *nhoka*-related diseases are believed caused by contamination resulting from taboo violation. These seem to include self-limiting and/or less serious gynecological and urological conditions.

As with modern medicine, *siki* diseases involve an invisible causal agent, known as *khoma*, which must be present in one partner for the disease to be transmitted. A number of other parallel beliefs and practices were found on which to develop preventive education. For example healers recognize latency of symptoms in STDs, and they advise clients to avoid sexual partners "outside the home." They caution clients to refrain from intercourse until they are cured of the STD.

Manica healers are allopaths in their treatment of *siki*. An alien element (an herbal decoction) is introduced into the body to kill the *khoma*. Healers and possibly their clients have great faith in the efficacy of traditional medicines for curing diseases such as gonorrhea and syphilis.

### OUTCOME

Based on anthropological findings, detailed health education strategies were developed in consultation with local AMETRAMO leaders. Using these strategies, a workshop was held in Chimoio to improve intersectoral cooperation in the prevention and treatment of child diarrheas and STDs. The basic workshop strategy was to identify and reinforce aspects of traditional medicine found to promote public health, while discouraging those found to have negative health impact. Those beliefs and practices found to have little or no health impact were left alone.

Unlike standard health workshops, local health terms and concepts in local languages were used. The use of scientific terms in European languages was avoided. Communication took the form of "round-table" seminar-style discussion between peers. Traditional healers were very supportive of this approach. Participants and moderators also demonstrated correct mixing and administration of ORS, correct use of condoms, and sterilization of razor blades in hydrochloric acid solutions of household bleach. A separate workshop report and a training manual for provincial health workers were also produced.

This report covers the background, methods, and findings of the research as well as an analysis and interpretation of workshop findings. It also sets forth a training strategy that was developed from the findings and tailored to the existing beliefs and practices of traditional healers in Manica Province.

Based on limited research data on diarrhea and STDs from other parts of Mozambique as well as health ethnographies from neighboring coun-

ies, it appears that health beliefs and practices in Manica are similar to other regions of the country. It is hoped that the present study as well as the ensuing training strategy and collaborative seminar with traditional healers can serve as a model for collaboration between the modern and traditional health sectors elsewhere. A program involving traditional birth attendants has already begun in Mozambique. The present program is the first involving traditional healers.)

The Department of Traditional Medicine has proposed a three-year program to establish a viable foundation for public health collaboration between the National Health Service and the traditional healers of Mozambique.<sup>1</sup>

Preliminary census work by the Department in Maputo and Manica provinces suggests a curandeiro:population ratio of roughly 1:200. This estimate is comparable to those elsewhere in Africa: 1:234 for urban Zimbabwe; 1:575 for rural Zimbabwe; 1:200 for Lagos state, Nigeria; 1:100 for rural and urban Swaziland, 1:407 for Ghana, and 1:60 for peri-urban Senegal. With a total population of about 16 million, Mozambique should have approximately 80,000 healers. This can easily be rounded off to 100,000, because there may be a greater density of healers in rural Mozambique than elsewhere in Southern Africa and the resulting constraints on government health outreach in most rural areas. The estimate also refers to curandeiros and not traditional birth attendants or religious healers. The physician:population ratio in Mozambique is about 1:50,000, with some 52 percent of doctors concentrated in the Maputo area.

Following partly from these statistics, the rationale for developing a collaborative program between the National Health Service and traditional healers is:

- (1) Government health services are inadequate in human resources, distribution of these resources, and rural outreach;

- (2) Mozambicans are dying from preventable and treatable diseases;
- (3) Traditional healers have the numbers and distribution needed to serve the population as well as other advantages over allopathic health workers, such as cultural acceptability;
- (4) For a variety of reasons, traditional healers want to improve their healing skills, learn more about allopathic medicine, and collaborate better with modern health practitioners—which is not to say they wish to stop being traditional healers;
- (5) Since the 5th Congress (July 1989), the Government of Mozambique is seeking ways to collaborate with healers to improve the public health; and
- (6) WHO, UNICEF, OAU, the Non-Aligned Countries and other international bodies have recommended to member states that strategies to develop traditional health manpower be developed.

In view of the above, it is not a question of whether but rather how best to collaborate with traditional healers to improve the health of Mozambicans.

One of the department's primary objective was to establish regular dialogue with traditional healers in curative and preventive aspects of certain priority diseases, beginning with child diarrhea and AIDS/STDs. This was undertaken to upgrade and complement their existing skills and better adapt national health programs to the social and cultural realities of Mozambique. The first pilot or model program was in Manica province.

# I. Background to Study

## THE MODEL PROGRAM

The Department began a project in Manica province in 1991. It is hoped the Manica program can serve as a model for planning and implementing a local program of collaboration between government and traditional healers in other provinces of Mozambique. The pilot project focused on child diarrhea and AIDS/STDS; however, the model should serve to guide the establishment of programs in other health areas, such as immunization, maternal and child health, infectious diseases including malaria and tuberculosis, infant nutrition, or mental illness.

Diarrhea and STDs/AIDS were initial focus areas of the pilot program because they are both high-priority health concerns. Other selection criteria were the potential to have substantial health impact in the short to medium term and be able to begin a collaborative program without undue delay. Modern and traditional health sectors have collaborated in child diarrhea elsewhere in Africa, therefore there is a fund of practical experience on which to draw. Moreover the American consultant had considerable experience in developing and implementing a diarrheal disease program involving traditional healers in neighboring Swaziland.

In the case of AIDS/STDS, Mozambique's National Program to Combat AIDS (1988-90) had already recognized the important potential role of curandeiros in reducing the spread of HIV and the prevalence of other STD infections. The AIDS/STDS program has also set aside funds for efforts involving curandeiros. It also happened that both the Department of Traditional Medicine and the consultant had experience in ethnomedical research related to sexually transmitted diseases.

One reason for selecting Manica for the model program is that this province employs a person to act as a liaison with traditional healers. He also happens to be the AIDS Coordinator for the

province, reinforcing the choice of AIDS/STDS as a focal area. Another reason for choosing Manica was that traditional healers seemed relatively well-organized in that area, greatly facilitating communication and the logistics of organizing a collaborative program. A final reason was the safety of the Beira Corridor and resulting access to rural areas where traditional healers practice.

## BACKGROUND AND METHODS

In February 1991 under a previous consultancy, the consultant provided training in qualitative research methods for the Department of Traditional Medicine and the Manica Provincial Health Department. During an eight-day period, in-depth interviews were begun with traditional healers specializing in diarrheal disease and STDs. A preliminary report was then written.

## II. Diarrheal Disease

### BACKGROUND AND METHODS

In February 1991 under a previous consultancy, the consultant provided training in qualitative research methods for the Department of Traditional Medicine and the Manica Provincial Health Department. During an eight-day period, in-depth interviews were begun with traditional healers specializing in diarrheal disease and STDs. A preliminary report was then written.

Under the Department's immediate direction and in the absence of the consultant, five additional weeks of qualitative data-gathering was conducted in July-August 1991. Between August-September, there was preliminary analysis and interpretation of findings. The consultant returned to Mozambique in October to assist in analysis, supervise a final two weeks of data gathering in Manica, and provide training in the methods and procedures for focus group discussions (FGDs). Details of both in-depth interviews and FGDs are now presented.

### IN-DEPTH, KEY-INFORMANT INTERVIEWS

Interviewers were from the Manica Provincial Health Department (3), Radio Mozambique (1) and the Department of Traditional Medicine (2). Interviews lasted an hour or more. They used a semi-structured, open-ended interview schedule. It was refined and modified as incoming information was assessed and new lines of inquiry—or new ways to ask questions—were suggested. They interviewed 104 traditional healers in individual, in-depth interviews, 53 on diarrheal disease and 51 on AIDS/STDS in the homes of the healers in the five districts of Manica province accessible by road (and accessible at the time to the Manica branch of METRAMO). Occasionally they conducted more than one interview with a particularly-

helpful informant to go more deeply into a topic. The numbers and locations of interviews by sex were as follows:

TABLE 1. NUMBERS AND LOCATIONS OF DIARRHEA INTERVIEWS

LOCATION	F	M	TOTAL
Cidade de Chimoio	16	6	22
Vila de Gondola	7	0	7
Amatongas	8	1	9
Vanduzi	6	3	9
Machipanda	5	1	6
Total	42	11	53

TABLE 2. NUMBERS AND LOCATIONS OF AIDS/STDS INTERVIEWS

LOCATION	F	M	TOTAL
Cidade de Chimoio	9	6	15
Vila de Gondola	6	4	10
Amatongas	4	4	8
Vanduzi	2	7	9
Machipanda	3	6	9
Total	24	27	51

### FOCUS GROUPS

Six focus group discussions (FGDs) were planned for three districts in Manica province in early November 1991. Transportation problems during the last two days set aside for FGDs prevented the sixth FGD from being held. In the end, three were focused on diarrheal disease and two on STDs/AIDS. Three groups were to be comprised of women and three of men, as illustrated below, but one of the FGDs for women was canceled.

There were between four and nine traditional healers per focus group; a total of 38 participated. Discussions lasted two hours or slightly longer. Each group was led by a moderator and a detailed written record of each session was written by a recorder. The consultant trained three health workers and a local journalist in FGD methods. Topic guides specifically tailored to traditional knowledge, attitudes and practices in Manica were developed for both for diarrheal disease and AIDS/STD. All staff was trained in their use.<sup>2</sup> FGDs were conducted in villages and/or the compounds of traditional healers to help participants feel relaxed and unintimidated by any of the trappings or symbols of Western, allopathic medicine. Segregation by sex was more to remove any barriers of decorum than because it was anticipated that male and female healers differed in knowledge, attitudes and practices (104 individual interviews suggested there were no such significant differences).

To the extent possible, all participants were specialists either in diarrheal disease or in STDs. Some 38 traditional healer participated in FGDs. The majority had not been previously interviewed.

## **METHODOLOGICAL NOTE ON FOCUS GROUPS**

FGDs proved to be less productive of useful information than key-informant interviews and less efficient in terms of resource allocation. Local health workers who were involved in both individual interviews and FGDs, themselves believed the former method superior for obtaining the type of information sought, noting "They get at the truth better than focus groups." Part of the weakness seems inherent in the method itself, at least when used to discover information often kept hidden from the government. FGD moderators felt that when traditional healers are brought together in a more formal setting—especially but not limited to occasions when circumstances forced organizers to use government facilities—they adopted the polite, accommodating, deferential manner many healers have learned to present to government officials. There seemed to be pressure during FGDs for

healers to conform to a unified view, one that tends to be more in line with the views of health authorities.

Although the rudiments of FGD research can be taught to *agente*-level health workers relatively simply, moderators and recorders seemed to be hampered by a lack of comparative perspective, analytic tools and experience, and a broader interpretative framework.

If FGDs are used in the future, they could elicit basic disease terms and related concepts before the individual in-depth interviews. Individual interviews could then be used to delve more deeply into the subject—rather than the other way around as was attempted here.

The following findings are based on both in-depth interviews and FGDs.

### III. Findings

#### HEALERS IN THE MANICA AREA

Healers in the sample came from several ethnolinguistic groups related to *chiShona*: *chiUte*, *chiNdau*, *chiManica*, and *chiSena*. Two basic types of specialists were found, the herbalist and the diviner or medium. The latter also uses herbs and works closely with ancestral and other spirits believed to assist in diagnosis, determining treatment, and treatment itself. Many healers profess specialties in both areas and therefore may use two or more names to describe their specialties. Herbalists may be called *madoto* or *nyanga*. Diviners or mediums may be called *hakata*, *chiremba*, or *nyamussoro*. Also encountered was the term *dota* (probably from the English word doctor), apparently a title used for diviners with wide experience and especially good reputations.

Healing knowledge seems to be passed along within families, often from a paternal or maternal grandparent. Sometimes a grandparent's spirit is said to guide the healer. In any case, healers claim to gain diagnostic and healing knowledge directly from spirits, or through dreams. Little information was gathered on the extent and nature of empirical training healers undergo, such as through apprenticeship under a senior healer. However this is acknowledged to occur.

Healers in the general vicinity of Chimoio resemble healers in most other parts of Africa in their interest in learning more about modern, allopathic healing. They are also quite open and forthcoming about sharing aspects of their knowledge and practices when approached with politeness, respect and a reasonable explanation or inquiries into their practice. Healers who live some distance from town, however, seemed unaware of the government's new policy of *laissez faire*, let alone its interest in developing cooperation between the two health sectors. A

few such healers expressed fear of being arrested, and they were reluctant to be interviewed.

#### ■ Organization among Manica Healers

A number of Manica Province healers have heard of ZINATHA (the national traditional healers association in Zimbabwe) and some have actually attended ZINATHA meetings across the border. Urbanized healers generally agree that Mozambique needs a similar organization to "have contact with doctors."

In early 1991, few healers had heard of AMETRAMO, the fledgling national association of Mozambican healers that was created in Maputo in 1990.<sup>3</sup> But by October, a delegation from AMETRAMO had visited Manica from Maputo, and local associations of traditional healers in Manica had reorganized themselves into provincial- and district-level branches of AMETRAMO. A president of Manica traditional healers and healers from each district within the province (at least the districts accessible to Chimoio) had chosen a president and a coordinator to represent the district. AMETRAMO is currently mobilizing healers in more distant districts. The speed of such organizing is all the more remarkable in view of the Mozambique government's earlier policy of marginalizing or suppressing traditional healers.<sup>4</sup>

#### ■ Use of Modern Medicines

Some healers were asked if they use any modern medicines with their clients. All said no (true, they might fear reprisals or restrictions if they admitted this, but no evidence that modern medicines are used on clients was found). Some healers use aspirin and other common allopathic medicines for themselves; some mentioned they had no objections if their family members or

clients use such medicines. A number of healers reported referring certain cases to health centers or hospitals.

With the lessening of government controls on medicine and the development of a market economy, it is inevitable that Mozambicans will begin to self-medicate with antibiotics. Already in the Chimoio markets one can buy a 3,000,000 I.U. injectable vial of penicillin with 10 ml of distilled water in sealed plastic for Mt. 500 (21 cents U.S. at "parallel market" exchange).<sup>5</sup> With 10 year-old children sometimes the only ones available for advice on dosage (when they are in charge of a market stall), improper use of antibiotics can be anticipated. This will contribute even more to the growth of penicillin-resistant infections, thereby reinforcing the belief that traditional remedies for STDs are more effective.

### THE CONCEPT OF NHOKA

To understand local beliefs and practices related to diarrhea (including dehydration), it is necessary to understand the concept of *nhoka*. Indeed it is a key to understanding broader health beliefs in the region. A discussion of *nhoka* is presented here rather than in the analysis section. The word *nhoka* (in English orthography) means "snake" in several Bantu languages, but it has a special meaning in connection with health. Although there is no easy way to translate *nhoka* into Western biomedical terms, it may be thought of as symbolic expression of the need to respect the human body—rather like a personalized immune system.

Some healers say the *nhoka* guards or protects the body. A useful English translation might be Guardian of Health or Bodily Purity. This Guardian demands that the body it inhabits be kept clean of various impurities (toxins, in biomedical terms) or it will react with displeasure, causing pain and discomfort. It is referred to as if it has a personality somewhat independent of the body it inhabits. It may, for example, be angry or calm.

According to healers, all people are born with a *nhoka* and it remains inside the person until death. *Nhoka* can move up and down in the body from the area of the heart to the abdomen. *Nhoka* is not visible, even if one cuts open a body. It is known about because it can be felt when it is disturbed. For example, if dirt, spoiled food, or bad medicine enters the body, the *nhoka* may contract and cause cramps. It can make noise in the stomach. Healers insisted *nhoka* is not directly linked to the intestines or to worms that may appear in feces, in spite of the snake-like appearance of these visible things.

Some healers spoke as if each person has three types of *nhoka*. Most said, however, that there is only one *nhoka*, but it can manifest itself in various ways or it is spoken of in different ways depending on its function. When a child is exposed to impurities, the *nhoka* can pull down the child's fontanelle by moving downward in the body. The sunken fontanelle is locally recognized as a serious sign of poor health (and is recognized biomedically as an outstanding symptom of dehydration from diarrhea). Another way the *nhoka* can react to the accumulation of impurities is in mental retardation and/or abnormality in a child's physical development. If there is no purification of the body, the offended *nhoka* manifests itself in health problems in adulthood, such as appetite loss and infertility.

Women's *nhoka* is associated with menstruation. (This is not surprising in view of the common belief among traditional Africans that menstrual blood is contaminating.) When "dirt" accumulates in a woman's body, her *nhoka* twists and turns in discomfort and irritation. These movements are felt in the cramps that precede menstruation. Such cramps are taken as evidence that the *nhoka* is preparing to expel accumulated impurities from the body during the menstruation period.

If a man has intercourse with a woman during her menstruation, he becomes contaminated with the impurities her *nhoka* is in the process of

expelling, and he develops a disease known as *khundu*. (Note that this is not a diarrheal disease; it is seen as a sexually transmitted disease and discussed in the STD section below. The use of the term *nhoka* for this STD provided a hint that *nhoka* was involved with more than simply diarrhea, indeed with more than only children's diseases.)

If the man does not treat the *nhoka khundu*, not only will he remain sick but at the moment of conceiving a child with a woman, the unborn child's *nhoka* will be negatively affected. When the child is born, it will not only have symptoms of the disease *nhoka khundu*, it will also be susceptible to various other diseases (in biomedical terms, the child will have poor resistance, or a weak immune system).

Lastly—as elaborated below—dirt and impurities that accumulate in a child provoke the *nhoka* to at first make grumbling noises of complaint and then to cleanse the body by means of diarrhea. It, like menstruation, is seen as a natural function of ridding the body of toxins. (This view of diarrhea conforms to the modern biomedical view.)

As esoteric as the foregoing may sound, an understanding of *nhoka* has practical public health utility. It can, for example, be a vehicle for introducing public health messages. In this function it can provide a needed link between diarrheal disease, dehydration and actions needed to remedy dehydration. A detailed diarrheal disease health education strategy is outlined in a section to follow.

## LOCAL DIARRHEA TAXONOMIES

Manica healers described a variety of diseases or syndromes characterized by frequent, loose, watery stools. They say such illnesses were very common, especially among children. Focus group participants cited two to four locally-recognized diarrheas—including those with

symptoms medically recognized as dehydration—as the most common serious health problems afflicting children in the area (malaria was sometimes mentioned as another). The focus of individual interviews was on child diarrheas.

Composite profiles of several locally-recognized diarrheal diseases are now presented. While such profiles are useful in obtaining an overview of these diseases, it must be recognized that there may be conceptual differences between language group, area, and individual practitioner. Such differences add to the difficulty of designing a health education strategy for healers. Indeed a fair amount of focus group—and later, workshop—time was devoted to clearing up differences and finding points of agreement among the healers themselves. Healers in Manica, as elsewhere in Africa, do not ordinarily share their "secrets" with other healers. This means that they may never have been exposed to anything like a composite profile of locally-recognized diseases in their own areas, and they may disagree with details of symptoms or recommended treatments.

Interviewers used the Portuguese orthography for spelling of disease terms in local languages and dialects. The first or principle disease name used reflects the frequency with which a name is used in the districts where interviewing was conducted.

The table on the following page summarizes the most important diarrheal diseases discovered. Those associated with dehydration symptoms are included even if healers do not regard them as diarrheal diseases.

Table 3. SUMMARY OF IMPORTANT LOCALLY-RECOGNIZED DIARRHEAS IN FIVE DISTRICTS OF MANICA

Name of Disease	Found in Children	Found in Adults	Districts Where Found
Manhoka, Nhoka Dzo Kusorora (ordinary diarrhea)	x	x	all districts
Phiringanisso (diarrhea & vomiting, dehydration symptoms)	x		all districts
Chinhamukaka (milky diarrhea, vomiting, dehydration symptoms)	x		all districts except Amatomongas
Chikahara (a "depressed fontanelle" syndrome, not a diarrheal disease)	x		all districts
Chikamba (greenish feces, pain or lump, depressed fontanelle)	x		all districts
Kuamwissira (mucus in diarrhea, dry & wrinkled skin)	x		Amatomongas, Vanduzi, Machipanda
Tsanganiko (diarrhea with blood)	x	x	Gondola, Amatomongas, Vanduzi
"Diarreia Simples"	x	x	Chimoio
"Colera," Thikwa	x	x	Chimoio

### 1. MANHOKA

**SYMPTOMS:** *Manhoka* is a general term for diarrhea, especially the simple, common, non-dangerous type. It is the plural of *nhoka* meaning snake in the narrow sense (see preceding section). *Manhoka* may be caused by eating bad

food or drinking bad water. *Manhoka mfulu* may refer to watery diarrhea.

Used more specifically, *nhoka kusorora* seems to be the most common term for simple diarrhea. It is a condition of both children and adults. As with other *nhoka* diseases, healers begin discus-

sufferer's stomach. The *nhoka* reacts to dirt or impurities that may be introduced into the body through bad eating habits, dirty water, poor hygiene, too much water or coarse-grained porridge given to young children; or simply giving water to a young child.

While most explanations for simple diarrhea are naturalistic, some healers cited causes relating to mystical contamination and taboo violation. These latter explanations, however, are more associated with the specifically-named, more serious diarrheas listed in the next section.

Another *manhoka* is characterized by a child's eye appearing yellowish. This is associated with the rainy season, playing in a dirty area, bad hygiene, or flies that alight from mangoes. *Manhoka ekufambissa* is associated with a child cutting its first teeth. It signals the child will walk soon.

During discussions of *manhoka*, more serious symptoms were sometimes described such as vomiting, blood in the diarrhea, appetite loss, or constant thirst. Used in this sense, *manhoka* probably does not denote simple diarrhea but instead is being used generically to refer to all diarrheas. The causes of such "*manhoka*" syndromes usually go beyond food and hygiene and refer to taboo violation or other less naturalistic causes. One such syndrome is *manhoka nekurusa*, recognized by

symptoms of both diarrhea and vomiting. Another is *nhoi kusorora nhigaze*, caused by neglect of tradition. Still another is *manhoka kuhambisa asinadriru*, which involves an avenging spirit entering a child's body to seek compensation for a past homicide committed by a family member.

compensation for a past homicide committed by a family member.

**TREATMENT:** Herbal decoctions are prepared by boiling certain roots, then are introduced as teas or mixed with porridges. Those given as tea may be made from different roots than those given in a child's porridge. Healers often specified giving a teaspoon of the tea three times a day for three days. The medicinal porridge may be given less often, perhaps once a day. Adults may be given a cupful of the same tea three times a day. The goal of treatment is said to be to stop or block the diarrhea flow.

For more serious diarrheas there are more exotic treatments. For example *manhoka kuhambisa asinadriru* requires a *kufemba* ceremony which involves drumming and spirit possession on the part of the healer/medium to expel the spirit.

**COSTS.** One healer charges Mt1,000 for the initial consultation and an additional Mt5,000 if a *kufemba* ceremony is required.

### Note on Spirits and Sorcery

*Manhoka kuhambisa asinadriru* was the only diarrhea mentioned during two months of research whose etiology involved an evil or avenging spirit. Its existence was only discovered by probing. There were likewise only one or two references to witchcraft in descriptions of the more serious diarrheas. Healers in Mozambique are especially wary about revealing belief about spirits, sorcery, or witchcraft to those perceived as government authorities because of the same government's attempts (especially in the early post-independence years) to suppress such beliefs. It appears that the concept of *nhoka* is far more important in locally-perceived diarrheas than evil spirits or sorcery (the deliberate sending of illness or misfortune by one person to another).

One unusually candid healer explained that evil spirits exist, only they do not provoke diarrhea directly. Instead they prevent curative medicines from working. This is why rituals to expel spirits may be required. It is possible that this way of regarding—or at least explaining—the role of evil spirits protects healers from the intrusions of disapproving outsiders.

## 2. PIRINGANISSO

**SYMPTOMS:** Diarrhea and vomiting. The diarrhea is frequent and watery. This is a children's disease. Dehydration symptoms other than the sunken fontanelle are associated with this disease, especially dry, wrinkled skin.

**CAUSE:** This diarrhea results from violation of the norms of sexual behavior (such violation is called *piringaniswa*). It seems usually to be provoked by a man having intercourse "outside the home," i.e., with another woman while his child is still breastfeeding, and then coming home and touching his child before washing. The child then gets watery diarrhea. This type is different from the diarrhea resulting from bad food or water. It is more serious, "more like what Europeans know as dysentery," as one healer put it. The mother might also cause this diarrhea in her child by having "outside" sexual relations. The more immediate cause of the symptoms is the *nhoka*.

**TREATMENT:** Special roots are prepared with a whole egg. The parents are called together in front of the healer and the adulterer must confess his transgression. Or both parents admit that they have neglected the child and that they resolve to do better in the future. The egg is buried overnight. The next day the egg is exhumed. The healer cooks it slightly with the roots, and the mixture is given to the sick child with boiled water.

Hospitals are not thought to be able to treat this diarrhea. "It is not simple diarrhea; it's a traditional disease." The hospital staff is not thought to understand that it is the behavior of the parents that is the real cause of the illness.

## 3. CHINHAMUKAKA

**SYMPTOMS:** Whitish, milky diarrhea accompanied by vomiting. The vomit may also be milky. It is a children's disease that is said to be frequent in the summer—which some relate to a child's exposure to heat. Some healers men-

tioned depressed fontanelle, sunken eyes or skin that has lost elasticity, and lack of urine production (all dehydration symptoms).

**CAUSE:** A mother steps in milk expressed from the breast of a woman who has had a miscarriage. Her breastmilk becomes contaminated. She passes this on to her nursing child who develops diarrhea. Several other causes were described, such as a child is exposed to "heat," either directly or via breastmilk; a child drinks too much water or is exposed to salt; a child drinks breastmilk when its mother becomes pregnant again; a child ingests dirt; a child's *nhoka* is disturbed; or a mother's milk is "hot." There were a very few mentions of witchcraft. A single healer might cite more than one cause.

**TREATMENT:** Special roots boiled and decoction given three times a day, sometimes in porridge. Some healers cautioned against adding sugar or salt to therapeutic porridges, saying this would stimulate vomiting or more diarrhea or would spoil the medicine. A few cited a treatment involving the mother and her sick child which must take place at a crossroads. Using roots, vaccination incisions and ritual, the mother's milk is purified.

**ETIOLOGY.** Can be fatal if not treated. Some consider this the most serious of diarrheas.

## 4. CHIKAHARA

**SYMPTOMS:** This term appears variously used to refer to a disease or syndrome, or simply to the symptom of a depressed fontanelle in a child. In any case *chikahara* is identified by a sunken fontanelle, an outstanding symptom of dehydration. Another such symptom may also be associated with a sunken roof of the mouth. Some healers describe a lump or boil on the child's left side (although others maintain this is *chikahara* or another disease). *Chikahara* is recognized as leading to death unless treated properly. However most healers seem not to associate the fontanelle symptom with diarrhea, a common phenomenon in traditional medical

enon in traditional medical systems worldwide.<sup>6</sup> The above may be accompanied by high fever, causing the fontanelle to rise.

**CAUSE:** Children are said to be born with the sunken (or unclosed) fontanelle. The immediate cause is the child's *nhoka* contracting or pulling downward, which also pulls down the fontanelle.

However, the *nhoka's* action is considered a reaction to contamination. Less often, *chikahara* is seen as a growth deficiency which may refer to the unclosed fontanelle.<sup>7</sup>

**INCIDENCE:** *Chikahara*, like *chikamba* below, is described as one of the most frequent serious health problems of local children, one that can be fatal.

**TREATMENT:** One treatment is a cold water herbal solution (which one healer called *mugonangerere*). Another—more common—is an herbal decoction from boiled roots. With both, a small portion is given three times a day for three days. A medicine may also be applied directly to the top of the child's head. The child is carefully watched during treatment.

**PREVENTION:** As with treatment of certain diarrheas, the focus of preventing *chikahara* is on the mother, not the child. In this case, the mother drinks a special herbal decoction over a six-to-seven month period prior to giving birth. If this is followed, the baby will not develop a depressed fontanelle. As what might be called a secondary prevention, babies "born with" a depressed fontanelle must be rubbed with a special medicine known as *mpikwe* within two or three days after birth, or they will develop full *chikahara*.

**TRADITIONAL VERSUS MODERN TREATMENT:** Mothers with access to a hospital may first take their child there for treatment of simple diarrhea. If the child does not improve quickly, she will take it to the healer. As one healer said, "This is when a disease like *chikahara* is suspected." Healers expressed complete confidence in the efficacy of their treatments for these two

conditions and believe hospital staff cannot recognize, let alone treat, these. In the words of one, "They think the child only has diarrhea. That's why we need to have cooperation between doctors and traditional healers!" (Nb. that this is just what many doctors say about healers, i.e. they do not understand dehydration.)

Healers believe *chikahara* cannot be treated very effectively by modern medicine. They can cite cases unsuccessfully treated at the hospital that they later cure. They are quite confident that they can cure this condition in two or three days. Some healers claimed they refer children with diarrhea to the hospital if they cannot cure them in this period<sup>d</sup>.

## 5. CHIKAMBA

**SYMPTOMS:** Greenish feces and a lump or pain in the side (usually left) of a child's waist. In two of three districts, depressed fontanelle was cited as a symptom. Some healers reported greenish diarrhea, but others thought *chikamba* unrelated to diarrhea.

One informant described this as the most serious child's disease. A child is believed to be born with this. The ultimate cause is that one of the parents slept with a partner outside of the marriage. If it is the father and he sleeps with his wife before purifying himself, his semen will carry a contaminating agent to his wife's womb. Some said the mother in this state has the gynecological problem of contamination known as *nhoka dzoni* (see STD section). The woman's next child will be born with this contamination and will eventually fall ill. As a congenital disease, *chikamba* is not contagious.

**TREATMENT:** An herbal decoction given as a tea or mixed in the child's porridge. An herbal medicine may also be rubbed or massaged onto the child's stomach. There may be razor incisions.

**INCIDENCE:** *Chikamba*, like *chikahara* above, is described as one of the most frequent serious health problems of local children.

## 6. (DIARRHEIA DE) TSANGANIK

**SYMPTOMS:** Chronic diarrhea mixed or streaked with blood. Coughing present. A few healers linked this syndrome with tuberculosis or mentioned weight loss.

**CAUSE:** Like *phiringanisso*, *tsanganiko* is provoked by the behavior of the parents of a child. However the behavior in question is not "outside sex" but failure to perform funeral rituals for a family member. Some said this was trying to be too modern or "civilized." Another explanation relates to a death in the family. If someone comes to visit from the outside, he or she should take a preventive medicine given to combat contamination from the death. If the visitor fails to do this, his whole family might get sick with bloody diarrhea. A diviner-healer giving this description commented wistfully that many traditions are neglected nowadays and that hospital medicine cannot help with problems that result from neglected traditions.

**TREATMENT:** Parents must confess their transgression.

## 7. (DIARRHEIA DE) KUAMWISSIRA

This is a child diarrhea provoked by nursing a child with milk believed to be spoiled by a new pregnancy. Some healers described the diarrhea as milky or mucousy. Some mentioned the dehydration symptom of dry, wrinkled skin.

## 8. NHONGO

Children with *nhongo* have greenish or very white eyes. Another symptom is brown mucus in their vomit, plus they have diarrhea. It is often seen during the season of fresh leaves when a lot of green leaves are eaten. Another cause is when fear becomes "stuck in the child's stomach." For this latter, the healer gives a medicine to make the child vomit (note use of purgative).

## 9. OTHER SYNDROMES

Occasional mention was made of *puwa* or *powa*, a yellowish diarrhea accompanied by convulsions and fever. Infrequent mention was also made of *diarreia simples* and colera (cholera), described as a very serious type of diarrhea. One female healer described colera symptoms as pain and heat in the stomach, vomiting and diarrhea. The cause of colera was said to be spirits bringing bad luck, or perhaps revenge. Its treatment was similar to other diarrheas: cut roots, boil them in water, and give the decoction to drink. The European names cholera and simple diarrhea appeared to be used only around the town of Chimoio.

## IV. Analysis and Interpretations

By the standards of traditional medicine, Manica healers have complex disease taxonomies based on fine distinctions between symptoms. There are only three major types of diarrheal disease (including fontanelle syndrome) in Swaziland,<sup>8</sup> five in Lubumbashi, Zaire,<sup>9</sup> and few countries appear to exceed eight world-wide.<sup>10</sup>

### TREATMENT

According to some (but not all) healers, the goal of treatment in common or simple diarrhea (*manhoka*, *nhoka kusorora*) is to stop the symptom of diarrhea, whereas in all more serious syndromes (*chinhemukaka*, *piringanisso*, *chikahara*, *chikamba*, etc.) the goal is to "calm the *nhoka*" of the sufferer. Others claim that all diarrheas should be stopped, although some note that the best way to accomplish this is to calm the *nhoka*. Stopping the diarrhea is not consistent with the belief that diarrhea serves the useful purpose of ridding the body of impurities. That medicines are used with this avowed purpose probably reflects healers' ambivalence toward the symptom of diarrhea: it is good that impurities are leaving the body, yet diarrhea is a fearful thing. The same ambivalence can be found in modern biomedicine. Diarrhea is seen as flushing toxins from the body, yet a variety of largely-ineffective remedies intended to stop diarrhea are used and even prescribed by doctors and pharmacists.

Little variation was found in the basic approach to treating diarrhea between healers, ethnolinguistic group, or specific type of diarrhea. Herbs (roots, sometimes leaves) are used as decoctions or cold-water solutions and given as teas to the child. The hoped for effect—as elsewhere in Africa—is to "stop" or "slow" the diarrhea. The herbs probably contain tannins which slow peristalsis in the bowel. Purgatives and enemas seem not to be used for diarrhea. One healer explained that there is no need to increase the flow of diarrhea by putting more

liquids in the child's mouth or by performing an enema. Some healers were said to use herbal fumigation, but none were encountered who mentioned using this method themselves.

A major difference between traditional and modern treatment of diarrheal diseases is that the former attempts to go beyond symptomatic cure and employs a form of socio-therapy to rectify what is perceived as the real cause. Since causes are often related to the correct and moral behavior of the parents and improvements in these areas can only improve the home environment, such treatment can be viewed as holistic and complementary to symptomatic cure. They are not, therefore, something to be discouraged.

With diarrheal disease, as with other diseases that have been the subject of health education efforts, ideas whose origin are with allopathic medicine are often mixed—even integrated—with traditional health beliefs. In the context of a formal interview, traditional healers may tend to emphasize "modern" health ideas in an attempt to impress the interviewer favorably and to avoid the possibility of ridicule.

One such concept is "lack of blood" or "lack of water" (in Portuguese: *falta de sangue*, *falta de agua*). Although the former might seem to refer to anemia, for most healers the two phrases mean the same thing. Healers explained—or were able to repeat—that it is a condition that occurs when all traditional methods have failed and a child still has diarrhea. The child then develops symptoms such as whiteness of palms and soles, white eyes, edema in limbs, loss of appetite, loss of skin elasticity, general weakness and thirst. These are interpreted—or at least were learned—as the child being without water. Healers noted that they can give the child water but this will just swell up his stomach. "It won't be enough." The child must be taken to a hospital quickly, where the doctors "will put water"

(or "blood") into the child by needle in the arm. Some healers said that if *falta de agua* occurs at night, one can give some boiled water, sugar and salt mixture, but the child must still be taken to the hospital.

In spite of the ability of some healers to provide such an explanation, very little evidence was found of healers using ORS or sugar-salt solution for dehydration or even the individual constituent elements of water, sugar or salt (see discussion below.)

### DIETARY AND GENERAL ADVICE

Manica healers claimed not to give much specific dietary advice regarding the sick child. Since the quality and purity of the mother's milk is of such importance in locally-recognized diarrheas, healers might be more inclined to give dietary advice to the mother. For example, they may suggest avoiding bitter food or alcoholic beverages while their child has *manhoka*. For the older sick child, most healers seem to advise maintaining normal levels of feeding.

Some nutritional and general advice, however, seems to be of considerable negative health consequence, especially if it reflects the beliefs and practices of mothers of children with diarrhea. For example, healers often advise mothers to allow less food and liquid into the child because—as several noted—the less that goes in, the less that comes out in diarrhea. For this reason, healers were nearly unanimous in prescribing only small amounts of fine-grain, non-watery porridge for children with diarrhea. Porridges are made from *mpira* for younger babies (during the first six months) and maize for older babies, or when *mpira* is not available.

Other porridges are used to introduce herbal medicines into the child. They are made from the same grains but they are relatively dry and only small portions are given. There seems to be a notion that these porridges "clean" the child's insides.

Most healers said they do not ordinarily give water to children in the first four months, and they are sparing with liquids when medicine is given. Some healers specifically mentioned that water is bad for infants—or for older babies in more than very small quantities. On the other hand, a few healers reported giving or recommending rice water (*caldo de arroz*) as a remedy for diarrhea.

Again most healers spoke of a traditional prohibition against giving salt to a child before the eighth month, or before its first teeth appear. Salt was believed to be harmful to babies by contaminating them. Some healers said that salt interferes with traditional medicines; others simply explained that ancestors forbid salt for young children.

Note that some healers reported that ingesting salt or sugar is actually the cause of certain child diarrheas, for example *chinhamukaka* which is associated with dehydration symptoms. This greatly complicates attempts to promote the addition of sugar or salt to drinks or porridges already in use.

Only a very few healers claimed they added a small amount of sugar, salt, and or lemon juice to porridges intended for children with diarrhea (lemons, papaya and bananas are available in the area).

In another finding related to both diet and the infant's immunity to infections, the colostrum appears to be regarded as "dirty" or spoiled and therefore bad for the nursing infant; therefore it is thrown away. The infant does not nurse until the mother's breast is "cleaned" until "better," presumably cleaner-appearing, milk emerges. Only one better-educated healer claimed colostrum was good for babies because it was "full of vitamins."

## RECOGNITION OF DEHYDRATION

Traditional healers in Manica do not recognize a syndrome comparable to what modern biomedicine calls dehydration. Many individual symptoms of dehydration are recognized, but not necessarily together or in association with diarrhea.

Various names for the fontanelle were encountered, the most common being *chikahara* (*chipande* in *chiShona*). It is medically recognized that a depressed fontanelle in a child is a sign of dehydration. Local doctors told us that an open fontanelle—which is normal in some infants—is often confused with a depressed fontanelle by worried mothers who bring their child to the hospital. In individual interviews, traditional healers cited the following beliefs about depressed fontanelle.

TABLE 4. COMMENTS ABOUT DEPRESSED FONTANELLE

Comment	Number of Healers
1. A symptom of the disease, <i>chikamba</i>	11
2. A sign of any serious illness	10
3. Something that provokes diarrhea or fever	10
4. Something unrelated to diarrhea	5
5. It means that the pulse if felt in the chest; this may be a signal that death is approaching	5
6. A sign that the <i>nhoka</i> is pulling inward, downward	4
7. A symptom accompanying serious diarrhea	3

The above is not based on results of asking healers exactly the same question. For example, it became apparent in the focus groups that virtually all healers agree that a child's *nhoka* can and does pull the fontanelle inward or downward. However a healer might not volunteer such information, depending on the wording of the question and on whether the person inquiring seems to the healer to understand and sympathize with the concept of *nhoka*. The comments presented here are therefore more to indicate the type and range of response, rather than to quantify their importance.

Sunken eyes, dry skin or skin that has lost elasticity and lack of urine production are other dehydration symptoms that are linked with *piringanisso* or *chinhamukaka* and not necessarily with the fontanelle syndrome.

## ORAL REHYDRATION THERAPY

There was no evidence of ORS packets in use or even much knowledge of ORS other than some awareness that it is used in hospitals. Of 48 traditional healers who commented on ORS, 38 had heard of it, and 10 had not. Of the 38, 15 expressed generally positive attitude toward ORS; 14 were negative; one expressed no opinion; eight said it sometimes works and sometimes fails. Of these, five said it does not work if bad spirits are involved in the disease or its cure; and two said it does not work for *piringanisso*.

Most traditional healers who recognized ORS thought it was a remedy for diarrhea rather than dehydration. Several had tried it on children in their own families and found it not only failed to stop the diarrhea, it actually increased the flow.

One healer knew a packet of ORS is mixed with one liter of boiled water and that the solution can be used for only one day. One more urbanized healer claimed he knew how to mix sugar/salt solution himself; when asked his formula he erroneously said a soup-spoon of salt and a teaspoon of sugar in 1/2 liter of water.

## DISCUSSION OF DIAGNOSIS AND CAUSE IN CHILD DIARRHEAS

A variety of causal factors emerged in discussion about locally-recognized diarrheas. These include: a nursing mother's milk becoming contaminated; wrongful or neglectful behavior on the part of the child's parents; consumption of dirty water, badly-prepared food, spoiled food; exposure to sun or heat (which has a special meaning); stepping in contaminated milk (milk may be "death-contaminated" from the still-birth of a baby); a child drinking too much water or salt—or an infant consuming any salt; disturbing the *nhoka* believed to live in the stomach; bad hygiene; a new pregnancy (because the mother's milk becomes spoiled); resuming sexual relations after post-partum taboo period before performing a ceremony; parents failing to perform mortuary ceremony after death of kinsman or neglecting other traditions; or provocation of avenging or evil spirits (or at least spirits that block the curative action of traditional medicines).

What is one to make of such diverse explanations? In a useful survey of traditional diagnoses and theories of diarrhea causation in Africa, Hogle and Prins found a similar range of explanation. They group various explanations under categories such as foods as contributing causes; "bad" maternal milk; and parental sexual transgressions; and list them as parallel and implicitly equivalent explanatory categories.<sup>11</sup> These may be useful groupings of traditions that should be added to the list. It was also found that traditional healers seemed to think in terms of successive levels of explanation with more fundamental causes underlying more immediate causes.

For example, the cause of simple diarrhea (*manyoka kusorora*) may be bad food or dirty water. If symptoms persist in spite of treatment for *manyoka*, the condition may be rediagnosed as something with a deeper, more serious cause, such as *phiringanisso*. In the latter case, the cause

is believed to be adultery, and treatment involves the ritual purification of the sick child's parents.

Reviewing findings on diarrhea causation, it is concluded that contamination is the broadest, most fundamental explanatory principle in local etiologies of diarrhea and other illnesses (see STD section below). This is true in other areas of Africa as well. The notion that pathology in social relations leads to illness—also common in African thought—is also evident in Manica, but it seems secondary to notions of contamination. For example, transgression of rules regarding sexual behavior (such as committing adultery) is a source of social strife believed to lead to various diarrheas afflicting children.

A social strife, however, is not seen as directly causing illness such as diarrhea; it is mediated by a process of contamination. One such diarrhea, *piringanisso*, is attributed to a man having intercourse outside the home (a norm transgression and source of social strife) while his child is still breastfeeding, then touching his child before washing or decontaminating himself. For at least some healers, the contamination caused by wrongful behavior can be transmitted by the father's semen to his wife, after which the next child will be born with the same contaminant. The child's *nhoka* will know this and will sooner or later react with diarrhea or other symptoms. Viewed in this way, some serious child diarrheas are congenital.

The concept of *nhoka* springs from concern with contamination and it serves to unify the different causes and levels of explanation. Diarrhea itself is referred to by the plural form of *nhoka* and the term contamination was often used with any and all explanations. To choose an example relating to tradition neglect, it was said that a child's porridge made from maize should be beaten on a traditional grinding stone or pounded in a mortar while still in the maize leaves. If the maize is pounded directly in the mortar it becomes contaminated. Yet whether

the cause of diarrhea is attributed to diet, environment, social relations, taboo violation, death in the family or vicinity, miscarriage or a new pregnancy, it is always the *nhoka*—the Guardian of Bodily Purity—that reacts by provoking diarrhea and related symptoms as a warning that there needs to be expulsion of impurities and subsequent purification.

At this point it may be useful to consider contamination in the context of four other basic conceptual themes in traditional African thought relating to health: purity, balance, coolness and social harmony. These latter also proved useful for understanding and interpreting both diarrhea and STD findings from Manica, and indeed for developing strategies for intersectoral collaboration, although not as useful as contamination. The following is adapted from a table from Janzen.<sup>12</sup>

1. Purity refers to the absence of contamination or pollution. Contamination may be conceived in natural terms (dirt) or mystical terms (the pollution of sin, evil spell) or something in between (menstrual blood, which may be regarded as an agent of mystical potency);
2. Balance refers to the maintenance of harmonious relations with society, nature and the spirit world;
3. Coolness refers to lack of heat. Resembling (and perhaps influenced directly by) traditional health beliefs from the circum-Mediterranean and Islamic regions, Africans healers may attribute hot and cool qualities to both illnesses and their cures; and
4. Social harmony refers specifically to maintenance of harmonious relations with kinsmen, neighbors and others with whom people come into regular social contact. Social disharmony leads to resentment, anger, envy, jealousy and eventually to sorcery and witchcraft.

Although broader characteristics of African ethnomedicine will not be discussed, the important thing to note is that although there appear to be many irreconcilable differences between the two systems, at perhaps a deeper level they share underlying concepts such as elements of wellness. It helps explain how and why the concepts of contamination and a Guardian of Bodily Purity proved to be appropriate vehicles for the introduction of public health concepts and practices to traditional healers in Manica.

## V. Diarrheal Disease Health Communication Issues

### GENERAL APPROACH

As stated in the Department of Traditional Medicine's Three-Year Plan, the approach is to identify, reinforce, and adopt aspects of traditional medicine found to promote the health of the people while discouraging those found to have negative health impact. An important corollary is to leave alone those beliefs and practices found to have little or no health impact, positive or negative. Whenever possible, it is best to avoid confronting widely-held beliefs head-on, because this may alienate traditional healers (or mothers) and make them disinclined to listen to suggestions, such as adopting ORS.

With these empirical findings on ethnomedical beliefs and practices, it is possible to tailor a health education strategy to the cultural realities of the peoples of Manica. The basic strategy is to blend introductory materials with existing knowledge, attitudes and practices to the extent possible without compromising scientific health concepts or principles. Initially concentration is on the areas of interface between traditional and modern biomedicine.

At the outset it must be acknowledged that the research found an unusual number of traditional beliefs and practices related to diarrhea and dehydration that appear to have negative public health consequences was found. For infants with diarrhea, for example, healers expressed antipathy toward: (1) water, (2) salt, (3) sugar, (4) the colostrum in breastmilk, and—some cases—(5) treating the sick child during the first 24 hours. Restrictions against water, salt, and sugar are sufficiently unusual to raise the possibility that traditional healers at least in Manica may have adopted a defensive posture against a government that in the recent past tried to suppress traditional medicine. It would be interesting to know more about attitudes about water, sugar,

and salt before independence which is also before the government's ORS campaign. A few older healers reported that there were no restrictions of this sort when they were young.<sup>13</sup>

In any case, this is further evidence that health authorities and Mozambican traditional healers need to find ways to collaborate, lest they continue to work at cross-purposes. A clear example of such cross-purpose came out during a focus group of healers where, if anything, healers are more likely to say things to please health authorities than during individual interviews. They reported that sometimes mothers try to give water to their infants suffering from diarrhea, but when healers "discover this, they call attention (to the error) violently."<sup>14</sup>

### RATIONALE FOR AN ORT STRATEGY

Findings and considerations relevant to developing a cooperative ORT strategy that combines traditional and Western beliefs include:

- In all districts, the sunken fontanelle is recognized as a symptom of a serious health problem in infants. The phenomenon is referred to most frequently as or occasionally *chikamba*. The symptom may not be linked to diarrhea.
- Dehydration symptoms may also be recognized in locally-recognized diarrheas such as *phiringanisso* (dry, wrinkled skin) or *chinhamukaka* (depressed fontanelle, sunken eyes or skin that has lost elasticity).
- Most diarrheas are treated with herbal teas, or similar medicines introduced (in small quantities) when children are fed porridges. There are also ritual-ceremonial treatments.

- The depressed fontanelle symptom is treated with traditional ointments, applied on the fontanelle.
- Less than 50 percent of traditional healers claim to be in favor of ORS. Virtually none use ORS in their healing practices.
- Traditional healers believe that ORS is supposed to cure or stop diarrhea or at least decrease its flow, which is a common misconception. Many healers have observed that ORS does not cure diarrhea and may increase its flow.
- There is a widespread belief that salt is bad for young children.
- People also believe that sugar is bad for young children with diarrhea because it stimulates vomiting.
- Sugar and salt are relatively rare commodities among the poor.
- It is difficult to teach correct home mixture of sugar/salt ORT solution, and incorrect mixing can result in dangerous solutions.
- Healers (and presumably their clients) are usually unaware of the ingredients of ORS packets.

These are concepts that are compatible with both traditional and Western systems. They can, therefore, be the basis for a cooperative CDD strategy.

- Although modern medicine does not have an equivalent word for *nhoka*, it should be agreed that people have something within them that requires purity and the absence of dirt. A person's *nhoka* is disturbed when impurities accumulate in his or her body.
- It should also be agreed that diarrhea (and vomit) flush out these impurities. Therefore the flow of diarrhea should not be stopped, but the cause of diarrhea should be treated.

- It has been found that diarrhea does not get rid of all the impurities in the body. There is still some residual impurity. The body needs water to complete the job, yet it has run out of water.
- The *nhoka* is aware of this residual impurity that has not been expelled by diarrhea. The *nhoka* reacts by twisting downward and pulling down the child's fontanelle. It also pulls in the eyes and skin. This reaction is more serious than the diarrhea that helps the *nhoka* rid dirt from the body.
- During diarrhea the body not only flushes out impurities, it also loses certain body elements which it needs, such as salt, sugar, potassium.
- With diarrhea, the body soon needs the two things it has lost: (1) water and (2) important body elements or salts. *Falta de agua* refers not only to lack of water but to the loss body elements as well.
- ORS solution restores these two things. It consists of water and a special mixture of the elements the body has lost. Now the *nhoka* will no longer pull in the eyes, fontanelles, etc. If diarrhea returns after giving ORS, it means the body can rid itself of the impurities that were not expelled before.
- Due to problems in communication, the message health authorities have tried to promote about ORS has been misunderstood. ORS is not a remedy for the symptom of diarrhea. (Examples of miscommunication can be given.)
- In conditions where the *nhoka* has pulled down the fontanelle (*chikahara*, *chikamba*), ORS should be given to the child in sufficient quantities.
- Some of the symptoms of at least two local diarrheas, *chinhamukaka* and *piringanisso*—namely sunken eyes or dry skin that has lost elasticity—are also due to *nhoka* pulling

inward and downward. If ORS is given to the child in sufficient quantity, these symptoms will also disappear. The child's *nhoka* will be satisfied and be at rest.

There is no need to make reference to the sugar and salt ingredients of ORS since traditional healers discourage giving sugar and salt to infants. Instead ORS is "a special hospital mixture" or "medicine" to restore water and lost body elements/salts.

It should be noted that ORS packets are produced in the coastal city of Beira, some 200 KM from Manica's capital. ORS is not only scarce in rural areas, it is not always available in the hospitals and pharmacies of Manica.<sup>15</sup> Therefore a related strategy is needed to promote oral rehydration by other means; that is, to promote oral rehydration therapy (ORT) in general through encouraging the use of home available fluids (HAF).

The following is a related HAF strategy:

- Porridges used to introduce traditional herbal medicines can be left alone. Healers believe that adding salt to "therapeutic" porridges would spoil the medicine. To add water would likewise dilute the medicine.
- The other type of porridge used as routine nourishment should be modified by adding more water and sugar, salt and lemon (or equivalent) drops. The reasons given should make reference to *nhoka*, *chikamba* and *chikahara* and, in fact, are the same as the reasons for giving ORS.
- Any use of rice water (*caldo de arroz*, millet water, etc.) for diarrhea should be reinforced and encouraged. These drinks should be modified with sugar, salt, and fruit juice for the same reasons as porridges.
- Breastfeeding for as long as possible should be encouraged, since breast milk may well be a child's best source of both nourishment and liquid.

- Recognizing there is some risk to promote dilution of porridges because the child may thereby get less nourishment, this should only be done when diarrhea last for period of time. There must be more frequent (perhaps smaller) feedings to compensate.

## CURING THE DIARRHEA

At this point in the strategy the child's life has been saved, but the diarrhea may still need to be cured if it is not self-limiting. Healers can be asked to send their patients to the hospital, but this is hardly realistic since both healers and their clients have confidence in traditional medicines. The best that may be accomplished—at least during an initial phase of collaboration—is to keep the child rehydrated while traditional treatments are given a chance to work. If diarrhea—especially if it contains blood or mucus—continues beyond a certain number of days it may be possible to persuade healers to refer the child to the hospital. Such a possibility can only be enhanced by generally improving communication and good will between the two health sectors. Teaching healers the symptoms of the serious diarrheas requiring hospital (allopathic) medicines will demonstrate that they do work.

Promotion of ORS and existing foods/drinks (HAF) with rehydration potential in culturally-meaningful terms as well as for the condition for which it is effective should raise the credibility of the Manica Health Department and help clear up the confusion that currently exists. This confusion is by no means peculiar to Manica or even to Mozambique. Dehydration is a difficult concept to convey unless local research reveals ways to approximate it in the vernacular, based on symptoms people already recognize. Typically in Africa, however, health education messages express the concept in Portuguese, English, or French. It becomes simplified in the minds of listeners to "diarrhea" because there is frequent reference to diarrhea in the same message. It has also been observed that ORS is sometimes promoted as a treatment and preven-

tion for diarrhea. For example, a page-long article on diarrhea in NOTICIAS (10/26/91, p. 4) advises: *A solucao SRO feita a partir de um pacote de sais de reidratacao oral destina-se a tratar a diarreja, mas pode ser tambem utilizada para proveni-la.*

If traditional healers find discrepancy between the proposed new message of using ORS for the fontanelle condition or disease rather than for diarrhea, the response is that the MOH see chikahara as a phase of diarrheal disease. In any case, the sunken fontanelle is an outstanding symptom and the one that should be treated without delay.

There are other benefits to linking HAF or ORS to the depressed fontanelle syndrome rather than to diarrhea. It has been reported in Kenya that mothers commonly gave sugar/salt solution to babies during the first year of life in order to prevent diarrhea. This seems to reflect confusion over what ORT is supposed to prevent.<sup>16</sup>

### RISK-BENEFIT CONSIDERATIONS

Some local doctors feared that using the *nhoka* concept in an approach with traditional healers would reinforce negative or superstitious thinking and behavior. It is felt, however, that the existing situation calls for a new and different approach. *Nhoka* might appear to some health workers to be synonymous with disease or—worse still—might evoke superstitions about snake veneration or the presence of snakes in the body, but research has clarified that in fact the concept is positive, health-promotive and not unrelated to the immune system. Moreover at this point, it is not recommended launching a radio campaign about *nhoka*, but only trying to get through to the first 30 traditional healers, using terms they understand and concepts they believe in. After all, the plural form of the term *nhoka* is the local word for diarrhea and *nhoka* is the key concept in understanding diarrhea-related beliefs and practices.

In fact it may not be possible to link diarrhea, dehydration, and ORS through any other means. When questions about sunken fontanelle and diarrhea were first posed to healers, their answers gave the impression that the two were unconnected in their minds. Once the concept of *nhoka* was introduced and the researchers understood it, however, it was apparent that sunken fontanelle and diarrhea were already at least potentially linked in the minds of healers. *Nhoka* provokes both, in one case to rid the body of impurity and in the other to alert the body to the presence of impurity.

ORS is already being promoted directly to the population of Mozambique, including Manica without much success. Perhaps it is now time to try a different approach, one that seeks to define areas of interface between traditional medicine and public health and develops a health education strategy based on this interface.

This approach seeks to reach the broad population by influencing local-level opinion leaders in health matters, which certainly includes traditional healers. A 1989 study in Haiti showed that deliberately excluding traditional healers from the national ORS campaign did not prevent people from continuing to consult healers about diarrhea and ORS. In response to such "demand," healers began to mix ORS, but incorrectly since no one had bothered to teach them.<sup>17</sup>

To those who believe that only porridge modification should be promoted to healers and not ORS, this approach alone is unrealistic. For one thing, people rarely have sugar and salt in their homes in Manica. Equally important, for whatever reasons, local healers at present actively advise against the use of water, sugar and salt for children with diarrhea.

Finally there is the perennial fear that traditional healers will mix ORS incorrectly. Again, the government is already promoting ORS to the general population through mass media. Is

there any reason to expect laymen will mix ORS better than traditional healers who are deliberately trained in a week-long workshop? In sum, while there may be some risks in reinforcing traditional beliefs (albeit beneficial beliefs in the case of *nhoka*) and in promoting ORS to traditional healers, the benefits of saving the lives of many children seem to far outweigh any such risks.

## VI. Sexually Transmitted Diseases (STDs)

### PRELIMINARY CONSIDERATIONS: THE LINK BETWEEN STDS AND AIDS AND THE ROLE OF THE TRADITIONAL HEALER

Some well-documented collaborative programs in Africa have used traditional healers to help governments carry out diarrheal disease programs. More recently governments and donors have begun to consider ways to recruit healers in AIDS campaigns. There does not seem to be, however, any precedent for involving traditional healers specifically in STD programs. During a 1990 WHO-supported international workshop on prospects for enlisting traditional healers in AIDS control, there was not even a recommendation to involve healers in STDs in any way.<sup>18</sup> Some justification of such a program is therefore warranted. The goal of the STD collaborative program is twofold: (1) to reduce the spread of HIV infection; and (2) to reduce the incidence of common STDs because they are co-factors in the spread of HIV and they themselves constitute a significant health problem in Mozambique and elsewhere in Africa.

The standard approach to reducing the spread of AIDS is through preventive education focusing on sexual abstinence, restricting the number of partners, and using condoms. Another approach is called for because it would take too long to achieve significant impact from these measures alone.

Since standard STDs are the major co-factors in the spread of HIV infection in Africa,<sup>19</sup> it is proposed to reduce the incidence of such infection by lowering the incidence of high-prevalence STDs such as gonorrhea and syphilis. How can this be done? African health ministries have been struggling with STDs for years yet prevalence rates, if anything, are rising.

A fundamental problem in treatment is that most STD cases are not even presented at health facilities. They are treated by traditional healers.

Failure to present STD cases at health facilities is due not only to rural Mozambicans' special problems of access, but also to cultural barriers to allopathic treatment, a phenomenon found throughout Africa. Cultural barriers here refer to ethnomedical beliefs and attitudes that prevent people from using modern health facilities even when they are available. In Mozambique, a complete in-patient or residential traditional treatment of gonorrhea can cost Mt15,000 or three chickens. Such treatments occur within walking distance of health facilities where antibiotic treatment is available almost free of charge. This is dramatic proof of the strength of confidence in traditional treatment for a common STD.

Traditional treatments for bacterial infections such as gonorrhea are probably not biomedically effective. Sustained and probably increasing STD prevalence rates attest to this, although failure of modern treatment could also account for the high rates. Yet most healers and their patients sincerely believe traditional treatments work. Traditional healers advise their clients to avoid sexual intercourse while undergoing STD treatment, after which both healer and patient believe it is safe for the patient to resume sexual relations. Since their conditions have probably been improperly or inadequately treated, many Mozambicans may still be able to infect others with STDs.

No attempt to reduce the incidence of STDs will have much impact if it does not somehow involve traditional healers. If cooperation with healers is sought in the area of STDs, they cannot simply be told that their interpretation of the disease and their treatments are wrong, and therefore they should stop seeing patients. Nor can healers be trained in diagnosis of STDs, and expect them to refer all their patients to hospitals and health centers. Many Mozambicans lack physical access to hospitals, and therefore have no alternative to the traditional healer. Moreover it is completely unrealistic to expect healers

to hand over their business to the competition—especially as they sincerely believe that their own remedies work and that modern doctors do not even understand the true cause of STDs.

### **TRADITIONAL AND SCIENTIFIC CLASSIFICATIONS OF STDs**

Before turning to the research findings, some comments are in order about the problems of disease classification and the translation of local and traditional disease concepts into allopathic cognates.

The interviews on STDs (including AIDS) and child diarrhea are not only to assess the degree of scientific understanding of these conditions on the part of the traditional healers. It is equally important to understand how diseases are traditionally classified and understood by traditional healers. When researchers begin to probe diseases related to sexual intercourse as they are locally recognized and understood, the question immediately arises: are interviewers and interviewees (informants) talking about the same thing? Some general observations about African disease classification are in order.

Indigenous African classification of STDs may not correspond with scientific categories and, in fact, are often broader. Illnesses and conditions not classified as sexually-transmitted in biomedical nosology may be regarded as such by indigenous healers, and presumably their clients who share a common belief system. In a survey of traditional healers and their clients in Maputo, tuberculosis was listed as the third most common condition treated by traditional healers.

It was found that most people sampled in two peri-urban neighborhoods believed TB to be sexually transmitted in various ways.<sup>20</sup> A larger study of pulmonary TB in Inhambane province also found that TB is believed to be a sexually transmitted disease by most surveyed and that most patients seek traditional therapy in cases of what biomedicine would classify as pulmonary

TB.<sup>21</sup> In the latter study, specific mention was made that it was the violation of sexual taboos, such as intercourse with widows or with women who have recently had an abortion, that caused TB symptoms.

In studies of STDs in Liberia and Swaziland, researchers found that symptoms relating to (urinary) schistosomiasis, hernia, leprosy, tuberculosis, piles, seizures, or hookworm might also be seen as related to sexual intercourse.<sup>22</sup> By this is meant not that these other conditions are necessarily sexually transmitted (i.e., always), but that they and others are sexually transmissible—that is, they can be transmitted by at least certain types of sexual intercourse. To understand this, one needs to recognize the prevailing belief in traditional African thought that many diseases or conditions can result from contamination or spiritual punishment, or from sorcery or witchcraft. Sexual intercourse provides one common point of contact for the contamination, medicine or spell causing or transmitting such diseases.

## VII. Profiles of Locally-Recognized STDs

A number of diseases believed to be transmitted through sexual intercourse are recognized by Manica healers. An even larger number of diseases are thought to be "caused" by sexual intercourse in the sense that their underlying cause is believed to be sexual intercourse with a prohibited person. As elaborated in the Analysis section below, Manica healers classify several common sexually-transmitted diseases together under the rubric *siki*. These were uniformly described as "adult diseases," conditions not found in children, at least before the age of intercourse.

The following are composite profiles of the more important locally-recognized diseases believed to be transmitted through sexual intercourse. As discussed in the diarrhea section, there may be conceptional differences between language group, area, and individual practitioner in details of diagnosis, treatment, etc. Sometimes this is noted in the sketches that follow.

### 1. CHIMANGA

**SYMPTOMS:** sores in the genital area. In men, these may be located on the head or point of the penis. Some described a white fluid coming from the penis. Some healers claimed that women as well as men can have genital sores or boils, and that they are of similar size and appearance. Some claimed the sores or boils do not run, others said they ooze a watery liquid. The sores might begin inside the genitals and then spread to the outside. The sore was characterized as red, sometimes white. Some described little holes or punctures on the penis.

There is also pain in urination and men walk stooped over due to "pain in the lower backbone." Some describe the manner of walking as wiggly, "like a duck." Several healers said that the disease or its symptoms can remain hidden, perhaps especially in women.

One healer described "Type 1 and Type 2 *chimanga*," and provided considerable detail about the appearance of symptoms, e.g., a man's urine turns from very yellow to colorless by the third day in Type 1.

Healers disagreed over whether a man becomes sterile or impotent if *chimanga* is not treated. Most healers seemed to believe a woman becomes infertile if the illness remains untreated for, variously, one to six months. Some thought a cured woman can still have children in the future—we know this because "she can still menstruate." The newborn child of a woman with *chimanga* can have sores on the skin, mouth or nose. The newborn can die from the illness, either in the womb or some time not long after birth.

A woman with *chimanga* might have no visible sores, therefore the disease might be overlooked unless she is pregnant and miscarries. In this case, "The baby dies inside her and then for about four days little bits of the foetus come out of her." The miscarriage is due to contamination. In the words of one healer, "There is something dirty inside her uterus and the baby eats this dirt and then dies."

**CAUSE:** This and most other common, locally-recognized STDs are usually described as resulting from intercourse with a person who has the disease, specifically from transmission of an agent of cause or transmission known as *khoma* (see below). *Chimanga* is considered a disease of adults, not children: one must be sexually active to get it. Many traditional healers implicated or designated promiscuity (having many partners) as a contributing factor, noting the disease is found in men who go around with many women. The presence of Zimbabwean troops has led to an increase in this disease in recent times.

*Chimanga* can be transmitted in ways other than intercourse, namely by stepping in urine or feces, wearing clothes, or touching cloth contaminated with the agent *khoma*.

**PREVALENCE:** *Chimanga* was described as very common and dangerous. Some claimed this disease is transmitted in both directions (male to female, female to male) with equal ease, therefore it is found in both men and women in equal numbers. Others thought men get the disease more than women.

**TREATMENT:** Treatment for *chimanga* consists of an oral decoction as well as a poultice applied directly to the sores. The latter medicine may be put inside the vagina as well. One healer commented that the genital sores or boils may disappear quickly but they "go inside," so treatment must be continued for at least a week. The patient must take the oral medicine three times a day. There are certain taboos such as avoiding alcohol, smoking, Coca-cola (the other local soft drink, Fanta, is permitted), and *peri-peri* or hot pepper. This seems compatible with what doctors would advise in cases of prostatitis. Eating *peri-peri* is said to interfere with treatment because it "stimulates *khoma* in the abdomen." Healers stressed the importance of following the correct treatment regimen. The disease ought to be treated within one week—but at the latest, within one month; otherwise it becomes too advanced.

**TRADITIONAL VERSUS MODERN TREATMENT:** *Chimanga* is described as a uniquely traditional disease, therefore hospital medicine is ineffective as a treatment. Several healers claimed that "hospital medicine cannot kill the *khoma*," and in fact can make the *khoma* hide. Thereafter become impossible to finish with traditional medicine.

Some healers said—perhaps diplomatically—that both modern and traditional medicines were effective. One older healer commented that in earlier times, hospital treatment worked

quickly. Nowadays it does not work this way (evidence of antibiotic resistance?), so patients come to her instead of going to the hospital.

**PREVENTION:** *Chimanga* can be prevented by boiling some roots in clean water and then keeping a bottle of this available with the roots still in solution. The decoction is taken as needed. Healers noted that preventive medicine is different from *chimanga* curative medicine. The factor that determines susceptibility to *chimanga* is said to be in the blood. If one's blood is fortified with the preventive medicine, one should not get this disease.

At the same time, healers advised not having many sexual partners and avoiding prostitutes and others who might carry the disease as a way of preventing *chimanga*. Healers were emphatic in their advice that sexual relations must be suspended during treatment lest the patient continue to spread the disease.

A female healer commented about foetal contamination with *chimanga*, noting that it can be avoided if the mother with this disease takes the traditional preventive medicine once a week until she delivers the baby. In which case the child will be normal. Without such treatment the baby can die in the womb or might be born with the same sores as the mother.

**ETIOLOGY:** *Chimanga* was believed by some to be fatal unless treated by either traditional or modern medicine. People may try to hide the disease for some time due to shame or fear, thereby delaying treatment. The pain and discomfort of *chimanga* is such, however, that people eventually seek treatment.

**COST:** *Chimanga* patients usually make repeat visits to the healer or they may actually stay in the healer's compound for about a week. There are certain advantages to a patient in residence, e.g. the healer can make sure the medicine is taken at the right times and in the right dosage. He can also enforce the dietary proscriptions.

In-patient fees are higher, however, because the patient must be fed and housed. The cost of a week's treatment would be about three chickens or its cash equivalent (about Mt.15,000).<sup>23</sup>

## 2. CHIKAZAMENTU (DROPU, GOBELA)

**SYMPTOMS:** A white, milky discharge from both penis and the vagina, characterized by some as "dirt" or impurity. There is also painful, burning or difficult urination for both men and women. There may be abdominal pain, slight fever, itching, weight loss, and/or—according to some—sores or boils on or around the genitals that secrete a milky fluid. Several healers specifically mentioned that there are no sores with *chikazamentu*.

Another symptom may be heat in the waist or groin. Another, in both men and women, is a wet groin from the discharge which they are always trying to hide. A female healer characterized female symptoms as stomach pain, heat, stools that change from normal to yellowish/milky, and boils on both sides of the vagina.

At least one healer saw *chikazamentu* as equivalent to what the hospital calls gonorrhoea. The term *dropu* is also used by Swazis and Zulus to designate or approximate gonorrhoea.<sup>24</sup> It may come from the Dutch or Afrikaans word for gonorrhoea (*druiper*) or from the English drop, referring to drops or discharge from the penis.

**CAUSE:** Sexual intercourse with someone having the disease. Single women who have had many partners are likely to transmit *chikazamentu*, according to some. As with *chimanga*, it is also believed possible to become contaminated with the disease from contact with bodily waste or clothing of a person with the disease. A few mentioned toilets and "lack of hygiene" as ways to catch it. Those who mentioned stepping in infected urine referred to little creatures (*bichinhos* in Portuguese) in the urine as agents of transmission.

**TREATMENT:** Similar to *chimanga* and other *siki* diseases (see below), all of which seem to be treated in much the same way. Special roots are placed in water and the solution is drunk over a period of a week. Some said *chimanga* may lead to infertility (or impotence) within six months if not treated. Others disagreed. A few healers emphasized that one has to "treat all partners of the patient to avoid new transmissions" of the disease.

**INCIDENCE:** Most said *chikazamentu* was very common, although healers disagreed whether it was more or less common than *chimanga*. A number of healers believe that men are more likely than women to get the disease.

## 3. MULA

**SYMPTOMS:** Painful lump, furuncle, abscesses or sores around the genitals. Some described dirty discharge, painful urination, little creatures in the genitals, sores inside the bladder, difficulty in walking, and/or sores that disappear then return. A few healers volunteered that the disease is fatal if not treated. Specifically, the untreated sore "opens up inside" allowing the impurity to go inside the stomach and cause death.

Healers disagreed over whether an infected pregnant woman can pass the disease to her unborn child. Some said the condition causes miscarriages and still-births.

**CAUSE:** Intercourse with an infected person. *khoma*, the same causative agent that transmits the two STDs listed above was sometimes specified as the thing that transmits *mula*. Others, using Portuguese, called the agent a little creature (*bichinho*.) *mula* is also transmitted by contact with contaminated feces, urine, and dirty toilets. Prostitutes and Zimbabwian soldiers are likely carriers.

**TREATMENT:** The roots of several curative plants may be combined with each other or used as alternatives. These are left in cold water

until the solution looks bubbly or frothy. Treatment lasts for five days. As with the first two diseases described as sexually transmitted, *mula* patients should avoid sexual relations and hot pepper until they are completely cured.

**PREVALENCE:** Described as very common, although perhaps not as much as the first two diseases.

**TRADITIONAL VERSUS MODERN TREATMENT:** The invisible "little creature" that transmits *mula* is impervious to injection (e.g. penicillin). A few healers said that hospital treatment can be effective in the early stages of the disease, but if the secretions become heavy, traditional medicine is needed. One healer commented that hospitals will operate for this condition.

#### 4. SONGEIGA

**SYMPTOMS:** Characterized by a yellowish, malodorous pus discharge from the penis or vagina. It is also characterized by pain in urination, those afflicted "scream" when they urinate. Other symptoms—according to some—include swollen groin, abscesses in groin, yellow feces and/or urine, pain in the waist and legs, and blood in the urine. As with the conditions described above, untreated *songeiga* can lead to infertility. The "impurity goes inside the stomach and causes internal abscesses." A few healers said that *songeiga* and *mula* are the same. Men have little boils inside the penis whereas women have external sores and menstrual problems. A few healers referred to stillbirths.

**CAUSE:** It is caused by either men or women sleeping with a contaminated person. As with other STDs, it is also transmitted by contact with contaminated feces, dirty toilets, little creatures of an infected person, etc. Also like other *siki* diseases, the Portuguese are thought to have brought the disease to Mozambique. Zimbabwean soldiers are likely to spread it nowadays.

**PREVENTION:** People can prevent this disease, especially men. If a special medicine is taken, a man or woman can have intercourse with a sick

partner and probably not get *songeiga*. There seem to be a number of different medicines that can be used in this way.

**COST:** One healer revealed that it costs MT3,000 for treatment of *songeiga* and Mt4,000 for prevention. Clients apparently come to traditional healers for prevention as well as treatment of this and other STDs.

#### 5. CHIKEKE

This name was encountered in the Gondola, Vanduzi and Chimoio areas. Symptoms may include blisters or sores like little tears in the genitals, milky discharge, painful urination, genital boils and swellings (causing stooped walking), yellow or bloody urine, sores spreading to the rest of the body, and genital discharge. The sores can spread to the rest of the body including the mouth. Some describe *chikeke* as in many ways similar to *chimanga* and *chicasamento*. It is regarded as a disease in the *siki* category (see below) and indeed shares many features of symptoms, prevention, and treatment with other STDs.

It is believed to have come from Malawi.

#### 6. NHOKA KUNDU and NHOKA DZONI (NZONI)

There are two *nhoka*-related diseases believed to be sexually transmitted, *nhoka kundu* which affects men and *nhoka dzoni* which affects women.

**SYMPTOMS:** In men at least, the disease is in the upper groin. The testicles are swollen and painful. The stomach is upset and noisy. The lower back may ache and people may have trouble walking upright. There may also be hernia (*phuzi*) symptoms or even paralysis in the lower waist and back. Women experience miscarriage, menstrual irregularities, infertility, and premenstrual problems.

**CAUSE:** The male variant is believed caused by a man having intercourse with a menstruating woman. As mentioned in the *nhoka* discussion in the diarrhea section, such a man will become contaminated with the impurities that the menstruating woman's *nhoka* is in the process of expelling. A man who has many sexual partners may get this and then give it to his wife.

More generally, the *nhoka* diseases are cause by contamination and subsequent provocation of a person's *nhoka*. They can also be caused by violation of behavioral norms, such as a menstruating woman jumping over a man or a child.

**ETIOLOGY:** They are transmitted between men and women with equal facility.

**TREATMENT:** A topical medicine is rubbed in the upper groin. A decoction is also drunk. Treatment for *nhoka dzoni* is directed at regularizing menstruation and preventing infertility.

## 7. GOBELA, KENI, MADJURU

(Some say this is the same as *chikazamentu*.)

This was described as "holes in the penis." The condition obstructs the flow of urine and therefore urine is said to leak out of little holes at the end of the penis. Another symptom is pain in urination. Men also have a wet crotch which they may try to hide, but this symptom can not be hidden for long. Females also get this STD; it may appear as sores or wetness from discharge.

**TREATMENT:** An oral decoction is drunk. An herbal medicine also treats the external sores.

## 8. RIKAHO, RUKAWE

Elsewhere in Southern Africa there is widespread recognition of a sorcery-related STD, sometimes with gonorrhoea-like symptoms. It is believed to result from a special medicine that a man secretly rubs on his wife to "protect" her from sex with another man. If such sex occurs, the woman's partner will exhibit symptoms

which include pain in urination and pus discharge. Some Chimoio healers recognized the syndrome and called it *rukawe* or *rikaho*. (*Rukawe* is used among the Shona of Zimbabwe and *likhubalo* among the Swazi.) In one local form, a man surreptitiously puts a special medicine in the food that he and his wife will eat together. If the wife sleeps with another man after ingesting the medicine, the latter will fall ill with genital and urinary symptoms. The man might also vomit a dark substance and develop an oozing sore on the top of his head as well as headaches and stomach pain. The condition was described as fatal and incurable.

In one form of this, a woman committing adultery becomes stuck to her partner in such a way that they cannot separate. Some healers described this condition as well known locally and quite common, although it was better known during the colonial period, especially in Tete province or "in the north." One healer commented that many old men would protect their young wives this way. He made a comparison with laying an explosive mine. Many whites were said to die this way when they slept with local women.

## ANALYSIS AND DISCUSSION

It should be recognized that, by the standards of tribal or folk medicine, traditional healers in the Manica region of central Mozambique have complex nosologies (disease taxonomies) based on fine distinctions between symptoms. This requires highly-developed diagnostic skills and implies careful empirical observation. Interviewers caught enough glimpses of local materia medica to suggest to us that this is no less complex. Regarding nosology, healers appear to have no fewer diagnostic categories of venereal, gynecological and urological diseases than allopathic biomedicine, at least as routinely practiced in Mozambique's smaller hospitals and health posts. Considering the triage conditions of Mozambique's understaffed provincial hospitals, traditional healers in their daily

practice almost certainly deal with a greater number and variety of diagnostic categories than do local doctors and nurses.

Considering the foregoing, the view that traditional healers need to be taught correct diagnosis appears condescending if not fatuous. Instead it would appear that local health workers could benefit from learning about the empirical symptom-based diagnostic practices of traditional healers.

It is only for the purposes of translating research findings into a biomedical framework and developing an educational strategy that an attempt will be made to simplify the ethnomedicine of STDs and related conditions in Manica. Traditional healers in this area recognize two broad categories of illnesses believed to be sexually-transmitted: *siki* and *nhoka*-related. Both will be described.

### ■ Siki

A generic term, *siki* exists in several Manica languages and dialects to designate the more serious diseases that are considered sexually-transmitted, namely *chimanga*, *chicazamento*, *mula*, *songeia*, *chikeke*, and *gobela*. These seem to correspond fairly closely to the more serious and common STDs of Western biomedicine: syphilis, gonorrhea, lymphogranuloma venereum, chlamydia and chancroid. At the risk of generalization, *siki* diseases are characterized by the following symptoms in men: hot, burning urination; sores on the penis; and/or a white, milky discharge from the penis. In women, there is also hot, burning urination; sores on the genitals, and pain in the stomach. *Siki* diseases are usually said to be more common in men than women.

*Siki* may derive from the English word sick as suggested by a few older healers.<sup>25</sup> Such derivation might lend credence to the local belief which is found elsewhere in Southern Africa that syphilis and gonorrhea were first introduced by Europeans. Indeed healers claim that

these diseases originated with Portuguese soldiers having sexual intercourse with horses or less often, with dogs. These soldiers then slept with African women and introduced the disease to the local area. One healer with an etymological bent suggested that another STD term (a variant of *gobela*) used across several local dialects, *keni*, comes from the English watering can, since the term refers to "holes in the penis" which resemble the pouring end of a watering can.

*Siki* diseases are not associated with causal concepts usually found in traditional African ethnomedical thought; namely imbalance or strife from violation of social norms, sorcery or witchcraft, or evil or avenging spirits. Instead they are believed to be caused by a common invisible, microscopic agent (*khoma*), or by direct contact with pus or other genital discharges that contain *khoma*. Different diseases are carried by different *khomas*, so the word must be regarded as generic, similar to the bacterium of biomedicine. *Khoma* was sometimes translated into Portuguese as *bicho* or *bichinho*, a small animal or insect. At least one healer conversant in biomedical concepts explained that *khoma* was like a microbe.

Manica healers are allopaths when it comes to *siki* treatment: an alien element is introduced into the body to kill the specific disease-causing *khoma*. Special herbs are boiled, the decoction cooled down, and then drunk in the morning before eating. In another type of medicine, certain leaves are crushed or ground, then the resulting juice is drunk. There are medicines applied directly to genital sores as well. Treatment takes about one week and is usually accomplished in the patient's own home.

*Siki* diseases are believed to be preventable in two ways, medicinal and behavioral. There are different preventive medicines for men and women. They are said always to work if taken before intercourse with someone carrying the disease. Several healers observed that *chimanga*

and other local STDs are more difficult to prevent these days because the security situation makes it difficult or impossible to travel to places to obtain the necessary plants. These diseases can also be prevented by abstaining from sex, by choosing partners carefully, and by refraining from sex during treatment (see the modification of sexual behavior section below).

A few healers thought that some *siki* diseases, such as *chikazamentu*, are really pre-colonial diseases that are related to the *nhoka* attempting to rid a person's body of impurities by evacuating them in pus discharge, feces, vomit, and bad smells (see next section). But for the great majority of healers, *siki* diseases are understood in a naturalistic manner not dissimilar from the biomedical view.

### ■ Nhoka-Related

Manica healers described only two diseases that use the name *nhoka* and are sexually transmitted: *nhoka kundu* which affects men and *nhoka dzoni* which affects women. However, these entail symptoms that are so diverse that the two diseases probably correspond to, or overlap with, a number of diseases or conditions in biomedical classification. Furthermore, other locally-recognized STDs do not use the name *nhoka* yet are based in *nhoka* ideas of contamination.

It seems useful to use the term *nhoka*-related diseases to refer to a category of illnesses whose etiologies are conceived in a more traditional African way, compared to *siki* diseases. As with *nhoka* diarrheas, STDs of this sort involve the idea of contamination and the role of a personified Guardian of Bodily Health or *nhoka*.

### Note on Sorcery

Other than *rikaho*—mentioned by healers only after probing—no evidence was found of sorcery or witchcraft in the etiology of locally-recognized STDs. Focus group participants specifically denied that any form of *siki* could be willed or sent by enemies or otherwise ill-intentioned people.

As noted in the *diarrhea* section, it is not felt that researchers have learned all that might be learned about beliefs in a possible role of spirits, witchcraft or sorcery in connection with STDs. For one thing, sorcery and related beliefs are found in the etiologies of STDs (including gonorrhoea, apparently) among the neighboring Shona, who speak a dialectal variation of the languages of the informants.<sup>27</sup> It is also recognized that Manica healers are reluctant to speak of anything suggesting witchcraft or sorcery since the government in the recent past used such beliefs to denounce traditional healers and suppress traditional medicine. Nevertheless it may be concluded that *siki* diseases are perceived in essentially natural terms, and these are the STDs of priority concern for public health.

A woman who has sex with a man who has *nhoka kundu* gets a disease of women known as *nhoka dzoni*. It can also be contracted by stepping in bodily waste contaminated by the male disease or from a mother who, if she does not treat her *nhoka dzoni* with traditional medicines, can pass it on to her unborn daughter.

Judging by the symptoms of *nhoka*-related diseases, a variety of apparently less serious, self-limiting genitourinary infections and conditions may come under this category, e.g. non-specific urethritis, yeast infections, prostate infections, and trichomonas. The category probably contains conditions that are not actually sexually transmitted but that affect the genital area and so might appear to be so.

The symptom of swollen testicles is often referred to in the male *nhoka* disease.

Local doctors think this refers to hydrocele or other conditions of scrotal masses which relate to hernia or trauma, or which perhaps are congenital. The preferred

biomedical treatment of acute hydrocele is bed rest, scrotal support and application of cold. Although hydrocele is not biomedically regarded as sexually transmitted, other scrotal masses such as epididymitis may occur as a complication of urethritis or prostatitis<sup>26</sup>. The low back pain referred to under *nhoka kundu* symptoms may suggest various kidney conditions.

There are other locally-recognized STDs which are not regarded as *siki* diseases yet are not explicitly referred to as *nhoka* diseases. Syndromes of this sort include *chitheta* (or *chiterera*), *iumanga*, *mugarapadima* and *sikumbe*. These are considered by healers as less-serious than *siki*. They include symptoms of menstrual irregularities, vaginal inflammations and discharges, sores in the groin or elsewhere, miscarriage and infertility. Some of these are regarded as adult diseases but not as sexually-transmitted. The etiology of at least *chitheta/chiterera* involves the position or state of the *nhoka*. For purposes of this discussion, these gynecological and other relatively minor conditions can be regarded as *nhoka*-related.

## ■ AIDS

Most traditional healers knew little about *sida* (AIDS) except what they have heard on the radio. Most believe they have neither seen nor treated this new disease. A few healers may confuse AIDS with familiar STDs, especially when they are told it is sexually-transmitted. A very few healers believed that people are wrong to think *sida* is a new disease. It is really the old familiar disease *songeia* or perhaps *chimanga*. For those, there are a variety of familiar medicines to cure the disease. At least one healer thought AIDS is different from traditional STDs, nevertheless there are traditional medicines to cure it and perhaps already have cured cases.

Some knew that AIDS is characterized by progressive weakness and diarrhea, and that it is highly contagious. Few understood, however, how AIDS is transmitted. For example, there

was almost no reference to blood, although several forms of casual contact were mentioned such as eating together.

## CONFIDENCE IN TRADITIONAL TREATMENTS

On the interesting and complex question of why healers seem to have such complete faith in their own medicines for STDs when antibiotics are available, a number of reasons are suggested:

- It is the nature of most common STDs for the symptoms to go into latent stages. There may be an apparent cause and effect relationship between administering traditional medicine and the apparent disappearance of symptoms.
- Many STD patients may use modern and traditional therapies simultaneously, and nowadays this may include antibiotic self-treatment. If a patient recovers from his symptoms, anyone and everyone involved can take credit for the cure.
- *Siki* patients may disappear after treatment, not because they are cured but because they seek treatment elsewhere. The healer may assume he has cured his patient.
- There is considerable antibiotic resistance to common STDs in Mozambique, meaning that hospital medicine may indeed be completely ineffective. Even when antibiotics could be effective, patients may not take the full course for various reasons. (It appears that in Manica, men are beginning to take Tetracycline preventively i.e., one or two capsules before intercourse with a questionable partner.)
- Hospitals are often out of antibiotics. This in combination with antibiotic resistance means that traditional medicines might indeed be better—or at least no worse—than modern medicines.

- However remote, there is the possibility that traditional STD medicines may be biomedically effective. Although the high and still-growing incidence of STDs would seem to belie this, it is possible that traditional healers' medicines are effective but their patients repeatedly reinfect themselves. In other words, traditional treatment for STDs may have as high a failure rate as modern medicine in Mozambique for the same reason: patient behavior.

Whatever the reasons, healers seem to advise their STD clients to use traditional medicines and to avoid hospital medicines—or injections specifically. Healers commented that *siki* diseases are centered in the lower stomach. Traditional medicines can easily reach this area but injections can not. And as already noted, injections are said to make the *khoma* hide in the body.

On the other hand, it is possible that the supreme confidence that healers express in their *siki* medicine is at least in part a marketing and public relations ploy for their clients. After all, one of the reasons African medicine works so well is because the therapist uses whatever means available to gain the implicit faith of his client.

## VIII. AIDS/STDs Health Communication Strategy

There are two broad categories of STDs in Manica: *siki* and *nhoka*-related. Since syphilis and gonorrhea and other high priority serious STDs fall within *siki*, the communications strategy will focus on *siki*. This conforms to the priorities of the existing national and provincial AIDS/STD program. The presence of syphilis and gonorrhea are major co-factors in the spread of AIDS as well as being major health problems in their own right. And unlike AIDS, which can only be prevented, syphilis and gonorrhea are highly treatable. It seems probable that other STDs such as *chlamydia*, *chancroid*, *papillomavirus*, and *lymphogranuloma venereum* are classed under *siki* by local healers. These are also treatable and may also be co-factors in HIV transmission.

It would appear that traditional healers' understanding and treatment of *nhoka*-related disease (which probably include hydrocele, urethritis, yeast infections, prostate infections, trichomonas, leukorrhea and possibly various hernias and kidney conditions) are at least non-injurious and may even be effective. Their preventive strategies to avoid these conditions involve maintaining bodily purity, and therefore are generally promotive of good hygiene and health. In any case, such diseases are of less public health consequence than AIDS or the systemic STD infections. They are not, therefore, part of the strategic focus.

There are several favorable factors in developing a health communication strategy for Manica healers. It is not necessary to accommodate the message to complex supernatural beliefs; in fact *siki* diseases are thought of in much the way biomedicine understands common STDs. Furthermore virtually all of the preventive advice traditional healers give is biomedically sound: refraining from intercourse during treatment; locating and treating all recent sexual partners of a sufferer; even avoiding alcohol and spicy foods during treatment. There are other parallels with modern medicine, such as recognition that STDs

can infect newborn infants and that STD symptoms can become latent. Manica healers also recognize that untreated STDs (especially the disease approximating gonorrhea) lead to infertility. In fact, this was mentioned often, reflecting the traditional concern with fertility and fecundity found throughout Africa.

The question remains, however, what to advise about treatment. Healers are convinced that only their own medicines can treat *khoma*, the causal agent of most *siki* diseases. Some healers even say that it retreats in the presence of hospital medicine and subsequently may become impossible to cure.

Another factor is that even if it seemed feasible to advise healers to send their patients to the hospital for treatment of STDs, hospitals in Manica province and elsewhere in the country are out of antibiotics a good deal of the time, at least for non life-threatening emergencies. Assuming the availability of antibiotics in hospitals in the future, it may be possible to build upon a growing spirit of intersectoral trust and cooperation after the first workshop and persuade healers at least to let their *siki* patients benefit from hospital as well as traditional medicine.

One possible referral strategy would be to agree with healers that *siki* diseases are foreign, therefore foreign (biomedical) medicines are needed to treat them. Such an approach was used with some success in Swaziland when cholera first appeared in 1980. Nevertheless, it is probable that the most impact could be in the prevention of STDS and AIDS. This can be done by reinforcing existing STD preventive practices which are sound and introducing new ones such as sterilizing razor blades and adopting condoms.

## CONCEPT OF LATENCY

Manica healers recognize latency of symptoms in STDs. Thus aided, the biomedical concept of latency can be explained. Healers noted that the symptoms of e.g., *chimanga* can remain hidden. In discussion of treatment, healers gave their explanation that the *khoma* (causal agent) of *siki* "hides in the body" when a *siki* patient takes antibiotics, after which the disease may be impossible to cure. This may reflect empirical observation of patients who self-medicate improperly or who fail to take the full course of a prescribed antibiotic treatment for gonorrhea. Here healers' discouragement of laymen medicating themselves can be reinforced and the opportunity taken to explain the proper use and function of antibiotics.

It can be explained how symptoms of gonorrhea and syphilis "hide in the body" yet the microbe or *khoma* is still present, in a resting state. Symptoms can disappear even if there is no treatment. In any case, a full course of treatment should be followed with either traditional or modern medicine. This would appear to be the only realistic strategy until a way is found to attract more clients of traditional healers to hospitals for antibiotic treatment.

## AIDS

The topic of AIDS will be introduced without reference to scientific terms such as virus. AIDS and HIV transmission will be explained in terms of healers' existing understanding of *siki* diseases and their beliefs about contamination. AIDS is indeed a new disease, one that is transmitted by an invisible, tiny causal agent similar in some ways to *khoma*. The AIDS *khoma*, however, perhaps is not transmitted in ways in which the healers are familiar. For example, it is not transmitted by touching, sharing eating utensils, sleeping under the same blanket (ideas which emerged in individual interviews), or by stepping in a sick person's excrement or discharges (by which means it is possible to become contaminated with *siki*). It is instead transmitted

through contact of one person's blood with that of another. This means that the AIDS *khoma* can be transmitted through open wounds in the skin, especially through the genital sores of *siki* diseases. This also means that if one or both partners have a *siki* disease, not only can the *khoma* of the *siki* be transmitted but also the *khoma* of AIDS. And AIDS is both fatal and incurable.

Another opportunity for the blood of a sick person to infect or contaminate another's blood is through traditional healers' use of razor blades in vaccination or scarification. Unless new razors are used with each patient and/or used razor blades are properly sterilized, small amounts of blood—or even the invisible *khoma* of AIDS—can cling to the blade and enter the bloodstream of the next person on whom the same razor is used.

## ■ Condoms

Due to innumerable factors—well documented in studies in neighboring countries—there is great resistance to using condoms on the part of Mozambicans. This research clearly showed that condoms (*chibudu*, or *preservativos*, *camisas* in Portuguese) are held in low regard. As a means of STD prevention, traditional medicines and advice were believed far superior to condoms. The strategy here is to find an opportunistic entry-point among traditional healers, upon which can be built a more ambitious program of condom promotion. Since healers already advise their patients with *siki* diseases to avoid intercourse during treatment, healers should be persuaded to provide their clients with condoms to ensure their compliance with the healers' own advice. Healers should find this logical and the actions would reaffirm their current beliefs and practices. Some modern technology to help them accomplish the task will simply be added.

How can demand for condoms be created? The practical, logistical strategy will probably be to promote community-based distribution (CBD) in such a way that healers can earn a small profit

on condom sales. Such an approach appears to be fully compatible with the condom strategy of the national AIDS/STDs program.

It is further part of the strategy not to try to attempt to reduce the complexity of the healers' *siki* consultation to the mere provision of a Mt50 condom. It must be kept in mind that their consultation consists of an integrated package which includes diagnosis, possibly divination, preventive advice, treatment and follow-up.

In the diarrhea section, the authors suggested that Manica healers might have consciously or unconsciously reacted in a rebellious way to the government's ORS campaign. It may have seemed to them that their years of training and experience—not to mention spiritual inspiration—in understanding and treating various diarrheas have been reduced by the government to a simple treatment of sugar, salt and water. This may have provoked healers to preach against the use of sugar, salt and water in child diarrheas. A negative reaction on the part of healers to the condom campaign planned by the national AIDS/STDs program should avoid this.

### ■ Razor Blades and Blood Contact

Some STD or other traditional treatments may contribute to the spread of AIDS and other diseases. The use of unsterilized razor blades for traditional vaccinations or incisions for introducing medicines into the bloodstream is an example of this. The same razor may be used for several patients. Although there may be no clear epidemiological evidence to date that skin-piercing practices associated with traditional healing are spreading AIDS in Africa, potential for such transmission is sufficient that the World Health Organization recently inaugurated a strategy to "collaborate with member states to ensure the use of sterile needles, syringes and other skin-piercing practices in medical and other settings."<sup>28</sup> "Other settings" presumably refers to ethnomedical and other traditional settings.

At the same time, traditional healers are themselves exposed to blood and other bodily fluids in their routine practice. Some of their patients may be HIV-positive or even have AIDS, putting the healers themselves at risk.

Therefore the strategy will build upon a pilot program the Department of Traditional Medicine initiated in 1989 to promote:

- Use of only one razor per client when possible; this may require clients bringing their own razor to the healer;
- Sterilization of razor blades used for treatment; and
- Healers avoiding contact with patients' blood.

Locally-available hydrochloride solutions such as Javel bleach will be promoted for sterilization of razors. Each participant healer in the workshop will be offered a bottle of Javel and sterilization will be explained and demonstrated. Boiling razor blades in water emerged as a less favorable alternative for healers because healers feared razors would become blunt.

### ■ Traditional Ideas of Contagion

As suggested earlier, there is some evidence of traditional ideas of contamination in association with *siki*. For example, the urine, feces, and clothing of a person with *siki* are believed capable of transmitting disease by mere contact. The same belief was encountered in diarrheal diseases: bodily waste becomes contaminated and spread disease. Instead of focusing health education messages that directly contradict such beliefs, it seems more useful to reinforce the idea that human waste can indeed carry disease agents such as those that cause cholera and typhoid. This would avoid confrontation on a minor, innocuous issue while strengthening environmental sanitation efforts as well as education directed at reducing cholera, typhoid, schistosomiasis, helminthic infections and the like.

It is noteworthy that villages in the parts of Manica visited are unusually clean and free of even the odors of human or animal waste. The same is true of peri-urban neighborhoods. It would appear there might be a relationship between beliefs regarding the safety of human or animal waste and degree of household and neighborhood sanitation.

### ■ Modification of Sexual Behavior

Among the many parallels found in Manica between traditional and modern understanding and treatment of STDs, traditional healers provide their *siki* patients with biomedically sound advice about sexual behavior. Specifically, patients under a healer's care for either *siki* or *nhoka*-related diseases are told to refrain from intercourse until they are free of the disease. Likewise a few healers advise their patients to bring their husband, wife, or lover to the healer for treatment of the same disease.

Healers also give considerable preventive advice to clients such as avoiding or at least being wary of sexual partners outside the home. Healers specifically discourage relations with prostitutes and Zimbabwean soldiers. The implication is that people should avoid relations with partners suspected or known to have had many sexual partners. Phrased in the latter fashion, this is central to the AIDS/STD preventive message.

Traditional healers can also influence the general public in matters relating to sexual behavior. African healers are often guardians of traditional codes of morality and values. Indeed in Manica they interpret various diseases other than *siki* as resulting from violations of moral codes and neglect of traditions. Manica healers are certainly more conservative and restrictive than the national AIDS/STDs program in their advice about safe sex.

There is a complex system of sexual prohibitions, the violation of which leads to a variety of health problems (including several prominent child diarrheas). For example, intercourse

during menstruation is considered contaminating, therefore unsafe and something to be avoided. Such avoidance under certain conditions may help prevent minor urological problems. Of more potential significance, some AIDS researchers suspect that menstrual blood—in combination with other factors—may provide a vehicle for HIV transmission. If this proves true, healers erring on the side of greater sexual conservatism and restriction may be saving lives.

Many prohibitions, such as sex with a widow or with a woman who has miscarried, however, may have sociological ramifications rather than health effects. In any case, they fall under the categories of beliefs or practices to be respected and left alone.

The basic strategy is to reinforce the idea that sex outside the home can be dangerous, particularly during a time of population and social upheaval. This is particularly true when a new, deadly, incurable foreign disease (AIDS) has been introduced.

### ■ Locating Recent Sexual Partners

In a related area, the Ministry of Health has acknowledged that hospitals have had little success in locating and treating recent partners of STD patients. It has been suggested that traditional healers could help hospitals in such an endeavor. The problem here is that healers feel fully competent to treat such patients themselves. Again we may have to settle for a short-term strategy of agreeing with healers that the full course of treatment should be followed with either traditional or modern treatment. This includes finding and treating recent partners of *siki* patients. In any case, healers should prove relatively successful in this since they are more likely than hospital staff to know something about the social and romantic life of the *siki* patient. Compared to hospital staff, healers also have more moral and mystical persuasive power with the patient, aided by coming into regular contact with the patient.

## ■ Care and Support for AIDS Patients

As AIDS cases proliferate in Africa, it is clear that national health systems will be unable to even take care of the physical needs of patients, let alone provide psychological or spiritual support. The Mozambique national AIDS/STDs Program has already recognized the important role of traditional healers in this regard. In fact, Mozambican healers can and do help families of patients during periods of loss and trauma, including war-related trauma. Such support should be recognized, accorded the value it deserves, and reinforced in a communications strategy.

## Endnotes and References

<sup>1</sup>Green, E. C. and the Cabinet of Traditional Medicine Studies, Proposal for a Program in Public Health and Traditional Health Manpower in Mozambique. Mozambique Ministry of Health and the European Community (March 31, 1991).

<sup>2</sup>For training materials including topic guides developed for the model program, see E. C. Green, Developing a Program of collaboration with Traditional Healers: A Manual for Health Workers. Mozambique MOH (December, 1991).

<sup>3</sup>For background on AMETRAMO, see E. C. Green, T. Tomas and A. M. Jurg, A Program in Public Health and Traditional Health Manpower in Mozambique. Mozambique Ministry of Health and European Community, Maputo (March 30, 1990).

<sup>4</sup>Nordstrom, C., "Final Report: Formalizing Traditional Medicine," Maputo: USAID (June 1991); Hanlon, Joseph, *Mozambique: who calls the shots?* London: James Currey, Ltd. (1991).

<sup>5</sup>This appears to be a new phenomenon as the authors found no evidence of antibiotic sales in local markets earlier in 1991. The authors purchased a specimen vial of penicillin. It was from West Germany from a lot that expires in October 1993.

<sup>6</sup>Yoder, P. S., "Cultural Conceptions of Illness and the Measurement of Changes and Differentials in Morbidity," Philadelphia: Center for International Health and Development Communication, University of Pennsylvania. *Working Paper* 115 (1989).

<sup>7</sup>Local doctors in Manica report that mothers sometimes bring their children to the hospital concerned about their child's depressed-seeming fontanelle when in fact the fontanelle is simply unclosed due to somewhat slow cranial development.

<sup>8</sup>Green, E. C., "Traditional Healers, Mothers and Childhood Diarrheal Disease in Swaziland," *Social Science and Medicine* 20 (1985) 277-285.

<sup>9</sup>Yoder, P. S., R. Drew and Z. Zhong, "Knowledge and Practices Related to Diarrhea Disorders, Oral Rehydration Therapy and Vaccinations in Lubumbashi, Zaire." Philadelphia: University of Pennsylvania, HealthCom Project (nd) 12-14.

<sup>10</sup>Yoder 1989. *op cit*, p. 9.

<sup>11</sup>Hogel, J. and A. Prins, "Prospects for Collaborating with Traditional Healers in Africa." Arlington, VA: Management Science for Health (MSH) PRITECH (April 1991).

<sup>12</sup>Janzen refers to the first three of these as elements of wellness. Green added the fourth concept to account more directly for the centrality of sorcery beliefs in many parts of Africa. Cf. Janzen, J., "The Meeting of Allopathic and Indigenous Medicine in the African Context." Published as "Hippocrate de le Desserto, Galen de la Savanna," *Kos: Revista di Cultura e Storia Della Scienze Mediche* III (Feb/Mar 1986):39-61.

<sup>13</sup>Restrictions against use of water and salt for young children with diarrhea were also found in the area around Maputo by Julio de Sousa and Manuel Wilsonne (de Sousa, anthropology thesis in progress, Zimbabwe University). Traditional healers in Zambesia province have also been reported to oppose the government's child vaccination program.

<sup>14</sup>According to a World Bank report, Beira's ORS factory suffers from shortages of glucose and spare parts.

<sup>15</sup>Hogel, J. and A. Prins, "Prospects for Collaborating with Traditional Healers in Africa," Arlington, VA:MSH, PRITECH Project (April 1991).

<sup>16</sup>Correil, J. "Innovations Among Haitian Healers: The Adoption of Oral Rehydration Therapy." *Human Organization* 47 (1988):48-57.

<sup>17</sup>World Health Organization. "Report on the Consultation on AIDS and Traditional Medicine: Prospects for Involving Traditional Health Practitioners." Traditional Medicine Programme and Global Programme on AIDS. Francistown, Botswana, July 23-27, 1990.

<sup>18</sup>Pruhal, A., S. Chacko and D. Koch-Weser, "Sexual Behavior, AIDS and Poverty in Sub-Saharan Africa." *Int'l. J. of STDs and AIDS* 2:1, (1991):1-9; Piot, P. and R. Tezzo, "The Epidemiology of HIV and Other Sexually Transmitted Infections in the Developing World." *Scand. J. Infect. Disease. Suppl.*, 69 (1990):89-97; Georges, A. J. et al, "Epidemiologie des Infections a VIH en Afrique." *Rev. Prat.* 40 (1990):2131-5; Mhalu, F. S., "The Inter-relationship between HIV Infection and Other Sexually Transmitted Diseases." *E. African Med. J.* 67 (1990):512-7.

<sup>19</sup>Jurg, A., de Jong, J., et al, "Fornecedores e Utentes de Cuidados Modernos ou Tradicionais de Saude em Maputo, Mocambique: opinioes e preferencias mutuas em Mozambique." Maputo: Instituto Nacional de Saude, GEMT (1991):4-5.

<sup>20</sup>Pateguane, J. L., "Tuberculos Pulmonar e Alguns Factores Culturais ao Abandono do Tratamento." Trabalho Proposto as IV Jornadas de Saude (1983).

<sup>21</sup>Green, E. C., "Sexually Transmitted Disease, Ethnomedicine and AIDS in Africa," *Social Science and Medicine* (in press); Green, E. C. and Monger, H., "AIDs and Other Sexually Transmitted Diseases in Liberia: Results of a Qualitative Study." Washington, DC: The Futures Group (March 1989).

<sup>22</sup>Cost of treatment was a sensitive topic; therefore it was not part of the interview schedule. Although some information was revealed during discussions, it must be regarded as very preliminary and not necessarily reliable.

<sup>23</sup>Green, E. C., "Sexually Transmitted Disease, Ethnomedicine and Health Policy in Africa." *Social Science and Medicine* 35.2 (July 1992):121-130.

<sup>24</sup>The languages of Manica are related to chiShona. Perhaps *siki* originates with the Shona of neighboring Rhodesia/Zimbabwe where English is the official language.

<sup>25</sup>Gelfand, M. S., R. B. Drummond and B. Ndemera, *The Traditional Medical Practitioner in Zimbabwe*. Harare: Mambo Press (1985).