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Traditional healers and the treatment of sexually transmitted illnesses in rural Zambia

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Abstract

Lately there has been increasing interest regarding the practice of traditional healers and their use of indigenous plants to treat illnesses. Twenty-three local healers (n'ganga) in Chiawa, rural Zambia, were interviewed about knowledge, practices, and their use of indigenous plants in the diagnosis and treatment of sexually transmitted illnesses (STIs) among male clients. They were also asked about their perceptions of modern medicine. The study revealed that all the n'ganga diagnosed and treated three main types of STIs. They named them as: songeya, doroba and bola-bola. They treated the illnesses with Strychnos cocculoides; Musa species; Solanum delegoense; Ximenia caffra; Diplorynchus condylocarpon; and Croton megalobotrys. Ten of the n'ganga perceived modern medicine to be effective against STIs and five of them sometimes referred some of the clients to the local health centre. It is being argued that a scheme to incorporate the n'ganga into STD control activities in which they can be utilised to refer clients to modern medical facilities can be baneficial. Given the necessary health information and support, the n'ganga may effectively execute this scheme. © 1999 Elsevier Science Ireland Ltd. All rights reserved.

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1. Introduction

During the past decade there has been increasing global interest regarding the practice of traditional healers and their use of medicinal plants to treat illnesses (Akerele, 1994). It is often argued that traditional healers operate closer to the people (Turner, 1967; Janzen, 1978; Kleinman, 1980) and that they are indispensable health care providers in many rural communities of Africa where modern medicine is not readily available (Twumasi and Warren, 1989). Current literature suggests that traditional healers should become the subject of intense research with a view to establish new ways of strengthening collaboration between modern health care providers and the traditional healers (Kaido et al., 1997; Dubey, 1997; Abdussalam, 1997). Small scale collabora-

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tive STD/AIDS programmes have already begun in some of the African countries (Green et al., 1995).

In the past, traditional healers were considered to be more effective against psychosocial illnesses (Ngubane, 1977; Leeson and Frankenberg, 1977), but this view seems to be changing. It is now being recognised that traditional healers use a vast array of medicinal plants, which can treat many infectious diseases such as malaria (Gessler et al., 1991). Although western technologies have transformed most of the plant products into more palatable tablets and syrups, many traditional healers still use the plants in their raw and crude form in the name of herbal medicines. Extracts from some of the medicinal plants being used by traditional healers have been found to contain properties that inhibit the growth of some microbes (Recio and Rios, 1989; Fabry et al., 1996; Navarro et al., 1996).

In Zambia, like in many African countries, sexually transmitted diseases (STDs) are a major public health problem (Hanson et al., 1997). Data collected at several intervals by different health related bodies confirm this fact (Hira, 1989; Salem et al., 1990; NASTLP, 1995). It is known that traditional healers, popularly known as n'ganga in most languages of Zambia, are using indigenous medicinal plants to treat many illnesses including sexually transmitted illnesses (STI). Although some studies, particularly one by Leeson and Frankenberg (1977), have demonstrated the role of *n'ganga* in treating many illnesses, few have focused on their clinical practice and treatment of STIs. The skills, competence and effectiveness of the n'ganga in the treatment of STIs in Zambia are still to be well understood and documented.

This study was carried out in Chiawa, rural Zambia, to describe the knowledge, practices and the use of indigenous plants by local *n'ganga* in the diagnosis and treatment of STIs in males. The specific objectives of the study were: to determine their knowledge and practices; to document the medicinal plants they use to treat STI; and to assess their perceptions about modern medicine. This study focused on the treatment of STIs in males only. Other members of the research project conducted a separate study focusing on women in Chiawa (Bond and Dover, 1997).

STD and STI are both used in this paper. STD refers to syndromes that are recognised in clinical medicine. It is used only with reference to modern biomedical facilities. STI refers to syndromes recognised by the *n*'ganga and the community for which the diagnosis is purely symptomatic and/or subjective.

2. Materials and methods

2.1. Study area

This study was carried out in Chiawa chieftaincy, a rural settlement about 160 km south-east of Lusaka, the capital of Zambia. Chiawa is located in the lower Zambezi valley, on the border with Zimbabwe. It has a population of about 8000 people (CSO, 1991) who are spread over 30 villages of about 200 inhabitants each. The dominant ethnic group call themselves Goba (people of the low river valley) and speak Kore-kore, a dialect of the Shona people of neighbouring Zimbabwe. Subsistence farming and fishing are the major economic activities of the area. The demographic characteristics of Chiawa community are consistent with those observed at national level with 45% of the population under the age of 15 and a sex ratio of 2:1 in favour of women (CSO, 1991).

The flora of Chiawa indicates strong affinities with other hot-dry valleys in the region. Several vegetation types appear to be common, for example, *Acacia albida*, *Colophospermum mopane* woodlands and dry-deciduous thickets. The drydeciduous thickets are composed mainly of *Combretum*, *Commiphora*, *Kirkia* and *Croton* species (Guy, 1977). This type of vegetation has provided a diverse flora with rich medicinal plants that the people of Chiawa have always used to treat many illnesses.

Like in most rural communities of Zambia, in Chiawa modern medical services are not well functioning. The area has only one rural health centre (RHC) which is manned by a clinical officer, a nurse and an environmental health technician, giving a ratio of 1:2667 of the local population. The RHC is always in short supply of essential drugs. Consequently, it cannot adequately meet the therapeutic needs of the community. It is under these and other circumstances that the *n'ganga* are seen to provide most of the basic medical care. Chiawa has a total of about 24 *n'ganga*, out of which 23 were reached during the study.

2.2. Study design

The study was conducted over a period of 2 years. Prior to the study, all the n'ganga in Chiawa were identified through a survey conducted among young men to determine local STI treatment options and sources. Names and villages of 24 n'ganga frequently consulted by the young men for STI advice and treatment were compiled. All the 24 were enlisted for study. However, one of them, a female, was not reached due to perennially inaccessible roads. Data collection from the 23 n'ganga was done in two phases (Table 1). The first phase was done through a social survey using a semi-structured questionnaire. This facilitated the collection of baseline information on the demographic characteristics, the history of healing practice, perceived area of competence and specialisation, local classification of STIs, knowledge of medicinal plants, and perceptions about modern medicine. The second phase was done through in-depth interviews and observations during n'ganga-patient consultations. In this phase, data on the practices pertaining to some aspects of diagnosis, prescription and administration of the medicine was collected. With the permission of the healers, the in-depth interviews were often tape-recorded. Knowledge about and use of

Table 1 Data collection phases and activities

Activity		
Field survey		
Data analysis		
In-depth interviews		
Data analysis		

medicinal plants was determined by the number of STI signs and symptoms reported by a healer as well as the number of plants used. This knowledge was validated through comparison between and among the healers.

Informed consent was always obtained before the start of every interview. Appointments to conduct the interviews were often made 4 days in advance. The interviews and observations were conducted in the *n'ganga's* homes using the local language. In some cases the main investigator, with the help of two local research assistants, accompanied the n'ganga into the forest to compare the reported names with the actual plants. The research assistants were very conversant with local plants. However, no samples of these plants were collected for further identification outside the field area. Literature on medicinal plants within Zambia and neighbouring countries was widely reviewed to compare the names of the reported plants with those published in the literature (Storrs, 1979; Gelfand et al., 1985; Hedberg and Staugård, 1989; Chhabra et al., 1993).

2.3. Data analysis and ethical issues

Data from the survey questionnaire was analysed using EPI-INFO statistical programme. Open-ended responses were coded and together with pre-coded responses entered into the database. Descriptive statistics was used to analysis the data. Qualitative data from in-depth interviews was reviewed and common themes were determined and recorded. This study was approved by the Research and Ethics Committee of the University of Zambia as part of the on-going collaborative research project on community capacity to prevent, manage and survive AIDS/ STDs in Chiawa.

3. Results

3.1. Background information

Details of demographic characteristics of all the *n'ganga* are listed in Table 2. The *n'ganga* had been practising for variable periods of time. The

Table 2				
Demographic	characteristics	of	the	n'ganga

Number	Sex	Age	Marital status	Number of years in school	Type of healer	Christian denomination
1	М	68	Married	0	Herbalist	None
2	Μ	65	Married	0	Herbalist	None
3	F	70	Widowed	0	Diviner	Watchtower
4	Μ	51	Single	3	Diviner	Catholic
5	Μ	57	Married	7	Herbalist	Watchtower
6	F	70	Married	0	Diviner	Catholic
7	Μ	64	Married	7	Herbalist	Watchtower
8	Μ	55	Married	0	Diviner	Watchtower
9	Μ	63	Married	3	Diviner	None
10	Μ	79	Married	3	Herbalist	Catholic
11	Μ	85	Married	0	Herbalist	Catholic
12	Μ	69	Married	0	Herbalist	Watchtower
13	Μ	70	Married	0	Herbalist	Catholic
14	Μ	63	Married	3	Diviner	None
15	F	40	Married	5	Herbalist	None
16	Μ	79	Married	0	Herbalist	None
17	F	31	Married	4	Herbalist	Catholic
18	Μ	32	Married	5	Herbalist	UCZ ^a
19	F	76	Married	0	Herbalist	None
20	Μ	59	Married	0	Herbalist	Catholic
21	Μ	53	Married	4	Diviner	Catholic
22	F	43	Married	0	Herbalist	None
23	М	67	Married	0	Herbalist	None

^a United church of Zambia (UCZ).

median was 24 years (range 3-60). Two types of n'ganga were categorised; the herbalist and the diviner (i.e. those who were purely herbalists and those who also undertook divining). This categorisation was based on their own perceptions of what they were. There were three ways by which the n'ganga acquired their healing practice. A family member taught the majority (12), seven were directed by the *midzimu* (ancestral spirits) and four learnt from other healers. The seven who were directed by the midzimu were diviners and reported being spiritually endowed by one of two main ancestral spirits. The spirits were named as: the spirit of a dead relative who was a healer (shave); and the guardian spirit of the lion (mhondoro).

All the 23 *n'ganga* reported being specialists in treating one sort or another of STI. Along with STI, 20 were specialised in treating infertility and impotence. Two of the females reported assisting with child birth. The reported number of clients attending STI treatment per month ranged between one and 25 (median six) per n'ganga. The n'ganga charged for their services. There were two types of charges mentioned: chiponda msango and shano. Chiponda msango (step into the forest), was described as a charge that a client pays before any medicines are dispensed. It was a kind of a fee for the trouble the *n'ganga* took to go into the forest to collect the medicine. Only six said they charged chiponda msango. The median charge was US\$ 1.50 (range 0.37-2.24). Shano is the payment made after the client is healed. Twenty said they charged after the patient was healed. The median charge was US\$ 7.00 (range 0.37-15.00). One diviner charged only US\$ 0.20 for divining and his medicine was free. Two herbalists said they did not charge anything. There were no significant differences between the male and female n'ganga with regard to the main background characteristics.

3.2. Diagnosis and classification of sexually transmitted illnesses

The n'ganga demonstrated knowledge of STIs and their classification. All 23 were aware that STIs, locally known as matenda ve chihure, (literally translated as illnesses of prostitution) were transmitted through sexual intercourse. They also recognised that STIs presented themselves in different ways although primarily affecting the genital organs. To distinguish one type of STI from the other, the *n'ganga* had local terms which they used for each one of them. The physical manifestations or signs and symptoms identified the type. The common signs that they reported were: genital sore (zvironda); pus discharge (kubuda ukono); and swollen lymph nodes (kazvimba mamota). Other signs and symptoms reported by some of them were: backache (musana), body rash (makoroni), and fever (mhepo). The knowledge about signs and symptoms was not influenced by any of the background characteristics such as sex or length of practice.

The knowledge about the signs and symptoms facilitated the process of diagnosis. Clients were often physically examined to determine the type of STI. The female n'ganga were assisted by their husbands and elderly sons to examine clients. Only a minority (five) of herbalists (three males and two females) did not often examine. They relied on the descriptions given by the clients.

The three main types often diagnosed by all the 23 were: *songeya*, *doroba* and *bola-bola*. *Songeya* was described as being characterised by sores on the genital parts. They recognised that *songaya* sometimes produced a body rash. The majority (15) said that an infant born from an infected mother was likely to develop this rash. All the females held this view.

Doroba (meaning town alludes to the fact that the illness first emanated from the urban centres) was characterised mainly by pus discharge. All of them reported that, in addition to pus discharge, a person with *doroba* has backache and finds it difficult to urinate. *Bola-bola* was said to be accompanied by persistent fever. The most conspicuous thing about a person suffering from *bola-bola* was the difficulty with walking. The person walked with his legs far apart (*kutangasa makambo*). A person suffering from *bola-bola* developed swellings on the groin that form lumps, which resemble tennis balls. The term *bola-bola* is a euphemism for a ball. They said that at some point the swollen nodes burst, releasing pus.

3.3. Reported names of the medicinal plants and herbal administration

A total of 19 different species of indigenous plants used to treat STIs were reported (Table 3). Six plants were mentioned by all the 23 n'ganga. These were: Strychnos cocculoides, Musa species Solanum delagoense, Ximenia caffra, Diplorvnchus condylocarpon and Croton megalobotrys. Ten of the *n'ganga* gave up to eight different plants. These were the older men and their ages ranged from 60 and above. All the females gave up to six different plants. All the plants mentioned were found within easy reach of every village in Chiawa. The herbs derived from a particular plant were used singly but more often in combination with herbs from other plants. Several plant parts were being used (Table 3). It was observed that the administration of the herbs depended on whether the particular STI produced genital sores or a urethral discharge. For instance, all the n'ganga recognised that the common feature of songeva was the sores that developed on the genital organs, treatment, therefore, focused more on the application of the medicines onto the sores, although some medicines would also be taken orally. A slight majority (13) used the roots of Musa species and C. papava which they burnt and the ashes applied directly onto the sores. Four used powder from the pounded roots of O. trichocarpum which they applied directly onto the sores. The others burnt the roots of O. trichocarpum, the ashes were then mixed with some cream which the client applied onto the sores. In addition to treating the sores, they all prescribed some medicines to take orally. They used infusions consisting of the roots of R. caffra or C. arborea or A. antunesiana with roots of C. limon taken at intervals of 3-4 h for about 7 days.

Doroba was treated mainly orally. An infusion consisting of the roots of C. abbreviata, D. condy-

locarpon or X. caffra were taken by mouth. Four n'ganga preferred a decoction of the roots of A. garckeana and Musa species taken orally. The majority (17) of the n'ganga recommend taking

the medicines for at least 7 days whilst the rest recommended less.

Treatment of *bola-bola* consisted of taking the herbs orally and also applying onto the swollen

Table 3

Reported names of the medicinal plants, STI treated and plant parts

Family/species	Kore-kore name	STI treated ^a	Plant parts ^b
Loganiaceae Strychnos spinosa Lam. Strychnos cocculoides Bak.	Mutamba	s d b	ft rt
Papilionaceae Ormocarpum trichocarpum (Taub.) Engl.	Mupotanzou	s b	rt lf
Araliaceae Cussonia arborea A. Rich.	Mufenje	S	rt bk
Solanaceae Solanum incanum L. S. delagoese Dunal	Muhnundurwa	d b s	rt
Leguminosae <i>Albizia antunesiana</i> Harms. <i>Cassia abbreviata</i> Oliv.	Muriranyenze Muveneka	s b d d b	rt lf rt bk
Apocynaceae Diplorynchus condylocarpon (Muell. Arg.) Pich.	Mutowha	d	rt
Rauvolfia caffra Sond.	Mukashu	S	rt
Bignoniaceae Kigelia africana(Lam.) Benth	Muveve	b	rt bk
Olacaceae Ximenia caffra Sond.	Mtswanzwa	d	rt
Burseraceae Commiphora mossambicensis Oliv.	Muchabobo	b	rt
Malvaceae Azanza garckeana (F. Hoffm.) Exell&Hillcoat	Munego	d	rt bk
Musaceae Musa spp. (Cultivated)	Banana	d s b	rt st
Rutaceae Citrus limon (L.) Burm f.	Lemoni	s d b	rt lf
Euphorbiaceae Croton megalobotrys Muall. Arg.	Muchape	s d b	rt bk
Caricaceae Carica papaya L. (Cultivated)	Paw-paw	b d s	rt st
Moraceae Fic sur (miq.) Del.	Mukuyu	s b d	rt

^a STI treated: b = bola - bola, d = doroba, s = songeya.

^b Plant parts: bk = bark, ft = fruit, lf = leaves, st = stem.

parts. The bark from *K. africana* was pounded into powder and taken orally in porridge. Of those who used *K. africana* (nine) all the females (three) recommended taking the powder in maize meal porridge. The males recommended taking the powder in a beverage, especially locally brewed beer. Eleven cited decoction from the roots of *C. mossambicensis* and *C. papaya* which was taken by mouth for 7–10 days. After the swellings on the groins burst open, four of them used the roots of *A. antunesiana* and *O. trichocarpum* which they burnt and the ashes applied onto the wounds. Twelve prescribed roots of *Musa* species, *C. papaya* and *C. limon*, which they soaked in water for the client to wash the wounds.

There was a wide spread belief in induced purging and vomiting as a means of guaranteeing a cure. Most of the n'ganga reported that STIs destroyed abdominal veins and treatment must include cleaning the abdomen. The means of cleaning was through induced purging and to a lesser extent through vomiting. Fifteen n'ganga administered purgatives and/or emetics to clients. C. megalobotrys was commonly used as a purgative. Powder from the roots or bark of C. megalobotrys was added to porridge and taken by mouth. Six n'ganga used the leaves of A. antunesiana as a purgative. The leaves were taken orally in water or any beverage. S. cocculoides was used as an emetic. Powder from the unripe fruit of S. cocculoides was added into milk or any beverage and taken orally. The belief in the use of purgatives was more dominant in older herbalists. Thirteen herbalists and two diviners all aged from 57 and above administered purgatives. Sex, christianity and the length of practice did not influence the belief in purgatives.

3.4. The perceptions about modern medicine

The *n'ganga* varied in their perceptions of modern medicine with regard to the treatment of STIs. Five said that modern medicine cured all STIs and another five said that modern medicine could cure some but not all STIs. Thirteen said they did not perceive that modern medicine could cure STIs. The five who said that modern medicine could cure all the STIs were males but their ages varied. Adherence to christianity seemed to influence the perceptions. Nine (9/10) of all those who said modern medicine cured some or all STIs belonged to christianity. These perceptions determined the *n'ganga's* referral patterns and preferences. The five n'ganga that perceived modern medicine to cure all the STIs sometimes referred some of their clients to the local health centre. Nine said they referred their clients to other n'ganga and the remaining nine said they never refer clients because their medicine was effective and had never failed to treat a STI. One of the herbalist remarked that his herbs could not fail to treat an ordinary STI unless HIV was also present. Education or age did not seem to influence perceptions about modern medicine.

4. Discussion and conclusion

This study shows that the *n*'ganga of Chiawa have knowledge of STIs, and based on local interpretations they have developed culturally appropriate terms which they use to communicate with their clients. They use 19 species of indigenous plants to treat STIs and they demonstrate great trust in the effectiveness of their medicine. The effectiveness of their medicine lies in purging out the illness. Modern medicine is not perceived to be effective against STI by the majority of the *n'ganga*. It is known from other studies of rural communities in Africa that traditional healers view themselves as knowledgeable and more competent to treat many illnesses that would be classified as STDs in clinical medicine (Rheinhallt Jones, 1949; Green, 1989; Bond and Ndubani, 1997). However, the present study shows that there are some n'ganga who had positive perceptions about modern medical cures for STIs and some of them referred clients to the local health centre.

The age distribution of the 23 n'ganga studied shows that they were predominantly older people, who had been practising for variable lengths of periods. The majority were males. Slightly below half had attended formal education. However, the level of education was too low to make any significant impact on their practice and perceptions about modern medicine. Over half of all the n'ganga belonged to a christian denomination. Christianity seemed to influence perceptions about modern medicine. Majority of those who had positive perceptions belonged to a christian denomination. In Zambia, many christian denominations are actively involved in the dissemination of health information. This could be one of the explanations of the association between belonging to a christian denomination and positive perceptions about modern medicine. The majority of the healers did not perceive modern medicine to be effective. This is consistent with studies done among young men within Chiawa which have revealed widespread negative perceptions about modern cures for STIs (Ndubani, 1997). Unlike modern medicine, the perceived efficacy of traditional medicine seems to lie in the use of purgatives.

Among the study group the belief in christianity did not inhibit practices and beliefs in the indigenous midzimu (ancestral spirits). It was observed that almost all the n'ganga maintained strong beliefs in midzimu. Spiritual endowment was one of the ways by which some of the n'ganga achieved the healing powers. Those who were spiritual endowed were diviners. Several studies have shown that most diviners depend on spiritual powers for their competence in treating illnesses (Staugård, 1985; Ngubane, 1989; Sekou and Sterck, 1994). Apart from the initiation through midzimu, the healing practice was also taken over from a family member. Traditionally, healing tends to be a guarded family knowledge and possession which is handed down through kinship (Osujih, 1993). Most of those taught by a family member were herbalists. This implied that for one to be a herbalist he or she did not always require any rigorous spiritual guidance, though, as Reynolds (1996) has observed, the interest to learn the art of healing could be itself spiritually engendered.

The *n'ganga* had considerable amounts of knowledge of the common types of STIs. Oral accounts indicate that STIs have been prevalent in Chiawa for a long time. Like many rural communities of Zambia, STIs are traced back to the colonial period (Evans, 1950). They emerged as a

result of increased migration of people, particularly the young male adults, to and from the urban centres. Over the years the *n'ganga* developed, not only local terms for STIs but also culturally appropriate diagnostic and therapeutic practices. Other than *bola-bola*, all the terms indicated by the *n'ganga* are unique to Chiawa. The terms are in *Kore-kore*, a language which is not spoken in any other part of Zambia. Literature indicates that these terms are also being used in Zimbabwe. *Songeya* and *doroba* refer to syphilis and gonorrheoa, respectively (Gelfand et al., 1985). *Bola-bola* is a term used in most parts of Zambia. It refers to the swellings on the groins which are typical of *lymphogranulona inguinale*.

STIs were recognised by all the *n'ganga* to result from infection (*kutapukira*). Their symptoms were seen primarily as somatic and, consequently, both the herbalist and the diviner dealt with them in a more empirical way and the majority carried out physical examinations to facilitate diagnosis. Whilst it is true that diviners largely rely on spiritual powers to determine the nature and cause of illnesses, it has also been shown that for conditions which are not seen to result from witchcraft, divination as a diagnostic tool may not be used (Ngubane, 1989). STIs are seen to result from transgression of moral rules or lack of self control (*kazvibata*) by the individual.

All the *n'ganga* studied had deep understanding of indigenous medicinal plants. Their understanding of the plants was accrued over variable lengths of practice. The older n'ganga knew and used more plants than the females and the relatively younger males. Of the 19 species reported, six were being used by all the *n'ganga* to treat STIs. The six were S. cocculoides, Musa species, S. delagoense, X. caffra, D. condylocarpon and C. megalobotrys. The vegetation of Chiawa indicates that these species are among the commonest plants (Guy, 1977). The application of the herbs depended largely on the type of the STI but generally most of them were either taken orally or applied onto the affected parts. Roots were the commonest plant parts used, followed by barks and leaves. It is known that roots and barks are the dominant plant parts used in herbal preparation (Gelfand et al., 1985; Chhabra et al., 1993). Literature reveals that some of the plants being used in Chiawa are also being employed elsewhere within sub-Saharan Africa to treat various illnesses including STIs (Kokwaro, 1976; Harjula, 1980; Gelfand et al., 1985; Staugård, 1985; Hedberg and Staugård, 1989).

Purgatives and emetics were considered essential in the treatment of STIs in Chiawa. The *n'ganga* believed that the illness ought to be purged out of the body (kuparutsa), so a therapy that did not often involve purgatives and emetics was not perceived to result in a complete cure. Purgatives and emetics were believed to cleanse the stomach (munumbu). We viewed this as the major basis why many *n'ganga* perceive that modern medicines did not cure STIs. The n'ganga did not seem to comprehend how a client could be cured if he did not purge out the illness. This point was reinforced by the referral practice. The majority of them preferred to refer clients to other *n'ganga* when they were not competent enough to treat a particular episode of STI. However, one should not be too critical, though, about the belief in the role of purgatives in illness remedy. In modern medicine, until fairly recently, the belief in purgatives was held by many practitioners. There is evidence, for instance, that to date giving pre-delivery enemas to women in labour is seen as a normal routine in some countries, although there has been no scientific proof to the benefits of using enemas or purgatives. World Health Organization has for sometime now been discouraging their use (WHO, 1985).

The *n'ganga* of Chiawa operate within the same socio-cultural environment and they share a common ancestral background. This may explain why there are not major variations with regard to conception, classification and perceptions about the treatment of STI. Traditional medicine is part of people's culture and its effectiveness or lack of it must be seen within the context in which it is being used. Diagnosis, therapeutic choices and healing are interpretive processes which can only be understood within the context of cultural meaning, experience and social systems (Kleinman, 1980). The present study has only attempted to document the ethnography of indigenous plants as well as describe the practices of the

users. It has been suggested that an ethnography of plants should lay the basis for ethnopharmacology which seeks to link traditional empirical knowledge with bioscientific research (Etkin, 1993). The literature clearly shows that several ethnographic studies of plants have been conducted in Sub-Saharan Africa in the last 40 years or so (Gilges, 1955; Sofowora, 1993) and that pharmacological tests and analyses on these plants suggest that some of them contain pharmacologically active substances against some microbes and fungi (Desta, 1993; Chhabra et al., 1993; Fabry et al., 1996; Navarro et al., 1996).

In Zambia as the situation stands now, the state of the art as regards the clinical competence and effectiveness of the n'ganga is unclear and understudied. Over-reliance on the *n'ganga* in treating STIs may have its own limitations. As long as the efficacy of herbal medicines remains scientifically inconclusive, their prescription and administration unstandardised and the skills and effectiveness of the *n'ganga* less understood, there will always be some skeptisms about how much support should be given to traditional medicine. Nevertheless, it has been shown that the *n*'ganga always serve as traditional counselors, psychotherapists or social workers in their communities (Winston and Patel, 1995). Based on these roles, there is scope for drawing them into collaboration with modern medical services. One of their roles in the collaboration should be that of referring the clients to the health centres. At the present moment most *n'ganga* have a negative perception about the effectiveness of modern medical cures, not so much because they have the proof but largely because they lack accurate information. Information should be given to them and, as shown by Green et al. (1995) and Wilbur (1997) in their evaluative studies, when accurate health information is given to the n'ganga, they are likely to change their perceptions about modern medicine. The evidence is clear from this study, the *n*'ganga that reported having positive perceptions about modern medicine referred clients to the health centre. Based on these findings, a realistic scheme by which the *n'ganga* can be trained to refer clients to the health centre when they realise that their medicine has not worked can be designed.

However, a workable referral scheme should presuppose an improvement in the STD quality of care at the health centres otherwise the scheme will fail. Such avoidable inadequacies as negative attitude of staff towards STI clients and lack of confidentiality should be addressed. The *n'ganga* will not refer clients if they feel that people perceive their services to be better than those obtaining at the health centre.

It is hoped that the results of this study will serve as a basis of information, not only for further research into n'ganga and the treatment of STIs, but also on future schemes to integrate the n'ganga into STD control in Zambia.

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