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HIV/AIDS and TB knowledge and beliefs among rural traditional health practitioners in Limpopo Province, South Africa

SIMON M. NEMUTANDANI¹, STEPHEN J. H. HENDRICKS¹ AND F. MAVIS MULAUDZI²

¹School of Health System and Public Health, University of Pretoria, Pretoria, South Africa. E-mail: Ve2si@yahoo.com ²Nursing Department, University of Pretoria, Pretoria, South Africa

Abstract

HIV/AIDS and TB infections are major health problems in South Africa. Approximately two thirds of infected patients consult traditional health practitioners (THPs) to manage opportunistic infections. This study seeks to assess HIV/AIDS and TB related knowledge and beliefs among traditional health practitioners in Limpopo Province. A quantitative cross-sectional study was conducted to assess knowledge and beliefs on HIV/AIDS and TB infections among group of THPs attending training workshops in Limpopo Province, between December 2013 and May 2014. Structured questionnaire was used to collect data. Most THPs were not educated. Majority were women at senior citizens level with more than two decades of working experience. They had adequate knowledge of HIV/AIDS and TB transmission, signs and symptoms. Of great concern were the prevailing myths and beliefs that HIV/AIDS and TB patients were bewitched; there is cure for HIV/AIDS and THPs have *muthi* (traditional medicine) and herbs capable of curing it. We recommend that tailor-made HIV/AIDS and TB health education targeting THPs beliefs; and training workshops on signs and symptoms of HIV/AIDS and TB be initiated urgently.

Keywords: Health education, HIV/AIDS and TB knowledge, traditional health practitioners, signs and symptoms, traditional myth and beliefs, training.

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Introduction

Traditional health practitioners (THPs) play an important role in health delivery among patients in the rural communities, especially in the under-resourced countries (Baleta, 1998; Sharkey et al., 2012). In sub-Saharan Africa people commonly seek initial health consultations from them (King, 2000; Babb et al., 2007; Sharkey et al., 2012). There is a wealth of published reports on contributing factors which are thought to motivate and influence patient to seek services of a THPs. These include traditional beliefs, presenting symptoms, perceived source of the illness, social acceptability, easy access, low cost,

confidence in THPs, as well as the perceived fit of a THPs' explanation of illness with expectations of the local culture, and or failed treatment from allopathic health practitioners (AHPs) (Green, 1999; Pinkoane et al., 2005; Stekelenburg et al., 2005; Babb et al., 2007; Audet et al., 2012; Sharkey et al., 2012). For example, when there is death in the family, communities believe in the process of spiritual cleansing and healing of minds.

Bereavement process would not be complete without performing traditional rituals (Richter, 2003; Roura et al., 2010). Allopathic health practitioners would often dismiss such cultural tradition and practices as "superstitious" and uncivilized" actions without fully understanding the basis for their beliefs and practices (Liverpool et al., 2004). It often contributes to the animosity between THPs and AHPs (Oswald, 1983; Smyth et al., 1995; Van Niekerk, 2012).

Health authorities and researchers have acknowledged that substantial percentage of patients and communities would first consult THPs despite availability of biomedical practitioners (Madamombe, 2006; Mills et al., 2006; Plus News, 2010; Audet et al., 2012b). Some studies have reported that up to 80% of the patients consult THPs.

Within that estimated percentage, a substantial number of those patients could be infected with human immunodeficiency virus (HIV), some with Acquired Immunodeficiency syndrome (AIDS) and tuberculosis (TB) infections. The two diseases have reached crisis level in South Africa. By 2010, there were approximately 6 million South Africans living with HIV and AIDS and TB (UNAIDS, 2013; WHO/UNAIDS, 2013; Simbayi et al., 2014). There is, therefore, a high possibility that millions of them first consulted THPs with or without signs and symptoms of HIV and AIDS.

With this position of huge responsibility and influence on the health of their patients and community, THPs can chose to either refer patients to western clinics or treat them in a traditional way. Given the level of trust in the community, their absolute numbers and the current initiatives of trying to incorporate THPs into the formal health system, this choice has a major effect on the patient's health and thus on the entire community (Audet et al., 2013).

It could either help increase early diagnosis and therapy with prompt referrals or delay it. Such power could be harnessed in favour of HIV/AIDS and TB prevention in South Africa. The piloting phase of National Health coverage plan, together with the re-engineering of primary health care services and establishment of ward based health system, would benefit and reach more patients if it were to collaborate with the THPs.

Traditional health practitioners are community based health providers, with extensive skills and experience of conducting home visit and home base care. They are capable of providing primary health care services providers.

Several studies conducted in sub-Saharan Africa have reported that THPs delay patients from taking HIV and TB treatment (Audet et al., 2012; Njau et al., 2012)) and may also transmit HIV through direct body fluid transfer through mother to child practices and use of unsterilized instruments such as razors for traditional skin-cutting practices (Smyth et al., 1995; Ayisi, 2006).

There are reports of THPs prescribing risky treatments in order to lift curses or spells (Kale, 1995; Munk, 1997; Richter, 2003; Babb et al., 2007). Anecdotal reports suggest that some of *antiretroviral therapy* (ARV) and TB treatment defaulters are attributable to THPs' claiming to have herbs and *muthi* to cure HIV/AIDS and TB.

Despite these health hazards many patients continue to seek treatment from THPs who hardly have the incentive to refer people to clinics for HIV testing and treatment (Sharkey et al., 2012), more so when their science and knowledge are not acknowledged.

Given that background, urgent measures are needed in South Africa to reduce the incidence of HIV/AIDS and TB infections. Possible strategies could include the training of THPs on signs and symptoms of HIV/AIDS and TB, recognising their role and initiating collaboration in fight against the diseases.

Such role could extend to task-shifting with THPs and their inclusion in the management of patients to reduce workload in the already overburdened and short staffed public health facilities. For example, allowing THPs to become involved in providing support for patients on ARV and TB treatment, making HIV treatment much more widely accessible and available are possible options (Audet et al, 2013).

The World Health Organization (WHO) and African Union (AU) have recognised and acknowledged the important role that THPs play in communities, and urged different governments to integrate traditional health system into all aspects of healthcare provision (African Union, 2007). In 2007, South Africa prioritised recognition of THPs and promulgated the Traditional Health Practitioners Act No 22. Plans to register all

THPs under one regulatory body and integrate them into conventional health systems are at advanced stages (Republic of South Africa, 2007). There are approximately 350, 000 THPs in South Africa (Peltzer, 2009; Nxumalo et al., 2011). An estimated number of between 25,000 -30, 000 THPs were practising in Limpopo Province in 2011. The number in Vhembe district is estimated at 6,000.

Despite the reports indicating that around 80 percent of people living with HIV/AIDS and TB visit THPs before consulting a doctor (Peltzer & Mngqundaniso, 2008) little is known about what THPs understand and believe regarding prevention of HIV/AIDS and TB transmission. More troubling is the fact there are still high rates of new HIV infections in South Africa, knowledge levels on prevention of HIV/AIDS and TB transmission significantly declined in recent years, and these were being accompanied by increased risky sexual behaviours (Simbayi et al., 2014).

To provide a more complete understanding of THPs' knowledge and beliefs on HIV/AIDS and TB diseases, we administered a questionnaire to them before attending a training workshop on HIV/AIDS and TB infections. We inquired about their knowledge on what causes AIDS and TB, mode of transmissions, and common signs and symptoms of HIV/AIDS and TB. We also asked about THPs' prevailing myths and beliefs that HIV/AIDS and TB patients were witched and whether THPs have muthi and herbs capable of curing the disease. It is hoped that this initiative will help to identify risky behaviours and practices that may need urgent and prompt public health intervention stem the spread of the epidemic in South Africa.

Methodology

Context and the study area

This is a quantitative cross sectional study was conducted between December 2013 and May 2014 to assess the knowledge and beliefs on HIV/AIDS and TB infections among group of THPs attending training workshop on signs and symptoms HIV/AIDS and TB diseases. It was part of pre-phase planning process, preparing for the main project of developing a model of collaboration between THPs and AHPs in the management of HIV/AIDS and TB patients in Vhembe District, South Africa. The research population comprised THPs from four local municipalities in Vhembe District (Makhado, Musina, Thulamela and Mutale local municipalities) with an estimated population of 1.3 million people who were predominantly Tshivenda speaking.

Sampling procedure

Vhembe Traditional Health Practitioners council provided the list of names with contact numbers of all THPs registered in each of the four local municipalities under the Vhembe District. From the existing lists, a representative sample of 120 THPs from each local municipality (i.e. 480 THPs) was selected through purposive sampling. The researcher made sure that all villages within local municipalities were represented. Some participants were acknowledged and recommended by their committee as representative of the group. Sampled THPs were informed at least three weeks before the study and invited to attend training workshop.

Measurement Instrument

The instrument applied by Audet and others (2012) was adapted for our study. The questionnaire was piloted with group of traditional health practitioners who were not participating in the study.

A pre-training multiple choice questionnaire was used. The English version of the questionnaire was translated into Tshivenda and Xitsonga and validated by language specialists at University of Venda, Thohoyandou, South Africa. To be able to accurately collate the correct assumptions and beliefs of the THPs, semistructured interviews with five THPs were conducted by principal investigator before designing the questionnaire. Three THPs reviewed the draft questionnaire and provided feedback prior to implementation.

Traditional health practitioners' demographics were collected, their HIV/AIDS and TB knowledge and beliefs items were rated as *true, false or do not know*. Questions included type of traditional healer, experiences, knowledge on causes of HIV/AIDS and TB, transmissions route, signs and symptoms, and their beliefs with regard to cure for HIV/AIDS and TB. An aim was also to bring assumptions and beliefs to light.

Multiple choice questions and response options were read to participants by the principal investigator, and responses were recorded. During the workshop, the presenter went through the questions, gave explanations of the correct answers with background, and further information was supplied if requested.

Ethical clearance for the study was granted by Ethics Committee of the University of Pretoria (399/2013) and Limpopo Health (PMREC-54/2013). Permission and approval for the study was received from THPs council. Formal informed consent was granted by the participants who individually signed the questionnaires during the interviews. Quantitative measures are presented as descriptive statistics using SPSS version 14.0.

Results

Our results were broadly categorised into the following headings: (1) characteristics of traditional health practitioners; (2) HIV/AIDS and TB knowledge; and (3) health assumptions and traditional beliefs about HIV/AIDS and TB diseases.

Demographic characteristics of traditional health practitioners

A total of 437 THPs were interviewed. Characteristics of traditional health practitioners are presented in Table 1. Diviners (*Nanga*) and family practitioners (*Maine*) formed more than 74.2% of THPs. These are traditional healers who perform divination (throwing the bones or ancestral channelling), family protectors (*vhea mudi*) and birth attendants. Those who use knowledge of plants, herbs and animals products only to cure illness were 36 (8.2%). Spiritualists who included faith healers, prophets and fortune tellers (*ufemba*) accounted for 77 (17.6%).

With regard to gender, almost two- third of them were females. Half of the THPs were above 60 years of age, 32.9% were between 41 and 60 years old; whilst 10 (2.3%) of the THPs were minors (below 18 years of age). A significant percentage (34.8%) of them reported that they had no formal education, 178 (40.7%) indicated that their highest level of education was primary school. Only 43(9.8%) of them had passed matric, and 14 (3.2%) possess post-secondary qualifications.

The working experiences as a THP varied. The least experienced had less than 5 years working experiences (18, 5%), followed by those between 6 and 10 years (22.2%). Those with more than 20 years of experiences were represented by 27.5%. Almost all participants (93. 4%) reported that they were attending HIV/AIDS and TB training workshop for the first time. Eighty –seven percent of them did not know their HIV status.

| | | n | % |
|---------------------------------|-------------------------------|-----|--------|
| Type of THPs | Diviners [#] (Nanga) | 101 | 23.1% |
| | Diviners and family | 223 | 51.10% |
| | practitioners | | |
| | Herbalists | 36 | 8.2% |
| | Spiritualists/Faith healers | 77 | 17.6% |
| Gender | | | |
| | Male | 112 | 25.6% |
| | Female | 325 | 74.4% |
| Age(in years) of THPs | | | |
| | < 18 years | 10 | 2.3% |
| | 19-40 | 65 | 14.8% |
| | 41-60 | 144 | 32.9% |
| | 61 and above | 218 | 50.0% |
| Highest level of education | | | |
| 0 | No schooling | 152 | 34.8% |
| | Primary school | 178 | 40.7% |
| | Incomplete secondary school | 50 | 11.5 |
| | Matric | 43 | 9.8% |
| | Higher education | 14 | 3.2% |
| Working experiences as a THP | | | |
| | >5 years | 81 | 18.5% |
| | 6-10 years | 97 | 22.2% |
| | 11- 20 years | 139 | 31.8% |
| | 21 years and above | 120 | 27.5% |
| Previously attended HIV/AIDS/TB | Yes | 29 | 6.6% |
| workshop | No | 408 | 93.4% |
| Tested for HIV infections | Yes | 57 | 13.0% |
| | No | 380 | 87.0% |

Table 1: Characteristics of traditional health practitioners (n=437)

Note: # all diviners are herbalists. Not all herbalists are diviners

Knowledge on HIV/AIDS and TB infections

Table 2 summarises the participants' knowledge and beliefs on HIV/AIDS and TB infections.

The causes of HIV and AIDS diseases were correctly identified as HIV infections 337(77.1%). The correct causes of TB were identified by 89.7% of the respondents.

A significant portion of them agreed that the evil spirits and spells were the main reasons why patients had HIV/AIDS (22.9%) and TB (10.3%) infections, respectively. With regards to their knowledge of HIV transmission, majority of the THPs agreed that HIV/AIDS could be transmitted through blood (91.2%), unprotected sex (88.1%) and breast milk (59.3%). A high percentage (86%) indicated that HIV/AIDS could also be transmitted through kissing. Inhaled air (94.3%), blood (56.8%), kissing (49.4%) and contaminated foods (86.3%) were

stated as route of TB transmission. Common signs and symptoms which THPs associated with HIV/AIDS infections were: unexplained weight loss (96.8%), sores and herpes zoster (92.9%) and diarrhoea (84.4%). More than 81.5% of them were unaware that oral candidiasis is one of the main signs in the oral cavity, which indicates the severity of immune system suppression and possibility of high viral load in the blood. Identified TB symptoms were persistent coughing with pain/blood (99.1%), night sweating (94.8%), weight loss (82.6%) as well as loss of breath and fatigue (92.7%).

Health assumptions and traditional beliefs about HIV/AIDS and TB diseases

Nearly one third (22.9%) associated HIV/AIDS diseases with witchcraft and evil powers. Many THPs indicated that HIV /AIDS patients (41.9%) and TB patients (48.3%) could be cured. Thirty-four percent believed that there are traditional herbs, muthi and powers from the ancestors which are able to provide protection against possible HIV infections and also prevent infections.

| | | | Response n=437 (%) |
|--------------------------------------|--|-------------------------|-----------------------|
| IIV | Causes of AIDS | HIV infections | 337(77.1) |
| & AIDS Transmission routes i | | Evil spirits/spells | 100 (22.9) |
| | Transmission routes identified | Blood | 398 (91.2) |
| | | Unprotected sex | 385 (88.1) |
| | | Breast milk | 259 (59.3) |
| | | Kissing | 376(86.0) |
| | Ancestors/Muti can protect against HIV | Yes | 151(34.6) |
| | | No | 199 (45.5) |
| | | Not sure | 87(19.9) |
| Common signs and symptoms identified | Common signs and symptoms identified | Sores and herpes zoster | 406(92.9) |
| | Weight loss | 423(96.8) | |
| | | Diarrhea | 369(84.4) |
| | | Candidiasis | 81(18.5) |
| | Traditional herbs can cure AIDS | Yes | 183(41.9) |
| | | No | 200(45.8) |
| | | Not sure | 54(12.3) |
| Transmission | Causes of TB indicated | TB-Bacterial infections | 392(89.7) |
| | | Evil spirits/air/spells | 45(10.3) |
| | Transmission routes identified | Inhaled air | 412(94.3) |
| | | Contaminated items | 377(86.3) |
| | | Kissing | 216(49.4) |
| | | Blood | 278 (56.8) |
| | Common signs and symptoms identified | Persistent | 433(99.1) |
| | | cough/pain/blood | 414(94.8) |
| | | Night sweating | 361(82.6) |
| | | Weight loss | 405(92.7) |
| | | Loss of breath and | |
| | | fatigue | |
| | Traditional herbs can cure TB | Yes | 211(48.3) |
| | | No | 203(46.5) |
| | | Not sure | 23 (5.2) |

Discussion

Characteristics of traditional health practitioners

Our study found that many THPs perform divination as a profession. THP is a profession which has been practised for centuries in Africa long before western medicine became the dominant health system. Their knowledge and practice of herbs, roots, and other medicine have been passed down through generations. These are acquired during their ancestral calling to become a THP (*thwasana*) (Liverpool et al., 2004).

A call to become a THP could start any age and present in different ways including unexplained illness, constant headaches, dreams and night mares associated with ancestors, loss of weight, etc. (Liverpool et al., 2004). Unlike in medical schools, becoming a THP doesn't follow selection criteria such as grades achieved at grade 12, entry level examination, age, etc. Although it is not rare to find children employed fulltime in different economic sectors in the rural areas, it was surprising for us to find that ancestors have called children to become THPs. Some of them had been practicing for more than five years, suggesting that they may have been called to become THP at an estimated age of 9 years or so. Majority of THPs were adult women aged between 41 and 60 years with no formal education (34.8%). It compared well with Vhembe District Profile (2013), which reported that over 53% of the district's population was women, with little or no formal education.

THPs' wealth of experiences and source of knowledge of traditional medicine and patients' management are from ancestral spirits incarnated during their initiation process (*u wisiswa*). Such knowledge and practice of herbs, roots, and other medicine have been passed down through generations. Compared to allopathic health professionals who are required to attend continuous training and be updated on latest medical developments, theirs is to comply with ancestral spirit that called them to become THPs. In a western paradigm these fields and practices are considered backward, unscientific, erroneous and potentially harmful.

Knowledge on HIV/AIDS and TB infections

The THPs were aware of the dangers of HIV/AIDS and TB. Their knowledge on the causes of HIV and AIDS (77.1%) and TB (89.1%) infections were exceptionally high considering that HIV/AIDS was discovered in the early 1980s. Virus and bacteria concepts are not separated in traditional medicine, and there is yet no common traditional name for HIV and AIDS conditions. Peltzer and Mngqundaniso (2008) have also reported high knowledge of HIV/AIDS among THPs in South Africa. Among the African people, AIDS is called by

many names, which are usually the descriptions of its clinical manifestations such as herpes zoster (*bannda* [belt] or *maswa vhusiku* [burned during the night]), oral thrush (*vhudaadaa or mahada*), etc.

The other factor worth noting was that almost a quarter of the THPs had no formal education. Their source of knowledge is most likely to have been through public media (radio discussions, announcements), one to one conversations and community awareness campaigns.

Their good and correct knowledge on identified transmission routes, common signs and symptoms for these diseases is very important, especially in the fight against an increasing high rate of new infections despite increased funding for health education, prevention and treatment. Therefore, THPs could use their knowledge of HIV/AIDS to influence their patients comply with treatment adherence and thus help fight the spread of disease in the community. If given the necessary support and training on the management of HIV/AIDS and TB, THPs could help to improve the quality of life among affected and infected people in Limpopo Province.

Health assumptions and traditional beliefs about HIV/AIDS and TB diseases

Traditional health practitioners play a very important role in the African communities. Significant number of patients consult them. Often the decision is made out of necessity as AHPs fail to explain "why me" question and "the ancestors are not happy". Traditional health practitioners often provide an explanation to which the patients and community could relate and understand regarding existing traditional beliefs and cultural practices (Liverpool et al., 2004).

This position in the communities is one of great respect and influence; they are the first to be consulted when a disease afflicts a community (Audet et al., 2012). They can either refer patients to western clinics or treat them in their own way. This choice had a major effect on the patient's health and thus on the entire community (Kale, 1995). Such power could be harnessed in favour of patients. Educating the THPs has been shown to significantly improve their knowledge of HIV/AIDS and TB (Gqaleni et al., 2011). Through their role as family doctors they could reach out to the whole community, thus improving the process of diagnosis and referral, which may lead to prevention or spread of disease (Calvin et al., 2003; Furin, 2011; Audet et al., 2013).

The questionnaire used in this study provided an opportunity to test existing beliefs and myths associated with AIDS and TB, and major gaps in the participants' knowledge. Our study has brought both interesting and worrisome information to light. A significant portion of the THPs agreed that the evil spirits

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and spells were the main reasons why patients contract HIV/AIDS (22.9%) and TB (10.3%) infections. Some of these beliefs may have a negative effect on the patient's health and the spread of HIV and TB (Smyth et al., 1995; Stelenburg et al., 2005; Sharkey et al., 2012). The most notable beliefs that ancestors' powers and *muthi* that they provide have protective effects against HIV infections should be a matter of great concern to all. Despite availability of HIV awareness campaigns and condom distributions, recent report indicates that HIV infection rate in South Africa has increased over the years (Simbayi et al., 2014). If these untested claims continue to prevail and communities don't take measures to prevent HIV/AIDS infections, the current low HIV/AIDS infection rate in the Vhembe district is likely to increase.

Many (41.9%) of the THPs believe that their traditional herbs can cure AIDS. Some THPs actually indicate their inability to treat HIV/AIDS and TB; however, others claim that their herbs and therapy for HIV/AIDS and TB has always been successful. This is remarkable and could indicate lack of knowledge about HIV/AIDS diseases and opportunistic infections associated with AIDS, which is claimed as being treatable by the THPs.

As previously stated, THPs define HIV/AIDS by its clinical appearances. It is not surprising that the disappearance of clinical signs and symptoms of HIV/AIDS is believed to be a cure for it. Although their therapy is believed by some to have no scientific basis (Freeman & Motsei, 1992; Farrand, 1984), their process of diagnosis is often correct and most THPs are able to diagnose numerous tropical illnesses including HIV/AIDS and TB, based on signs and symptoms (Green, 1999; King, 2000; George et al., 2013).

Knowledge concerning HIV/AIDS and TB, therefore, varies greatly among THPs, and would result in some referring patients whom they believe suffer from HIV/AIDS and TB to AHPs while others treat them in a traditional manner. Subsequently, HIV/AIDS will pose a continuous threat to the health of the population. Therefore, a large-scale health education programme, targeted at THPs, could positively affect HIV/AIDS and TB treatment, adherence, and spread.

Difficulties exist in penetrating traditional beliefs and cultural paradigm. Although some THPs are correctly informed and knowledgeable about modern diseases such as HIV/AIDS and TB and effective western medicine (Peltzer et al., 2006; Peltzer & Mngqundaniso, 2008; George et al, 2013), their traditional health system and medicines, which are often ignored, manage similar diseases with good outcome and to the patients' satisfactions (Peltzer & Mngqundaniso, 2008; Furin, 2011). THPs have long accepted the need for working together with AHPs in mutual respect for each other's tradition and practices (Gqaleni et al., 2011; George et al., 2012). However, THPs often refuse to cooperate with AHPs.

Most collaborations are to the benefits of AHPs, extracting herbal knowledge and exploiting THPs' ignorance of scientific processes and intellectual property rights (Kayombo et al., 2007; Madiba, 2010). A way to address this challenge could be to implement changes enlisting help from chiefs and THPs in leading positions. The hierarchy and respect of traditional leaders is most likely to make this achievable.

Limitations

Limitations of this study include the small number participants and the necessity of getting permission and approval from THPs' ancestors. In addition, it is possible that THPs withheld certain information about themselves. In an effort to minimize this and other sources of inaccuracies in the data, we assured the THPs during the informed consent process that there were no right or wrong answers, that responses would be anonymous and confidential, and that the interview was not in any way intended to be judgmental. In addition, the principal investigator maintained good working relationship with THPs, developed over a period of 7 years. The answers to questionnaire items were kept simple to make it easier; however, this could have resulted in some information bias. Multiple choice questionnaires per se have some inherent information bias caused by limited options thus facilitating respondents 'ability to make a wild guess. Although such limitations could bias our results, we consider our findings useful because of the insight provided regarding the HIV/AIDS knowledge and practices among THPs.

The THPs are very secretive, ancestor-respecting people and could be dishonest to please the interviewer. They could also be advantaged to hear whispering answers from ancestors and be in a spiritual and subjective states.. This could result in information bias, unfair advantage and selection bias.

The results of this study prompt the need for further research into the effectiveness of health education programme targeted at THPs. The suggested positive effect on HIV/AIDS and TB health education programme could be assessed in a prospective cohort study in the area.

Conclusion and recommendations

THPs were observed to have inadequate knowledge of HIV/AIDS and TB transmission as well as its signs and symptoms. Of great concern were the prevailing myths and beliefs that HIV/AIDS and TB patients were bewitched; there is cure for HIV/AIDS and THPs have muthi and herbs capable of curing the disease.

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Given that approximately 80% of the patients consult THPs on daily basis, and South Africa has a very high prevalence of HIV/AIDS and TB, consideration must be given to how to improve the HIV/AIDS and TB knowledge among THPs, so that when consulted by patients with clinical signs and symptoms the disease, they seek assistance from allopathic health facilities and jointly manage the diseased patients in a collaborative manner. This is particularly important because of the sub-standard and even harmful practices sometimes associated with care provided to patients by private providers, both allopathic and traditional.

Further, the widespread reliance on ancestors and *muthi* for protection against HIV infections, existing myths about evil spells or spirits causing HIV/AIDS/TB and beliefs in the efficacy of traditional herbs to cure HIV/AIDS in this study demonstrates the need for constructive engagement and training workshops to exchange knowledge and information on the AIDS pandemic and its opportunistic infections.

We recommend that tailor-made HIV/AIDS and TB health education targeting THPs beliefs; and training workshops on signs and symptoms of HIV/AIDS and TB be initiated urgently.

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