

Collaboration between African Indigenous and Biomedical Health Practitioners: Perceptions Regarding Tuberculosis Treatment

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Abstract

Despite programmes developed to alleviate tuberculosis (TB) infection worldwide, South Africa is still reporting high rates of infection. Most South Africans believe in and consider using the medicine provided by African indigenous health practitioners (AIHPs) rather than consulting practitioners at modern health facilities. The isolated functioning of these two groups of practitioners motivated the government to establish the Traditional Health Practitioners Act (22 of 2007), to encourage AIHPs and biomedical health practitioners (BHPs) to collaborate on the healing of different diseases, including TB. The Mpumalanga province has been hit the hardest by TB and has a high infection rate. The study aimed at exploring and describing the perceptions of AIHPs and BHPs on collaboration concerning TB treatment in the Ehlanzeni district, Mpumalanga. A semi-structured interview guide was used to collect data from focus groups with 21 AIHPs and in-depth individual interviews with 10 BHPs. The findings of the study reveal differing perceptions, as some BHPs accept the Act and acknowledge collaboration, while others have concerns about standards of care, patient safety, and overdosing. They are reluctant to accept integration, as they see AIHPs as unscientific practitioners who use strong medicine that is detrimental to patients. The AIHPs welcomed the idea of working together and mutual teaching with the aim of empowering each other with knowledge regarding the treatment of TB, for the ultimate benefit of patients.



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Introduction and Background

South Africa is a diverse country with different cultures and health care systems. The various cultures influence the understanding of these health care systems regarding health and diseases. According to Agu (2019), people from diverse cultural backgrounds are using a variety of herbal plants, plant extracts, animal products, and mineral substances as the means to prevent, treat, and/or manage ill health. In South Africa, there are African indigenous health practitioners (AIHPs) and biomedical health practitioners (BHPs) who operate in parallel and in isolation (Mendu and Ross 2019, 104). As they are separated in the health care system, they practise and treat patients differently, which results in many diseases costing the lives of South Africans.

The most common disease that devastates lives worldwide because of its severity (fatality) is tuberculosis (TB). A total of 1.5 million people died from TB in 2018 globally, and it is one of the top ten causes of death (WHO 2020). Out of the 500 000 cases in South Africa, the WHO estimates that about 330 000 people (66%) are infected by both HIV and TB (UNAIDS 2018, 1). Musoke and Michel (2016) indicated that TB cases stood at 1 003 per 100 000 of the population in 2012, despite the treatment and programmes developed to stop TB from spreading in South Africa. The spread of TB and the use of traditional and biomedical medicine concurrently formed the basis for the establishment of collaboration between AIHPs and BHPs, in an effort to bring the disease under control. These collaborative relationships can benefit all patients and prevent TB from spreading (Mothibe and Sibanda 2019). Most South Africans believe in indigenous healing, and when they become sick, they prefer AIHPs to BHPs (Mothibe and Sibanda 2019). According to Mothibe and Sibanda (2019, 31), “Traditional medicine has been used by humankind for the treatment of various diseases since long before the advent of orthodox medicine, and to this day, serve the health care needs of the majority of the world population.” Many people also treat themselves before seeking a second opinion from AIHPs (Godoy and Simmons-Duffin 2020).

At present, South Africa and other countries are facing a Covid-19 pandemic. This disease is a respiratory infection like TB and SARS, which occurred some years ago. According to Lone and Ahmad, “it comes as no surprise that Africans can’t confront this alone, and therefore global support in any form can assist Africa to step ahead of this pandemic” (2020, 1308). During the Covid-19 pandemic, it is not evident that the government is integrating AIHPs to assist in resolving the spread of the disease. Maseko (2020) indicates that AIHPs had to protest against their exclusion from the Covid-19 consultation process before they were included. Maseko (2020) further indicates that most South Africans believe in indigenous medicine and continue taking medicine without going for testing and without consulting BHPs for treatment. Ndlendele (2020) supports Maseko by indicating that “traditional healers in Cameroon say they are being

overwhelmed by the number of people seeking herbal medicine for treatment of the virus, despite warnings from the WHO that the herbal cure for Covid-19 is unproven”.

These delays in seeking help from BHPs caused some patients to become seriously ill, warranting admission for long-term hospitalisation, and some lost their lives (Awortwe et al. 2018, 679–80). After discharge from the hospital, these patients continued using traditional medicine. It has been confirmed that AIHPs are the primary source of health care for South Africans, especially in rural areas. Zuma et al. (2016) indicate that, in 2016, 70% of Africans depended on indigenous medicine for minor ailments in primary health care. In support of Zuma et al. (2016), the Treatment Action Campaign indicated that the South African public health care system is in crisis due to shortages of health workers, poor TB infection control, and long waiting times (TAC 2018). The government has recognised that the integration of traditional healing into existing health care services is necessary, given the failure of programmes such as the Stop TB Strategy, developed to combat the spread of TB infection (Van Rooyen et al. 2017, 292).

The Traditional Health Practitioners Act (22 of 2007) was established to improve accessibility through the cooperation of AIHPs and BHPs for the best care of patients with TB. According to Van Rooyen et al. (2015), recognising the practices of AIHPs and integrating them with those of BHPs was controversial because of the many arguments for and against their integration. Van Rooyen et al. (2017) and Mothibe and Sibanda (2019) further argue that the misunderstanding of AIHPs’ practices have historical origins.

According to Mothibe and Sibanda (2019), the potential integration of AIHPs was crucial. It would greatly benefit the health system, and failure to do so would result in dangerous situations, including toxic drug interactions, a failure to administer the most effective treatment, and delayed treatment. Awortwe et al. (2018) and Silverman (2017) have documented several patient responses to treatment where alternative treatments altered the effects of TB prescription medication, such as by diluting it, making it more harmful to the patient, or causing dangerous side effects. Survey control studies have adopted *Stockley’s Herbal Medicines Interactions* to identify herbal medicines with the potential to cause adverse effects due to interactions with prescribed medication (Awortwe et al. 2018). At the Alma-Ata Declaration of 1978 Conference, it was reaffirmed that the promotion of health was government’s responsibility, which means that the South African government must ensure that the country’s wellbeing is in good hands (Krah, De Kruif, and Ragno 2018). Krah, De Kruif, and Ragno (2018) provide an example from Sri Lanka, which, at the time, was facing disease burdens related to communicable diseases with the attendant rising medical and welfare costs. The government involved traditional medical practitioners in their interventions in the situation, as these practitioners were known to play an essential role in the provision of universal health services.

Collaboration between AIHPs and BHPs exists in various countries, including sub-Saharan countries such as Botswana, but it does not occur in the Mpumalanga province,

and it has been reported that TB has hit this province the hardest. With regard to people living with HIV/AIDS and TB, UNAIDS and the National Strategic Plan (NSP) (MPAC 2019) have set targets of 90-90-90. In terms of the first 90%, which refers to people living with HIV and TB knowing their status, Mpumalanga is at 90,5%. Regarding the second 90%, which refers to diagnosed people being on treatment, Mpumalanga is estimated to be at 73,5% (Van Rooyen et al. 2015). For the last 90%, which refers to people on treatment who are virally suppressed, Mpumalanga is at 88,1%. UNAIDS (2018) estimates that there were 19 000 TB cases in 2016, up from 7 350 in 2007 (a three-fold increase). In the Eastern Cape, no collaborative relationship has been facilitated between the two health practitioner groups to expand the reach and improve the outcomes of community health care, despite the establishment of the Traditional Health Practitioners Act (TBFacts.org 2018). A study by Weintraub et al. (2018) focused on the formal integration of AIHPs in Johannesburg, Durban, Cape Town, and Pretoria into the mainstream health care system. In the literature, there is no study on collaboration between AIHPs and BHPs in the Ehlanzeni district.

During the establishment of the Traditional Health Practitioners Act, BHPs expressed concern about working with AIHPs, as the traditional practitioners were viewed as illiterate and unscientific (Nemutandani, Hendricks, and Mulaudzi 2016). However, eventually, BHPs in the Mpumalanga province agreed to collaborate, on the condition that AIHPs receive training on TB and how to care for these patients. The training was intended to be a mutual teaching experience, to ensure that the work of the AIHPs is respected and properly understood by BHPs and to sustain and strengthen their relationship. According to Green and Colucci (2020), collaboration between these two health care systems would benefit people and sustain the national development goals of good health and wellbeing (see UN 2020). Green and Colucci (2020) further indicate that a new health care solution might emerge, thereby improving services in the health care system.

The purpose of this study was to explore and describe the perceptions of AIHPs and BHPs on collaboration in treating TB. The study also aimed to gain an understanding of the underlying reasons why these two groups of practitioners have been working in parallel and isolated from each other.

Problem Statement

TB remains relatively unpublicised and continues to produce fatalities on a large scale (WHO 2020). According to TBFacts.org (2018), it is estimated that about 80% of the population in South Africa is infected with TB. The highest prevalence of latent TB, estimated at 88%, has been found among people in the age group 30–39 years in townships and informal settlements. It continues to be the leading cause of death in South Africa. In 2018, a total of 63 000 people died of TB. Of these, it is probable that 42 000 were HIV positive. The Ehlanzeni district in Mpumalanga was one of the 19 districts with the highest TB rate in 2015, when the National Strategic Plan was developed (TBFacts.org 2018).

During the researcher's time as preceptor at one of the nursing colleges in the Ehlanzeni district, she accompanied student nurses in the wards for clinical exposure. She observed that the condition of TB patients was critical, and that some die even though TB is curable. The researcher spoke to patients to discover how they became so ill. Some patients indicated that they had been under the care of AIHPs for several weeks before coming to the hospital. The researcher noticed that there was no collaboration between AIHPs and BHPs, as they provide health care services in parallel and isolated from each other (Mendu and Ross 2019, 104). This is evidenced by the number of people infected with TB, the number of people who die from TB, and by the fact that the condition of critically ill patients worsened while they were under the care of AIHPs. The condition of these patients led the researcher to consider investigating the views of AIHPs and BHPs on collaborating in the treatment of TB.

Research Question

The following research question gave direction to the study: What are the perceptions of AIHPs and BHPs on collaborating in the treatment of TB?

Aims and Objectives of the Study

The study aimed at exploring the perceptions of AIHPs and BHPs on collaborating in the treatment of TB in the Ehlanzeni district, Mpumalanga province. The objective of the study was to explore the perceptions of AIHPs and BHPs on collaborating in the treatment of TB.

Research Methodology

Research Design

A qualitative, descriptive approach was chosen to explore the perceptions of AIHPs and BHPs on collaborating in the treatment of TB. This enabled the researcher to gather information regarding collaboration between these two groups. The qualitative approach allowed the AIHPs and BHPs to explore their perceptions regarding collaboration based on their practices.

Study Setting

The study was conducted in Ehlanzeni in the Mpumalanga province. The selected district consists of four sub-districts, and Mbombela North was the district involved. Mbombela North contains several areas, and the participants were from three surrounding areas. Data collection with the BHPs was done at the selected TB hospital in the offices and wards, where it was quiet. Data were collected from the AIHPs at the home of the leader of the African indigenous practitioners.

Study Population and Sampling Procedure

The study population comprised all nurses providing health services to patients with TB. Ten BHPs—eight registered nurses and two enrolled nurses—were part of the study. They were all female, and their ages ranged between 30 and 59 years. One participant was aged 30–39 years, four were 40–49, and five were 50–59 years.

There were also 21 AIHPs who provided direct service to TB patients. The majority (62%) were females, and the remainder (38%) were males. All participants in this group were black, and their ages ranged between 30 to 70 years. Nine participants were between the ages of 30–39 years, six were 40–49, four were 50–59, one was 60–69 and one was over 70 years old.

Purposive sampling was used to select both BHPs and AIHPs who provide services to patients with TB (Maree 2017). The BHPs were interviewed individually, and focus groups were held with the AIHPs. The saturation of the data determined the sample size. Data saturation was reached when no new information was obtained from the participants; this occurred with the tenth participant in individual interviews (BHPs) and with the third focus group interview (AIHPs). The inclusion criteria were all AIHPs who had indigenous knowledge and expertise in the traditional treatment of TB in the selected district in the Mpumalanga province, as well as BHPs providing health services to patients with TB.

Data Collection

Data were collected on April 3 and 4, 2014, during in-depth individual interviews with the BHPs, assisted by three questions from an interview guide, and on July 8 and 10, 2014, during three focus groups with AIHPs. The interview guide was developed in English and then translated into Siswati to accommodate the AIHPs who did not understand English.

The perceptions of the AIHPs and the BHPs on collaborating in the treatment of TB were explored during the interviews and focus groups. An audio recorder was used to record the interviews after permission had been granted by the participants. Semi-structured interviews were held and field notes were taken (Henning 2017). The interviews with individual participants lasted 30–45 minutes each and the focus groups lasted 30–60 minutes each.

Data Analysis

The audio recordings of the conversations were transcribed, and the transcripts were checked for accuracy by the main researcher against the original audiotapes. Tesch's method was used to analyse the data (De Vos et al. 2017; Jones and Liyanage 2018). Themes and subthemes were generated manually. The processes of organisation, reduction, giving meaning to data, and identification of themes and subthemes were carried out as described below.

The researcher first formed a sense of the entire study by reading through all the transcripts while making notes. One document was chosen to start the analysis, and while reading it, the researcher made additional notes. Similar topics were clustered together and arranged according to major topics. The researcher organised the topics as codes and then went back to the original transcribed data and wrote the codes in the margin. The researcher found the appropriate descriptive wording for the topics, which became categories. The grouping of related topics reduced the total number of categories. The researcher made the final decision on the appropriate abbreviations for the various categories, assembled the data relevant to each category, and performed a preliminary analysis. The researcher coded the data and, finally, conveyed the findings of the analysis.

Trustworthiness

Trustworthiness was ensured according to the four criteria of credibility, transferability, dependability, and confirmability (Nowell et al. 2017). To ensure credibility, the researcher allowed each participant to verbally confirm that the transcription of her/his interview was a true reflection of what he/she said. The audiotape was replayed after each interview to confirm the transcription. Trust was established with the participants by visiting them before the interview to create a rapport and to familiarise them with the process.

The researcher ensured transferability by providing a detailed description of the research methodology. The researcher depended on the field notes and an audiotape when transcribing data to ensure that no information was missed. To ensure confirmability, the researcher ensured that preconceived ideas and bias did not influence the results, and that the research findings were the actual product of the participants' views, collected using an audiotape and field notes.

Consideration

Honesty and integrity are required when conducting research, and the rights of the subjects must be recognised and protected (Maree 2017). This study was approved by the research ethics committee of the University of Pretoria on January 6, 2014. The Mpumalanga Department of Health gave permission for the study to be conducted in the selected district. The hospital manager and the headman also gave permission to the researcher to conduct the study.

Informed consent was obtained from both the BHPs and the AIHPs prior to their participation, after they had been informed about the purpose of the study and its methodology, and after clarification had been provided where requested. The participants were informed that participation was voluntary and that confidentiality would be ensured. They were made aware that they were free to withdraw from an interview at any time without penalty. The participants did not experience any discomfort or harm, whether physical, emotional, spiritual, economic, social, or legal (Maree 2017, 44).

Results

Three themes emerged from the data obtained from the BHPs and two themes emerged from the data obtained from the AIHPs. These themes are discussed in the following subsections.

Themes That Emerged during Individual Interviews with BHPs

The three themes that emerged are acknowledgement of integration with AIHPs, acknowledgement of the establishment of the Traditional Health Practitioners Act, and empowerment of AIHPs. These themes were divided into subthemes, as illustrated in Table 1.

Table 1: Themes and subthemes emerging from the individual interviews with BHPs

Themes	Subthemes
1. Acknowledgement of integration with AIHPs	1.1 Group integration
2. Acknowledgement of the establishment of the Traditional Health Practitioners Act	2.1 Acceptance of the Act
3. Empowerment of AIHPs	3.1 Understanding each other's sector

Theme 1: Acknowledgement of Integration with AIHPs

The BHPs showed appreciation of the Traditional Health Practitioners Act. They indicated that they are ready to cooperate and integrate with AIHPs, as they will attend workshops first. The following question was asked of the BHPs: “The Traditional Health Practitioners Act 22 of 2007 was established to incorporate a two-health-care system in the healing of TB. What is your plan in executing this Act?” This is what they said:

Our society needs to be educated; we don't oppose the traditional way of healing, but some of the things, like TB, should be referred to the hospital. TB is common and in the African way they say it is *Mafulatsa*. [*Mafulatsa* is a condition that is contracted from a home where there was a death and where cleansing rituals were not carried out. The family members start coughing and also lose weight.] (BG11)

Here in Mpumalanga, they decided to call the sangomas to give them health education about TB. Now they know the signs and symptoms of TB, and they refer patients to the hospital. I think now we have become one. (BG5)

Subtheme 1.1: Group Integration

The participants indicated that integration was taking place between some BHPs and some AIHPs, especially those who wanted to move forward with collaboration and forget past negative attitudes. They shared their views regarding the treatment of TB. They were further probed with the following question: “As you have indicated that there

is group integration, what are the actions that were taken to prove that there is integration?" Two participants reported the following:

Since then, there [has been] great improvement. When the patients go to the traditional healer, the traditional healer will transfer the patient to the medical staff. (BG7)

Sangomas bring patients who were brought to them for *ku thwasa* (initiation) when they see the signs and symptoms of TB on the patient. (BG5)

Theme 2: Acknowledgement of the Establishment of the Traditional Health Practitioners Act

The BHPs acknowledged the Traditional Health Practitioners Act based on the integration between them and AIHPs with regard to the delivery of quality service to patients with TB.

Subtheme 2.1: Acceptance of the Act

Some BHPs were reluctant to acknowledge the establishment of the Act, as they were not willing to collaborate with AIHPs, whom they believe to be illiterate and unscientific. They had to be convinced into abiding by the Traditional Health Practitioners Act. Their responses were not straightforward:

The AIHPs must not mix traditional medicine with Western medicine. It cannot work; they must see that they use it separately, one at a time. To prevent them from mixing medication, we give them health education. (BG2)

First, we have to teach the AIHPs—explain side effects to them to ensure that they understand before treating the patients. The doctors explain to them why patients are not healing and explain what they use to drain the treatment in their bodies, in some hospitals where they have the equipment to do so. We educate the families [about] the danger of herbal treatment, so that if a patient is discharged, they [will] not take the patient to a herbalist. (BG4)

Hmm! They must be educated on how these patients should be cared for. (BG6)

Theme 3: Empowerment of AIHPs

The BHPs considered empowerment as a prerequisite for integration with AIHPs. They indicated that they had held meetings to teach each other how to treat TB. As a result, uncertain practices were reduced and there was a great improvement in referring patients with TB to BHPs. The following is a reflection of what they said:

There were workshops where biomedical and indigenous teams came together. They were talking about TB; the BHPs were explaining to the AIHPs how TB spreads and how it should be prevented. They also indicated that when a patient complains of cough [the patient] should be referred before [being] given traditional medicine as [TB is suspected]. (AG1)

They were told to bring them to the hospital to check sputum for TB. The workshop is effective and was done through media as a support system, and they know how patients with TB can be handled. (BG6)

There is an improvement really; they refer patients to medical staff. When the patient is weak, the AIHPs can say “a ngeke ngi ku bemise wena”— “go to the hospital to get blood or a drip”. (BG7)

Subtheme 3.1: Understanding Each Other’s Sector

The tension that exists between AIHPs and BHPs can be resolved. This issue is crucial to the optimisation of health care for every human being, as patients seek health care from both sectors. The biomedical health system is used by only 20% of the population; on the other hand, the African indigenous health care system is extensive, and their services are relatively accessible and affordable for 80% of the population. The two systems therefore need to be integrated for the benefit of patients and to ensure the smooth running of the service.

Mutual understanding between BHPs and AIHPs was viewed as critical for effective collaboration. The participants indicated that they meet and teach each other about health and are involved in meetings, workshops, and raising awareness to increase acceptance and understanding of their capabilities.

Themes That Emerged during Focus Groups with AIHPs

These results were divided into two themes, namely perceptions of BHPs regarding integration and views regarding enhancing integration. These themes were divided into subthemes, as illustrated in Table 2.

Table 2: Themes and subthemes that emerged during focus groups with AIHPs

Themes	Subthemes
1. Perceptions of BHPs regarding integration	1.1 Disrespect
2. Views regarding enhancing integration	2.1 Capacity building

Theme 1: Perceptions of BHPs regarding Integration

The AIHPs indicated their disconnection from BHPs and mentioned that the treatment they receive made them uncomfortable:

The communication is one-way, they instruct us, and they do not take advice from us. (AG2)

Another participant said:

I referred my learner to the Mantangaleni clinic and asked the nurses not to inject her, as I [would] have difficulties in treating the learner due to the injection. They did not

listen to my request; they injected the learner. We were informed by the government that we are allowed to write our patients sick notes, but it does not work. Our sick notes are not accepted. (AG2)

Subtheme 1.1: Disrespect

The AIHPs feel that they are looked down upon and not considered as health practitioners who can contribute to the treatment of TB. The following subcategory emerged.

Subcategory 1.1.1 Lack of Acknowledgement of AIHPs and Their Treatment

The AIHPs felt that they are being undermined, as they are not allowed to visit their patients in the hospital, as doctors do. This is because BHPs suspect that AIHPs are bringing traditional medicine for their patients, which interferes with the Western medicine and can delay healing in patients. They are monitored when they enter the wards to prevent this. One participant displayed his anger by saying the following:

They do not allow us to go to the clinic to check our patients. They do not allow me to attend to my patient. I promised to hit someone because they undermine us.

Theme 2: Views regarding Enhancing Integration

The integration of AIHPs with BHPs can play a significant role in the health care system. The AIHPs are unhappy because they are not considered when they work with BHPs. They noted that they did not get feedback after referring patients to BHPs. According to the AIHPs, they are treated like illiterates by BHPs. However, despite this, they look forward to collaborating to improve their skills. BHPs seemed to resist their integration and emphasised that training should be given to empower each other and to improve the practices of AIHPs before integration takes place. Encouraging words from the participants to support their integration with BHPs were as follows:

The nurses and traditional healers must work together and respect each other. (AG1)

Because of lack of knowledge, nurses nurse patients with *Mafulatsa* unaware, thinking that it is TB, as the symptoms are similar. Hence, working together is important so that we [can] teach each other. (AG1)

One participant supported the statement that AIHPs work with BHPs and that they advise their patients and colleagues to seek help from the hospital when they are sick:

Today I told someone to go to the clinic for investigations, and she indicated that she would go tomorrow. (AG 3)

Subtheme 2.1: Capacity building

The AIHPs indicated that their collaboration with BHPs could be strengthened through meetings, workshops, health education, mutual understanding, and respect. They should

acknowledge each other and work together harmoniously. They also stated that they were being educated about TB and HIV/AIDS. This is what they said:

We attend classes at Gutshwa clinic and we receive certificates. During these classes we cook food and we meet with nurses and police. Sometimes we learn about TB, HIV/AIDS, and the assessment of patients with TB. We also learn about cleanliness, especially [in] the traditional healers' house (*ndhumba*). (AG 1)

What can integrate us to become one is the government. The government must be told that the traditional healers are happy to work with the nurses. (AG 3)

Discussion

The findings of this study indicate that both AIHPs and BHPs are practising in isolation and that this affects the health care system, resulting in the uncontrollable spread of TB in the Mpumalanga province. This is in line with the findings of Van Rooyen et al. (2017), who reported that no evidence-based recommendations were found that facilitated a collaborative relationship between the two groups of health care practitioners in the Eastern Cape province. The disease is escalating, and collaboration is crucial. BHPs are ready to cooperate and integrate if AIHPs can address their reservations about the AIHPs' practice. They acknowledge that the Traditional Health Practitioners Act was established to incorporate the dual health care system in treating TB. However, some BHPs were reluctant to acknowledge the Act, as they were not willing to collaborate with AIHPs, whom they believe to be illiterate and unscientific.

Integration was found among some BHPs and AIHPs, where views are shared regarding the treatment of TB. The degree of understanding between BHPs and AIHPs was discussed, as it appears that 20% of the population use the biomedical health system, while 80% use the African indigenous health system. This reiterates the need for collaboration so that both systems can benefit patients and the service can operate smoothly.

There is evidence of conflicting paradigms of knowledge and polarisation between AIHPs and BHPs based on the treatment of TB, as patients were consulting indigenous practitioners in large numbers. However, AIHPs turned to BHPs when they realised that patients were deteriorating. It has been determined that BHPs were unlikely to collaborate with AIHPs, as the latter are labelled unscientific and as they were practising in an environment with poor hygiene (Lampiao, Chisaka, and Clements 2019). Nmutandani, Hendricks, and Mulaudzi (2016) found that BHPs were not ready to work with AIHPs, citing challenges of quality of health care, differences regarding concept of sciences and source of knowledge, and a lack of a policy on collaboration. Kasilo et al. (2016) further indicate that AIHPs' beliefs and practices have no scientific basis and that they pose a danger to patients' health; hence they are regarded as inferior, illiterate, and unscientific by BHPs (Van Rooyen et al. 2015). Lampiao, Chisaka, and Clements (2019) indicate that the consulting of AIHPs led to a delay in patients seeking treatment

and consulting BHPs. In a study done in Namibia by Verburg et al. (2020), it was confirmed that the treatment of patients with TB is often delayed due to poor access to health care; these patients are more likely to interrupt treatment and die from TB.

The AIHPs in this study felt disrespected and not trusted. The mistrust caused tension between them and BHPs, as there was no respect, mutual understanding, or collaborative relationship. However, they kept attempting to encourage integration by demonstrating their interest to BHPs. The BHPs acknowledged collaborating with AIHPs under certain conditions, for the best care of the patients with TB. Very little is known about collaboration between AIHPs and BHPs in Mpumalanga.

The findings of this study show that AIHPs are willing to collaborate and learn from BHPs, despite their differing perceptions. Lampiao, Chisaka, and Clements (2019) supported the notion of willingness by indicating that the AIHPs were more enthusiastic than the BHPs, who had several reservations about the AIHPs and placed certain conditions on future collaboration. Finally, most BHPs saw an advantage in integrating with AIHPs, as they were preferred by the community and seen as knowledgeable. The BHPs concluded that they need to address their reservations through health education, workshops, and campaigns in order to make collaboration possible. They also stated that if AIHPs are well informed and encouraged to integrate, they could make a difference in the lives of the communities in the Mpumalanga province.

The collaboration of these two groups of health care practitioners could be easily accessed, which would also strengthen their relationship. Mutual understanding between BHPs and AIHPs was viewed as crucial for effective collaboration. Communication and respect between these two groups of practitioners could lead them to a better level of engagement. Integration would eliminate fear and mistrust and allow for continuity of health care. Lampiao, Chisaka, and Clements (2019) indicate that at first glance, the two groups of health care practitioners have different motivations, but ultimately both groups wish to improve patient care. Our findings show that AIHPs and BHPs do share goals and motivations in their practice, namely to treat patients and promote a healthy society.

Conclusion

Collaboration between BHPs and AIHPs is central to combating the TB pandemic in the Mpumalanga province. The willingness of these health care practitioners to collaborate has been emphasised, although under certain conditions. Based on the findings of this study, BHPs and AIHPs should accommodate, teach, and learn from each other to achieve the best practices for the benefit of the entire community in the Mpumalanga province. BHPs want the government to establish the parameters within which AIHPs should practice, as they are regarded as unscientific and their practices are regarded as detrimental to patients. Trust and relationships should be built and negative attitudes should be challenged for the benefit of both patients and health practitioners, and in order to sustain their relationship.

Limitations of the Study

Our findings cannot be generalised, because they are applicable in a specific context with a small population, and they are of a qualitative nature. They are meant only to generate a hypothesis.

Recommendations

Based on the results of the study, the authors recommend that directives be developed regarding the training and health education of AIHPs. The directives should be made known to newly initiated AIHPs so that they can be aware of the training before they start treating patients with TB. Both groups of health care practitioners should be involved in training to teach and empower each other and both groups should be accommodated in the health care system. Guidelines should be developed to set the parameters for AIHPs with regards to healing diseases and the procedures to be followed, for patients' safety. Communication should be encouraged between the two health care systems.

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