Chapter

Understanding the Science of Indigenous Health System: Key to Sustainable Collaborations

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Abstract

Most of the health systems in developing countries are dysfunctional and hardly responsive to the needs and demands of patients. Access to a plural healthcare system and reports of patients abandoning western medicine for indigenous medicine are signs of nonresponsive health system. The major contributing factors are the failures of the allopathic health system to recognize that indigenous medicine is a living and practised science, with its own philosophy, beliefs and practices developed over centuries. Indigenous communities and the patient's worldviews are intertwined with indigenous traditions, practices and beliefs. While the two health systems, allopathic and indigenous, coexist in Africa, they must collaborate in the management of patients. The two systems assign different etiological explanations and meanings to health, disease and illness based on worldviews, epistemologies and methodologies developed over time. Change of mindset, attitudes and practices through decolonization will lead to sustainable collaboration.

Keywords: indigenous health system, indigenous healers, living science, multiplicity of the epistemologies, colonization and destruction of indigenous practices, indigenous paradigms and euro-western paradigm, decolonization processes, change of mindset, attitude and practices, integration, sustainable collaborations

1. Overview

"Death is a spiritual illness to eradicate physical and biological life"

After reading this chapter, the reader should be able to appreciate the need to interrogate the predominant Euro-western mindset, attitudes and practices, which have existed as the results of centuries of colonization. There should be a new approach which enables the reader to explore the multiplicity of epistemologies and worldviews to include the voices of the indigenous communities and its science, which tend to be referred to as witchcraft, evil and inferior practices.

The reader is challenged to critically evaluate the power and extent of the influence of Euro-western history, its culture and philosophy on practices of medicine as science and monolithic approach to the search for answers to illness and diseases. The principles of the Euro-western approach are that if you do not know it, it does not exist and if you do not understand it, it's not science and therefore should be rejected. Their tendency is that of breaking it into pieces and flattening it to fit the mindset.

At the end of the chapter, the indigenous and Euro-western paradigms are compared in terms of what counts as scientific knowledge and ways of knowing, including the respective value systems applied in research. The reader is expected to continue to search for the path which will lead to full discovery of own truth.

As for the indigenous researchers, they should be able to remove the shackles which chained them to Euro-western practices and change their mindset of being loyal followers and consumers of western developed knowledge without considering the relevance thereof in the context of time, space and place. Where the content is alien to community beliefs and practices, it should be analyzed and interpreted through the worldview of the indigenous communities.

The institutions of higher learning, and especially those entrusted with the responsibility of approving, awarding and granting permission to conduct research, should consider whether they are promoting the discovery of unreported knowledge or whether they are promoting existing but unreported indigenous knowledge. Comments and questions from members of ethics committees, such as "Which methodology are you following?" and" Is there a similar approach reported in the literature?", suggest that those members do not understand that an indigenous approach to research and to access knowledge entails a ceremony which often involves communication with ancestors, facilitated by indigenous healers.

It must be indicated from the onset that an indigenous health system consists of multiple connections which indigenous communities experience with individuals around them, the environment, living and nonliving beings and objects in a state of physical, mental and spiritual consciousness. It is the frame of reference through which indigenous communities and their healers see the world and interpret events, including the diagnosis and management of illness and misfortunes in their environment.

It further exposes the reader to the existing ignorance and misunderstanding regarding the science behind indigenous health systems and the philosophy of Ubuntu applied in the management of patients in indigenous communities.

The authors strongly advocate that an environment of professional neutrality and open-mindedness should be the premise on which negotiations for collaboration between indigenous and Euro-western health systems are conducted.

2. Background

"When the body is smarter than the brain..."

Most of the Euro-western-based social and health sciences disciplines have inherited the logic that when they mediate and interact with indigenous communities, their disciplines constitute the gold standard [1]. This logic represents a colonial mindset of authority over and superiority to indigenous knowledge systems and is critical of any systems and science, which does not adopt or conform to their views of what constitutes science [2–4]. The sciences and philosophies of indigenous knowledge systems are labeled as witchcraft, pagan and barbaric. In the past this approach has resulted in representatives from indigenous communities to abandon their indigenous character, practices and own particular scientific reasoning and methodology [5, 6]. Where colonization to change indigenous practices failed after applying the conventional methods and means, it resorted to drastic and draconian actions such as banning it [7]. In order to survive the powers of colonialism, it appeared that those representing indigenous health systems and knowledge have adapted to "a new knowledge" and experienced their environment along the rules of a western system [8, 9].

Despite an increase in awareness of indigenous beliefs, forms of living and practices, the latter still get destroyed when they do not meet western standards. Destruction takes place through inquiries based on the relational realities and forms of knowing that are predominantly western, and anything not complying with this should be revised to fit the mold [9].

> *"Knowledge is acquired, without respect it's a self-imprisonment"*

Ways of knowing follow a particular trajectory of searching for knowledge and is influenced by how one relates to the source of knowledge and the people who own and share that knowledge. Most of our understanding of science as determined by western standards is about compartmentalizing knowledge as it is being discovered and fragmentation thereof to fit the western model while ignoring the environment in which it is to be applied. It is common for practitioners of western-based science in the process of the so-called "new discoveries" of things that have existed in indigenous communities to disregard indigenous characters and names and rename them according to western concepts. Where there is poor understanding of the indigenous sciences, the *modus operandi* would be to destroy it to prevent it from competing with western standards. As Kaptchuk and Miller [10] explains it, western science seems not to understand that indigenous sciences do not characterize ways of knowing as higher and lower knowledge. The dominant Eurocentric model of thinking and relating to items and experiences is an attempt at homogenizing everything to become comprehensible [1, 11–14].

3. Indigenous health practitioners

There are different categories of indigenous health practitioners in Africa. Depending on the region, most of them are also known as a traditional healers, medicine doctors [15], etc. For our readers, an indigenous health practitioner is defined as someone who is recognized by the community in which she/he lives as a competent person to provide advice on the causation of disease, misfortunes and disabilities in their community and diagnose and provide treatment for both physical, spiritual and psychological conditions in individuals and the community as a whole [14]. The calling to become an indigenous health practitioner may manifest in different ways and at different ages or times in life. Some are "called" before they are born, while others are "called" during childhood or adulthood. Some are "called" through illness, while others are "called" by experiencing persistent unnatural occurrences in their lives such as dreams and visions of departed relatives and ancestors [1, 9, 15].

There are instances where the call is either not realized soon or sometimes the person ignored it [15]. If the "calling" is not obeyed, the person becomes ill or continues to suffer until he or she accepts the "calling" and enters into an apprenticeship with a more experienced indigenous health practitioner [12]. In South Africa, the process of training to become a health practitioner is called "u thwasa" [15]. The training period may range from a few weeks to months. During this period the intern/thwasana discovers his or her ancestors and means and methods in which they would communicate with and through him or her [9]. Visits by ancestors would often take place during the night, and prescriptions and directions would be provided on how and where to obtain treatment for the patients. Upon mastering the art of abiding and obedience to the ancestral spirits, a graduation function is organized [9].

While the knowledge about diseases is passed on from the training supervisor to the intern/thwasana during apprenticeship, the knowledge of medicines, preparation and application thereof is directly communicated to the thwasana by his/her ancestors only. Both the trainer and thwasana closely guard these secrets from the ancestors [9, 15].

Indigenous health practitioners are broadly categorized according to the techniques they employ and the methods of diagnosis [15]. The three main categories are discussed below.

3.1 Diviners

Diviners are a category of indigenous health practitioners who diagnose diseases and illness through divination. It's the unique and special process of interpreting the message of ancestors through possessed crafted objects such as bones, shells, wood, etc. This category of indigenous health practitioners also possesses the spirit to interpret misfortune and to perform family rituals to secure the protection and guidance of ancestors. They represent the memories of ancestors in human form and establish a crucial link between humans and the supernatural [2, 16, 17].

3.2 Herbalists

Unlike diviners, this category of practitioners are predominantly ordinary people who have acquired an extensive knowledge of herbal medicine and the application of plant components such as roots, barks, leaves, oils, minerals, etc. in treatment. It is a category in which skills are learned and acquired without the involvement of ancestors. They voluntarily decided to undergo training with an established herbalist and then practice independently. They diagnose and prescribe medicines to prevent and to alleviate illness and to provide protection against witchcraft and misfortune or evil, as well as to bring prosperity and happiness [16].

3.3 Traditional birth attendants

This category probably existed long before all other categories of health practitioners. Through the centuries their services had been utilized by all humanities albeit as a matter of necessity due to cultural beliefs or medical conditions which allopathic health practitioners were not able to explain and manage, such as birthmarks [15]. Their focus is on mother and child health, starting from conception right through till the child reaches the age of 5 years. The health of the nursing mother is managed together with that of the child. It is believed that the newborn will not survive unless prenatal conditions and infections that the mother may develop are left untreated. The traditional birth attendants are mostly elderly women of 60 years or older and use herbal medicines to treat their patients.

3.4 Spiritual healers/prophets/faith healers

The spiritual or faith healers and prophets have recently emerged as another category of indigenous health practitioners, and whether they should be recognized and accepted as indigenous health practitioners continues to be debated.

They use prophesy and faith in supernatural beings as the source of their power. A common practice among them is the use of prayer, candlelight and or water to heal their patients [18].

There is division within this category of indigenous health practitioners, and it is based largely on legitimacy and beliefs. Prophets/spiritual healers among

themselves differ on the legitimacy of spiritual healers based on calling and supernatural sources of communication. One group of spiritual healers claim to have revelations and visions related to supernatural beings and a so-called heaven as their calling. This group also claim to communicate directly with God in the healing process and do not make use of roots and other raw plant materials to prepare traditional medicines. Instead, they use water and processed herbs to heal. However, the second group of spiritual healers claim to have visions of objects and people as their calling, similar to diviners.

4. Convergent and divergent views between allopathic health practitioners and indigenous health practitioners

Apart from a few areas of possible convergence between the two health systems, it is the divergent views which have obstructed the development of sustainable collaborations between allopathic and indigenous health practitioners. Some are highlighted in **Table 1** below.

The areas of convergence between the two systems are that both display sympathy towards their patients and care about the wellbeing of their patients. In addition, they accept accountability for their patients' health, work from a body of underlying empirical knowledge and both engage in elaborate processes of discernible empiricism in their efforts to diagnose and treat their patients [16]. There is, however, a view among allopathic health practitioners that indigenous medicine in terms of its body of knowledge and practices had remained stagnant during the course of human evolution [19]. The irony is that much of western knowledge, which is vowed to be scientifically based, originated from indigenous medicine by selecting certain practices from the latter, subjecting it to analyses and then

Indigenous health system	Characteristics	Allopathic health system
Diseases and illness are caused by supernatural forces (thuri[a]) and for a reason	Disease/illness	Disease and illness are the result of pathogens or physiological changes
God/supernatural powers in human/plant system; macro level	Source of healing/who heals patients	God/supernatural powers in the unit cell/energy: micro level
Plants, animal by-products Endogenous	Source of medications and treatment	Plants, animal by-products Endogenous
Ancestors/spirits/God Spirits do not forget Carried to next generation	Source of that knowledge Memory At death	Human, library/books and learning Rely on memory End of knowledge
Obedience to and compliance with wishes of ancestors	Improvements/growth	Training and development
Divinations Supernatural powers	Common diagnostic process/procedure	Investigations such as X-rays, FBC, examination, stethoscope, etc.
Biological and endogenous spiritual and exorcism	Treatment and intervention	Biological and endogenous
Ancestors/God	Ownership of knowledge	Individual
For spiritual/psychological cases	Ideal	For physical entities and body

[a] *Evil spells are thought to be in a form of a small nocturnal animal, capable of causing insanity.*

Table 1.
Simplistic comparison of the two health systems.

incorporating some of that into allopathic settings. Very little, if any, recognition is given to the science and philosophy of indigenous knowledge, let alone assigning intellectual ownership.

From the above table, it is evident that the two health systems display differences in their approach to knowledge and science. These differences could be explained using ontology as it evolved culturally and historically over time. The allopathic perspective is based on western science, while indigenous medicine is based on indigenous sciences. Allopathic health practitioners seem to find it difficult to accept the indigenous sciences into their "rational" scientific framework because it does not fit their model.

Another difference relates to the belief of what causes disease and illness. Allopathic medicine associates disease and illness with invading pathogens such as bacteria, parasites and viruses and or physiological changes. The indigenous system believes that disease and illness are caused by supernatural forces. Various explanations are offered for "why me and now" [20–22]. It can be as a result of the individual's own spiritual mishaps, provocation of ancestors by violating taboos, obligations or responsibilities or a mere "call" by ancestors to perform certain rituals. Witchcraft and evil spells are regarded as common causes [7].

Another aspect on which the two systems differ is on what is understood to be science. The point of departure would be on how knowledge or empiricism as a science is defined. Science as it is known from a western perspective in modern times is the accumulation of knowledge through experience/experimentation and observation, and it is stored in books or electronically [23]. In order to be educated, one has to read the books or access the information electronically. For this reason, allopathic medicine utilizes textbooks and other archived material to pass knowledge on. On the other hand, among indigenous health practitioners, knowledge is handed down, often verbally, from healer to apprentice, from one generation to the next [24, 25]. It provides the "paradigm" through which and by which they understand and interpret their environment. The entire constellation of beliefs, values, techniques, etc. is shared by the members of a given community as health practices [12, 18, 26].

The two systems have a different understanding and explanation of what constitutes a healthy individual and society and illness in the community. The allopathic health system subscribes to World Health Organization's (WHO) definition of health as "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity" [27]. This definition of health is limited to an individual within the society and does not comply with the indigenous standard of health. For the indigenous communities, health is not experienced at an individual level. It is defined in terms of the completeness of society as a whole, connectedness and harmonization between the living human kingdoms/beings and their ancestors, animal kingdoms and environment. It values health as a system, similar to the human system, with different components, and each component contributes to the functionality and completeness to purpose [28, 29].

There is growing evidence that the two main health systems—indigenous and allopathic—are operating side by side in Africa [9, 30]. Depending on the country and history of colonization, allopathic health practitioners tend to be well resourced and supported by the government, while neglecting and, in some situations, suppressing indigenous health systems and its practices. At times, the lack of communication and the adversarial relationships between the two systems impact negatively on the delivery of health services to communities [31, 32]. Patients are receiving conflicting advice from their health practitioners. Treatment overdose and drug interactions are very common, and this is not surprising as the two systems have divergent worldviews of the causes of diseases; why, when and how a person becomes ill; and finally the diagnostic tools, processes and approaches to

management of patients [33]. Their understanding of what constitutes a diseased patient and or community and the healing process is largely influenced by their respective values and meaning of life and death. Why people get sick and why they should die or live longer will determine their acceptance of the outcome: death or recovery to health/healing. For example, if the death of a diseased individual is viewed as a means of joining the ancestors to provide guidance and advice to the living, the outcome of healing will not be considered as good and beneficial to the indigenous communities.

Indigenous health systems acknowledge that there are diseases and/or illness which infect or attack the human spirit without affecting the physical body [34]. The illness could be as a result of spiritual attacks by evil spirits or evil spells, demonic forces, ancestors' way of communicating with an individual, family and communities. While western science has not accepted this concept of disease, not everything that western science practices and observes meet their own standard of science. For example, western science believes that life in human beings constitutes the coexistence of the physical body, spirit or soul. The existence of the spirit as part of giving life to the body is not based on sciences, but on a belief system which is common to all [35–37].

Indigenous science believes that the spirit, which inhabits individuals, does not present with physical signs and symptoms which could be detected and diagnosed by modern technology as employed by allopathic health systems, e.g. a stethoscope, diagnostic radiography (X-rays), ultrasound, computed tomography (CT) scans, magnetic resonance imaging (MRI) scans and nuclear medicine scans. The opposite is also true. There are diseases, which infect/attack the physical body without affecting the spiritual aspect [35, 38–40]. Allopathic practitioners are well resourced to diagnose and manage both that of the body and spirit. At the centre of the two health systems is the phenomenon of dual consultation which is being exercised by patients based on their preferences of health provider, accessibility and affordability of the services and integration of the disease management model with their belief systems and practices. The perception created over the years under colonial rule by western authorities is perpetuated with the mindset suggesting that patients belong to the allopathic health system with no right of choosing and consulting health providers other than allopathic health practitioners [4]. Failure to recognize indigenous worldviews and beliefs had created a crisis for allopathic healthcare which persists to this day [41, 42].

This is particularly evident among HIV/AIDS and TB patients who are reported to be abandoning western treatment in favor of indigenous remedies and practices. In most cases allopathic health practitioners are made aware of this, often at an advanced stage of treatment, when patients who have been exercising their rights to choose disclose that they are also receiving treatment from indigenous health practitioners [43–45].

Without the recognition of patients' rights and the establishment of collaborations and referrals of patients between the two systems, the postcolonial health system will remain dysfunctional and ineffective to fully respond to the needs of the indigenous communities.

5. Integration of the two healthcare systems

The point of departure should be the interrogation and understanding of the existing health system which was operating in communities before colonization and globalization of their environment [46, 47]. The definition of indigenous in our context refers to the root, something natural or innate (to), a way of life, living, beliefs and practices which is an integral part of community culture. It is embedded

in the culture and therefore tacit knowledge. It is communal, a shared form of knowledge achieved through experience. It is a linguistic phenomenon. This phenomenon serves cognitive interests of three types namely technical, moral and critical of own environment [48].

Due to globalization, indigenous communities have become increasingly exposed to foreign cultures and practices. There are no aspects of their social life, customary practices or traditional behavior which remained untouched. Communities are now living in countries without borders, and they seem to be short-changed by globalization and colonization. Foreign cultures and practices have intruded into indigenous inner self and being without respect and invaded their living space similar to a declaration of war against cultures that were different to that of the colonizers. The character and nature of globalization and colonization is to perpetuate the dominance of that which is being introduced to communities: western or foreign culture, language and health systems, including diseases against which indigenous communities had no innate immunity, constantly displacing indigenous knowledge systems of managing their patients.

For centuries, indigenous communities have maintained their dignity and trust in that which worked for their communities and which was gained through experience over many years. They rebelled against colonization and resisted to be mere bystanders and simply witness their indigenous norms and values to become extinct. With the rediscovery of self, communities are increasingly reclaiming their past and striving to retain their cultures and ways of knowing which were previously marginalized and dubbed unscientific and barbaric. This is no easy feat as they are split between claims of global science on the one hand and the equally compelling claims to recover the "African past" on the other hand.

Health systems are defined as all activities in the community which serve to promote, restore and maintain people's health. In a postcolonial and globalization context, both the indigenous and allopathic health systems are operating side by side. For the two systems to function optimally, it would require the leveling of the playing field through decolonization of mindsets, attitudes and practices. The desired outcome should be the gaining of knowledge, together with acknowledgment and recognition of the important role that indigenous health system plays in the delivery of primary healthcare services.

Globally, indigenous medicine has been declared a component of Primary Health Care (PHC) by the World Health Organization's Health Promotion: Strategy for the African Region. The strategy recommends that different countries should promote and incorporate their indigenous health practitioners into healthcare systems. The implementation of the recommendation has been met with resistance and criticism from allopathic practitioners [9]. A significant number of indigenous communities prefer indigenous medicine as their first choice. Indigenous medicine has always been acceptable, accessible, available, affordable and attainable to them. Several countries have adopted legislation promulgating traditional medicine initiatives. In response to the World Health Organization's Health Promotion: Strategy for the African Region, South Africa promulgated the Traditional Health Practitioners Act [49], to establish a regulatory body controlling the registration and education of THPs [49]. Despite this legislation, allopathic and traditional healthcare sectors remain in conflict and disjointed. Few allopathic health practitioners understand the philosophy, ontology and epistemology of indigenous medicine, let alone accept it as scientific with its own long-standing experiments and standards comparable to western medicine [4, 12]. Simply stated, most of the allopathic practitioners are not able to free themselves from the shackles and deeply embedded mindsets of colonization. Because there is no true understanding of indigenous healthcare systems and its sciences, allopathic health practitioners do not want indigenous medicine to be recognized as a health science [4, 12].

6. Misinterpretation and misrepresentation of indigenous healthcare system

The introduction of Euro-western culture, practices and religious beliefs, such as the Christian faith, dominated and disregarded the indigenous knowledge system. Indigenous still remained alive among communities even though it was not recognized by colonizers [4]. This had a significant impact on colonizing the minds of indigenous people. It enforced a change in indigenous culture, behavior, practice and belief. The continued alienation and exclusion of indigenous health practitioners in the management of patients is largely based on a monopolistic health system, which recognized allopathic health systems as the only practice of health systems emanating from the prevailing dominant practices by allopathic health practitioners and the lack of respect and recognition of traditional health systems [12]. In many of the formerly colonized countries, indigenous healthcare systems continue to be regarded as less important by Eurocentric healthcare providers and funders of healthcare services [12]. It is often perceived as a threat to western norms of standard of healthcare and at times associated with "witchcraft", actively discouraged and suppressed through powerful legislation [4].

Anecdotal actions, supported by published reports, reinforce the stereotype which appears to suggest that patients belong to allopathic health practitioners [4] and have no right to seek alternative opinions and treatment other than what western medicine prescribes. These actions go against the provisions of the Patient and Human Rights Charter in South Africa. In general, communities and patients are denied the power of self-determination, based on experience and informed by their understanding of health in their own particular context.

Most of the health training curriculums in universities and colleges do not expose students to the science of indigenous health systems, community belief systems and their particular worldviews. When confronted with patients demanding alternative health services from indigenous health practitioners, allopathic health practitioners have the perception that such demands for pluralism would lower their standard of heath service provision and result in inappropriate management of "their" patients by indigenous health practitioners through poor treatment, lack of compliance and a possible overdose of medication. These views of allopathic health practitioners have been commonly expressed to and reported by HIV/AIDS patients using traditional medicine concurrently with allopathic medicine.

Due to misinterpretation and misrepresentation, there is a lack of trust between the allopathic and indigenous healthcare sectors, which is exacerbated by a lack of understanding regarding the knowledge base of each sector. Allopathic healthcare providers simply expect indigenous health practitioners to use allopathic principles to treat ailments and promote health instead of indigenous practices. Throughout the era of colonization, and even during postcolonization in Africa, westernized healthcare training institutions have not incorporated traditional medicine and its philosophies in their curriculums. In instances where mention of indigenous health practices is made, it is usually done in a unilateral manner without incorporation of indigenous health practitioners as tutors and lecturers.

As a result, allopathic healthcare practitioners deny students the opportunity of exposure to the multitude of traditional health practices, among others the traditional preparation and packaging of medicines; reproductive health; indigenous preventative and promotive health practices; diagnostic measures; curative and rehabilitative practices; management of diseases and health promotion; lifestyle and dietary preferences; the status of women; music, ancestral drumming and dance and its influence on wellbeing; spirituality; types of traditional healers; traditional leadership; patient management; palliative care; and maternal and child health.

Although traditional health practices are considered to be primitive and backward, they continue to thrive due to its cultural importance among communities. In some communities, traditional healthcare practices are the only available healthcare services, given the prohibitive cost and inaccessibility of allopathic healthcare. It is estimated that to this day between 60 and 80% of patients in Africa consult indigenous health practitioners [41].

Despite years of colonization, the prohibition of indigenous health practices and its sciences, indigenous communities have not completely abandoned their ways of life, practices and beliefs [37]. For an outsider, this may be construed as being stubborn, backwards and ignorant of modern sciences and its achievements. For the local and indigenous communities, the allopathic health system has until now been unable to offer explanations for the onset of illness, the "Why me? Why now?" rationale which forms a crucial part of African indigenous understanding of health and healing [50]. In many instances the instructions by allopathic health practitioners to not use and mix allopathic medicine with traditional herbs confuse patients and do not achieve the desired effect [33]. Patients perceive it that they are expected to abandon their indigenous practices and roots and become part of the western culture.

If parity is to be reached, the two healthcare systems should embrace pluralism and respect the rights of choice for all communities. All parties should acknowledge that globalization created contemporary societies where there are different and coexisting competing health systems arising from different traditions, practices and bodies of knowledge. Although pluralism is now recognized as a global phenomenon, its application in colonized communities seems to remain a pipe dream. It will remain a challenge until such time as allopathic healthcare practitioners and students respectively provide and receive training based only on a western-orientated curriculum that excludes alternative methods of care acceptable to the indigenous communities. The worldviews that inform the current curriculum for allopathic healthcare practitioners are monolistic, hospital-centred and disease-oriented and exclude self-care or healing. Furthermore, the curriculum perpetuates health disparities and power imbalances that adversely affect patient outcomes [4, 12, 31].

6.1 Indigenous health systems as a living science

One of the common arguments by proponents of exclusivity health systems is that "our value system, science of medicine and standard of care will be compromised if we recognize and accept indigenous health practitioners to treat our patients" [4].

There are three fundamental problems associated with this approach, which require elaboration.

Firstly, it's the mindset and attitudes which seem to suggest that patients and communities are owned by health providers.

Secondly, the perception that allopathic medicine is the standard against which all health knowledge is measured.

Lastly, the notion that for "others" (indigenous health practitioners) to exist, function and be accepted by communities, it will require approval and support from allopathic health practitioners.

The plausible explanation for the above problems could be lack of knowledge and understanding of indigenous health systems and its sciences. In life, what we do not know or understand does not mean that it does not exist or does not make sense/work. It may possible mean that one does not understand and comprehend the whole picture and/or is not yet exposed to it.

Indigenous health systems constitute a life force of science practised by indigenous health practitioners before and after colonization; It has a history, origin, philosophy and epistemology [51–53]. Indigenous health system has its own level of excellence in providing an answer to-"why me, why now", resources, the dynamic that carries communities forward. Indigenous communities consider it as the knowledge inherent to its own identity, with its own science and technological advances beyond physical limitations. It is an institution in its own right, with consumers and pioneers [51, 52].

Long before colonial rule invaded indigenous communities, indigenous health practitioners were developed and advanced comparable to the allopathic health system. This is supported by a report by a Scottish medical anthropologist who witnessed the indigenous surgeons in Buganda performing a cesarean section (**Figure 1**).

The Scottish colonizers interacted with the indigenous communities and learnt from them while conducting studies through observation. It culminated in the publication of an article that appeared in the *Edinburgh Journal of Medicine* and in a dissertation titled "Ueber die Lage und Stellen bei der Geburt" which he submitted to the Marburg University in Germany in 1885 [53].

That article is now part of the *Annals of Obstetrics and Gynecology* history, describing in detail how cesarean section was performed. He gave an illustration of procedures and how they were carried out: anesthetics practices, aseptic measures, performance of the actual cesarean section, how the uterus was massaged and delivery progressed, the final postoperative measures and how the mother and baby responded were all included. From this it is evident that the procedures and the science practised by indigenous healthcare providers at that time compared to the best standard of performing a cesarean section that existed in Europe.

Research reports and dissertations published by medical anthropologists in 1885 confirmed that indigenous health practice is a field of health science practised by indigenous health practitioners with high ethical standard of care and value systems.

The question of what is defined as science, how it is practised and how the standard thereof is measured is worth exploring and explained in this context. It is not disputed that science is an art, a pathway and systematic process of finding solutions to societal problems. There are also different pathways of knowing and finding solutions to problems facing communities. Different communities had explored different mechanisms and at different times during the development of their healthcare systems, through experimentation and testing the efficacy of their different

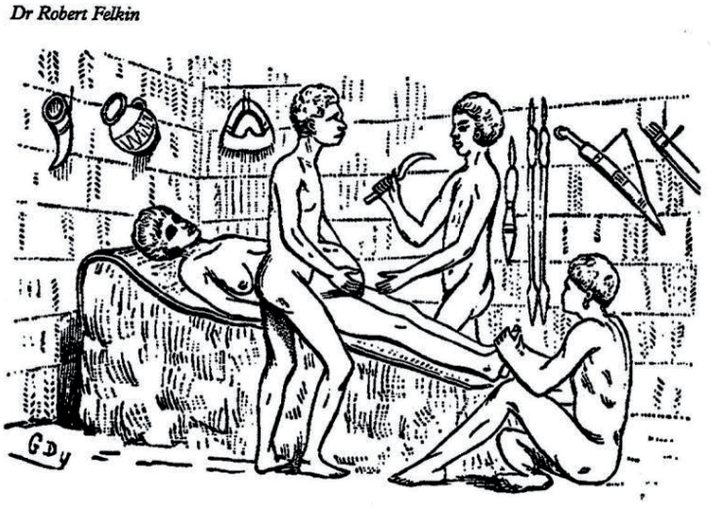

Figure 1.
Indigenous health practitioners of 18th century performing caesarean delivery.

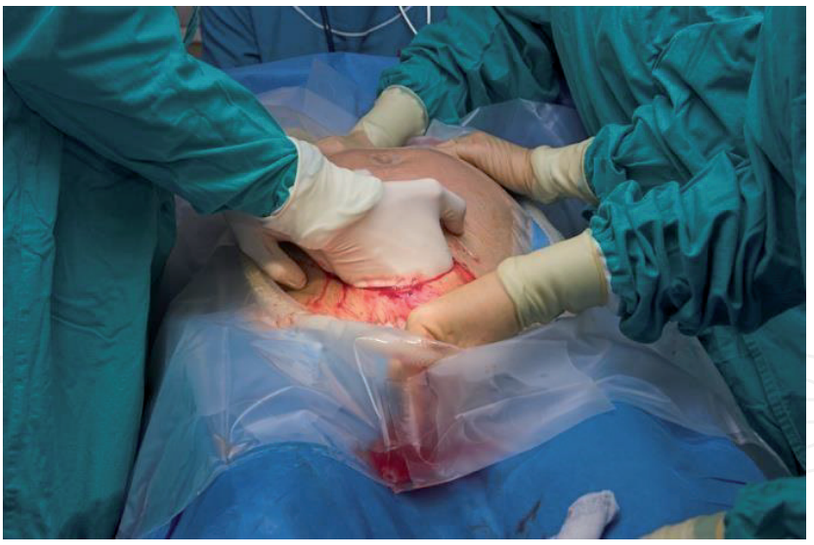

Figure 2.
Allopathic health practitioners of the twenty-first century performing caesarean delivery.

medicinal products, beliefs and practices. Some solutions are yet to be explored and discovered. Reports confirmed that indigenous health practitioners have perfected the art of sciences long before colonizers and missionaries introduced western medicine. Their processes of diagnosis and patient management are documented as being thorough, scientific and of comparable standard to other practices.

Despite what Felkin witnessed as being no different, in principle at least, from what modern doctors do, allopathic health practitioners of the twenty-first century do not recognize that indigenous health systems are a science and could play a significant role in existing health systems. There are several factors which contributed to poor working relationship between the two systems. Key among them is the effect and impact of colonization, globalization and commercialization of health and healthcare services as a commodity. Indigenous communities were encouraged to abandon their practices, beliefs and sciences. High levels of suspicion and mistrust supported the enforcement by law that prohibited the use of indigenous medicines.

There is no doubt that the impact of colonization extended beyond politics and the economic life of indigenous communities, for it disorientated and destabilized their psychosocial interactions with reality. There are perceptions that most scientific scholars raised and educated according to the western doctrine are unable to use their worldview to interrogate and interpret the world and environment, unless it meets the western worldview. They subscribe to western principles despite its limitations in African settings. While most of the colonized countries may have achieved political freedom from their erstwhile masters, the pervasive socioeconomic mindset persists and liberation from western scientific inclinations evades indigenous scholars.

Figure 2 Allopathic health practitioners of the twenty-first century applying similar principles, protocol and standards to that of indigenous health practitioners reported by medical anthropologist in 1885 during the delivery of a baby through Cesarean section (Google source).

7. Exploring the indigenous epistemologies and sustainable collaborations

The author argues for the need of a different approach to collaboration with indigenous communities who have experienced centuries of colonization and

dehumanization of their traditional beliefs, health systems and practices. It is the author's view that postcolonial indigenous researchers should develop indigenous epistemologies and methodologies which dismantle, deconstruct and decolonize the Euro-western paradigms of thinking. It provides a platform for the rethinking of the indigenous health system, its philosophies and the sciences involved when a complete healthcare service was provided for centuries before colonization [54]. Although the two healthcare systems operate side by side at different levels of science, i.e. theory of disease causation and management of disease, a mutually agreed upon collaboration between the two systems could positively impact the establishment of a complete health system. A new trajectory and respect for the views that an individual or a community holds on health and diseases should be established, which will not only influence the interpretation of different health conditions and beliefs regarding causation of diseases but will also determine the type of providers who are consulted for the management, restoration of health and the wellbeing of communities. A sustainable collaboration would require exploring approaches that eliminate the "come join us" attitude and monopolistic health system of allopathic health practitioners who regard themselves as holding the gold standard against which all others are assessed.

8. Development of sustainable collaborations through decolonization processes

Studies show that the integration of allopathic and traditional medicine should include co-learning and mutual respect [19, 55, 56]. Traditional and allopathic healthcare practitioners already have common practices, for example, the physiotherapists' use of steam for inhalation therapy which is similar to ukugquma and using a warm towel compress which is similar to ukuthoba. Midwives recommending alternative positions during delivery is similar to methods used by traditional birth attendants throughout the ages.

Creating opportunities for collaboration and capacity development through training of allopathic healthcare practitioners in traditional healthcare practices is emancipatory, will stimulate awareness and creates a cultural sensitivity among allopathic healthcare practitioners [50, 57]. Collaboration will create an opportunity to enhance the transfer of skills and sharing of knowledge between the traditional and allopathic healthcare sectors [58, 59]. It should translate into curriculum transformation through co-teaching, co-supervision and transfer of knowledge on diagnostic measures applied by indigenous practitioners in preparation and packaging of traditional medicines. Through such a training process, trust will be fostered between the traditional and allopathic healthcare sectors, and co-operation will be facilitated, leading to sharing of critical information and ultimately empowerment of both types of healthcare practitioners [60].

Indigenous communities, through colonization, have been oppressed, stripped of human dignity and have died inside a long time ago. Existing collaborations have failed to recognize the importance of redressing the inequalities of the past and to acknowledge the importance of indigenous knowledge [4]. It is the belief that the experience gained when indigenous and allopathic health practitioners work alongside each other would result in lasting collaborations. The view has been expressed by indigenous scholars that decolonization of healthcare requires a change in mindset and the establishment of agendas that would allow for mutual exchange and recognition of indigenous knowledge [61]. The success of it relies on a change in attitude, recognizing the value of indigenous health systems, beliefs and the Ubuntu spirit in African communities.

The process of decolonization requires a participatory approach which requires commitment from all stakeholders [12, 62, 63]. It begins with demystifying traditional healthcare practices and community empowerment through honest and open discussion about the need for allopathic healthcare practitioners to learn from indigenous health practitioners. The main objective is changing the mindset and attitudes of the colonized indigenous and allopathic health practitioners through a participatory process. The demystifying stage involves the five phases of a decolonization process [4, 12, 62]: (1) rediscovery and recovery, (2) mourning, (3) dreaming, (4) commitment and (5) action (**Figure 3**).

8.1 Rediscovery and recovery process

This is the first phase in the process of decolonization. Allopathic healthcare practitioners are encouraged to rediscover and recover their historical cultural practices, languages and identities. They are to rediscover the many traditional practices including traditional methods of preparation and packaging of medicines; reproductive health, indigenous, preventative, promotive and diagnostic measures; curative and rehabilitative practices; management of diseases and health promotion; lifestyle and dietary preferences; the status of women; music, ancestral drumming and dance and its influence on wellbeing; spirituality; types of traditional healers, traditional leadership; patient management and palliative care; and maternal and child health.

Similarly, the colonized indigenous practitioners and communities should rediscover, interrogate and question the current status of their practices. Rediscovery and recovery give the oppressed and colonized people the ability to decontaminate their minds and thought process in which they can define their real world and problems associated with it. Indigenous practitioners should decide on their terms of references and rules for engagement among themselves and with others. In this case, allopathic healthcare practitioners go through the process of rediscovery and

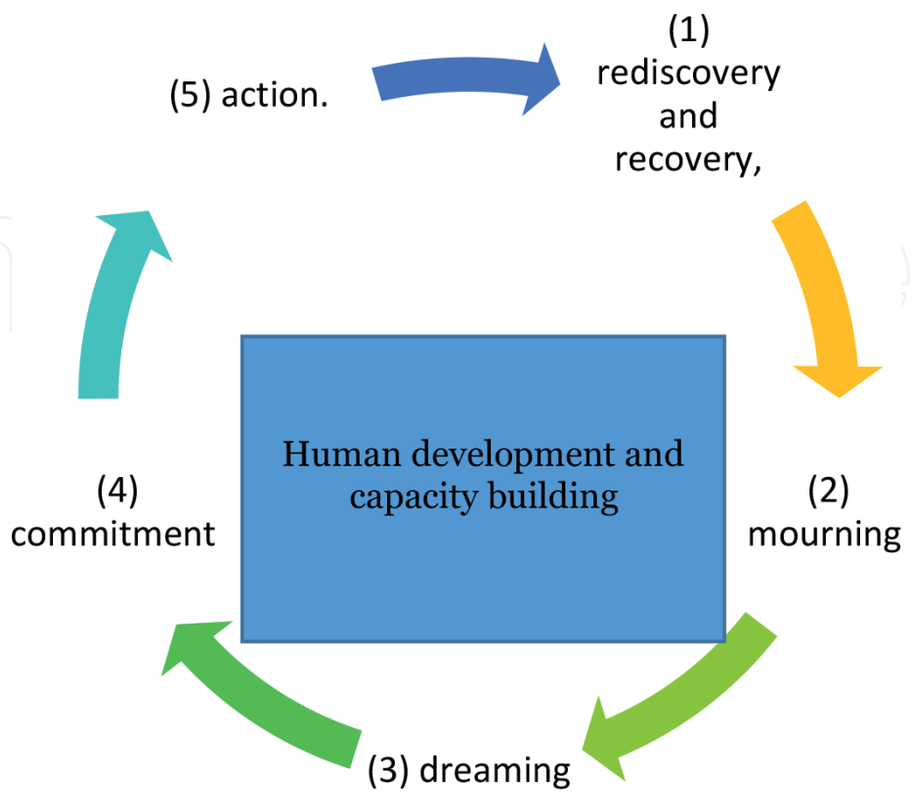

Figure 3.
Cyclical pattern of decolonization adopted from Nemutandani et al. [4].

recovery through learning about existing traditional healthcare practices, languages and identities. This process is the cornerstone for sustainable collaboration.

9. Mourning the disrespect of the indigenous medicine

This stage refers to the process of lamenting the injustices that have been done by colonization and how this has affected the self-esteem and image of the indigenous practitioners in the communities, including the impact it had on their practices and traditions. It has been argued to be an important part of healing and preparing for moving forward. The years of assault upon and damage done to the minds of indigenous people, their traditions, values and belief systems were reported on literature.

The scars from years of colonization and the indoctrination of African people to disown their own ways of living and of health practices are still evident years after achieving independence from colonizers. The perception that traditional beliefs and practices belong to the dark ages and uncivilized societies appears to have resulted in a refusal to accept indigenous heath practitioner.

Even the so-called educated and liberated middle-class African health professionals have not been prepared to free themselves of the limitations of colonization. "The main challenge is the existing negative perceptions you have about us. This is more prevalent among the educated and middle-class people… consult secretively, with skepticism, doubts and pride…." as quoted by an indigenous member in the study by Nemutandani and others [4].

9.1 Dreaming process

The third decolonization process involves dreaming in which the allopathic healthcare practitioners will allow the traditional healers to educate them about different possibilities of knowledge and skills that can still be helpful to offer alternative care. In the environment in which the dreaming should take place, two processes are required.

9.2 Commitment process

The allopathic healthcare practitioners should take on the positions of activism to advocate for incorporation of indigenous healthcare practices into the curriculum. They will therefore write monographs and textbooks to take the knowledge from tacit to explicit.

9.3 Action process

The last process in decolonization is the joint development of a plan of action by allowing indigenous health practitioners to build capacity among allopathic health practitioners. Dreams and commitments are translated into strategies for capacity building and skill transfer to ensure that their collaboration is sustainable.

The existing collaborations between the two health systems without understanding and acknowledging that the indigenous health system is a living science are not sustainable.

Finally, there are reports which found that allopathic and indigenous medicine are compatible in their sciences of treating and managing their patients. For example, allopathic health practitioners, using their existing biomedical knowledge of HIV-/AIDS-related illness, would set a course of treatment that emphasize antiretroviral medications and hospital treatment. On the other hand, indigenous

health practitioners, invoking existing knowledge of sicknesses caused by spirits, set a course of treatment that emphasize herbal medicines, sacrifices and ritual ceremonies to appease ancestors. It can be argued that both approaches are typical of all medical systems in that they "frame problems in relation to the solutions they have to offer" and how they understand it to be according to their existing knowledge as defined by their health system—in textbook or through ancestors.

In conclusion, any health intervention which disregards the existing community health beliefs, traditions and cultural practices is likely to be resisted passively by communities if not openly by creating parallel systems acceptable to the communities.

Despite the existing bias against indigenous health practitioners and the negativities associated with those consulting them, collaboration between allopathic health practitioners and indigenous health practitioners in the management of patients is certainly possible.

Reflection: Why is it that indigenous health sciences are not incorporated in the curriculum of most health professional training institutions in Africa? Despite the strong beliefs and practical experiences of both academics and students being products of indigenous systems, few seem capable of associating with it. One could conclude that the prevailing educational system does not encourage either students or academics to think for themselves but rather follow the path traveled by their Euro-centric predecessors, despite well knowing that their environment is different. There seems to be a deeply embedded western paradigm of reasoning among members of human research committees who seem to be fixated on whether similar research had been done and whether tried and tested methods are being followed.

Reflection: For a long time, when we go out for research, if we are honest enough, what we are gathering or we went out for is a collection of existing information and raw data. It's only when we process it in our university (standards) that we call it knowledge. There are many of us who still go out and do research that way; it is the habit of the heart and mind and the habit of relating to people, society and healers as objects.

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References

[1] Wreford J. Working with Spirit: Experiencing Izangoma. Healing in Contemporary South Africa. Oxford, UK: Berghahn Books; 2008

[2] Stoner BP. Understanding medical systems: Traditional, modern, and syncretic health care alternatives in medically pluralistic societies. Medical Anthropology Quarterly. 1986;**17**:44-48

[3] Bishop R. Freeing ourselves from neo-colonial domination in research: A Kaupapa Maori approach to creating knowledge. In: Denzin NK, Lincoln Y, editors. The Landscape of Qualitative Research. 3rd ed. Thousand Oaks, CA: Sage Publications; 2008

[4] Nemutandani SM, Hendricks SJ, Mulaudzi MF. Decolonising the mindsets, attitudes and practices of the allopathic and indigenous health practitioners in postcolonial society: An exploratory approach in the management of patients. The African Journal of Primary Health Care & Family Medicine. 2018;**10**(1):e1-e8

[5] Ashforth A. Madumo: A Man Bewitched. Chicago, IL, USA: University of Chicago Press; 2000

[6] Ashforth A. Witchcraft, Violence, and Democracy in South Africa. Vol. 10. Chicago, IL, USA: University of Chicago Press; 2018. pp. e1-e8. DOI: 10.4102/phcfm.v10i1.1518

[7] Government Printers. Witchcraft Suppression Act, No. 3 of 1957. Pretoria: Republic of South Africa; 1957

[8] WHO Kobe Centre. Formalisation of Traditional Health Services. Planning for Cost-Effective Traditional Health Services in the New Century, 2002. Available from: http://www.who.or.jp/tm/research/bkg/5_formalisation.html [Accessed: 02 June 2015]

[9] Kale R. Traditional healers in South Africa: A parallel health care system. British Medical Journal. 1999;**3**(10):1182-1185

[10] Kaptchuk TJ, Miller FG. Viewpoint: What is the best and most ethical model for the relationship between mainstream and alternative medicine: Opposition, integration, or pluralism? Academic Medicine. 2005;**80**(3):286-290

[11] Lett J. Science, religion, and anthropology. In: Anthropology of religion: A handbook. 1997. pp. 103-120

[12] Chilisa B. Indigenous Research Methodologies. United States: SAGE Publications Inc; 2012

[13] Kuper J. Sangoma's Power Challenges State. Mail & Guardian; 2015

[14] Mafukata MA. Mandevu. Journal of Arts and Humanities. 2015;**4**(1):14-26

[15] Bereda JE. Traditional healing as a health care delivery system in a transcultural society [MA disseration]. Pretoria: University of South Africa; 2002

[16] Puckree T, Mkhize M, Mgobhozi Z, Lin J. African traditional healers: What health care professionals need to know. International Journal of Rehabilitation Research. 2002;**25**:247-251

[17] Mehl-Madrona L. Coyote Medicine: Lessons from Native American Healing. New York, USA: Scriber; 1997

[18] Brownlee F. Some experiences of native superstition and witchcraft. African Affairs. 1940;**39**:54-60

[19] Farrand D. Is a combined western and traditional health service for black patients desirable? South African Medical Journal. 1984;**66**(17):779-780

[20] Van Dyk AC. "Why me and not my neighbour?" HIV/AIDS care and counselling in a traditional African context. Curationis. 2001;**24**(3):4-11

[21] Van Wyk NC, Bourne B, Gericke GJ, Mokoena JD, Mulaudzi FM, Van Wyk IWC. Integrative Healthcare: A Guide to Meet the Needs of Africa. Cape Town: Juta and Co Ltd. South Africa; 2009

[22] Van Wyk NC. Similarities in the meta-paradigm of nursing and traditional healing: An attempt to contribute to the integration of traditional medicine and western medicine in Africa. Health SA Gesondheid. 2005;**10**:14-22

[23] Clark VLP, Creswell JW. Understanding Research: A consumer's Guide. Pearson Higher Ed; 2014

[24] Conley RJ. Cherokee Medicine Man: The Life and Work of a Modern-Day Healer. Norman, OK, USA: University of Oklahoma Press; 2005

[25] Denzin NK, Lincoln YS, Smith LT. Handbook of Critical and Indigenous Methodologies. Thousand Oaks, CA: Sage Publications; 2008

[26] Keikelame MJ, Swartz L. A thing full of stories': Traditional healers' explanations of epilepsy and perspectives on collaboration with biomedical health care in Cape Town. Transcultural Psychiatry. 2015;**52**(5):659-680

[27] WHO. Definitions of Health/ Wellness, 1946. Available from: http://www.pnf.org/Definitions of_Health_C.pdf [Accessed: 20 January 2013]

[28] WHO. Traditional Medicine Strategy 2002-2005. Geneva, Switzerland: World Health Organisation; 2002

[29] Struthers S, Eschiti VS, Patchell B. Traditional indigenous healing: Part I. Complementary Therapies in Nursing & Midwifery. 2004;**10**:141-149

[30] King R. Ancient Remedies, New Disease: Involving Traditional Healers in Increasing Access to AIDS Care and Prevention in East Africa. Geneva: Joint United Nations Programme on HIV/ AIDS (UNAIDS); 2002

[31] Peu MD, Troskie R, Hattingh SP. 2001. The attitude of community health nurses towards integration of traditional healers. Curationis. 2001;**24**(3):49-55

[32] Unge C, Ragnarsson A, Ekström AM, Indalo D, Belita A, Carter J. Ilako F, Södergård B. The influence of traditional medicine and religion on discontinuation of ART in an urban informal settlement in Nairobi, Kenya, AIDS Care 2011; 23(7): 851-858

[33] Schatz E, Gilbert L, McDonald C. 'If the doctors see that they don't know how to cure the disease, they say it's AIDS': How older women in rural South Africa make sense of the HIV/AIDS epidemic. African Journal of AIDS Research. 2013;**12**(2):95-104

[34] Kuokkanen R. Towards an "indigenous paradigm" from a Sami perspective. The Canadian Journal of Native Studies. 2000;**20**(2):411-436

[35] Loughlin M, Bluhm R, Fuller J, Buetow S, Upshur RE, Borgerson K, et al. Philosophy, medicine and health care—where we have come from and where we are going. Journal of Evaluation in Clinical Practice. 2014;**20**(6):902-907

[36] Lovell B. The integration of bio-medicine and culturally based alternative medicine: Implications for health care providers and patients. Global Health Promotion. 2009;**16**(4):65-68

[37] Madamombe I. Traditional healers boost primary health care: Reaching

patients missed by modern medicine. Africa Renewal. 2006;**19**:10-12

[38] Niehaus I. Witchcraft, Power and Politics: Exploring the Occult in the South African Lowveld. London, UK: Pluto Press; 2001

[39] Novins DK, Beals J, Moore LA, Spicer P, Manson SM. Use of biomedical services and traditional healing options among American Indians: Sociodemographic correlates, spirituality, and ethnic identity. Medical Care. 2004;**42**:670-679

[40] Makhubu N. SABS Urged to Standardize Traditional Cures. Available from: http://www.iol.co.za/news/special-features/the-zuma-era/sabs-urged-to-standardise-traditional-cures-1.1161993#.U-h5TvldV8E [Accessed: 08 July 2014]

[41] Freeman M, Motsei M. Planning health care in South Africa: Is there a role of traditional healers? Social Science & Medicine. 1992;**34**(11):1183-1190

[42] Madiba SE. Are biomedicine health practitioners ready to collaborate with Traditional health practitioners in HIV and AIDS Care in Tutume sub District of Botswana? African Journal of Traditional, Complementary, and Alternative Medicines. 2010;**7**(3):219-224

[43] Flint AG, Payne JR. Reconciling the irreconcilable? HIV/AIDS and the potential for middle ground between the traditional and biomedical healthcare sectors in South Africa. Forum for Development Studies. 2013;**40**:47-68

[44] Flint AG. Traditional healing, biomedicine and the treatment of HIV/AIDS: Contrasting south African and native American experiences. International Journal of Environmental Research and Public Health. 2015;**12**(4):4321-4339

[45] O'Brien S, Broom A. HIV in (and out of) the clinic: Biomedicine, traditional medicine and spiritual healing in Harare. SAHARA-J. 2014;**11**:94-104

[46] World Health Organization (WHO). Promoting the Role of Traditional Medicine in Health Systems: A Strategy for the African Region 2001-2010. Harare: World Health Organization; 2000

[47] WHO. The WHO Traditional Medicine Strategy: 2014-2023. Geneva.; 2013

[48] Bodeker G. Complementary medicine and evidence. Annals of the Academy of Medicine, Singapore. 2000;**29**:3-6

[49] Stuttaford M, Al Makhamreh S, Coomans F, Harrington J, Himonga C, Hundt GL. The Right to the Traditional Health Practitioners Act, Act 22 of 2007. Pretoria, Republic of South Africa: Government Printers; 2007

[50] Petersen I, Baillie K, Bhana A. Understanding the benefits and challenges of community engagement in the development of community mental health services for common mental disorders: Lessons from a case study in a rural south African subdistrict site. Transcultural Psychiatry. 2012;**49**:418-437

[51] Davies JN. The development of scientific medicine in the African kingdom of Bunyoro-Kitara. Medical History. 1959;**3**(1):47-57. DOI: 10.1017/s0025727300024248

[52] Felkin RW. Notes on labour in Central Africa. Edinburgh Medical Journal. 1884;**29**(10):922-930

[53] Meetings of Societies. Edinburgh Medical Journal. 1884;**29**(9):833-843

[54] Wilson S. Research Is Ceremony: Indigenous Research Methods. Manitoba, Canada: Fernwood; 2008

[55] Henneman HA, Lee JL, Cohen JI. Collaboration: A concept analysis. Journal of Advanced Nursing. 1995;**21**:103-109

[56] Campbell-Hall V, Petersen I, Bhana A, Mjadu S, Hosegood V, Flisher AJ. Collaboration between traditional practitioners and primary health care staff in South Africa: Developing a workable partnership for community mental health services. Transcultural Psychiatry. 2010;**47**(4):610-628

[57] Liverpool J, Alexander R, Johnson M, Ebba EK, Francis S, Liverpool C. Western medicine and traditional healers: Partners in the fight against HIV/AIDS. Journal of the National Medical Association. 2004;**96**(6):822-825

[58] Kayombo EJ, Uiso FC, Mbwambo ZH, Mahunnah RL, Moshi MJ, Mgonda YH. Experience of initiating collaboration of traditional healers in managing HIV and AIDS in Tanzania. Journal of Ethnobiology and Ethnomedicine. 2007;**3**:6-10

[59] Gqaleni N, Hlongwane T, Khondo C, Mbatha M, Mhlongo S. Biomedical and Traditional Healing Collaboration on HIV and AIDS in KwaZulu-Natal, South Africa. Vol. 2. Universitas Forum; 2011. Available from: http://www.universitasforum.org/index.php/ojs/article/view/62/240 [Accessed: 08 June 2014]

[60] Jernigan VB, Jacob T, Tribal Community Research Team, Styne D. The adaptation and implementation of a community-based participatory research curriculum to build tribal research capacity. American Journal of Public Health. 2015;**105**(Suppl 3): S424-S432

[61] Schrage M. Shared Minds: The New Technologies of Collaboration. USA: Random House; 1990

[62] Smith LT. Decolonizing Methodologies: Research and Indigenous Peoples. 2nd ed. United Kingdom: Zed Books Ltd; 2012

[63] Vogel V. American Indian Medicine. Norman, OK, USA: University of Oklahoma Press; 1970