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## RESEARCH ARTICLE

## The Efficacy of Indigenous Knowledge in Scaling up HIV/AIDS Treatment-Practices and Challenges: The Case of Zimbabwe.

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### Abstract

The HIV/AIDS pandemic has plagued the world for over three decades and ARVs have emerged as the only form of treatment available offering longevity to those infected. The positive picture presented by ARV therapy is however, not a reality in resource poor countries like Zimbabwe. ARV costs and the diagnostics that go with them are beyond the reach of many. The paper notes that traditional medicines remain dominant in Africa and they remain a primary source of treatment not only because of financial reasons but also because of socio-cultural beliefs. The paper explores the usefulness of indigenous medicinal knowledge in treating HIV/AIDS and related ailments in Zimbabwe. The paper's methodology is based on documents research. The paper concludes by highlighting that there is inconclusive information available regarding the efficacy of indigenous knowledge in treating and mitigating the impact of HIV/AIDS and therefore advocates for further research.

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## Introduction

Over three decades have passed since HIV/AIDS was first discovered by the USA CDC's Morbidity and Mortality Weekly Report of 5 June 1981 which is acknowledged as the first published scientific account of what we now know as HIV and AIDS. This was after the CDC described unusual cases of pneumonia and Kaposi Sarcoma in five young men in Los Angeles. Africa like the rest of the world was unprepared for the emergence of the pandemic. Africa like the rest of the world was unprepared for the emergence of HIV/AIDS. According to Jackson (2002) almost three quarters of adults and children living with HIV/AIDS are in sub Saharan Africa and as such it is considered the greatest threat to socio-economic development in the region as the majority of the 40.3 million people with HIV/AIDS belong to the productive age and sixty percent of those infected are in sub Saharan Africa and Zimbabwe included.

The advent of antiretroviral (ARVs) treatment has presented the greatest opportunity for treatment. The positive picture presented by ARV therapy is however, not a reality in resource poor countries like Zimbabwe. ARV costs and the diagnostics that go with them are beyond the reach of many. Despite the technological advances that have occurred over the years traditional medicines remain dominant especially in Africa. Indigenous medicines remain a primary source of treatment in Africa not only because of financial reasons but also because of socio-cultural beliefs. Indigenous medicinal knowledge has come in as an alternative form of therapy to support the conventional health delivery system which is failing to cope due to limited resources. The discussion examines the usefulness of indigenous medicinal knowledge and the use of foreign indigenous medicines in Zimbabwe in treating HIV/AIDS and related ailments. Focus will also be given to the controversy and mystery surrounding indigenous medicines, uncovering associated challenges in an effort to come up with relevant recommendations.

## Background of the Study

According to the UNAIDS (2002:27) report on the global AIDS epidemic, “Sub-Saharan Africa has just over ten percent of the world’s population but is home to close to two-thirds of PLHWA. In 2003 alone, an estimated 3million people in the region became newly infected. In Zimbabwe two thousand new infections are recorded each day while about three thousand people die each week” It is also estimated that AIDS related deaths claim over three thousand lives weekly while life expectancy has declined by almost 50% from about 65years to just over 30years. (Hamadziripi, 2005:14). Currently, over 340 000 PLWH are in urgent need of ART (CD4 200); 593 168 are in need of ART (CD4 350), with only 259 000 people accessing ART including 10,000 from the private sector. This means that of the people needing treatment, only 44% are able to obtain the necessary treatment. (SAFAIDS 2010)

There are only approximately 54 CD4 counting machines in the whole of Zimbabwe covering over 200 health centres. Thus machines to perform viral loads and facilitating other supportive tests are limited making the rolling out of ART a challenge. These machines are mainly concentrated in urban areas where they fail again to meet demand. The health infrastructure is limited in terms of technical skills and equipment. Scaling up treatment in Zimbabwe is indeed a challenge owing to financial constraints, a dwindling donor support owing to donor fatigue and a health delivery system that is in ruins. It is apparent that the scaling up of treatment as applied in developed world cannot be applied strait jacketed and misguidedly in developing nations like Zimbabwe because of the resource challenges cited. Indigenous knowledge may take a pivotal role in scaling up treatment especially taking cognisance of the popularity of traditional healers and indigenous medicines. Whilst culture has been viewed as the purveyor of the pandemic in the past it can now be seen as part of the solution in scaling up treatment through indigenous knowledge utilisation and not be viewed as of the part of the problem.

The HIV and AIDS pandemic has reached every corner of the country from the marginalised rural communities to the highly accessible and developed cities where unprotected, highly risky commercial and casual sex predominates. The impact of HIV and AIDS is being felt in all sectors of the society, especially in the areas of food security, education, labour market and health. It is estimated that a loss of 13.32% in GDP occurred as a result of HIV. Indications are that in Zimbabwe, if unchecked HIV would reduce GDP and discourage foreign and domestic investment. (Hamadziripi 2005:14)

In light of these challenges, the need to scale up treatment of HIV and AIDS has never been this apparent and imminent. Zimbabwe has been able to go through the challenges of treatment by declaring HIV and AIDS a national disaster paving the way for the local production of ARVs by local pharmaceutical companies like CAPS and Varichem, but the challenges of lack of funding and inadequate resources have ensured that production falls bellow demand requirements and resulting in the prices of the life saving drugs being too exorbitant for the market to bear.

This has necessitated that a holistic approach to providing HIV and AIDS treatment through conventional and alternative therapy be adopted in order to enable greater access to treatment, care and support as the health delivery system is over burdened. To this end it is necessary to explore which alternative indigenous knowledge remedies have been useful and to explore other new possibilities in order to encourage and promote their use in providing treatment effectively as an alternative to ART.

The government of Zimbabwe like most resource poor nations has realised the potential that lies within the local indigenous knowledge system and has followed into the footsteps of fellow African states like Zambia which started research into traditional medicines around over five years ago by injecting an initial US \$56 000. In Zimbabwe hospitals such as Nyadire Hospital, Nhowe Mission Hospital, All Souls Mission Hospital and an organisation known as ‘The Centre’ have been some of the leading advocates for HIV treatment through alternative therapy and with the majority of its members being PLHWA. The centre has been greatly involved in the treatment of HIV using alternative therapy from within the country as well as foreign alternative therapy have been some of the notable forms of best practice into the establishment of a holistic approach in scaling up treatment for HIV/AIDS related ailments as they have set up herbal gardens to promote the adoption of indigenous medicines.

## **Statement of the problem**

The use of alternative therapy in the prevention and treatment of HIV/AIDS in Zimbabwe and the world over has been shrouded in controversy and mystery. This paper seeks to understand the pros and cons associated with indigenous knowledge such as herbal therapy in treating HIV/AIDS and more specifically in documenting the successes and failure associated with it. So that the information gathered may be used to scale up treatment of PLWHA and reduce infection rates, integrating alternative therapy with conventional health services and coming up with recommendations to enhance HIV/AIDS treatment through the use of indigenous knowledge.

## **Research Questions**

1. To what extent does indigenous knowledge enhance the scaling up of HIV/AIDS treatment?
2. How can indigenous knowledge contribute to HIV/AIDS treatment?
3. What are the challenges associated with alternative treatment?
4. To what extent and what forms of alternative therapy are being used in Zimbabwe?

## **Methodology**

The paper is based on documents research. This was necessitated by the fact that in conducting documentary research one can get access to information that would be difficult to get in any other way, such as people or cases who might not be willing to talk in a formal research interview or might be difficult to track down (Creswell, 2007; Mertens, 2005). Documents eliminate the researcher effect. Documents also often make possible the collection of data over a longer period of time as well as larger samples than might be collected from other research tools. Using documents is relatively cheap particularly when the documents are easily accessible and already located in one's workplace, or on the internet. However, the method has its own short comings in that the information recorded may be incomplete. Also there may be information that is available for one period of time and not another.

## **Literature Review**

### **Negative prevalent views on culture and Indigenous knowledge**

In most developing nations especially those in Africa and Zimbabwe included, culture has for a long time been largely considered to be reflected in cultural products such as music, dance and drama. It is largely perceived as a past that is of limited relevance to our current concerns. Frequently western norms of 'modernisation' are adopted which rarely take into account indigenous knowledge. Such worldviews are ascribed a high status and to a large extent still remain as the dominant ideology from a local and global perspective.

Culture is largely considered as being part of the problem rather than part of the solution in relation to HIV and AIDS. There have thus been numerous development interventions in the area of HIV and AIDS but rarely do these adopt a 'culturally aware attitude' or harness culture as a means to make these initiatives sustainable and acceptable. To this end systematic complementary cultural approaches must be adopted by the 're-invention' of bad cultural practices in order to avoid its harmful effects but keep its positive aspects such as the recognition of indigenous medicines in the treatment of HIV and AIDS related ailments.

Three processes which are significantly affecting the continuation and validity of Indigenous Knowledge (IK) in local communities are: (1) the cultural discrimination of indigenous knowledge by the mainstream dominant culture as indigenous people feel inferior, as they are perceived as inferior by outsiders, who provide continuing stereotypes, (2) the disregard for traditional rights, culture and livelihoods by the nation state, both developing and developed, which tries to assimilate peoples of different ethnicity and conserve nature to the detriment of local people. For instance up until a few years ago a letter from a traditional healer was not regarded as evidence enough to warrant absence from duty owing to sickness. Even now after the official recognition of the role of traditional healers in providing health services very few individuals are "brave enough" to present documentation from a traditional healer as proof that they consulted health services for health ailments and (3) the growing globalization of markets and appropriation of local resources and knowledge by outsiders and ideologies offering a uniform and so-called superior Western ideal of urban and subordinate rural life.

In contrast to the negative views about culture and cultural elements such as medicinal indigenous knowledge it should be noted that culture offers a variety of opportunities, rather than solely a constraint, in the fight against HIV and AIDS not only in Zimbabwe but in most of the developing world and including the developed world. Thus cultural resources can be used to good effect in aspects of HIV/AIDS management and prevention, as they emphasize values and frames of reference that resonate with the population and are therefore accessible and sustainable.

It is important to note that a cultural approach which encompasses the use of indigenous knowledge in tackling the challenge posed by HIV and AIDS requires a critical questioning of current approaches and a deliberate and conscious attempt to relate to the cultural context through research and learning. This necessitates research into the various medicinal remedies which are yet to be subjected to scientific clinical analysis to authenticate their efficacy. This cultural context should be considered as both a source of knowledge and a holistic tool, as it is more than a mere communication vehicle as is often the view that dominates global discourses and scientific models that inform most development programmes.

Such an approach should lead to a number of reactions, including the need to see culture with different lenses altogether. So that culture along with all its elements including indigenous knowledge is perceived as being dynamic rather than fossilized in the past. This would make it easy for resource poor nations like Zimbabwe to incorporate indigenous knowledge and also include a cultural dimension in our HIV and AIDS intervention programmes in order to support research and learning activities and sufficiently ascertain the efficacy of indigenous remedies in treating various ailments including HIV and AIDS. Thus there has to be a paradigm shift from studies that focus on the negative aspects of culture to those that acknowledge the indigenous medicinal remedies that work— there is a need therefore for a balance. This would ensure that traditional bodies like ZINATHA are given priority to facilitate funding for research to enable the authenticity of various traditional medicinal remedies to be verified so that traditional healers are not defined as an ‘escape route’.

#### **The characteristics and the importance attached to indigenous knowledge**

Indigenous knowledge provides the basis for problem-solving strategies for local communities, especially for the poor more so for those in marginalized rural communities of the developing world. Indigenous knowledge in all its various forms of preservation and conservation techniques and indigenous medicines represents an important component of global knowledge on development issues though it remains to a large extent an underutilized resource in the development process. Learning from IK, by investigating first what local communities know and have, can improve understanding of local conditions and provide a productive context for activities designed to help the communities. Understanding IK can increase responsiveness to clients. Adapting international practices to the local setting can help improve the impact and sustainability of development assistance especially with regards to health matters. Sharing IK within and across communities can help enhance cross-cultural understanding and promote the cultural dimension of development. Most importantly, investing in the exchange of IK and its integration into the assistance programs such as those of the World Bank and other humanitarian development partners can help to reduce poverty.

Since medicinal plants are the main, often only source of traditional medicine for the rural population and are of high demand in the health care systems of this population when compared to modern medicine, ethno medicine activities need special consideration and back-up (Abbiw 1996). This is partly because modern medicinal services are either unaffordable or unavailable to the vast majority of local people due to their skyrocketing cost coupled with lack of transport to commute to and from health care centers. Often in health centres in rural areas of most developing nations are in most cases located a long distance away from where people live and transport to the health centres is scarce, unreliable and very often beyond the financial means of the impoverished majority.

Since time immemorial, traditional medicine has played crucial role in combating multiple and complex health conditions affecting the Zimbabwean people. Like in most developing nations it was the only system available for healthcare prior to the introduction of modern medicine for prevention, diagnosis and treatment of social, mental and physical illness (Dawit 1986). Herbal remedies are part and parcel of the entire system of traditional medicine which in turn is part of the indigenous knowledge system. The use of plant extracts or active substances is generally believed to constitute the major part of the therapy in this system. In a study conducted by Dawit and Ahadu (1993)

in northern Ethiopia the findings showed that a major portion (87%) of the parts used in traditional medicine came from plant sources, while animal parts and minerals contribute only a small supply.

Apart from their use in the traditional system of medical care at the local level, medicinal plants are currently used in the production of modern drugs as a source of direct therapeutic agents, as raw materials for the manufacture of complex semi synthetic compounds and as taxonomic markers in the search for new compounds (WHO 1998). Reports indicate that more than 35,000 plant species are being used around the globe for medicinal purposes (Lewington 1993) and, in developing nations like Ethiopia an estimate of 800 or so plant species are used as medicinal agents (Abbiw 1996). WHO (2002) concurs with this and estimates that the majority of the citizens in developing countries (80% of the population in Africa) primarily rely on traditional medicinal plant for their healthcare. In spite of this, natural products/drugs isolated from only 40 plant species have been incorporated into modern medicine (WHO 1998). These products include very important therapeutic categories such as antiseptics, steroids, quinine and artemisinin. These few examples are adequate to prove not only how modern drug delivery depends on the continuing availability of plant resources but also to explain why the international pharmaceutical industry has rediscovered the fundamental role that medicinal plants could and possibly should play in the development of safe and effective therapeutic agents (Farnsworth 1985).

### **Towards a new perception of culture: an avenue for the use and exploitation of Indigenous knowledge**

Noting the pivotal role played by culture and cultural commodities such as medicinal indigenous remedies should trigger us to have “*a new way to look at culture and its cultural products*” in the form of indigenous medicines. This enables the identification of indigenous medicines as a positive and potent resource as well as “*a good weapon in the fight against HIV/AIDS*”. To add impetus to the role of indigenous knowledge is the recognition that culture is a key component in HIV/AIDS prevention since it is part of “*the fibre that weaves society together*”. It is therefore imperative that we emphasize the positive aspects of our culture in our work on HIV related matters including health issues rather than focusing much more on the negative ones. This enables harnessing of all traditional medicines towards the treatment of HIV/AIDS and other health ailments. A “cultural approach” has many advantages, as it is cheap as well as effective as it derived from practice and it is easily sustainable since it depends on resources found within the community’s natural environment— whether there is donor funding or not. Such a cultural approach should not be ad hoc but should be incorporated consciously based on vast investment in research and documentation on indigenous knowledge especially indigenous medicinal knowledge. The cultural approach should also be included in the strategic plan at a national level and also the Parliament should be involved in moving this agenda forward.

Indigenous medicinal knowledge also needs to be transmitted. This could take several forms: thus, herbalists should train their children so that indigenous knowledge survives and the government and civil society could chip in by developing a curriculum for traditional healers in handling HIV/AIDS; education institutions and centres of worship could also pass messages about the positive role of culture and indigenous knowledge in mitigating the impact of HIV/AIDS through treatment and prevention strategies and IEC materials could be produced on medicinal plants in relation to HIV/AIDS. Resource centres and libraries could also be used as custodians and repositories in line with their mandate of preserving and transmitting cultural products from generation to generation. This could involve establishing a section on culture within university libraries and public libraries or in language resource centres.

### **Herbal medication and its use in Health Care Services**

To the majority of rural populations in developing countries, medicinal plants are a precious resource. This is especially true in Africa where more than 80% of the population relies upon medicinal plants for health care. Because of paltry incomes, limited modern conventional health infrastructures and a strong and vibrant traditional customs, medicinal plants are a major health resource (<http://www.oau-oua.org/Lusaka/index.htm>). Traditional medicines are an important component of the health care system in Zimbabwe and in most African countries though this is rarely formally acknowledged. According to the WHO (1998) report for instance, 90% of the Ethiopian population use traditional medicine for their primary health care needs. Such a wide use of traditional medicine shows that the Ethiopia Study on HIV/AIDS and the Environment highlights the contribution of the indigenous knowledge resources to the enhancement of the health care needs of the Ethiopian population and never be underestimated. However it should be noted that this is reflective of most African states including Zimbabwe. Traditional health practitioners in most African countries command great respect especially in the rural communities where there is a close adherence to traditional customs and values, there is also a great abundance of traditional



plants in the vast virgin forests. There is a difference in the major cities and the urbanized African communities where urbanization has overseen the distraction of medicinal plants and the thrill and exposure to modernization has resulted in the adoption of modern cultural values which are purely western in orientation. Some have argued this has resulted in the denigration of indigenous knowledge systems and also its commodification. Traditional medicine use in urban African societies is often shrouded in secrecy as most fear the negative stereotypes associated with it. However, traditional herbal medicines still remain and are often the first line of care, and as they are more widely distributed than modern and conventional health care services. The studies on the prevalence of herbal drugs use, in Addis Ababa, the capital city of Ethiopia for example was discovered to be 37%. The main reasons given for choosing herbal medicine as the first option of medication were: dissatisfaction with the services of modern health institutions due to their time consuming nature, cost considerations and perceived efficacy (Gedif and Hah, 2002).

Many local and traditional communities in most African countries rarely conserve medicinal plants in home gardens. *“The stock of medicinal plants continues to decrease at an alarming rate due to environmental degradation and human activity. And the knowledge passed down from one generation to the next is disappearing as fast as the precious plant varieties,”* points out Dr. Davy, a biologist. Deforestation to meet agricultural and domestic energy needs, the increased use of these plants in traditional medicine, inappropriate harvesting methods, commercialization and a growing demand on the market are all factors that threaten the sustainability of this biodiversity. *“And we know to what extent Africa needs these resources to meet its numerous health care challenges – malaria and AIDS to name only two,”* he pointed out (<http://www.oau-oua.org/Lusaka/index.htm>). Cultural preference and the high cost and unavailability and erratic supply of anti-HIV drugs for PLWHAs in the developing world lead many to turn to traditional medicine to manage HIV/AIDS-related illnesses. Traditional health practitioners can play an important role in delivering AIDS prevention messages and offer treatment for opportunistic infections (Bodeker 2006). In addition to patient safety issues since the efficacy of most herbal remedies has not been scientifically proven, there is the risk that a growing herbal market and its great commercial benefit might pose a threat to biodiversity through the over harvesting of the raw material for herbal medicines and other natural health care products. These practices, if not controlled, may lead to the extinction of endangered species and the destruction of natural habitats and resources (WHO, 2003).

Zimbabwe like most developing nations has a flora that is extremely rich in its diversity. It is therefore not surprising that some of these plants have chemical compounds of therapeutic value that may be used in the treatment of major diseases such as HIV/AIDS, malaria, cancer, etc (Urga *et al.*, 2004). The use of traditional medicine is still wide spread in Zimbabwe, and its acceptability, availability and popularity is no doubt as the majority of the population uses it for health care needs (WHO, 2002). According to Sofowora (1982), about 65-85% of the populations in every country of the developing world rely on traditional medicine because of lack of certain infrastructures like hospitals and health centers. It is also reported by Abbiw (1996) that traditional medicines are safe and with little or no side effects. The utilization of plants in the healthcare system was established as the principal means of treating various illnesses before the development of western drugs (Dawit 1986). In Africa including Zimbabwe, using traditional medicinal plants is common and this forms the backbone of traditional medicine. According to Balick and Cox (1996), the majority of the developing countries depend on traditional medicinal plants for their healthcare. This global utilization of medicinal plants has considerably increased in the last two decades (Dawit 2001). In developing countries leaning to and favoring traditional medicinal plants is mainly due to inaccessibility of modern medical system, economic and cultural factors (Abbiw 1996). According to Konno (2004), easy accessibility, efficacy on treatment and affordable cost in getting health services are the major reasons in the popularity of traditional medicine compared to modern medication. Countries like China, Pakistan, India and Vietnam, most of them developing nations, have identified potential usage of plant medicine and incorporated them into their overall health care system (Mirgisa 1996). Among African countries, Ethiopia is one of the countries which has about 60% of its indigenous plants which are believed to have healing potential (Bannerman 1983).

Munodawafa-Taderera (2011), sought to investigate and scientifically validate claims made by traditional healers on the healing properties of various plants. These plants are also believed to heal diseases such as syphilis, gonorrhoea and diabetes, among others. Munodawafa-Taderera (2011) undertook a study entitled ‘Anti-microbial and Phytochemical Screening of some Zimbabwean medicinal plants’ healing properties’. The study involved the testing of active ingredients from plant extracts against bacteria and fungi. The researcher worked with traditional healers from the provinces of Manicaland and Matebeleland in Zimbabwe; and they collected various plant specimens. Various parts such as leaves, roots or barks of the following twelve medicinal plants were used in the

study: *Annona stenophylla* – muroro, *Clausena anisata* – Muvengahonye, *Dicoma anomala* – Chifumuro, *Erythrina abyssinica* – Munhimitimbi, *Holarrhena pubescens* – Muhatsu, *Lannea edulis* – Mutsombori, *Peltophorum Africanum* – Muzeze, *Pterocarpus angolensis* – Mubvamaropa, *Turrea nilotica* – Mukanfanyoka, *Vangueria infausta* – Mutsviru, *Ximenia caffra* – Munhengeni, and *Ziziphus mucronata* – Muchecheni.

Antimicrobial activity was tested against four bacteria and two fungal species, through the use of the agar diffusion method. It was noted that the largest zones of inhibition resulted from the plant extract *Pterocarpus angolensis*, (Mubvaropa), root against *Escherichia coli*. Researchers noted that the larger the zone of inhibition, the more potent the traditional medicine. Some of the plants investigated included the leaf part of the *Clausena anisata* Rutaceae (Muvengahonye), which is used to treat Diabetes, Rheumatism, Migraine headaches and worms; and the whole plant of the *Dicoma anomala*, Asteraceae (Chifumuro), which is used to treat stomach/abdominal pains, Colic, Diarrhea, Syphilis, Gonorrhoea, Sore throat, Colds and Coughs. All the plants in the study contained secondary metabolites which accumulate with time. Different classes of secondary metabolites are associated with treatment of certain ailments. For instance, if a plant contains saponins it can be speculated that it can be used as a laxative – that is, to induce bowel movement or to relieve constipation.

Each plant under investigation contained at least one chemical class of secondary metabolites. During the investigation, the researcher applied plant extracts on microorganisms associated with Gonorrhoea and saw that the growth of the microorganisms was inhibited. From these preliminary studies, it was concluded that claims made by the traditional healers with regards to the usefulness of plants investigated are true. The results were not surprising as 80% of the plant derived allopathic medicines in the modern pharmacopoeia, (book describing medicines and their uses), are used in the same way to treat the same ailments treated by traditional healers.

Though the research focus was not directed at the usefulness of the plants in treating HIV/AIDS related ailments the study did show the potential traditional medicines have in treating opportunistic infections that occur as a result of HIV infection. However the researcher did recommend further testing in mice before trying to test the efficacy of the plants in humans. The study does indicate the great potential that lies in traditional medicines with regards to HIV/AIDS treatment.

In the mid-1990s a clinical trial committee which comprised of medical experts, traditional herbalists and researchers was convened to oversee the trials of herbal remedies for patients with HIV. One hundred and twelve participants were involved in the trials from the period of October 1993 to November 1994, 66 males and 46 females. Their ages ranged from twenty to sixty six years. The aim of the trial was to measure the well being, including aspects to do with weight gain and CD4 cell counts. The results the researchers obtained were inconclusive as they acknowledged that “significant gaps” in research design including the absence of any control group that is a group with similar characteristics with the one which was studied but who did not receive herbal treatment. Three separate CD4 counts over the trial period were obtained from only twenty two of the initial 112 trial participants. There was some improvement which was registered for some of those who had a CD4 count of below 450 per ml. Patients reported feeling better, had gained a significant amount of weight and had also a higher self esteem.

However, in the absence of hard figures and more reliable methodology which include control groups it becomes difficult to assess how significant the results were. This is further exacerbated by the very small sample size which completed the full trial. All the same the trial was an indicator to the role that indigenous herbal remedies may play in the treatment of HIV/AIDS including improving the psychological well-being of HIV/AIDS patients (The Insider, 1995).

The Blair Research Institute in Harare has undertaken a series of trials and in 2001 it released a report entitled “Neuropsychiatric Aspects of HIV Disease Progression: Impact of Traditional Herbs on Adult Patients in Zimbabwe” The study which involved around 200 patients uncovered that herbal remedies suppressed suicidal thoughts among patients and lowered depression. Dr Chandiwana under whose directorship the trials were conducted conceived of the link between depression and immune suppression with the consequence that some herbs boost immunity. Dr Chandiwana went on to accept the importance of herbs in dealing with various opportunistic infections apart from reducing depression. Chandiwana (2001) warned that, “the healers are saying they are not experimenting (with herbs) but have the solution, but scientists need scientific evidence”

In Kampala, Uganda in the early 1990s six month trials on herbal remedies were conducted by a newly formed organization called THETA (Traditional and Modern Health Practitioners Together Against AIDS and other Diseases). The study focused on comparing health gains among patients treated with herbal remedies and those treated with modern drugs. The study involved 500 participants and three HIV-related symptoms were examined these included chronic wasting, chronic diarrhea and herpes zoster (shingles). The results showed similar success in the treatment of diarrhea and shingles by both herbs and modern medicine. However, there was no significant weight gain which was observed with both methods of treatment. The study reinforced the idea of mutual respect between indigenous traditional practitioners and modern medicine practitioners, thus helped in forging mutual support in the form of referrals rather than the antagonism, hostility, competitiveness and sentiments of distrust. (Kaleeba 2000) In another study in Uganda results showed that HIV patients who received herbal therapy for shingles improved quickly that those who received standard treatment with acyclovir (a drug used for the treatment of shingles) It is in recognition of such successes that the African Union declared 2001-2010 as the decade of African traditional medicine. Information at hand is inadequate to encourage the full adoption of indigenous traditional medicines as they are still some dangers involved. For instance some herbs obviate the way in which some ARVs work for example St John's Wort which interacts with the liver to change the way in which ARVs like protease inhibitors and non nucleoside reverse transcriptase inhibitors (NNRTIs) work. This is so because St John's wort is considered to be a highly active drug. (Desclaux 2004). This calls for extensive research into establishing more authentic, accurate and in depth knowledge as to which indigenous knowledge practices are useful in the treating HIV/AIDS. However, the preliminary studies conducted in Zimbabwe and Uganda prove that the claims of the usefulness of indigenous knowledge in HIV/AIDS treatment are not just phantom less claims but are based on some evidence which call for further research.

#### **The use of Local indigenous medicines and foreign indigenous knowledge in HIV/AIDS treatment**

Herbal therapies are medically active substances harvested from plants. They may come from any part of the plant but are most commonly made from leaves, barks, roots, seeds or flowers. They may be eaten, drunk, smoked, inhaled or applied to the skin. Murray (2004:20) postulated that "herbal medicines are often viewed as a balanced and moderate approach to healing. Pharmaceutical drugs derived from plants are made by isolating the chemicals that have a medical effect and concentrating them in medication. Herbal therapies on the other hand, contain all the chemical components of a plant, as they occur naturally" This important part of herbal medicine may explain why some herbs especially those used by experienced practitioners for centuries have not performed well in modern clinical trials when their active chemicals are isolated from the rest of the plant.

Herbal therapy is probably the most popular form of indigenous knowledge in use in Zimbabwe. This includes use of moringa which is renowned for its nutritional riches as it contains seven times the vitamin "C" in oranges, four times vitamin "A" in carrots, three times the potassium in bananas and two times the protein in yogurts. It is also composed of minerals such as vitamins A, B1, B2, B3, C, calcium, chromium, copper, magnesium, phosphorous, potassium, protein and zinc. Moringa's nutritional values are utilised for boosting the immune system of PLWHA and the various elements of the plant such as the bark, roots and leaves are used to treat various elements of Opportunistic Infections (OIs) as a result of HIV/AIDS.

Spector (2000:78) stated that "garlic treats cold, diuretic, antiseptic, aloe treats constipation, basil treats nausea and helps digestion and a mouth soar antiseptic while cloves helps with appetite and diarrhea" All these diseases or infections are OI's associated with HIV/AIDS. In light of the practical uses of herb therapy the government has set up herbal clinics and hospitals. It is estimated that there is one herbalist in every two hundred people hence the popularity of herbal therapy for treatment in the country including HIV/AIDS treatment.

Male circumcision has been readily noted to reduce significantly the possibilities of HIV/AIDS transmission according to initial studies conducted in Uganda. The rate of transmission is lowered hence a ray of hope is offered by this traditional practice which is popular among the Tonga and Kalanga and which has been around for centuries. The government has been promoting male circumcision on a wide scale and with most health centres such as clinics and major hospitals promoting and offering these services.

Foreign indigenous remedies have also been used in treating HIV/AIDS related ailments. It is very important to note that the division between indigenous and foreign indigenous remedies is increasingly becoming blurred especially with regards to herbal remedies. For instance the use of guava leaves to treat flu and colds is difficult to regard as



purely indigenous because the guava tree is an exotic tree but which is utilized by the locals for treatment, the guava might not have been used for treatment by the original owners of the tree. Which puts the question of ownership of such knowledge into perspective as to who owns that kind of knowledge and whether the knowledge is really indigenous?

Homeopathy involves the use of specialized remedies to treat the whole person rather than a diagnosed condition. Homeopathy remedies are chosen by matching the remedy to the unique physical, emotional and mental characteristics of the individual being treated. Hundreds of homeopathic remedies are available, and all are prepared from dilute extracts of animals, plant and mineral substances. Homeopathy is widely used in Europe, where a number of clinical trials have looked at homeopathic methods. In an article in the prestigious journal, "The Lancet", concluded that the effects of homeopathy could not be attributed to the placebo effect and urged further clinical study. Kaiser (2001:12) noted that "although some people living with HIV/AIDS use homeopathy to treat particular HIV related infections or symptoms, very little has been published about the experience of HIV positive people with homeopathy and few studies have examined the usefulness of homeopathy in HIV"

Despite the scanty information available, homeopathic combination remedies are sold in some drug and health food stores. These over the counter remedies are not matched carefully to specific symptoms instead, they contain combinations of different remedies that are most commonly prescribed for particular illnesses. Despite this broad spectrum approach, these remedies carry little risk of side effects because they are so dilute but the great danger remains that of using traditional drugs whose side effects are not well documented.

Traditional Chinese Medicine (TCM) is a complete medical system with its own unique philosophy, diagnostics and treatment methods. It has been popularized throughout the world and is a product of the Chinese indigenous knowledge and it forms an integral part of alternative therapy for HIV/AIDS treatment. Cohen (2001:3) observed that "the goal of TCM is to balance the yin (vital function) and the yang (vital essence). One analogy describes yang as the gear and yin as the grease that allows the gear to run smoothly. An Excess of yang leads to the consumption of yin and the formation of heat, much as a gear that works too hard burns away the grease and builds up" The balancing of yin and yang stabilizes a person's energy, otherwise known as qi (pronounced chee). The purpose of TCM is fu-zheng, which means to support the true or righteous qi to inhibit diseased qi from progressing. Acupuncture is a component of TCM widely used by PLWHA especially locally. It stimulates the flow of qi in specific organs or areas through the insertion of needles at the designated points on the body. The information relating to the use of TCM and other forms of indigenous foreign medicines has not trickled down to most of PLWHA in Zimbabwe and is mostly administered through private practitioners. However, acupuncture can be used to treat generalized symptoms such as fatigue, and maybe useful for localized symptoms such as neuropathy (tingling or burning sensation in the feet and hands) Neuropathy which maybe a side effect of ARVs treatment or a direct result of HIV infection, is notoriously hard to treat. Haitow (2003:18) observed that "although different approaches work for different individuals, many reports indicate that neuropathy symptoms and pain decrease for PLWHA who are treated with acupuncture".

Cassileth (2003:10) propound that "clinical trials have shown that acupuncture can reduce the symptoms of peripheral neuropathy in people with diabetes. However, in PLWHA peripheral neuropathy, clinical trials have not duplicated these results" He goes on further to state that acupuncture has also been used to stimulate the immune system. Although there have been no studies of this use in HIV disease, acupuncture has been shown to increase CD4+ cells in people with cancer. Anecdotal reports suggest that acupuncture maybe useful in the management of other conditions faced by PLWHA, including diarrhea and addictions.

### **The Controversies and Challenges confronting Indigenous Knowledge**

Some experts caution against any attempts to transfer IK because they believe: IK cannot or should not be exchanged across communities because it could be irrelevant or even harmful outside its original cultural context; "Western" science is incapable of appreciating traditional cultures; and that attempts to record, document and transfer IK could lead to the dis-empowerment of indigenous people. Sensitive approaches will, therefore, be needed to reduce the potential risk of dis-empowerment of local communities, without compromising the principle of global knowledge partnership for the benefit of all communities.

Many practitioners of traditional medicine widely use a large number of plants well known to them (Mesfin and Sebsebe 1992). Nevertheless, many are less cooperative to show their knowledge and skill in traditional medicines to others. According to Pankhurst (1990), the knowledge on medicinal plants and method of use circulated mainly among practitioners and the beneficiaries of such practice which are usually close family members. This has made the knowledge and skill on traditional medicinal plants and traditional medicine more hidden but less available to the public (Abbink 1995). Often traditional methods of treatment and other forms of indigenous knowledge go into spiritual and metaphysical realm which makes the scientific study, documentation and transfer difficult leading to the gradual erasure of indigenous knowledge. Thus indigenous knowledge is facing extinction.

### **Mapping the way forward towards the optimum utilisation of IKS**

The challenge is to strengthen indigenous knowledge as part of indigenous cultures and societies, thereby providing better livelihoods. Internally, this requires that indigenous communities are made aware of the dangers of inappropriate development as well as the value of IK. They should document their own knowledge, involve all generations in the protection of IK by influencing the education of their children, and organize themselves to protect their livelihoods against external impositions. They also need to experiment with innovations within their own knowledge system through their own experimentation, hold exchanges with other communities and engage in dialogue with open-minded scientists and other academics. Externally, the networks of indigenous peoples need to show the validity of their cultures and knowledge in a modern and global world and eliminate the arrogance of national and international decision-makers and outsiders, who have devalued and even persecuted indigenous knowledge.

### **Conclusions and Recommendations**

We should not shun our culture and the cultural products such as indigenous knowledge but rather “*we need to de-stigmatise culture, and use it in the fight against HIV*”. Cultural and indigenous medicinal knowledge resources present an “*immense opportunity*” a message to which Government and NGOs should listen to. This would help to de-commercialise the “HIV industry” and to move culture much higher on the national HIV/AIDS agenda, a responsibility for all of us, not just government or policy makers. This would move us in a more positive direction in which we harness our limited resources to sustainable projects in investing in the research of indigenous medicinal knowledge to establish their efficacy thereby providing cost effective and practical solutions posed by the HIV/AIDS scourge. This should lead to the documentation and preservation of indigenous knowledge, preventing its extinction to enable its use by future generations and protect the intellectual plunder of indigenous knowledge by outsiders, leading to the global appreciation of the role of indigenous knowledge in solving socio-economic challenges such as the treatment and prevention of HIV/AIDS.

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