Journal of Sustainable Development in Africa (Volume 9, No.2, 2007)

ISSN: 1520-5509

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The Role of Indigenous Medicinal Knowledge (IMK) in the Treatment of Ailments in Rural Zimbabwe: The Case of Mutirikwi Communal Lands.

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Abstract

The article explores the contribution of indigenous medicinal knowledge in the provision of health care in rural Zimbabwe. It argues and justifies that herbs have been discovered as the best solution to most diseases as compared to other medical knowledge in rural Zimbabwe. The article also traces the historical origins of the decline in the use of IMK. It analyses the colonial system and deeper contacts with the outside world specialized on Euro-centric ways of conservation. The paper concludes by making recommendations for improved or increased use of IMK.

Introduction

Plants have been used as a source of medicine by humanity since pre-historic times. Despite advances that have been made in modern scientific medicine, the majority of the people in the Third World countries continue to rely on traditional medicine for their health care needs. (Masocha 2002:7). Despite the importance of herbs in the provision of health care in most Third World countries, destruction of natural habitats has resulted in the depletion of numerous species. With this happening, indigenous knowledge that forms the cornerstone of traditional medicine is also under threat by modernization of indigenous cultures. In light of these problems, there is therefore need to have a written record of the contribution of IMK in the provision of health care in rural Zimbabwe. In assessing the contribution of IMK in the provision of health care in Mutirikwi, it should be noted that, there are also other factors that contribute to primary health care of the people. IMK has and remain another portion of a whole that is used by the people of Mutirikwi in treating various human ailments.

Historical Background to IMK

Since time immemorial, indigenous people in different parts of the world have depended on herbal medicine for their primary health care needs. While most people knew the medicinal and other values of plants, not everyone was a specialist in the art and science of ethno-medicine. (Farnsworth 1988:37).

WHO, according to Farnsworth (1988:93), estimates are that more than 80% of the population of developing countries rely on traditional medicines for their health requirements. 85% of the substances used in the traditional health delivery systems are plants extractives or their derivatives. (Sheldon: Vol 12:104). Today, traditional medicine continue to provide solutions to the health needs of poor people who cannot afford expensive drugs prescribed in clinics, hospitals and private health facilities.

Mutirikwi is composed of people with diverse beliefs when coming to curing of diseases is concerned. This is where IMK is contributing in the provision of health care. Out of 51 respondents worked with in carrying out the study, 5,88% were Diviner-healers, 5,88% birth attendants, 15,69% Herbalists and 72, 55% were ordinary people who pointed that they depend on the local clinic, the church and some of them said they use both traditional herbs and the local clinic.

The vegetation of Mutirikwi communal area is a savannah type and it varies spatially. This has enabled the health of he poor people since they were and are able to secure medicinal plants and could easily be collect them. (Chavhunduka: 1994: 38). The respondents during the research pointed that, even before Zimbabwe's colonization in the 1890s, the people of Mutirikwi's grand parents like elsewhere in Zimbabwe practically depended on herbal therapy to combat diseases that infected them. Mutirikwi respondents who were mostly women pointed that, with the high prices of Western medicine most them in the rural areas who could not afford relies on IMK that was passed on to them through their parents and grand parents. Traditional medicinal knowledge has remained a family specialization, handed down orally and kept without any written records. (Masocha: 2001: 2). The people of Mutirikwi pointed that; more often than not the clearance of forests for agriculture due to increasing population has resulted in indiscriminate cutting of both medicinal and non-medicinal plants. This has therefore led to the endangering of medicinal plants and the health of the people who cannot afford the high costs of modern medicine in most rural areas. (Chavhunduka: 1994: 38).

Conceptual Framework

The concept of IMK in Zimbabwe has been of great importance since time immemorial. This is because traditional herbs have been used to treat various human ailments. The knowledge has been treasured in the hearts and minds of the indigenous people, that is, it has been kept in great secrecy.

Cuna and Muxhlanga (1999: 42) have defined IMK as medicinal knowledge accumulated by local population over the years and that the knowledge encompasses the way in which people deal and manage their immediate environments. IMK is knowledge that the people in a given area have developed over time and continue to develop and is based on experience and adapted to the local culture and environments. (Masocha: 2002: 23). It should be noted that, this knowledge is in the form of skills, beliefs, value systems and concepts that are passed from one generation to the other. (Chavhunduka: 1998: 39). It is like inheritance because those who are left to live are the ones who continue to posses the knowledge.

In addition, the concept of IMK has been associated with terms like disease, medicine, treatment and medicinal plant. The use of traditional herbs in providing health care in rural areas is as important as doctors sometimes tell patients what kinds of food they should take or not when ill. Traditional knowledgeable people have a view that this is similar to the way they administer medicines in their communities. (Koro: 2005: 37

Justification of IMK

In relation to IMK, it should be noted that there have been various threats associated with the occurrence and development of IMK. In Africa in general and Zimbabwe in particular, the availability of IMK has been threatened by various factors. There is what is called bio-piracy. According to Watt, IMK has been threatened by bio-piracy which is a process whereby external researchers, pharmaceutical companies and food companies get into a community and collect information about the community's livelihoods, indigenous knowledge and health care systems without the community's consent. (Watt: 1932: 104). The information and products are used outside the community for commercial purposes. In other words, the system robs communities of their knowledge and products they nurtured and developed over the years. According to Chitsike, the Turmeric Orange Roots used by the Indian communities to treat wounds was taken to the United States of America by an American researcher in 1995. (Chitsike: 2000). In addition, the Devil's Claw (Harpagophytum procumbens) was collected by the German researcher from the

San people of Namibia since it was used for treating many diseases namely heart problems. (Koro: 2005: 9).

In addition, it should also be noted that threats to IMK or indigenous knowledge in general has been a problem not only in Zimbabwe or Africa but also in most developing countries. An Indian Newspaper in 2002 pointed that,

> *From the 17th Century, the Portuguese had encored off the Malabar Coast and were received with warmth by the Zamroin. After a few days, the palace guards rush breathlessly into the court, lit with alarm … your Majesty, the foreigners are on the hill slopes, uprooting pepper vines and carrying them to the ship. If they begin to grow these in the lands, we will lose our trade. (*Http//www.globalissues.org*)*

This has been followed by Vandama Shiva, who has pointed out that,

> *" Bio-piracy and patenting of indigenous knowledge is a double theft of creativity and innovation, and secondly the exclusive rights established by patents on stolen knowledge steal economic options of everyday survival on the basis of our indigenous bio-diversity and indigenous knowledge. Over time, the patents can be used to create monopolies and make everyday products highly priced*. (Ibid)

Outsiders have become increasingly aware of the value of IMK, which has however led to the exploitation of such knowledge from Third World Countries.

Not withstanding the fact that some knowledge is lost naturally as techniques and tools are modified or fall out of use, the recent and current rate of loss is accelerating because of the rapid population growth, growth of international markets, educational systems, environmental degradation and development process. (Grenier: 1998: 4)

Because of the effects of bio-piracy, many people who cannot afford expensive medicines are now forced to do so due to products that would have been brought back to them by Multi-National Corporations. MNCs like Monsanto Dupont and others have been investing into biotechnology in such a way that patents have been taken out on indigenous plants which have been used for generations by the local people, without their knowledge or consent. (Http//www.globalissues.org). Bio-piracy does not affect just India, much of Africa and Latin America are prowling grounds for First World's knowledge pirates. (Ibid).

Indigenous Medical Knowledge's existence has not only been threatened by bio-piracy but also by rapid population growth. Chavhunduka has noted that, the decrease in knowledge of medicinal plants is partly attributed to agricultural expansion and lack of interest in traditional medicine by

the youth. (Chavhunduka: 1994: 28). One school of thought has therefore pointed that, " Often due to in-migration or government relocation schemes in the case of large development projects, such as dams – standards of living may be compromised". (Grenier: 1998: 8). This is one good example of why IMK is becoming extinct or why some plants with medicinal value are now scarce.

The other danger that indigenous plants are facing is that of too much demand. One school of thought has therefore pointed that,

> *" Already urban dwellers are flocking to rural areas looking for herbs with nutritional and medicinal properties that suppress the impact of HIV/AIDS related illness… there has been over harvesting of the African Potato by the urban dwellers…"(*Koro: 2005: 33)

The traditional leaders interviewed said that indigenous plants played an important role in their daily socio-economic needs and that they are also sources of food for the communities, wherein lies the link between the nutritional and medicinal values of indigenous plants.

Emmanuel Koro has pointed that unscrupulous pharmaceutical companies have continued to make super profits from the illegal exploitation of indigenous knowledge that establishes the nutritional and medicinal values of indigenous plants without benefiting sources of that knowledge. (Ibid). That being the case, indigenous people will find that the only way to use their old-age knowledge is to buy back from the big corporations. Brazil has some of the richest biodiversity in the world, however large multinational corporations have already patented more than half of the known plant species. (Http//www.globalissues.org).

The developed world has put in place for themselves convenient patent laws as a system. The Trade Related Intellectual Property (TRIP) instrument as a stick and the World Trade Organization (WTO) as the enforcing authority, the First World is seeking to 'rob' the Third World. (Ibid). In opposition to these intentions:

> "Patents and intellectual property rights are supposed to prevent piracy. Instead they are becoming the instruments of pirating the common traditional knowledge from the poor of the Third World and making it the exclusive "property" of Western scientists and corporations". (Ibid).

Such a system has resulted in countries of the Third World being weak to defend themselves in cases of bio-piracy because of the ways these developed countries are using to patent traditional knowledge. Due to bio-piracy, a number of food ingredients and plants especially those with medicinal value have been or have seen attempts to be patented by various biotech firms.

Although so far there are no known cases of bio-piracy in Mutirikwi, one cannot dismiss its possible occurrence in the future as there are a variety of biodiversity products developed traditionally by the inhabitants of Mutirikwi communal area in the form of medicine, and traditional food. As a result, one school of thought has revealed that there are a lot of researches taking place in South East Zimbabwe and there are chances helpful products being used by communities may be further researched. (Koro: 2005: 20). This implies that access and benefit sharing arrangements should be made between the community and researchers to avoid bio-piracy

It is essential to realize that inspite of the threats to IMK, there is a lot that needs to be done to ensure that indigenous people and their communities have access to and benefit from biological resources around them and in this case the protection of indigenous medicinal knowledge. Berks argues that ecological wisdom enshrined in traditional resource management and production systems emphasizes the communities' respect, responsibility and accountability on the use of resources. (1998: 7). This implies therefore that researchers who patent indigenous knowledge should stop doing so and respect the communities to live with their knowledge without them manipulating the whole system.

Gus Le Breton Director - SAFIRE pointed out that,

> "Free of the shackles of colonialism, and ensconced within a global trading system that does at least provide some regulatory measures to ensure equitable benefit-sharing, we have the chance to use this explosion of interest as a mechanism towards the sustainable growth and development of our continent. But we also face risks far more subtle and insidious than we have ever faced before, and if we get it wrong, the costs could be very high indeed". (Gus Le Breton: 2001: 7).

This shows that the relationship could be nice but the effects of losing knowledge to other countries and buy it back negatively impact the states where the knowledge is being tapped.

The Centrality of the Indigenous Medicinal Knowledge

Githens (1949: 67) observed that in Africa there are over 14 000 drug plants but it is unfortunate that most of these species are vanishing at alarming rates. Though he talks of plants with medicinal value and how these have quickly vanished over the past years, he does not link IMK with poverty. Most of the people who use traditional medicine in rural areas are poor, that is, those who cannot pay for the expensive medicine prescribed in hospitals and private doctors. Though that may be the case, it should be noted that not only the poor use traditional medicine

for their health care but even some wealthy families can also access medicinal herbs through traditional healers and herbalists. The use of IMK in rural areas does not mean that it is inexpensive but it is because some of the diseases do not heal from medicine prescribed by doctors. Some get sick from witchcraft, something a doctor cannot cure but with the help of a traditional healer it can heal.

The contribution of IMK in the provision of health care in rural Zimbabwe has been revealed through traditional healing, local herbalists and in most cases women who have been left for the care of the family while their husbands will be away in towns searching for other means of survival different from those found in the rural areas. (Chavhunduka: 1998: 39). From a cultural perspective, people are comfortable with traditional medicine, are satisfied with the results and therefore many choose traditional medicine regardless of the existence of Western medicine. (Saruchera: 1999: 88). The contribution of IMK has therefore to a greater extent served the life of many poor people in rural areas who cannot afford expensive medicine. Marshall (1997: 63) has pointed out that, “Traditional medicine in Southern Africa is viewed as the most appropriate means of addressing certain problems, not necessarily of the same nature as those usually addressed by Western medicine.”

In assessing the contribution of IMK in the provision of health care in rural Zimbabwe, it should be noted that the quantity and quality of the knowledge greatly varies. It is dependent on age, education, gender, social and economic status, outside influences, roles and responsibilities in the home and community, profession, available time, intellectual capability, level of curiosity and observation skills, ability to travel and degree of autonomy and control over natural resources are some of the influencing factors. (Grenier: 1998: 2). In addition, according to Koro (2005: 38), the African Potato (hypoxis species) known as Nhindiri has been used by indigenous communities in Zimbabwe in treating various ailments and is now popular for its ability to relieve complications associated with HIV/AIDS pandemic. This implies that Zimbabwe has indeed great potential that needs to be unfold through research.

In an earlier survey of this study, 80% of the respondents indicated that the traditional healers who have monopolized IMK and kept it in great secrecy were now fewer than they used to be before. 20% felt that, the situation had not changed. No respondent said the traditional healers had increased in number. According to the researchers, the decrease of traditional medical practitioners may be attributed to the reduction in the number of medicinal plants in the fields due to agricultural expansion and partly due to lack of interest in traditional medicine by the youth. According to Bourdillon (2001: 92),

> " This lack of interest is attributed to current changes in the social structure and set-up in which the youth no longer interact effectively with the older members of the rural community".

This source of valuable data needs to be recorded and preserved in both written and electronic formats for the benefit of the present and future generations before it is lost for good. Due to the current socio-economic demands of Mutirikwi and the rest of Zimbabwe, the youth are constantly moving to attain formal education not conducive for the transfer of knowledge, which is held in great secrecy.

The people of Mutirikwi have demonstrated their knowledge about medicinal plants that are used to treat disorders of the digestive system. The majority of the respondents knew at least one plant of medicinal value that is used for diseases that affect various parts of the digestive system. One respondent, a woman pointed that,

> " Sometimes we can spend more than three years without visiting the local clinic. If the disease is very serious we visit a traditional healer who through his powers and the help of medicinal herbs helps us fight the disease".(M^{c}Neely: 1990: 63).

Though that is the case, it should be noted that there are some diseases inflicted on people through witchcraft that a traditional healer sometimes fail to cure.

Muriro (1999: 66) noted that, in almost all parts of rural Zimbabwe, there is a high increase of abdominal diseases due to poor water quality from unprotected water sources and sanitary conditions. With the knowledge of indigenous medicine people of Mutirikwi have over the years been able to combat most of the diseases that affect them. In other words, the contribution of IMK in the provision of health care for the people of Mutirikwi communal area has been greatly appreciated.

The table below shows medicinal plants in their botanical names, local names, the part used for treatment, the exact part and how these are prepared before being taken.

Table 1: Disorders of the Digestive System

Botanical Names	Local Name	Condition Treated	Part Used	Method of Administration	Preparation of Dose
Dicoma Anomala	Chifumuro	Stomach upset	Bulbous root	Oral	Crushed bulb is mixed with water and decoction is drunk
Catharanthus Roseus	Chirindamatongo	Stomach ache	Root	Oral	Roots are crushed, put in a cup of water and is drunk
	Njonjonjo	All sorts of abdominal pain	Bulbous root	Oral	The bulb is chewed and swallowed.
Ochna pulchra	Munimu	Stomach problems	Leaves	Oral	Chew leaves and swallow sap or crush leaves and mix with water. Drink the mixture twice a day
Rhus Dentata	Mubikasadza	Ulcers, diarrhea, all sorts of stomach problems	Leaves	Oral	Chew the leaves and swallow the sap.
Schkuhria pinnata	Ruhwahwa	Stomach pains	Whole plant	Oral	Whole plant is put in water and the decoction is drunk
Sonchus oleraceus	Rurimirwemombe	Ease stomach pains	Leaves	Oral	Take fresh leaves and crush them, put leaves in a cup of water and drink
Crossopteryx febrifuga	Mukomberwa	Dysentery, diarrhoea	Bark	Oral	Remove the bark from the eastern and western sides of the trunk, dry it and grind to powder and mix porridge and eat
Kirkia Acuminata	Mubvumira	Diarrhoea, cholera, dysentery, constipation	Bark	Oral	Bark is carefully removed from eastern and western sides of the trunk. It is either mixed with water and the decoction is drunk or it is dried to a powder and mixed with food.
Lannea edulis	Musambasi	diarrhoea	Bark of the roots	Oral	The bark of the thick underground root is dried and put in water. the mixture is then drunk

Indigofera setiflora	Ruvavashuro	Diarrhoea	Roots	Oral	Roots are crushed and put in a cup of water. The mixture is drunk after some time.
Psidium guajava	Mugwavha	Severe diarrhoea	Leaves	Oral or rectal	An infusion of crushed leaf is mixed with one liter of water and is taken either orally or as an enema.
	Marubhani	Prevent and treat cholera	Bulbous roots	Oral	The root is taken, dried and grind into a powder. A teaspoon of powder is mixed with food and eaten.
	Chimwazano	Constipation	Roots	Oral	A fresh root is taken, crushed and put in water for some time and the decoction is drunk.
Zingiber offinale	Tsangamidzi	Stomach pains	Root	Oral	Chew small piece of root and swallow.
Branchylaena rotunda	Mupasa	Ulcers	Leaves	Oral	Chew the leaves and swallow the juice three times a day.
Leonotis leonurus	Mutodzvo	Duodenal ulcers	Leaves	Oral	Take fresh leaves, chew them and swallow the sap.
Crossopteryx febrifuga	Mukomberwa	Bowel problems	Bark	Rectal	Dry the bark and dry it to a powder. Take a horn, put powder in the horn, insert it into the rectum and blow the medicine in the body.
Maytenus heterophylla	Chizuzu	Abdominal pain	Leaves	Oral	Chew the leaves and swallow the sap.
Hypoxis vigidula	Nhindiri	Whole body	Bulb	Oral	Chew a small piece of bulb and sallow the sap.

Source; The Herbarium and Botanic Garden of Zimbabwe and Interviews

A total of 19 medicinal have been found in this category of disease. Basing on how popular diseases of the digestive system were, the researcher inferred that probably these were the most common in the area given the fact that most villagers fetch water from unprotected water sources.

As in the table above, with the exception of Guajava and Mukomberwa, most plants are used to make remedies that are taken orally. Leaves, roots and bark were the most frequently used parts while the whole plant is rarely used. With the aid of medicinal plants to treat various diseases, the people of Mutirikwi have managed to keep their health in good condition. Because modern medicine is far beyond the reach of many people in rural areas, they have resorted to indigenous medical knowledge in case of bad health.

Diseases that are connected to the respiratory system were also found to be common in Mutirikwi communal area especially during winter. Respondents during the research fairly knew medicinal plants that are used in the treatment of diseases affecting the respiratory system. Zimbani (Lippia Javanica) was the most popularly used plant with medicinal value used to treat several diseases such as influenza, colds and bronchitis.

Commonly used species are shown in the table below:

Table 2: Respiratory System Disorders

Botanical Name	**Local Name**	**Condition Treated**	**Part Used**	**Method of Administration**	**Method of Preparation**
Lippia Javanica	Zimbani	Coughs, colds	Leaves and twigs	Oral	Leaves and twigs are boiled in water and the infusion is taken as tea
Myrothamnus flabellifolius	Rufandichimuka	Colds	Leaves and twigs	Oral	Boil them mixed and drink
Pelleae adiantaceae	Mudziwebwe	Chest pains	Leaves and roots	Inhalation	Leaves and roots are dried. The smoke is inhaled.
Vilex payos	Mutsvubvu	Colds	Leaves	Smoking	Dry the leaves and use them to make a cigarette and smoke them.
Coleochloa setiflora	Rufuri	Pneumonia	Root	Oral	Dry the roots grind to a fine powder
Aloe ferox	Gavakava	Tuberculo	Leaves	Oral	Leaves are crushed, put in water(1

		sis			Cup). The decoction is then drunk.
Syzygium cordatum	Mukute	Tuberculosis	Bark	Oral	The bark is stripped off from the eastern and western side of the trunk and crushed. It is put in water to make the decoction that is drunk
	Chimbwidi	Asthma	Root	Oral	Crush the roots and put them in water. This is then drunk slowly.
Dalbergia melanoxylon	Mugwiti	Asthma	Bark	Oral	Leaves are dried and used to make a cigarette that is smoked

Source; The Herbarium and Botanic Garden of Zimbabwe and Interviews

In this category of diseases, there are nine plants of medicinal value that have been found. As in the table above, the methods that are used to administer the medicine are inhalation, smoking, and oral.

In addition it should also be noted that this research also found out about medicinal herbs that are used to cure Sexually Transmitted Infections. Most respondents in Mutirikwi who contributed on medicine concerning these STIs were mostly herbalists and ordinary people. Because of unprotected sex and lack of knowledge in using protection when having sexual intercourse, some people have been affected by STIs. Many people in Mutirikwi Communal Area who get infected by such diseases do not visit local clinics because they cannot afford the costs and also because they are shy to reveal themselves to the nurses. That being the case, it has been unearthed by this research that such people do use medicinal herbs to treat themselves. One respondent pointed that,

> "We are the ones most affected by these diseases. We do not visit the local clinic not because it is far from the village but because there are local herbalists who know very well how to treat these Sexually Transmitted Infections. The local herbalists can ask me to buy only a few beers to treat the disease and I will be guaranteed that no one will know". (Interview 2006)

There is therefore need to collect such information before it is lost for good because it helps cater for the health of those promiscuous men and women who would have infected by such diseases.

Table 3: Sexually Transmitted Diseases

Botanical name	Local Name	Condition Treated	Part Used	Method of Administration	Method of Preparation
Acacia karroo	Muvunga	Gonorrhoea, syphilis, Aphrodisiac for men	Root	Oral	Clean roots with water and dry them. Crush the roots and mix in a 750ml bottle of water. Drink the decoction 3 times a day.
Androstachys johnsonii	Musimbiti	Aphrodisiac for men	Bulb	Oral	Take 4 bulbous roots, dry them and mix with a 750ml bottle with water. Drink decoction is drunk after 2 days.
Garciana huillensis	Mutunduru	Aphrodisiac for men	Fruits	Oral	Ripe fruits are eaten
Macaranga capensis	Musvosve	Aphrodisiac for men	Root	Oral	Take the roots, clean and dry them. Grind the roots to a powder and put them in a 750ml bottle with water. Drink the decoction or mix it with porridge.
Commiphora marlothii	Mupepe	Dropsy	Roots	Oral	Crush roots and mix them with water. Drink the decoction 3 times a day.
Entandoragma condatum	Mubanana	Genital Warts	Fruit Peels	Topical	Burn the peels of the fruit in a potsherd, mix with Vaseline and apply to genital area in the morning and in the evening before sleeping. Should be done after bathing.
Strychnos spinosa	Mutamba	Gonorrhea and Genital warts	Fruits	Topical	The unripe fruit is broken open, mixed with water and boiled. Allow the infusion to cool and apply to the genital area.
Spirostachys africana	Munhiti	Venereal infection	Roots	Oral	The root is dried and mixed with porridge.

Source; The Herbarium and Botanic Garden of Zimbabwe and Interviews

People of Mutirikwi because of the use of IMK have been able to continue with their life without using large amounts of money especially when infected by STIs. The people in the area respect each other and if one is treated of an STI, it will be a secret between the herbalist and the patient.

Furthermore, a lot of information has been revealed in as far as how IMK has been useful to the people of Mutirikwi Communal Area. Though poor, the people of the area have managed to survive the diseases that killed many people in different parts of Zimbabwe. Because of need to help each other in the community, the people of Mutirikwi have established good relations with each other though there are other cases where people have their differences and therefore do not get along with each other. The research also revealed some diseases that are specific to women and the plants with medicinal value that are used to treat these.

Women constituted 62.75% of the total respondents. This is number is high due to the fact that when someone is ill, s/he is left in the hands of women to take care of the patient. That being the case, most women in Mutirikwi have come to posses a lot of knowledge is as far as traditional medicine is concerned. It is therefore surprising that the list of plants found in this category is fairly large despite the fact that the interviewer was of the opposite sex.

Table 4: Diseases/ Conditions That Are Specific To Women

Botanical name	**Local Name**	**Condition treated**	**Part Used**	**Method of Administration**	**Method of Preparation**
Dicerocaryum zanguebarium	Ruredzo	Dilating birth canal	Whole plant	Topical	Partially crush the plant and put it in the dish with water and stir until enough foam is produced. Apply the foam on the hand, insert the foam into the vagina and turn it into a fist. Gently pull out the hand and repeat the exercise for several days.
Sanse viera	Saramhanda	To dilate the birth canal	Roots	Oral	Roots are peeled and cut into pieces. They are put into a 2litre water container and the decoction is drunk.
Garciania huillensis	Mutunduru	Reducing the size of the birth canal	Bark	Oral	Bark is removed from eastern and western sides of the trunk, crushed and put in water. The decoction is drunk for 2 weeks.
Lannea discolor	Mugan'acha	Reducing the duration of menstrual flow.	Fibre	Topical	Method is same as above
Fiscus fur	Muvonde	To increase milk yield	Fruit	Skin incisions	A pair of shallow incisions is made on the breasts with a new razor. The whitish juice that oozes out of the fruit is rubbed on.
	Chirovadunguru	Preventing miscarriage	Roots and leaves	Oral	Dried roots and leaves are mixed with water and the decoction is drunk.

Source; The Herbarium and Botanic Garden of Zimbabwe and Interviews

Most of the people who knew the diseases and the cure to it were mostly women who acted as birth attendants in Mutirikwi Communal Area. This gives the impression that midwives continue to play an important role in the health delivery system of the villagers of the area. Thus Indigenous Medical Knowledge in Mutirikwi is of great importance to the health of men, women and children in fighting many diseases that have affected the indigenous people. That being the case, it is of significance at this point to collect and document as much knowledge as possible before it is lost because of lack of interest of the younger generation.

In addition as to how IMK has contributed to the health of the people in Mutirikwi, there are other diseases that are specific to children. As regards children's diseases, women knew most of the plant species that cure diseases that are specific to children than men did. Evidence to this is the fact that although men had some knowledge about plants that are used to treat children's diseases, they could not identify the plants in the field. The explanation that came out of the interviews is that, it is the responsibility of women to look after children hence they tended h to have a higher cumulative body of knowledge than men.

Table 5: Diseases That Are Specific To Children

Botanical name	**Local Name**	**Condition Treated**	**Part Used**	**Method of Administration**	**Method of Preparation**
Adenia gummifera	Ndeveramumvuni	To prevent Kwashiorkor	Stem and Leaves	Oral	Fresh leaves are cooked to make vegetables or the stem is cut and put in a large clay pot. Children are given this water to drink regularly
Lannea edulis	Musambasi	Bilharziasis	Root	Oral	Clean the roots, crush them and put them in a cup of water. Give the child to drink after some time.
Salons delagoense	Nhundurwa	Scabies	Fruit	Bathing	The yellowish fruit is crushed and put in a dish with water. After some time the child is bathed with this water
Zea mays	Barwe	Mumps	Cobs	Topical	Burn 2 cobs with no grain partially and tie them around the neck of the child

Source; The Herbarium and Botanic Garden of Zimbabwe and Interviews

As in the table, different plants are used to treat diseases that affect children. It is however clear from the table that the whole plant is rarely used. When asked why the villagers use the whole plant less frequently, most respondents were quick to point out that the use of the entire plant results in the destruction of the plant so it is used when necessary only. Even in cases where they used the roots of the plant, they would make sure they cut some parts of the roots so as to leave the plants to survive for future use.

Other plants like Musambasi were now not easy to find and therefore sometimes villagers in Mutirikwi communal area were forced to visit the local clinic, which was a distance and needed some money. This has led to some of the villagers to do piece jobs in search for money to take their children to the local clinic in case the medicinal plant that is used to treat the disease has not been found.

The Future of IMK

There should be indigenous medicinal knowledge projects to assist rural communities to protect their rich knowledge on the functions of indigenous plants from being illegally acquired and patented by western pharmaceutical companies. It is unfortunate that in Zimbabwe such projects are not available to protect communities from keeping their knowledge in great secrecy like it has always been. To ensure sustainability and better management of the indigenous plants, these projects should focus on the traditional leaders' role in managing the harvesting and exploitation of the plants. Through traditional fares, workshops, and media publicity, awareness could be created in the communities on the best practices to manage and sustain indigenous medical knowledge not only in Zimbabwe but also in Africa and all other developing countries that have fallen prey to bio-piracy.

In addition, it should be noted that the current WTO patent agreement, TRIPs - Trade-Related Aspects of Intellectual Property Rights - has been very controversial in this respect for many developing countries who want to have it reviewed, but are being somewhat blocked by the wealthier nations from doing so. (http://www.globalissues.org) This has however led to the increase in robbing of developing countries of their plants that have medicinal value and that have helped provide health care for the local rural people since time immemorial.

Given all the threats to the conservation and development of indigenous knowledge, there is need to try and protect the knowledge of the local people's interests. This is because patents of plants with medicinal value have greatly increased and there is fear from the exploited countries that the knowledge they have kept for long will come to an end. This will cause a big problem in as far as

the provision of health care is concerned in rural areas. This is because it will be difficult to source the funds to buy expensive Western medicine.

Conclusion

In summation, in as far as the contribution of IMK in the provision of health care is concerned the study has found out that villagers had more knowledge about diseases that affect the digestive system than other disease categories. It is essential to conserve indigenous medical knowledge in every part of Zimbabwe because of its contribution in the provision of health care. There are people who go to church and others who visit clinics other than using traditional herbs. It has been found out that most of the people who are knowledgeable about plants with medicinal value were mostly women who were left in the care of especially children while their male counterparts are away for employment. Most of the people who were found using traditional medicines were the poor because of its availability and lower costs but there are some rich people who were found using them because some of the ailments would not have cured by Western medicine. It is essential to pass effective laws that govern the conservation and protection of IMK so as to avoid patenting of these plants by foreign pharmaceutical companies that will resell them back to the local people at much higher prices.

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