Africa: Solutions to Most Diseases Lie in the Forests of Africa - Nwakanma

By Ebele Orakpo

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Vanguard

Mr. Moses Ndubuisi Nwakanma, a botanist, geneticist and environmental biologist, is a lecturer in the Department of Biological Science, Yaba College of Technology, Lagos. In this chat with Vanguard Learning, Nwakanma whose interest is in medicinal plants like Moringa oleifera, called the Drumstick plant/tree of life or Miracle tree, Vernonia amygdalina (bitter leaf) and guava, says if we understand plants, we will be happier in our health.

'If doctors go on strike as they did some time ago and you require medical attention, if you understand plants, it will not catch you off guard, but if you don't, and you rely solely on orthodox medicine, it will be a problem, so that is why I concentrate on studying medicinal plants.'

Excerpts: According to Nwakanma who has worked extensively on moringa, bitterleaf and guava, moringa

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What is the African Traditional Herbal Research Clinic?

Nakato Lewis

Blackherbals at the Source of the Nile, UG Ltd.

The African Traditional Herbal Research Clinic located in Ntinda, Uganda is a modern clinic facility established to create a model space whereby indigenous herbal practitioners and healers can upgrade and update their skills through training and certification and respond to common diseases using African healing methods and traditions in a modern clinical environment.

Traditional healers are the major health labor resource in Africa as a whole. In Uganda, indigenous traditional healers are the only source of health services for the majority of the population. An estimated 80% of the population receives its health education and health care from practitioners of traditional medicine. They are knowledgeable of the culture, the local languages and local traditions. Our purpose is to raise public awareness and understanding on the value of African traditional herbal medicine and other healing practices in today’s world.

The Clinic is open and operational. Some of the services we offer are African herbal medicine, reflexology, acupressure, hot and cold hydrotherapy, body massage, herbal tonics, patient counseling, blood pressure checks, urine testing (sugar), and nutritional profiles. We believe in spirit, mind and body. Spiritual counseling upon request. Visit us also at www.Blackherbals.com

Hours: 10:00 am to 6:00 pm Monday thru Friday Saturday by Appointment, Sundays – Closed
can be used against anxiety, depression, insomnia, skin infections, intestinal parasites etc. "If you rub the essential oil from the seed on your skin, it takes care of skin infections. It has a wide spectrum of actions. Whether it is the leaf, or the seed, every part has something to offer, so I choose to call it miracle tree," he said.

Bitter leaf, (Vernonia amygdalina) which has been a common feature in local herbal practice, is used to control diabetes, reduce high blood pressure and "we also found that it is indicated more recently against malaria and intestinal worms, just like moringa. So we got interested in some of these medicinal plants.

Also, Dr Ofodile, (my present head of department) and I, looked at the antimicrobial activity of guava leaves. We also worked on moringa against malaria because malaria is a problem in the tropics, Nigeria to be specific. A lot of people are dying of malaria. It kills more than any other disease known in the tropics.

According to WHO report, 80 per cent of these cases are in pregnant women called gestational malaria and infants. A lot of infants/children die of malaria so the fatality level is very high. Our research is therefore, centred on plants, to use plants to contribute to society with respect to treatment."

As a result of having his second degree in Environmental Biology and Genetics, Nwakanma got involved in some chromosomal works and toxicity.

"A lot of these plants and drugs may be good and attending to the problem; but what we are not sure of are the side effects so my own aspect of research deals with the side effects which could be manageable if they are just ordinary side effects but if they affect the chromosomes or genes, then it is a big problem, so I do a lot of genotoxicity work to find out whether the genes are affected.

If it affects the genes or chromosomes, it means it can be transferred from parents to children so it is important to me as a geneticist to look at the genotoxicity effect, whether plants, drugs or any food material that gets into the body. So my work revolves around cell biology, genetics, and environmental biology and plants are a major component of the environment," he stated.

Continuing, Nwakanma said they looked at the rise in cases of hypertension, diabetes, stress, malaria and many other maladies in the society "and we hope to find most of the solutions in plants. If we must combat most of these diseases, then we must go back to plants.

Our parents and our forefathers used them but then we say they were illiterates, but they knew plants, now we know a lot of things but we don't know plants and the death toll has hit the roof. When they did not know much but knew plants, the death toll was less but we know a lot of book work now, yet we don't know plants and death rate has gone very high.

Our intention here is to call people back to plants. Most of the solutions to different diseases lie in the forests of Africa so we are calling people back to plants, let us look at the natural products that God has given us. Most of the tablets we swallow come from plants but we now make synthetic products, analogues of the natural materials. So if we go back to the natural materials, we will be happier."

**Using bitter leaf to clean up polluted soil:**
"There are some other aspects of research, the environmental aspect particularly. Last year we did a research using bitter leaf to attempt to clean up an environment that was polluted with diesel and petrol (gasoline). The outcome was so interesting that the work was accepted and published by an international journal. The toxic effect of diesel and gasoline polluted soil by Vernonia amygdalina (bitter leaf), Nwakanma 2011. We have also successfully done a similar type of work using crude oil and spent engine oil. If you go to any mechanic workshop to service your car, they will drain the oil from the car and pour it in the surroundings hoping that it will simply disappear or volatilize, but we have found out that more often than not, if you put crops in this soil, they may have problems producing optimally.

Today, we hear about spills here and there, and it is causing a lot of problems, whether onshore or offshore, spills are spills and they can affect farmlands.

**How do you clean up that polluted environment?**
"Among many plants that have been tested before are cowpea and soybean, so we decided to test bitter leaf, whether it can be useful in such an area and the result at the moment is very promising. You plant the stems of the bitter leaf on the polluted soil. We did it with different concentrations, it uptakes the oil from the soil.

You know as you are working, some also will be lost through leeching and other means, but we are interested in its ability to uptake. As a step further from what we did last time, we decided to look at the plant now and the total hydrocarbon content. We also looked at the total hydrocarbon content of the soil.

The idea was to be able to make a definite statement on how much hydrocarbon was up-taken from that polluted soil. There are many mechanisms that plants use when...
Thousands of years ago, in the great society of Egypt that birthed the legendary Stellar and Lunar cults, men and women lived together as equals. They spent their lives striving for balance within themselves and with each other. To them the human body and consciousness were sacred and the inner questions of who and what they were reflected outward in their everyday lives. Living on the earth was a spiritual act and what we today consider mundane and ordinary, everyday reality, was understood by them to be infused with psychic energy and rich with personal meaning.

The cycles of the human body and the cycles of nature were revered and studied in great depth as a means of divination and insight into their individual quests for clarity and understanding. The way they lived together and interacted was symbolic of their inward journey through the great challenges of life on the path to wisdom.

There once were four great ancient cults that eventually evolved into what is now the main religion of Christianity.

The first Cult, the Stellar:
Some people, instead of speaking about the cults speak of 'Egyptology' which is much too general.

In the Stellar Cult women shared supremacy. Women were often keepers of the wisdom and there was harmony between the human and the world. The flora and fauna where deeply respected. There was also deep understanding of the geometrical and numerical principles of life and a tremendous understanding of the body and somatic harmony as regards health.

The original idea of the Stellar Cult, before it went corrupt, was to work people towards a state of union with nature, a state of cosmic harmony.

**Numerology**
Numerology is one of the great divination sciences that came out of the Stellar Cult, but then, every other cult, realizing its power, picked up on it, so we still have it today in the idea of numbers. You find the same numbers turning up all over the place. And of course two of the most important numbers you find in all fields, not just occultism but in Christianity and government, are twelve and seven. Twelve and seven are all over the place. There is a reason why those numbers are in the zodiac, in government, why you find them preferred by people, why the days of the week are seven. It's to do with Astrology. But it turns out that consciousness has been divided into twelve zones. And then the factors of twelve are very important: four and three. And four and three added equal seven and four and three multiplied equals twelve. Four and three were the most important numbers known in ancient times.

**The evolution of human consciousness and its ability to reflect upon itself:**
In the genesis of consciousness: it was consciousness found dividing into one then two then three then four, and then seven, ten and twelve. It went through an unfolding, like a plant. Your consciousness is a lotus.

The Egyptians used the symbols of the papyrus and the lotus, and the Indians, the Hindus, use the lotus. The Christians picked it up and started using Ivy and Myrtle, and then later the Rose. Sacred plants have always been used like that. Ivy and the Iris have been used to symbolize consciousness. Consciousness coming from a singularity and moving through different factors of number, most important being seven and twelve. The mind sits at the state of twelve-ness.

These cults connected to our universe and how it vibrates, to what in its simplest forms here on Earth are math and geometry. The numbers where regarded as a code that signals ancient DNA, cellular memory and higher consciousness to awaken. To awaken to a phase, a more spiritual space in the heart and mind and within life.

Discoveries in the brain sciences in the last half century clearly correspond to, what the ancient

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On 1–2 May 2013 international experts on plants used by humankind met in St Louis, Missouri to consider the ways in which a global crisis now underway—the loss of tens of thousands of plant species—can be addressed. These threatened plants include species vital to the lives of people throughout the world, including plants used for food and nutrition, medicine, cultural and spiritual purposes, and the maintenance of livelihoods; they are needed to redress poverty, provide food security, and ensure sustainable development in many nations. Plants and their associated biocultural knowledge play an essential role in the ecosystem services that support all life on Earth.

This statement is not only an appeal to the international community to address the tragic loss of plant diversity but a call for the development of a concerted effort worldwide to address the loss of essential knowledge about plants and their uses, especially at the level of local communities.

The meeting specifically focused on the objectives of the Global Strategy for Plant Conservation (GSPC), an initiative adopted by the U.N. Convention on Biological Diversity in 2002, and subsequently updated in 2010, as well as the GSPC targets pertaining to the maintenance and preservation of useful and culturally significant plants.

The participants concluded that there is also a great urgency to address the vital importance of traditional knowledge about plants, their utility, management, and conservation. This unique, often ancient, and detailed knowledge is typically held and maintained by local and indigenous communities.

The workshop contributors urged the development of a global program on the conservation of useful plants and associated knowledge, taking into account the need to:

- Call on the international community and governments to recognize the importance of wild and cultivated plant diversity, as well as the associated knowledge of their usefulness as a vital present-day and future resource. This should be accomplished through the successful implementation of the GSPC objectives and targets by 2020.
- Highlight the need for a concerted international effort to compile a widely accessible global catalogue of useful plants of importance for human kind, while respecting intellectual property rights, local ownership of knowledge and appropriate benefit sharing.
- Assist local peoples in the preservation of their traditional knowledge in a culturally appropriate manner.
- Stress the need for cross cultural and multilevel partnerships in the effort to build on and share experiences on conservation of culturally significant plants, their sustainable use, and associated knowledge.
- Develop an international research platform to address gaps in scientific knowledge of useful plants.
- Facilitate capacity building and training opportunities in ethnobotany, particularly in countries and regions with significant gaps in such resources.
- Support and encourage biocultural knowledge transmission and custodianship.
- Develop the appropriate facilities, methodologies, and techniques to support culturally sensitive curation of biocultural collections (artifacts, herbarium vouchers, produces, living collections, etc.) and associated traditional knowledge.
- Elaborate and disseminate educational materials and resources in appropriate languages that support and promote the study and use of traditional knowledge.
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and insure their inclusion in educational curricula.

- Develop a toolbox of methodologies, case studies, manuals, and good practices in order to support the conservation of useful plant and associated knowledge.

- Highlight the need for measurable indicators that monitor progress in the conservation of useful plants and associated knowledge.

- Follow the framework provided by the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity and FAO’s International Treaty on Plant Genetic Resources for Food and Agriculture, in order to manage and achieve ethical standards for access, fair and equitable benefit sharing, traditional resource and farmers’ rights, and the protection of intellectual property.

Signed

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Uganda: Medicinal Plants Disappearing, Says Minister

By John Odyek

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New Vision

Government has cautioned Ugandans against reckless cutting of trees saying it is leading to the loss of trees and plants with medicinal values.

Flavia Munaba, state minister for environment said traditional healers had approached government to complain about the rapid disappearance of trees and plants from which they obtain herbs to treat people.

She said this while launching a tree planting campaign by Global Pan African Movement in Uganda recently.

"The traditional healers say they have to go to distant places to find their medicines. They have given us a list of trees and plants that we can replant," she said.

She asked Ugandans to plant fast maturing trees if they want to use it for firewood and charcoal. Munaba represented Gen. Kahinda Otafiire, minister for justice they are doing phyto-remediation. It could be by phyto-extraction, phyto-volatilization etc., so we are trying to trace the pathway through which the bitter leaf uptakes and what it does with it.

If anything can affect the chromosomes, it will affect
Nowhere in the world has AIDS had a more devastating effect than in Africa. Tens of millions of people throughout the continent are known to be HIV-positive. The costly treatments developed by the pharmaceutical industry in the North are too expensive for most Africans, and are not widely available. Little wonder then that most people continue to turn to traditional healers for help in combating the disease. And despite the skepticism of many, there are signs that some of the plant-based remedies offered by the healers may be not just affordable, but also effective, according to Dr Sekagya Yahaya Hills who is both a modern dentist and a traditional healer in Uganda.

Dr Hills spoke at the International Symposium on Biodiversity and Health, held in Ottawa in October 2003. He outlined the work being done by PRO.ME.TRA, an “international organization for the preservation and restoration of the ancient arts of traditional medicine”. Long-term studies using a combination of African herbal medicines have shown positive results, and PRO.ME.TRA has already filed five patent applications for the use of medicinal plants in the treatment of AIDS (see related sidebar: On the Trail of a Treatment for AIDS).

According to Dr Hills, the Declaration of Traditional Healers — which he presented to the 13th International Conference on AIDS and STIs in Africa, held in Nairobi in September 2003 — well summarizes the role of traditional medicine in Africa. “As traditional healers, we are the most trusted and accessible health care providers in our communities,” the declaration states. “We have varied and valuable experience in treating AIDS-related illnesses and accept the great responsibility of continuing to do so.”

The declaration also recommends that traditional healers be involved in AIDS research, that there should be increased collaboration between conventional and traditional medicine, and that appropriate treatment and care for AIDS patients should include safe and effective traditional healing therapies.

Affordable and accessible
HIV/AIDS is far from the only ailment seen by traditional healers. The great majority of Africans routinely use the services of traditional healers for primary health care. One estimate puts the number as high as 85% in sub-Saharan Africa. According to Francois Gasengayire, Nairobi-based specialist in biodiversity and traditional medicine with the International Development Research Centre (IDRC), there is one healer for every 200 people in the Southern Africa region — a far higher doctor-to-patient ratio than is found in North America.

Recognizing that traditional medicine is “the most affordable and accessible system of health care for the majority of the African rural population,” the Organization for African Unity (now the African Union) declared 2001-2010 to be the Decade for African Traditional Medicine. The goal is to bring together all the stakeholders in an effort to make “safe, efficacious, quality, and affordable traditional medicines available to the vast majority of our people.” This goal is supported by the World Health Organization and IDRC, among others. IDRC played a major role in the process that led to the declaration of the Decade.

Dr Brian Davy, Senior Program Specialist at IDRC, calls it, “a decision that was vital for the health of African populations who depend largely on traditional medicines and medicinal plants.” That view is supported by Dr Philippe Rasoanaivo, who is responsible for traditional medicine in the Ministry of Health in Madagascar. The Decade has given an impetus to the development of a traditional medicine program in Madagascar, he said.

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This included a draft national policy on traditional medicine, a focus on traditional medicine in the business plan of the Ministry of Health, and the formation of a committee of scientists and lawyers to formulate laws and regulations regarding traditional medicine.

In addition, a computerized inventory of the country’s medicinal and aromatic plants was developed with funding from IDRC. The inventory, which contains some 6000 plants, is now available on CD-ROM from the Institut malgache de recherches appliquées (IMRA) and from IDRC’s regional office for Eastern and Southern Africa in Nairobi.

Several delegates at the International Symposium on Biodiversity and Health warned, however, that many of Africa’s medicinal plants are under threat. Gasengayire explains that although increasing population, deforestation, and desertification are partly responsible, poor harvesting techniques also kill many plants unnecessarily. For example, the bark of Prunus Africana contains ingredients used in the treatment of prostate cancer, he says. Many people will strip a tree of its bark, thus killing the tree. However, if bark was taken from only one side of the tree, it would survive and produce more bark for future harvesting.

**African products for African consumers**

Myles Mander, of the Institute of Natural Resources in South Africa, agrees that forest clearing and desertification have affected supply, “so that both quality and quantity are dropping.” He told the Symposium that as many as 80% of the plants used will probably die as a result of harvesting. “Local extinctions are occurring,” he added. “There is no incentive for cultivating and sustainable development.”

That incentive, Mander believes, will come only with the development of a modern industry based on medicinal plants that will produce “African products for African consumers.” He pointed out that despite having a market of over 500 million consumers, traders in medicinal plants are not involved in the development of the industry and are not well organized, so have little influence with their governments. “The result is reduced supply and increased costs, with little product development and poor quality products,” he said.

Messenvi Gbeassor, of the University of Lomé, Togo, agreed that there is an urgent need to improve harvesting and processing, and to develop an effective African industry to produce and market plant-based medicines. He stated bluntly that “there is no real pharmaceutical industry in Africa, and no coordinated research. There is a lack of entrepreneurs to help build an industry.”

Development of an industry based on medicinal plants has the potential to strengthen both health care systems and people’s livelihoods, he added.

**Toward solutions**

Growing recognition of the value and importance of traditional medicine is producing solutions, however. One that has much potential, says Gasengayire, is the IDRC-supported Network on Medicinal Plants and Traditional Medicine in Eastern Africa. This network brings together traditional healers, researchers, communities, entrepreneurs, development partners, and governments. Its goals include the sustainable, safe, and effective use of medicinal plants as well as the integration of traditional medicine in public health services.

“By pulling together all the different stakeholders the network makes it easier to get both results and recognition. We want to raise awareness of the problems and improve management of the resource,” says Gasengayire.

**New Network to Conserve Africa’s Medicinal Plant Resources**

A wealth of medicinal and aromatic plants ensures the primary healthcare and livelihoods of the poor in sub-Saharan Africa. Of the close to 6400 plant species used in tropical Africa, for instance, more than 4000 are used as medicinal plants. Up to 80% of the population relies on these traditional medicines. However, says the Network on Medicinal Plants and Traditional Medicine (Eastern Africa), loss of these genetic resources and their habitat is escalating. The loss of related indigenous knowledge is even greater.

Launched in September 2003, the network is supported by IDRC and coordinated by IDRC’s François Gasengayire in Nairobi. The goal, says Gasengayire, is to help reverse this trend by promoting the conservation and sustainable, safe, and effective use of medicinal plants and herbal products. The network also seeks to integrate traditional medicine in public health services in Africa and to promote appropriate policies. And as Gasengayire points out, the collaborative network offers all stakeholders — traditional healers, communities, researchers, governments, and others — the opportunity to share information and experiences, harmonize their approaches, and develop collaborative projects.

The network’s steering committee brings together leading institutions from three East African countries — the National Museums of Kenya, the Institute of Traditional Medicine in Tanzania, and the National Chemotherapeutics Research Laboratory in Uganda — as well as other key institutions, including government, traditional healer associations, and donors. Because
In many parts of Africa, traditional healers are the most easily accessible health resource available to the community. In addition, they are most often the preferred option for the patients. For most of these people, traditional healers offer information, counseling and treatment to patients and their families in a personal manner as well as having an understanding of their client’s environment. Despite this, "traditional healers have rarely been included in key decision making, action agendas and community programs in HIV/AIDS prevention and care" (National Council for International Health). Does it make sense to ignore traditional healers when trying to tackle epidemics such as HIV/AIDS, one of the most critical global issues of our century? What are the fears and difference in opinion of Western medicine and traditional healers that create barriers to forming equitable working relationships? What needs to happen in order for Western Medicine and traditional healers to bring together their unique resources to solve problems such as HIV/AIDS prevention and care?

The basic philosophic approach to disease is different for Western medicine and traditional medicine. Zimmerman, in his article "Western and Eastern Medicine Compared", explained "Western medicine is a sort of crisis intervention medicine, with its strength lying in its trauma care and therapies for acute problems." In contrast, in traditional medicine, there has been a long-standing viewpoint of wellness as "stability, using things around you, you mind, your body [and] your spirit" (Montaocean). According to Montaocean, co-director of the Center for Natural and Traditional Medicines, the traditional medical practitioner uses all of these in a systematic fashion to build a specific health system. Centering on metaphysical causes such as discontented gods or ancestors spirits and apparent disease, healers practice a holistic approach -- the ultimate goal being to restate the individual to a harmonious relationship with the social order (Outreach Services Newsletter). In this way, every aspect of an individual’s well being is taken into consideration and treated. Because of such an approach, traditional medicine is much broader because it includes recognizing disturbances in the environment outside the individual as being involved in the illness, whereas the Western concept strictly restricts the locality of the disease to the body of the individual. With regard to the Western medical systems, a different approach in treating the patient as well as the particular ailment is taken. Healing strategies are focused more on the individual and on a "more rigorous and scientific standard of understanding disease". In this way, the physical condition of the patient becomes the primary focus, with little or no consideration of the social and spiritual state of the patient (Outreach Services Newsletter). Because of such a difference in approach to medicine, both groups have difficulty in accepting the others' method. Therefore, there is a clash of methods and worldviews.

The history of medicine and health care in Africa has been a long and hectic one. Created by complicated social, political and economic processes, health care has come to take many forms. Africans "developed their own health and healing traditions, including ways of recognizing, classifying and treating disease and illness" (Outreach Services Newsletter). According to Dennis Ityavyar, author of "Health in Precolonial Africa", healers drew upon extensive knowledge of healing methods and materials, collected and passed down from one generation to another and based upon complex social, cultural and religious beliefs.

As Western missionaries and later colonial powers began to proliferate on the African continent, so too did Western modes of dealing with disease and illness. In fact, Montaocean, a medical doctor in Tanzania states that because of this proliferation, "the knowledge of traditional medicine [had to be] preserved through much sacrifice". This was because when Western philosophy and science came to Africa, it came about through aggression and with the purpose of "stamping Continued on page 9
knowledge believing that observational experience is orderliness and control, uses empiricism as a basis for Western science, a method well renowned for its empirically knowable whereas in traditional thinking it is viewed as a mystery. In Western thinking, nature is viewed as essential to understand the physical world. The fundamental idea behind empiricism is that knowledge can be derived through careful observation, classification of phenomena, and formulating laws and principles from these observations. Empiricism is knowledge derived through the senses. As John Locke proposed in his “Essay Concerning Human Understanding” it enables one to know and understand things around him or her. Locke stated that, "experience, [is what] all our knowledge is founded; and from that it is ultimately derived" (61). According to Locke, when humans were born, the mind was like a blank tablet or "tabula rasa", but as one grew, this tablet was furnished with information via the senses. This was to say, the script of this tablet was experience. It is this first hand experience that enabled humans to manipulate and understand the things around them better.

Both Western medicine and traditional medicine make many claims about their side of the argument, but there are three values that clearly conflict. These two sides in the conflict value knowledge concerning nature, but their methods of obtaining this knowledge are in conflict. In Western thinking, nature is viewed as empirically knowable whereas in traditional thinking it is viewed as a mystery.

Western science, a method well renowned for its orderliness and control, uses empiricism as a basis for knowledge believing that observational experience is essential to understand the physical world. The fundamental idea behind empiricism is that knowledge can be derived through careful observation, classification of phenomena, and formulating laws and principles from these observations. Empiricism is knowledge derived through the senses. As John Locke proposed in his “Essay Concerning Human Understanding” it enables one to know and understand things around him or her. Locke stated that, "experience, [is what] all our knowledge is founded; and from that it is ultimately derived" (61). According to Locke, when humans were born, the mind was like a blank tablet or "tabula rasa", but as one grew, this tablet was furnished with information via the senses. This was to say, the script of this tablet was experience. It is this first hand experience that enabled humans to manipulate and understand the things around them better.

This concept of empiricism has enabled Western medicine to advance. Beginning with Hippocrates, who used observation and simple deduction, and Galen who dissected human cadavers, Western medicine used this early form of empiricism to better understand the anatomy and physiology of their bodies (Mayeaux). Through careful observations, systematic ways of cataloging facts and the testing of phenomena, humans' were able to understand things about themselves and the nature around them.

Another way of knowing nature in Western thinking is via rationalism. Rationalists had immense faith in the logical power of the human mind. To them, humans understood or just knew some things because they were so clear mathematically and logically and because of the manner in which they followed the laws of nature. For rationalists, nature was no longer viewed as abstract and incomprehensible. Rather, it was believed that nature functioned according to a set of laws and rules and that it never strayed away from these laws and rules. This made nature more predictable and therefore empirically knowable. Thomas Paine, a believer in the capacity of human knowledge and a strong advocate of the use of reason, believed that people should base their search for truth on the use of reason. Paine strongly emphasized reason as the only trustworthy source of knowledge and understanding: "take away reason, and [humans] would be incapable of understanding anything" (Paine 78). As a consequence of this reason and knowledge, Western medicine could be trusted because it could be tested and the results cataloged. Therefore, in Western medicine, doctors and researchers, in exploring the unknown, try to establish a cause and effect relationship between phenomena. In sum, according to Western medicine, reason has enabled humans to explain things more accurately and has enabled people to follow a cause and effect path when trying to explain the workings of nature.

In contrast to this smooth running machine-like and predictable Western notion about nature, there is the more mysterious and incomprehensible traditional view about nature. In this view, there is no systematic way of observing phenomena or any form of testing and as a result, traditional medicine is a "system of medicine based on cultural beliefs and practices handed down from generation to generation"(Covington). In fact, Oniang'o of the foundation of African Philosophy stated that "the African culture does not assume that reality can be perceived through reason alone. There are other modes of knowing such as imagination and intuitive experience and personal feelings. That is why the deepest expression of the African culture has been through art, myths and music, rather than through logical analysis" (Oniang'o).

Therefore, in judging the cause disease or illness, traditional healers will first attempt to single out whom — not what -- is responsible for the disease. They often
believe — but do not prove -- that the patient has been bewitched. Subsequently the traditional healer will then execute some sort of supernatural divination — not experiments -- to establish if the patient has gone against any pre-established order. If the patient has, then the patient has to seek ancestor’s pardon through sacrifice and rituals to appease the angry dead. Finally, the traditional healer will prescribe "muti", which is basically a secret concoction that may include human body parts. Now if the patient dies after taking this muti, it is believed that his or her death was due to ancestral anger. If improvement does not occur, it is assumed that the patient did not to take the muti in the proper kneeling position, or was maybe facing the wrong direction. Traditional practitioners use intuition and therefore, this medicine sometimes works, and other times it does not. Therefore, the "patient’s improvement or recovery after treatment might be incidental" (Covington). Because of such unpredictability, nothing follows a set of rule or laws in traditional medicine; it is all a matter of chance, which plays little or no role in the process of the scientific method. No one can ever be sure or definite about the out come of anything. Therefore, traditional medicine believes that nature is not empirically knowable. Because of this lack of empiricism in traditional medicine, the idea of using science to derive one’s truth is defeated.

A second argument on this issue pertains to the concept of progress and change. Western medicine believes in progress and change, while traditional medicine does not. Western medicine relies heavily on progress and change through the means of technology. This is because Western medicine has to continuously come up with new drugs for the many different diseases. New technologies are needed to keep up with these diseases. In fact it is noted that because of the rapidly expanding technologies spawned by modern science, advances are occurring that were unimaginable a short time ago (for example, deciphering the human genetic code with computers). In fact, the World Health Organization (WHO) estimates that even though about 80% of the world’s people use traditional medicines as their primary health care, "almost all the funding and scientific attention go to the very expensive corporate or academic medicine form which the majority of the world is excluded" (James). With the explosion in research, and the rush to produce new breakthroughs, new drugs are continually flooding the market.

This commitment to change and bettering ourselves has been a long standing one, one that is also supported by Pi...
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African Context

was a guide for the people. It was a way to inform them on how to live their lives as well as practice their medicine.

Traditional people therefore went through great pains to preserve this information or knowledge. As Montascope states, "what they preserved for their knowledge . . . they kept at a high price". This was because as stated earlier, when Western philosophy was first introduced, it came with the idea of stamping out these peoples' perception on medicine. Western philosophy wanted the indigenous people to change and progress but they could not because this idea of progress and change would mean that they would have to change their whole culture.

As a result, traditional people probably had to come up with simple ways of keeping this knowledge and passing it down to the next generation. These ways may have included such things as music, dance and stories. Indeed LaoTsu's idea of simplicity would support the traditional medicine view. Everything is kept simple so that it is easier to transfer to the next generation. Lao Tsu stated that one should "give up ingenuity, renounce profit . . . to see simplicity" (19). Traditional medicine must remain unchanged for it to survive and this is in contrast to western medicine that is committed to change.

The third conflict on this matter relates to the issue of the value of life. Although both sides would tend to agree that life is valuable, their view on this value is different. In fact one would have to wonder how much at odds these two sides are. Traditional medical people have fought so hard to preserve their medicines in order to save lives. Why did they have to live under persecution in order to do so? Why has western medicine tried to impose its views about medicine on other cultures? Although this is not the place to analyze all attitudes about life, it is quite clear that these are difficult questions to answer.

Everyone has a right to live and that right must be respected. Everyone should be given the right to live, and one way of accomplishing this is by the elimination of disease or illness. One reason why life may be considered precious is in the way life and death is viewed. Western culture perceives life and death as two separate realities. For example, Rene Descartes in the 17th century stated that the mind and body were separate. Newton also spoke about separation. Newton’s view of the world and nature as operating in a linear and sequential form suggested a mechanistic view of nature and this view could also be used when dealing with the human body. The body could be viewed as a series of body parts. This was a kind of reductionist approach in which a person was reduced from a system to just a few cells. Hence, the human body could be viewed as a machine, and disease as the culprit that prevented the machine from working smoothly. Doctors were in turn trained to fix or repair broken parts through the use of drugs, surgery or even replacement of body parts. Because of such a belief, the "approach [to healing] is aggressive and militant, with physicians being in war against disease"(Fontaine). Consequently, because of such an approach to disease, Western medicine perceived humans as individuals who interacted with nature, and science as the tool they used to manipulate nature. All this really meant was that humans used science to manipulate nature in order to combat any disruption in the order of things. Humans used science within the medical field to combat disease and thus prevent death.

In contrast, from a traditional medical standpoint, death is seen as part of the harmony of nature. In African culture, death is not seen as the destruction of a person, but merely "a passing away into another state of existence (Oniang’o). It is a cruel and painful parting, but a necessary one. From the African perspective, "man and nature are not two independent realities, but an inseparable continuum of a hierarchical order by making the visible world continuous with the invisible world" (Oniang’o). Therefore, because of these two conflicting beliefs, the approach to saving life would be different. Western medicine would see death as an obstruction to living a long life and therefore use "surgical procedures and drugs to rid the body of sickness" which was the cause of death (Outreach Service Newsletter). In contrast, Traditional medicine would prescribe herbal remedies "for equalizing unbalanced relationships within the social or spiritual order" (Outreach Service Newsletter).

On April 10, 2000, a regional task force on traditional medicine and AIDS in east and southern Africa was inaugurated in Uganda. This task force was set up to "coordinate activity related to the widespread use of traditional medicine by people with HIV/AIDS and the role of traditional healers in the prevention of HIV/AIDS" (Bodeker). The reason for this task force was to try to promote alliance between traditional healers and western practitioners in the fight against AIDS. The task force believed that "the widespread use of traditional medicine was in a real sense carrying the burden of clinical care for the AIDS epidemic in Africa" (Bodeker). Why was this the case? Why does it seem that there are people out there trying to bridge this wide gap, but the gap still continues to grow larger? Continued on page 12
There are two basic reasons patients continue to choose traditional healers. First, for traditional societies, culture puts a large divide between Western science and traditional medicine. Traditional medicine lacks of scientific mentality and training, with traditional healers believing that "ill health and misfortune are more often based on social factors than on epidemiology." In contrast, Western medicine believes that success or cure "should be based on clinical success", (Bodeker). Another reason supporting this continued use of traditional healers is that the traditional people, when in need, believe that the healers are dealing with their misfortunes within a shared pattern of understanding. In the Western world, doctors hope that their patients will trust them just because they are doctors. The second reason for the continued use of traditional healers is that traditional healers are participants in the culture. Traditional healers can be found almost everywhere at any time. They do not have working hours and their services can be sought out on a Sunday, holidays and in the evenings. In addition, payment for traditional healers often occurs after treatment and depends much on the results, whereas in Western medicine, payment is due before the patient has judged its results.

All these reasons are sufficient to convince one why people often choose to go to traditional healers, but there are also good reasons why people should go to Western doctors. For example, Western hospitals are often funded, fully staffed, and provide a personal service to the patient. The doctors are also fully trained and understand exactly what they are doing and why. This is to say that the doctors have undergone professional training and have received licensing authorizing them to treat patients. Most, if not all traditional healers, have not received any form of professional training or licensing. Unlike the traditional way of doing things, in Western hospitals there is proper documentation and a standardized or a regulatory mechanism of doing things. There is also a wide range of drugs that can be used if one drug fails to do its job. (Bodeker).

Coming from Africa myself, I believe that no one way is the best. Both sides have their merits, but I see no room for cooperative effort. As long as Western medical practices are considered the "standard cure", it will be very hard for traditional medicine to become recognized. In fact, one could infer that because they [traditional medicine] differ from the "standard of care", the traditional practices and practitioners are incompetent. It therefore becomes important that the communication gap between the two groups is bridged, but, as stated by Engela Pretorius, "there is still a long, difficult road ahead". It is also interesting to read Covington’s article that mentioned that "much of the pharmacology of scientific medicine was derived from the herbal lore". He goes on further to explain that in fact, "one fourth of the prescription drugs used today are of herbal origin". Therefore, it becomes clear that although people might think that these two forms of medicine are incompatible, they really are not.

There is little realistic hope for cooperation even though some doctors are reaching out to traditional healers. Ruben Mowszowski reports that, "scientists have struck up a 50-50 deal with traditional healer [in South Africa] to test local herbal cures in the laboratory". According to Mowszowski, a collaborative organization, which calls itself the South African Traditional Medicines Research Group, has spoken to various traditional healers' organizations with the intention to receive any information on plants that they believe might be effectual against some illnesses. Although this seems as a good idea, there is still distrust. Traditional healers "fear that their remedies will be expropriated and land up under the label of a multinational pharmaceutical company" (Matabisa). While the traditional doctors' fears may be warranted, Sonia, a character in Mindwalk argues that the world is interconnected and that we all need each other. In spite of this view, she recognizes that Western science, which is the foundation of western medicine, encourages intervention and not prevention. As an example, Sonia uses Francis Bacon’s claim that scientists had to torture nature in order to get out her secrets. This is in contrast to traditional people who would probably claim that their culture, which is also a part of their medicine, prevents any violence to the environment. This is a complex issue and one cannot hope to resolve it easily.

In addition to distrust, there is also a certain amount of pride at work here. During the past summer, I attended a seminar in my country Botswana. The idea behind this seminar was to try to get traditional and Western doctors talking with the goal of reaching some middle ground. Throughout the whole seminar, I sensed that traditional doctors felt that the western doctors were only now coming to them because these doctors had run into a wall. These traditional doctors made it seem as if the western doctors wanted to steal their excellent medicines because their western medicine was not working. At the end of this three-day seminar, nothing was accomplished. The traditional doctors refused to cooperate and the
western doctors ran out of reasons to convince them that they were not trying to steal their medicine.

It is really hard for me to pick sides in this issue, but I feel that Western society's understanding of traditional medicine still has far to go to master the deeply rooted values beneath the culture. Too often, traditional culture is perceived as an early form of science. In fact, when strictly perceived in a time line dimension, traditional medicine becomes a collection of facts and practices frozen in the past. Its significance in the modern world becomes reduced to an effort to bring clusters of information forward to resolve diverse problems of the present (Moralez-Gomez). Rather than addressing traditional medicine with curiosity, it should be approached as a source of learning.

On the other hand, having grown up in a culture heavily influenced by Western practices, I also feel that Western medicine is also viewed with some degree of curiosity by traditional healers. They don’t understand it and, rather than trying to understand it, they totally disregard it. They view it as a modern day, instant solution. I personally feel that in such a matter, the choice should be left up to the individual. This past summer, while working in Botswana with cancer patients and patients with full blown AIDS, I encountered a young woman with advanced breast cancer who was struggling between the care of a traditional healer and surgery provided by a Western-style oncologist. She changed her mind several times, ultimately rejecting the recommended mastectomy in favor of the more familiar traditional care. Although I felt personally saddened when she left our clinic, I support her right to make that decision. In other words, as this example demonstrated to me, if one chooses to go to a traditional healer, let them go, and on the other hand, if one chooses to go to a Western doctor, let them go. I feel that it is sad that many Western skeptics accuse traditional medicine of fraud and quackery, and that the traditional healers accuse Western doctors of being profit driven and cold. Indeed there might be some truth on both these positions, but my feelings are that if the professionals on both sides cannot get along, how can we expect the patients to be cooperative?

http://www.drury.edu/multinl/story.cfm?ID=2524&NLID=166

Continued on page 2 – Africa: Solutions to Most Diseases Lie in the Forests of Africa

the plant but in the one we did last year and the one we have done this year, we have seen the same pattern. It affects their mitotic processes, so the chromosomes are not able to complete their mitotic cycle, so over time, it is possible that the plant after taking up so much, may die.

So we are looking at the window period between when it is used on that polluted soil and when it is able to uptake so much and clean the soil and whether it will lead to its death or not. This is going to be a major breakthrough in the area of phyto-remediation."

He advised people against eating plants grown in polluted soils because the fact that the pollutants affect the genes and chromosomes of the plants means that they will be affected. "Chromosomes are of universal occurrence; as they are in plants, so are they in animals and humans. So if they can affect plants, they can affect humans," he said.

Our goal:
"We want also to see if for instance you have a piece of land close to a mechanic village which you intend to use for agricultural purpose, how do you clean up the soil to make it ready? The implications are very wide ranging. We are hoping that the research will lead us to something positive that will benefit man, starting here in Nigeria," he enthused.

http://m.allafrica.com/stories/201211220497.html/

Continued from page 5 – Uganda: Medicinal Plants Disappearing, Says Minister

who is also the chairman of the Global Pan African Movement.

Ruth Tuma, executive director Global Pan African Movement Secretariat in Uganda said the tree planting campaign was environment campaign undertaken by the movement to restore and protect the environment.

"Let us plant trees in our homes. Trees are necessary for the good health of communities," Tuma said.

Robert Mugerwa LC III chairman Muduma sub-county Mpigi said people had cut trees in the forest and other parts of Uganda and should now participate in replanting them. He said a number of groups had been formed in the sub-county to plant trees.

Stephen Asiimwe, public relations officer Global Pan African Movement in Uganda explained Resolution 9 of the Pan African Movement talks of conserving and protecting the environment because of effects of global warming and environment degradation.

Asiimwe said they had partnered with the National
Continued on page 13 – Uganda: Medicinal Plants Disappearing, Says Minister

Forestry Authority to support their efforts in planting trees.

http://allafrica.com/stories/201306251526.html

Continued from page 7 – Recognition and Respect for African Traditional Medicine

partnerships are vital to the network’s success, interested development agencies and international and private organizations are invited to join this initiative.

http://idrc.ca/EN/Resources/Publications/Pages/ArticleDetails.aspx?PublicationID=713

Cameroon: Experts Examine Path Covered in Medicinal Plants Research

By Godlove Bainkong

2 July 2013
Cameroon Tribune

Board members of the Institute of Medical Research and Study of Medicinal Plants, IMPM, endorsed the report of the scientific committee in Yaounde on July 2, 2013.*

After examining the scientific reports of different research carried out on medicinal plants in the country by the scientific committee, board members of the Institute of Medical Research and Study of Medicinal Plants (IMPM) endorsed the report presented to it on Tuesday July 2, 2013. This was during a board meeting chaired by Board Chair, Prof. Rose Leke neé Gana.

According to the Chairman of the scientific committee of IMPM, Dr. Dawa Oumarou, the activity report of IMPM falls within the recommendations of the 14th board of directors meeting of December 29, 2010.

"Within this activity report, we have just analysed the path concerning scientific research which consists in analysing scientific results, to see how it has been organised and the results obtained. If we were there at the beginning, we would have analysed what the reports would have brought out. Basically, we looked at the different projects, how they have been organised and the different results obtained," he said.

The report shows that of the 18 research projects billed for execution in 2012, only four were effectively carried out but that ten non-programmed as well as others already begun are on course. It was also disclosed during Tuesday's meeting that other milestones of IMPM in 2012 included the collaboration between IMPM, through its Excellence Centre of the African Network of Drugs and Diagnostic Innovation, with the World Health Organisation on research on traditional medicines as well as its participation in national and international symposiums to better vulgarise research results carried out in the country. To the Director of IMPM, Prof. Jean-Louis Essame Oyono, health is an important aspect in the socio-economic life of a nation and their target for now is combating destroyers like HIV/AIDS and malaria.

http://allafrica.com/stories/201307030675.html

Ghana: 'Effective Collaboration Is Key to Traditional Medicine'

By Isaac Akwetey-Okunor

22 August 2013
The Chronicle

Koforidua — The National Organiser of the Ghana Federation of Traditional Medicine Practitioners Association (GHAFTRAM), Nana Kwadwo Obiri, has called on all traditional medicine practitioners to share their experiences with its members.

According to him, members of the Association had suffered many setbacks in the practice of traditional medicine, largely due to lack of commitment on their part to make their technical know-how available to others.

He has, therefore, appealed to the members to stop the selfish practice, and rather share their knowledge with others, for the enhancement of traditional medicine. He was addressing the election of a 9-member executive committee in Koforidua recently.

Giving a brief history of GHAFTRAM, Nana Obiri said his outfit was the umbrella association of all traditional medicine practitioners, and deals directly with the Ministry of Health, but upon sober reflection, the association had decided to elect executives in all the 10 regions, to ensure the efficiency and effectiveness of its operations.

In an interview with The Chronicle after the election, the founder of Herbal Life, Mr. Danfo Ani Asamoah, stated that it would be prudent for all practitioners who belong to smaller associations of traditional medicines to join GHAFTRAM, the mother association.

"When a practitioner gets himself or herself into trouble, GHAFTRAM has a lawyer who will serve as an advocate

Continued on page 15
for him or her. We have given them a grace period to join the bigger umbrella of GAFTRAM," he added.

However, he urged traditional medicine practitioners who are practising without the requisite documentation to immediate step up the acquisition process, since those documents would be their power of operation.

Mr. Kwame Gyamena was elected Regional Chairman, with Alhaji Cito Dike as Vice Chairman, and Mr. Kingsley Nkansah Regional Secretary.

The rest include Mr. Samson Nartey, Assistant Secretary, Mr. King Albert Yeboah, Regional Organiser, Nana Afua Tebiri, Treasurer, and Mr. Samuel Agyemang Tei, Welfare Officer.

The elected Regional Chairman, Mr. Kwamena Gyamena, thanked the members for the confidence reposed in him, and assured them of making the association attractive and worth joining in the Eastern Region.

Angola: Training of Traditional Therapists to Boost Natural Medicine - Says Professional

16 August 2013
Angola Press

Luanda — The training of national therapists will play an essential role in promoting and boosting the class, as well as the natural medicine, considered Wednesday in Luanda the coordinator of the Traditional Therapists of Professional Chamber, Kitoco Maiavanga "Avô Kitoco".

The appreciation was made during a meeting which took place at Scientific Research Centre, attended by professionals of these areas in the country, and the Portuguese chamber of haemopathy, having both countries been represented by Kitoco Maiavanga "Avô kitoco" and José Lopes.

Avô Kitoco stated that it is fundamental to train future workers so that they can act with efficiency for the improvement of the class by reaching significant levels in terms of research.

In his view, the history of professional Angolan naturalists could be a milestone with the construction later this year of a National Reference Hospital of Traditional and Natural Medicine.

The source stressed that the promotion of cultural aspects like flora and fauna should be maintained alive and needs to be explored so that they be recognised internationally.

http://allafrica.com/stories/201308170013.html

Angola: Students to Learn About Local Medicinal Plants

25 July 2013
Angola Press

Luanda — University students are learning from today (Thursday), the Angolan flora, in a study sponsored by the Botanical Centre of Agostinho Neto University (UAN), as result of a book on "Medicinal Plants of Angola."

Speaking to Angop, one of the authors of the book, presented Thursday to the public, Esperança Costa, said that the work includes the identification, distribution and use of about two hundred species used in traditional medicine.

Esperança Costa, who is also director of the UAN Botanical Center, said that the study aims to conduct a research on plants with medicinal use and collect plant material for the population, as well as other knowledge holders of potentiality of plants.

Esperança Costa said that some 500 species of plants have been identified, but the book discusses only 154 including 70 families of the main species.

The researches lasted five years.

With a circulation of 1300 copies, the book is being sold at a price of 8,000 for the public and 5,000 kwazas for students (one dollar worth 100 kwanzas).

http://allafrica.com/stories/201307261179.html

Angola: Traditional Therapists to Gain Training Centres Soon

7 September 2013
Angola Press

Traditional therapists in Angola will benefit from professional training centres in the chief towns of every province, starting in the last quarter of the present year, as informed recently, in an interview, the general co-ordinator of the African Medicine Research and Investigation Unit, Kitoko Maiavango "Avô Kitoko".

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Continued from page 15— Angola: Traditional Therapists to Gain Training Centres Soon

Kitoko Maiavanga said to ANGOP that the Traditional Therapists Training Centre will also provide training for traditional midwives and other additional activities, because until now there is no academic document that serves to certify the traditional medicine work in Angola.

According to "Avô Kitoko", all the provinces will gain a traditional therapy centre aimed at making this professional activity more scientific and upgrade the technicians.

The source revealed that this is an initiative being supported by Portuguese partners and sponsored by an Angolan supermarket. He added that by December the course will start in Luanda's Cazenga Municipality in December this year.

"The project is concluded, the manuals have been elaborated, the subjects selected and the teachers are ready", explained the traditional physician.

http://allafrica.com/stories/201309070155.html

Tanzania: African Traditional Healers Challenged to Share Skills

By Issa Yussuf

4 September 2013
Tanzania Daily News

Zanzibar — TRADITIONAL healers have been advised to disclose their skills in medicines so more people can benefit from the expertise.

The advice was given by the Second Vice-President, Mr Seif Ali Iddi, when gracing the African Traditional Medicines Day held at Victoria Garden in Zanzibar.

The annual event attracted several local healers and colleagues from Asia.

"Share your skills, avoid too much secrecy to win more trust from the people and the government," Iddi said at the function also attended by the Deputy Minister for Health, Dr Sira Ubwa Mamboya and WHO representative.

The 11th African Traditional Medicines Day was celebrated with the theme, 'Traditional Medicines and Development'. The vice-president said his government was committed to working closely with traditional healers in improving the health of the people.

"It is important that traditional healers are involved in different researches on medicines so that they meet the required standards in this era of science and technology," Mr Seif said. He said that most traditional healers had skills, but continued acting unnecessarily in secrecy.

"Some even die without revealing their skills. It is better to train people or share with others so that the knowledge can serve people longer," he said.

Ms Mayasa Ali, head of the Zanzibar Traditional Medicines Council in the Ministry of Health commended traditional healers, asking them to make sure they are registered so they can operate legally. She said registration would also help to minimize fake traditional healers in the islands.

http://allafrica.com/stories/201309040756.html

Create a Herbal Medicine Framework

By Joshua Grin Thembo

Director for Traditional and Modern Health Practitioners Together against Aids

August 24, 2013
Monitor

The use of medicinal plants to cure diseases is an old practice. Herbal medicine is part of the broad traditional medicine practice, which according to World Health Organisation, refers to diverse health practices, approaches, knowledge and beliefs incorporating plants, animal body parts, water, soils and or mineral based medicines or a combination of one or more of these to address health problems.

According to the Ministry of Health, Uganda, more than 60 per cent of the Ugandan population seeks care from traditional and complementary medicine practitioners before resorting to modern health facilities.

Whereas the ministry acknowledges such, little effort has been put in place to integrate the same in the formal healthcare system. As a result, many people tend to resort to ‘self-medication’ and use medicine concoctions in their raw form and perhaps in wrong doses; and most times the wrong medicinal drug.

For example, in Ngora District, 26 children of Omito Primary School in Kopir Sub-county nearly died as a result of taking a wrong herbal medicine prescription. On August 7, a Primary Five pupil convinced his male classmates to take a herb locally referred to as “Ekulachi”.

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He told them that the herb would help them stimulate their manhood. However, moments later, they got ill as a result and were rushed to Kapir Health Centre II. Dr Stephen Ocimwa, the in charge of at centre, observed that the pupils had varying degrees of body weakness, headaches, diarrhea, constipation and sore throats.

One of the main challenges in the practice of traditional medicine is the irrational use and abuse of herbal medicine. Whereas research has shown that some herbal products are as or even more effective than contemporary medicine, the potency and safety of some medicinal plants is not well documented. There are many genuine traditional health practitioners in Uganda but due to lack of legal and regulatory framework on the practice, many quacks have infiltrated the sector and tainted the image of the practice. This situation is worsened by the low community knowledge and lack of structural frameworks to promote and guide the usage of traditional medicine even when it is greatly acknowledged to be a source and perhaps a preferred care for 60 per cent of Ugandans.

There is an urgent need for the government to speed up the process of establishing the legal and regulatory framework for traditional medicine and enhance its integration into the formal healthcare system.

Angola: Traditional Healers Reaffirm Construction of Hospital

14 August 2013
Angola Press

Luanda — A national hospital of traditional and natural medicine with areas for high and higher training will be built from this year, in Luanda, Angop has learnt.

This was disclosed during a meeting between the traditional healer Kitoco Maiavanga, and the chairman of the Portuguese Association of Haemotapy, José Lopes.

The project is under responsibility of a Portuguese building firm and has already the assistance of national businesspeople, he said.

He announced the availability of Portuguese experts in collaborating with national colleagues.

Traditional Medicine in Uganda: Is it a Ticking Time Bomb?

By Sunshineastfrica
March 11, 2013

It is estimated that over 60% of Ugandans seek medical attention from Traditional Healers. This pattern cuts across all social classes and educational levels. With a medical doctor: patient ratio of 1:20,000 compared to traditional healer: patient ratio of 1:200-400, high poverty levels and a poor health system, the traditional healers’ services are the most accessible to the majority of Ugandans. With such statistics, it is inconceivable that the country has no national policy to regulate the activities of the traditional healers. It is possible that their services may be causing more harm than good to their clients.

The World Health Organization encourages sharing of information about Traditional Medicine/ Alternative medicine policy formulation because they acknowledge the complexity of the process. The traditional healers in Uganda have mobilized themselves under The National Council of Traditional Healers and Herbalists Associations of Uganda (NACOTHA). They seek to unite and to push for their field of Traditional Medicine to be given greater consideration by the government. It is reported that the

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Ministry of Health in Uganda drafted a Policy so as to regulate and improve research in Traditional Medicine in 2008. This policy has not been finalized to date.

There is need to formulate a policy to track, regulate traditional medicine in Uganda and conduct intensive research in traditional medicines so as to ensure proper determination and monitoring of drug safety. There is also need for preservation of the medicinal plants against extinction. Relevant medical training should also be offered to traditional healers.

http://sbphc.wordpress.com/2013/03/11/traditional-medicine-in-uganda-is-it-a-ticking-time-bomb/

The Traditional Healer as Part of the Primary Health Care Team?

November 2004, Vol. 94, No. 11 - SAMJ

Editorial

There is a global trend in health care away from the doctor-centred towards the patient-centred approach. This implies respect for patient autonomy and free choice in health care options. One of these options in South Africa is the African traditional healer, who still plays a significant role in the everyday life of the majority of the black population. An analysis was undertaken to investigate if it is feasible to include the traditional healer in the primary health care team and to achieve true co-operation between the modern and the traditional health care sector. The problem was considered from the viewpoint of the four major stakeholders: consumers, modern physicians, traditional healers and government.

With regard to health care consumers it was found that traditional healers are still firmly established health care providers in their respective communities. They are familiar to their clients. Both share the same language and world view.

Health and illness are perceived in the same light. Healers are consulted for a wide range of physical, psychological, spiritual, moral and social problems.\(^1\)

Another important reason for seeking the healer’s ministrations is prevention of illness and misfortune.\(^2\)

Modern physicians were found to be rather sceptical with regard to traditional healers, perhaps with the exception of mental health care workers. The general consensus is that the available information on safety and efficacy traditional medicine is far too scanty.

Traditional healing is rated as anything from beneficial to outright dangerous or even fatal.\(^3\)

The most frequently aired objection by modern medical personnel against traditional healers is their failure to acknowledge the limits of their skills and competence and an associated reluctance to refer patients timeously.\(^4\) And from the ethical/legal point of view there is the major obstacle posed by the largely unregulated state of traditional medicine, with its lack of uniform standards of training and practice and effective disciplinary mechanisms. Since there is no register of bona fide healers, it is difficult if not impossible to distinguish between qualified healers and charlatans.

On the part of the traditional practitioners there is often interest in better co-operation with modern health care personnel. Many healers are keen to learn more about modern medicine and are willing to undergo some sort of training in order to improve their healing skills. However, there are others who do not wish to be trained. This applies, for example, to those who feel that their calling comes from God or the ancestors, and who regard dreams and revelations as the source of their knowledge.\(^5\)

While registration may be regarded as conferring legitimacy, respectability and authority on traditional medicine, suspicion often remains as to the motives for the need for registration. In addition, national accreditation may pose more problems than assessment of qualifications at the local level. One of the main concerns of healers is probably to protect themselves against exploitation by Western researchers and pharmaceutical companies. They also do not wish to be seen as weak junior professionals of low status.

Government has held its same position since 1994, when the National Health Plan was adopted in which it committed itself to involving traditional healers in the official health services.\(^6\)

The White Paper on the Transformation of the Health System in South Africa of 1997 provides that traditional practitioners and traditional midwives should be recognised as an important component of the broader health care team. The National Health Bill of 2001 lists as one of the district functions the facilitation of co-operation between all health care providers in the district, including general, traditional and complementary practitioners. The Traditional Health Practitioners Bill went before Parliament in September 2004.

In summarising the abovementioned facts, African
INTRODUCTION: Traditional medicine has existed in Uganda for a very long time before the advent for modern forms of treatment and almost all communities entirely depended on it for their health care needs. Traditional practitioners are found in most societies in Uganda and these are more pronounced in rural settings like that of Kiruhura district. The increasing use of traditional medicine in Uganda and partucularly in Kiruhura district is based on the various advantages occurring to traditional medicine including but not limited to being cheaper and easier to access than biomedical health care and being culturally accepted among others. However, the use of traditional medicine has not been given the attention it deserves in terms of regulation and guidance and this is likely to result into health problems to the population. The challenges such as poor herbal preparation, dosage, storage and administration have continued to threathen the practice and are likely to result into negative health impacts if no mitigation measures are adequately put in place.

OBJECTIVES: The study was undertaken to assess the use of traditional medicine as a health care option and generate information that would be used in formulating guidelines on use and regulation of traditional medicine in Kiruhura district. Specifically the study was intended to establish the level of use of traditional medicine by the community in kiruhura district, factors responsible for utilization of traditional medicine, and the problems associated with use of traditional medicine in kiruhura district.

METHODS: A Descriptive cross-sectional study employing both qualitative and quantitative methods of data collection was used. The formula used to calculate the sample size was the kish and leslie formula of random sampling for single proportion. Thus a total number of 384 respondents was interviewed. The data collection tools included Focus Group discussion guides, key informant interview guide and interviewer administered questionnaires.

Data was entered using Epi-Info Version 3.2.2 (2005) software and exported to stata 8.2 software for analysis and it was done in stages involving univariate, bivariate and multivariate analysis.

RESULTS: The study revealed that about 62% of the population in Kiruhura use traditional medicine compared to modern or biomedical treatment. The factors that significantly influenced the utilization of traditional medicine were, strong traditional beliefs (47%), lack of drugs in health centres (29%), high cost of treatment in health centres (12%), long distances to health centres (9%) and others (3%). The problems associated with use of traditional medicine were found to be lack of herbal preparation standards, false application, unspecified dosage and wrong administration among others.

CONCLUSION: The study revealed that the population Kiruhura district use traditional medicine more than modern or biomedical treatment. The main factor that significantly influenced the use of traditional medicine was the inherently belief in traditional medicine where certain disease conditions are traditionally branded to be only cured by traditional medicine. Other factors were lack of adequate drugs in health facilities, high cost treatment in health facilities, long distances to health facilities and social demographic characteristics like the sex of respondent and occupation were the peasants use traditional medicine more than the rest. Women were more attached to the use of TM because of their house hold role of caring for the family’s health including their pregnancies. Notwithstanding
Continued from page 19 – Utilization of Traditional Medicine as a Health Care Option: A Case for Kiruhura District

the high level use of traditional medicine in Kiruhura district, a number of challenges were found to be associated with this use. These included lack of herbal preparation standards, false application were some drugs were falsely said to be curing everything, unspecified dosage and wrong administration were in some cases the traditional medicine was injected directly and posed health risks.

RECOMMENDATIONS:

1. The ministry of health and the district health team should guide the population in kiruhura on proper use of traditional medicine giving particular attention to issues of efficacy and safety.

2. Ministry of health and other stakeholders should undertake an inventory of the most useful traditional medicines/herbs and create a catalogue for easy research and guidance to the users.

3. The Local government of kiruhura district with the assistance of ministry of health should formulate a traditional medicine by-law to regulate the practice.

4. The ministry of health should establish more health centres nearer to the people and equip them with drugs to reduce dependence on traditional medicine.

5. The draft policy on traditional medicine should be quickly formulated to guide the traditional medicine practice paying specific attention to issues of efficacy, quality and mode of herbal preparation.

6. The ministry of health, District health department and other stakeholders should sensitize the population in kiruhura to change their beliefs in traditional medicine which has affected their modern health care seeking behaviour. (Some individuals still think that certain herbal can cure everything and they end up not visiting any doctor).

7. Traditional medicine should be included in school curriculum beginning from primary level to enable children grow up with an informed mind.

8. The ministry of Health should integrate a component on traditional medicine in the national health strategic plan.

9. There should be a deliberate effort to women health related issues in district since they are most affected and can influence behaviour change at household level.

Dissertation submitted in partial fulfillment for the award of the degree of Master of Public Health of Makerere University

http://dspace3.mak.ac.ug/xmlui/handle/10570/581

Continued from page 18 – The Traditional Healer as Part of the Primary Health Care Team?

traditional healing is part of African culture and essential for the health and well-being of a great part of the black population. The healer understands the significance of ancestral spirits, he shares the belief in supernatural forces, and he identifies with the reality of witches.

However, clients also value the efficacy of modern scientific medicine and have generally managed to become dual health care consumers in the sense that they use both medical sectors interchangeably, consecutively or even concurrently for the various aspects of one and the same condition. Broadly speaking, the traditional healer is consulted to explain the cause of an illness, and the medical doctor is visited to relieve the physical symptoms.7

In this way the two sectors complement each other. Mainstream medicine today is one of the most highly regulated of all socio-economic activities, the epitome of profession, and laws regulating the practice of modern scientific medicine are universal. They are essential both to provide the medical practitioner with legal protection and to safeguard the public from unqualified medical treatment. The Traditional Health Practitioners Act of 2004 will go a long way in allaying fears of charlatanism, but one basic concern remains. It arises from the very nature of traditional medicine with its strong religious, magical, spiritual and other supernatural dimensions that militate against any formal structuring of knowledge in the way professionalism may require. To a large extent, traditional medicine cannot be taught, assessed or subjected to standardised tests of competence and proficiency.

There are inadequate health care resources to provide modern health care to all people in South Africa. In addition, the biomedical approach of modern scientific medicine is unable to treat, or at best only partially equipped for treating, the whole range of illnesses to be found in Africa, while the traditional medical system may be well suited to meet the social and psychological needs not met by the Western style of care.

The traditional medical sector represents a vast manpower resource: approximately 300 000 traditional healers compared with just under 32 000 medical doctors as registered with the HPCSA in 2003. Effective utilisation could help to achieve total health care coverage through acceptable and economically feasible means. Through statutory regulation it is hoped to see traditional medicine practised in a safe and competent manner.

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The Traditional Healer as Part of the Primary Health Care Team?

Traditional healers as part of the primary health care team have an enormous potential in treating many prevailing illnesses, educating people in various aspects of preventable conditions and at the same time bridging the cultural gap in the concept of health and disease, thus making healing more culturally appropriate.

Ortrun Meissner
Faculty of Health Sciences, University of Transkei, Umtata, E Cape 18, November 2004, Vol. 94, No. 11, SAMJ


Half of Positions in Health Facilities Vacant, says Government
By Yasiin Mugerwa
September 27, 2013
Monitor

Ministry of Health report says stakeholders should prioritise staff accommodation as a strategy to address the issue of health worker attraction.

A new government report to Parliament casts a shadow on what the lawmakers called, “the tragedy of the country’s healthcare system” worsened by low staffing levels and poor housing facilities.

The 2013 Ministry of Health’s Human Resources for Health report found that nearly half of the required staffing levels in 2,934 health units in the country are vacant and that health workers live under “very poor” conditions.

“It is undeniable that the living conditions of Ugandan health workers are unacceptably poor,” a 121-page bi-annual report funded by USAID and IntraHealth International reads in part. “This of course affects staff moral and if the living conditions are improved could go a long way in improving staff attraction, retention and morale.”

Currently, the districts have 29,941 staff in post and according to the staffing standards; at least 21,612 houses should be in place to cater for at least 72 per cent of health workers. However, only 3,590 houses are in place catering for 12 per cent of staff, meaning that 26,351 health workers are not accommodated.

Since majority of the health workers are in lower level units where accommodation for renting is scarce, the report says “it means that these health workers have to travel long distances to go to work resulting in late coming, hence affecting productivity and service delivery.”

Based on the data collected from 111 districts across the country, the report puts the filled positions in health units at 60.5 per cent and vacant positions at 39 per cent. This level of staffing is; however, lower than what the government had anticipated after the planned recruitment of 10, 231 health workers last financial year.

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Continued from page 21 – Half of Positions in Health Facilities Vacant

However, out of 10,210 jobs advertised, 8,353 people were offered the jobs after interviews, but only 7,211 reported to work. According to the report, due to lack of accommodation, dispensers, nursing officers, midwifery, public health dental officers; theatre assistants; ophthalmic clinical officers and anesthetic officers were among the health workers did not turn up.

Reports from various districts show that the rate of health workers reporting to work after appointment was greatly affected by lack of staff accommodation. Even for health workers who reported to work, the report says that “their retention will be greatly determined by the availability and state of their accommodation.”


Ho Municipal Hospital Opens Herbal Clinic

20 March 2013

Ho, March 20, GNA - Management of the Ho Municipal Hospital on Tuesday formally started herbal medicine services at the facility with a promise to 'expand frontiers of herbal medicine to alleviate the ails of mankind'.

Dr Kofi Gafatsi Normanyo, Medical Superintendent who spoke at a forum on herbal medicine services held at the premises of the hospital, expressed hope that the clinic 'would fill the gaps which orthodox medicine has no clues to yet'.

He said the new service gave him inkling into the situation of the fusion of orthodox and herbal or alternative medical practice in the future.

Dr Normanyo said while between 70 to 80 percent of the world's population depended on herbal and alternative remedies that area remained largely untapped.

'It (herbal medicine) is cheaper and its primary resources are locally placed and therefore within easy reach,' he said.

Dr Normanyo said the World Health Organization (WHO) was at the forefront of the battle to give scientific meaning to herbal and alternative remedies while the African Union and its scientific organs had also risen to the task.

He said in Ghana, the Traditional and Alternative Medicine Division (TAMD) had made 'fantastic strides' in the area.

Mr Peter Arhin, Director of TAMD, said herbal medicine was largely affordable and that every effort was being made to apply technology to the area to make herbal products safe and potent and practice regulated.

Miss Ernestine Amponsem and Deladem Aloka, the two Medical Herbalists in charge of the clinic, took the forum through various aspects of herbal medicine.

She said 13 of the projected 18 pilot public herbal clinics are operational and that the good thing about herbal medicine was that it had an attachment to the belief system of the people.

Miss Amponsem said the area had a huge potential for the nation's economic growth including job creation.

Miss Aloka said among 20 ailments treated at the clinic were malaria, stomach ulcers, asthma and dermatitis, adding that 84 herbal preparations had been approved for dispensing at the clinics.

Miss Kafui Sokpe, Medical Herbalist at the Volta Regional Hospital, said there was the need to extend coverage of health insurance to clients of the clinic to improve attendance.


Establishing a Herbal Clinic: Kenya

GENERAL INFORMATION

Implementing institution
Department of Botany, Jomo Kenyatta University of Agriculture and Technology (JKUAT)

Head
Professor Nick Wanjohi (vice-chancellor)

Details of institution
Address:
Jomo Kenyatta University of Agriculture and Technology, Department of Botany, P.O. Box 62000, Nairobi, Kenya

Tel.: (+254) 20 67 52711
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E-mail: jkuat@nbnet.org, botany@jkuat.ac.ke
Web site: www.jkuat.ac.ke

Implementation period
Three years
Continued from page 22 - Establishing a Herbal Clinic: Kenya

Costs
Setting up the clinic cost JKUAT US$1,300 (Ksh 100,000) and another US$1,300 for the initial collection and screening of plants for medicinal use.

SUMMARY
In Kenya and elsewhere in sub-Saharan Africa, traditional herbal medicines are commonly used to treat a range of diseases. Such practices are especially wide-spread in rural areas where access to modern health care facilities is limited and the cost of modern pharmaceuticals is beyond the means of most people. In addition, there are very few effective drugs available for treating some of the most common ailments in these areas, including asthma, HIV/AIDS, malaria and typhoid.

Medicines derived from indigenous Kenyan plants, however, have long been used to treat these and other diseases.

Therefore, a clinic was established outside the university gates, offering treatments based on natural herbal products. Patients suffering from such common diseases as those listed above plus diabetes, hypertension, ulcers and others were provided with herbal remedies and checks were made of their progress. Initially, some 100 people were treated, many of whom were referred to the clinic by modern health practitioners. Since then, the clinic has treated thousands of individuals.

BACKGROUND AND JUSTIFICATION
In 1999, the faculty of science at Jomo Kenyatta University of Agriculture and Technology (JKUAT) agreed that the only way to control and treat debilitating tropical diseases such as malaria and typhoid was through the application of scientific research. At the same time, it was realized that most of the chronic diseases, including those resistant to existing conventional drugs, could be cured using traditional herbal medicines.

To tackle this issue, the university collaborated with the Kenya Medical Research Institute to establish the Institute of Tropical Research on Medicines for Infectious Diseases within the university. The new institution’s remit was to train master’s and doctoral students, mainly in the field of alternative medicines, with the aim of developing new drugs from the many indigenous medicinal plants available in Kenya.

However even if such drugs were to be developed, the majority of Kenyans living in rural areas are poor and cannot afford to attend hospitals or purchase expensive conventional drugs. There was a need, therefore, for the university to develop links with traditional healers to develop inexpensive and reliable herbal medicines for a variety of common ailments.

Responding to this need, staff in the Department of Botany, JKUAT, began the systematic identification of those plants used in traditional herbal medicines, collecting medicinal materials from the field and preparing medicines and dispensing them to patients.

Among the main challenges faced was the accurate determination of the correct dosage to prescribe to patients.

Also, as the herbal clinic was a new concept in Kenya, it faced a great deal of resistance from practitioners of modern medicine and needed to obtain formal registration from government officials.

DESCRIPTION
Establishing a formal herbal clinic in Kenya is difficult since there are many government regulations to which to adhere.

First, herbalists must demonstrate their proficiency in the art, and especially their knowledge of plant identification, using either the vernacular or botanical species names. Also, in order to receive a certificate of recognition, the practitioner’s plant materials must be checked and recorded by botanists at the University of Nairobi, Kenyatta University, the Kenya Medical Research Institute or the Kenya Forest Research Institute. Having satisfied this criterion, the herbalist must register as a herbal practitioner with the Ministry of Gender, Sports, Culture and Social Services. Having obtained a certificate from the Ministry, the herbalist must then apply for a permit to operate from the municipal council or local authority within which the clinic will be situated. These permits are issued under the close scrutiny of public health officers, who must issue a letter to certify that the clinic meets certain conditions of hygiene. Finally, two permits are issued: one by the local authority and the other by the Ministry of Trade and Industry according to the Trade Licensing Act.

During the initial phase of the project, medicinal plants were screened for microbial activity in the laboratory and, based on traditional practices, used to treat nine ailments: arthritis, asthma, bronchitis, Candida (thrush), HIV/AIDS, malaria, rheumatism, typhoid and ulcers.

Among the plants used were *Acacia* spp. (family Fabaceae), *Albizzia anthelmintica* (the aru or worm-cure tree, family Fabaceae), *Aloe* spp. (family Liliaceae, figs. 1a and 1b), *Asparagus africana* (family Asparagaceae), *Balanites glabura* (family Balanitaceae), *Carissa edulis* (the Natal plum, family Apocynaceae), *Catharanthus*...
Continued from page 24 - Establishing a Herbal Clinic: Kenya

Figures 1a and 1b. Aloe species, used to treat ulcers and skin conditions

*roseus* (the Madagascar periwinkle, family Apocynaceae), *Chalybea* sp. (family Melastomataceae), *Coleus aromaticus* (Indian borage, the mint family, Lamiaceae, fig. 2), *Commiphora africana* (hairy corkwood, family Burseraceae, fig. 3), *Erigeron canadensis* (fleabane, family Asteraceae), *Fagara* sp. (family Rutaceae), *Ipomoea kituensis* (a relative of the sweet potato, family Convovulaceae), *Kigelia africana* (the sausage tree, family Bignoniaceae), *Leonotis* spp. (family Lamiaceae), *Melia volkensii* var. *keniae* (family Meliaceae), *Mimosa pudica* (the sensitive plant, family Fabaceae), *Ormocarpum trichocarpum* (caterpillar bush, family Fabaceae), *Pappea capensis* (jacket plum, family Sapindaceae), *Prunus Africana* (pygeum or African stinkwood, family Rosaceae), *Psidium guajava* (guava, family Myrtaceae), *Rhoicissus tridentate* (wild grape, family Vitaceae), *Sterculia Africana* (African star chestnut, family Sterculiaceae), *Striga hermonthica* (witchweed, family Scrophulariaceae), *Synadenium compactum* (African milkbush, family Euphorbiaceae), *Urtica dioica* (stinging nettle, family Urticaceae), *Warburgia ugandensis* (East African greenheart, family Canellaceae, fig. 4) and *Ximeria caffra* (family Olacaceae).

Depending on the disease being treated, the bark, buds, flowers, leaves or roots of the plant were used. After determining the toxicity levels for the various medicines using brine shrimp (*Artemia salina*) in a bioassay, dosages (grammes per litre) were calculated for medicines made from both powders and fresh material using published guidelines (see table).
Establishing a Herbal Clinic: Kenya

Results of patient treatments were also captured through a feedback mechanism, which has enabled protocols and dosages to be refined through practical experience.

Among the most common ailments treated have been all forms of arthritis (rheumatoid arthritis is especially common); bronchial diseases; highland malaria; peptic ulcers; sexually transmitted diseases, including gonorrhea and syphilis as well as HIV/AIDS; tuberculosis; and typhoid.

PARTNERSHIPS

In Kenya, several organizations are involved in the practice and regulation of herbal medicine, including the National Association of Herbalists, the Ministry of Culture, the Ministry of Trade and Industry, local authorities and public health officers. However, although no formal collaboration has been formed with the international scientific community, the clinic has been visited by a team from St. Lawrence University, Germany, through an arrangement with the Institute for African Studies, University of Nairobi, and another team from the University of Cape Town, South Africa.

The major interest of these groups is in using the indigenous knowledge of Kenyan herbalists in developing new drugs to tackle such diseases as HIV/AIDS and influenza.

Herbal clinics are found in many regions of the world; however, very few have a research component. As a herbal clinic run by a university department, the aim was to uphold the highest standards possible by maintaining hygienic conditions while the remedies were being prepared and dispensed and by adhering to defined dosages. In this way, the success of the clinic should be emulated by all herbal clinics in Kenya. Already many practicing herbalists have visited the clinic to consult it on the preparation of tinctures, better storage and preservation conditions for medicines, and how to monitor the efficacy of herbal medicines.

Initially, modern medical practitioners, members of Kenya’s pharmaceutical societies and the Ministry of Health were generally skeptical about the efficacy of herbal medicine. By establishing the herbal clinic, the university has sent a clear message that the practice of traditional herbal medicine should not be left in the care of the old and illiterate — its image among Kenya’s educated urban classes — but rather should be given the scientific backing to modernize it. The success of the clinic has also demonstrated that herbal medicines are not toxic when consumed, as is often related by the authorities.

In summary, the experience of the herbal clinic can be used in other developing countries as a model for providing more affordable health care based on herbal medicines.

POLICY IMPLICATIONS

Like all medical services provided in Kenya, herbal clinics and practices are regulated by an act of parliament. Under the law, properly certified herbal practitioners are protected from legal redress arising, for example, from the death of a patient who, relatives allege, has been given an overdose of medicine.

Fortunately, this particular situation has yet to arise. However, the new constitution, now being drafted, recognizes herbal practitioners and reads: “Every person has a right to health, which includes the right to health care services, whether allopathic or complementary and alternative medicine, including reproductive health care.”

LESSONS LEARNED

Initially, traditional healers based in rural Kenya campaigned against the university’s involvement in herbal medicine.

They felt that knowledge of medicinal herbs was always passed from parent to child and should be limited only to those born into the families of traditional herbal practitioners. To some extent, this mindset has been
overcome through a series of meetings between university staff and traditional healers that have resulted in both parties developing an appreciation and respect for the work and knowledge of the other. University staffs are also involved in an ongoing public information exercise concerning herbal medicine, addressing church groups and where. Indeed, the aim is to share the experiences of the clinic with international colleagues through attending workshops and conferences and during short-term visits to other institutions.

Likewise, the clinic is attempting to establish strong contacts with the government, nongovernmental organizations, the pharmaceutical industry and health research institutes within Kenya to enhance the development of pharmaceutical products from the nation’s rich floral diversity. In particular, future research will be intensified to develop herbal products for the treatment of some of the more challenging diseases such as HIV/AIDS.

Nature conservation regulations restrict the collection of plant material from certain areas, such as forests, unless the collector has been issued a permit. To remove this need and reduce any impact on wild populations of medicinal plants through over-harvesting, a botanical garden is being created in which most of the plants required by the clinic will be grown.

In the long term, there are plans to develop a “herbal hospital” rather than a herbal clinic, but this requires that a new, larger building be constructed. Also, more staff will be deployed so that the clinic can reach as many patients as possible throughout Kenya.

PUBLICATIONS

Case study prepared by:
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Project participants:
John M. Ochora: Diagnosis of diseases, preparation and dispensing of herbal medicines to patients and coordination of clinic activities. Teresa Akenga: Laboratory screening of medicinal plants for microbial activity. Thaddeus Omwoma: Clinical attendant/record keeping.


The Role of Botanic Gardens in the Dissemination of Ethnobotanical Knowledge in Kenya
Contributed by Abel Barasa Atiti
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Introduction
Economic development in Kenya, which is and will continue to be largely dependent on the exploitation of plant resources, is at present unsustainable. Many of the plant resources are being mismanaged and cannot sustain their present rates of use. To this effect, biodiversity and the issue of the sustainable use of plant resources have become a primary and urgent concern for the Kenyan government. Botanic gardens have played a major role in the economic, cultural and scientific development of many countries in the world. They have an important role to play in conservation of plants, but conservation cannot succeed without education.

Kenya has few public displays and educational collections that can serve as botanic gardens. There is thus an urgent need to establish botanic gardens in every ecological zone of the country, which can then act as centres for environmental education. Already, plans are at an advanced stage to develop a botanic garden at the National Museums of Kenya (NMK) site. The UK Overseas Development Administration (ODA), through the Plant Conservation Programme at NMK, is committed to funding the initial development stages of the proposed botanic garden. The botanic garden will attempt to address the issue of education for sustainability by teaching about the links between plants and local indigenous people.

Collection and Documentation of Ethnobotanical Knowledge for Education
Ethnobotanists in Kenya are playing a very useful role in rescuing disappearing ethnobotanical knowledge and returning it to local communities. The scope of the ethnobotanical knowledge to be collected and documented is very wide as it relates to all aspects of a community’s life, including agriculture, taboos, conservation, religion, myths and other plant uses.

Different local communities in Kenya have various uses for particular species of plants. Ethnobotanical knowledge is generally richer among the pastoral communities who depend a lot on the environment for their survival.
Ethnobotanical Approaches to Biodiversity Conservation

Although Kenya has a very diverse cultural heritage, each community has developed land use systems which include environmental strategies. Most local communities had in-built practices that enhanced conservation of biodiversity. Rationalised harvesting of plant resources ensured sustainable supplies, while over-exploitation was avoided. This does not however imply that human-induced environmental change and degradation did not occur, but it was modest compared to present-day changes.

Respect for ancestral spirits directly contributed to biodiversity conservation. For instance, plants that existed in shrines were protected, as trees were not felled there. The belief that ancestral spirits lived in caves and rock shelters among some communities (Odak, 1990) assured conservation of biodiversity where such physical structures were found. The landscape and trees in such sites were protected against destruction. Trees that were regarded as sacred or ceremonial were never used for any purpose. In many local communities, all big trees were respected and large forests were regarded as sacred.

Myths, taboos and superstitions were also an ideological mechanism of managing plant resources. In some communities, trees near water resources were never cut for any purpose, and if anyone contravened this taboo, the person was fined or punished by a council of elders. Among some tribes, *Erythrina abyssinica* was the basis of a curse and it was believed that the wood could never be burned for fear of attracting lightning. Myths and beliefs that promoted biodiversity conservation are still abundant in Kenya.

It is however disturbing to note that there is a serious tendency for people in Kenya, especially the elites, to abandon the traditional cultures in favour of western cultures. Many have adopted values, attitudes and tastes of western cultures to the detriment of the indigenous ones (Kipkorir, 1980). Consequently, in places where beliefs and superstitions associated with sacred sites have been abandoned, the sites have been degraded and the associated biodiversity damaged. Species of plants that were valued in indigenous cultures have been gradually abandoned in favour of exotic ones. Extensive cash-crop farms occupy lands that supported a wide variety of valued indigenous species (Gatheru, personal communication). One way of arresting this situation is to promote dissemination of ethnobotanical knowledge through botanic gardens.

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Educators in botanic gardens may employ basic methods of collecting indigenous knowledge from local communities though, in my view, the exercise should be left entirely to ethnobotanists and other researchers. Collection may be done through interviews, observations and guided tours. Basic guidelines, which may be followed for collecting ethnobotanical knowledge for documentation, are:

- consumption uses of plants in different communities
- cultural ceremonies that involve plants
- customs, myths and beliefs that enhance plant conservation
- cultural factors that threaten biodiversity.

It is perhaps important to highlight the efforts of NMK as regards the collection and documentation of indigenous knowledge in Kenya. Through its Centre for Biodiversity (CBD) an action programme has been developed that gathers, stores, analyses and disseminates biodiversity information required for sustainable utilisation of biological resources. One of the many objectives of the CBD is to document the indigenous uses of biological diversity and, where appropriate, promote them with the full participation of local communities.

The CBD has two main programmes that will be invaluable sources of ethnobotanical knowledge for botanic gardens in the country; the Biodiversity Database Programme and the Kenya Resource Centre for Indigenous Knowledge (KENRIK) programme. The Biodiversity Database will serve both as a provider and collector of ethnobotanical information for botanic garden education. KENRIK is perhaps the most important contribution of NMK to the collection and documentation of ethnobotanical knowledge. KENRIK identifies and records indigenous knowledge with a view to preserving cultural and biological diversity for future utilisation. It further promotes ethnobotanical studies, establishes databases, and carries out community-based research and conservation programmes. Already it maintains an indigenous food plants database with over 800 records of edible plant species in Kenya.

It is anticipated that the proposed NMK botanic garden will greatly utilise the ethnobotanical knowledge that is documented at CBD for environmental education programmes. The collation of indigenous knowledge for the purpose of environmental education is proposed as one of the main activities in the education policy of the proposed NMK botanic garden.

Continued on page 28
The Potential Role of Botanic Gardens
The Global Biodiversity Strategy (WRI, 1992) lists deficiencies in knowledge and its application as one of the fundamental causes for biodiversity loss. The proposed NMK botanic garden will endeavour to disseminate ethnobotanical knowledge to the public, thereby reinforcing links between local communities and the environment (Martin, 1992). By incorporating ethnobotanical knowledge in its environmental education programmes, the botanic garden will help restore a sense of pride in local cultural knowledge and practices.

One major goal for the proposed NMK botanic garden will therefore be to facilitate the transfer and assimilation of ethnobotanical knowledge. This will promote integration of environment and development, and enhance awareness of, and concern for social and ecological approaches to education for sustainability. Generally, environmental education is not very well developed in Kenya. There is limited use of indigenous knowledge in developing training programmes and little consideration is paid to socio-cultural aspects and the interests of target groups. A major constraint is the shortage of funding and of basic teaching and learning resources and facilities. When they are established, botanic gardens will enhance both formal and non-formal environmental education. Non-formal environmental education has a long history as regards to the protection and conservation of sites of interest by the different cultural groups in Kenya. Sustainable development can only be achieved with the support and cooperation of an informed public.

Various approaches will be used in the dissemination of ethnobotanical knowledge at the proposed NMK botanic garden. These will include workshops, lectures, story-telling sessions and outreach programmes. Story telling and the compilation of folklore narratives that enhance biodiversity conservation will be a major educational activity at the garden. Cultural activities that involve use of plant resources e.g. traditional dances, drama, culinary and technology exhibits, will also be part of the educational programmes that will be developed to disseminate ethnobotanical information.

Outreach programmes to local communities will entail educating them about the need to respect and incorporate their values, knowledge systems and priorities in plant conservation and management. The use of newsletters and popular publications as a way of disseminating ethnobotanical knowledge will be pursued. Newsletters are a simple and inexpensive way of communication and they will provide a forum for exchanging opinions about plants conservation, ethnobotanical knowledge and community development.

Efforts will be made to prepare indigenous information packages in local languages for local communities through seminars and workshops.

Without doubt, botanic gardens in Kenya, when established, will play a major role in the dissemination of ethnobotanical knowledge for sustainable development.

Education for Sustainability
Different communities in Kenya have lived with, sustained themselves from, and conserved plant resources with respect for the environment. Through education at botanic gardens, understanding of cultures and ethnobotanical knowledge will be enhanced, thereby offering the needed options for future biodiversity conservation and development in Kenya. While the country has an extensive network of protected areas, conservation of plant resources outside these areas will depend on the goodwill of the local communities.

The Convention on Biological Diversity (UNEP, 1992) recognises the traditional dependence of many local communities on plant resources and the desirability of enabling them to share equitably in the benefits arising from the use of ethnobotanical knowledge. Education for sustainability at botanic gardens will sensitise the public to the importance of maintaining resource sustainability and will further promote utilisation, marketing and conservation of indigenous plants. With an educated population, it will be easier to protect sacred places and areas of cultural importance.

It will be very necessary that ethnobotanical knowledge disseminated at the botanic gardens is put to effective use by local communities. Applications of ethnobotanical knowledge learned at botanic gardens will include:

Construction of ethnobotanical nurseries
Local communities will be encouraged through education for sustainability to construct village ethnobotanical nurseries where useful species of indigenous plants can be cultivated.

The ethnobotanical nurseries will provide opportunities for the younger generation in the community to learn the traditional knowledge of their elders, particularly that of herbal medicine. They will also serve as demonstration plots where young people will be encouraged to plant indigenous species in afforestation, landscaping, soil conservation and urban park programmes.

Continued on page 29
Setting up herbal clinics
A large proportion of the Kenyan population still uses herbal medicine in their health care. Ethnobotanical knowledge learned at botanic gardens will be used to document traditional medical practices that may be applied in herbal clinics. This will ensure that herbalists are involved more fully in the management of areas that supply herbal medicines. Setting up of herbal clinics as a result of utilising ethnobotanical knowledge will further encourage agronomic and silvicultural practices in growing indigenous herbs and trees of medicinal value.

Establishment of community herbaria
Community herbaria can be effective tools in working with the younger generation in schools and villages (Martin, 1995). Students will be expected to apply basic herbarium techniques of pressing and drying plant specimens. This will encourage them to learn the knowledge of their elders, a traditional process that is rapidly dying in many communities.

Promotion of arts and crafts
Education for sustainability will enhance the rational use of plant resources in the production of baskets, textiles, woodcarvings and many other handicrafts. The aim of which is to minimise the overexploitation of plant resources.

Applications in forestry
Ethnobotanical approaches to plant conservation learned at botanic gardens will be applied in agroforestry, reforestation, selective logging and the sustainable harvesting of non-timber forest products. Suitable indigenous plant species will be used in agroforestry and in the ecological reconstruction of fragile lands.

Conclusion
As we approach the twenty-first century, the critical challenge for Kenya is to develop the botanic gardens that will be needed to educate people in the sustainable use of plant resources. The botanic gardens will deal with the dynamics of both ecological and social approaches to education for sustainability. They will be used to measure the true value of plant resources, widen the use of indigenous species and establish sustainable harvest-levels in the pursuit of protecting threatened ecosystems. Emphasising the understanding of ethnobotanical knowledge in botanic gardens will offer much-needed options for future plant conservation and utilisation. As educators in botanic gardens, we have an obligation to promote the dissemination of ethnobotanical knowledge for the sustainable use of plant resources and the protection of the environment. It is an objective that the proposed NMK botanic garden will be working hard to achieve.

References


http://www.bgci.org/education/1769/
Abstract

This study was conducted in Nangabo sub-county of Wakiso district. The purpose was to document the common Traditional Medicine (TM) practices; assess the local people's preferences for TM versus western medicine (WM) and lastly to determine the awareness about the importance of TM by local people. Data were collected using semi-structured administered face-to-face with respondents. A total of 120 interviewed. Six focused group discussions (FGDs) were held to validate the questionnaire responses. Data were analyzed descriptively using Statistical Package for Social Sciences (SPSS). The findings indicated that most (43%) respondents derive their livelihoods from traditional medicine practices. Three forms of TM were reported—herbalism (67%), spiritual counseling (23%) and bone setting (10%). Although the majority (81%) of respondents was quite aware of the importance of TM in the sustenance of health care system, majority (55%) of them shunned TM in preference to WM, largely because of the belief that TM is evil-founded and devilish in nature. Only 45% of the respondents preferred TM to WM. The main reasons given for visiting TM practitioners rather than western medical practitioners were that TM is sometimes more effective than WM and that in many instances it has very minimal side effects on the human body. There is, however, a need for Ugandan government to legitimize the practice of TM since it contributes a lot to health care needs in areas where western medicine is insufficiently provided. In addition, there is a need for further research into the efficacy and safety of traditional medicines if it is to be adequately integrated into western medicine.

Keywords: Traditional medicine, health care, herbalism, spiritual counseling, bone setting, Uganda

Introduction

Traditional Medicine (TM) can be defined as health practices, approaches, knowledge and beliefs including plant, animal and mineral-based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to diagnose, treat and prevent illnesses or maintain well-being (WHO, 2003). It is very important for primary health care (PHC) delivery and its use is widespread in developing countries of Africa, Asia and Latin America. In Africa, up to 80% of the population uses TM for Primary Health Care (PHC) (WHO, 2002). In developed countries, adaptations of TM are termed as “Complementary” or “Alternative” Medicine (CAM).

In Uganda, TM usage for day-to-day health care needs is reported to be close to 90% and that women and children form the bulk of the people reliant on herbal medicine (Kamatenesi-Mugisha and Oryem-Origa, 2005). The relative ratio of traditional medicine practitioners and western university-trained doctors in relation to the whole population in Uganda is revealing as is true for many parts of the African continent. There is at least one traditional healer in Uganda for nearly 290 people compared to one Western-trained medical practitioner for every 10,000 people in the urban areas and 50,000 people in the rural areas respectively (Weisheit and Male, 2003).

TM’s popularity to its accessibility, affordability and its firm embedment within the faith systems of the people (WHO, 2002). In the case of Uganda, western-trained medical personnel are either limited or not really accepted by the community, and traditional healers are easily consulted, living in the same community (Bannerman et al., 1993). The country imports most of its drugs from abroad and often experiences serious shortages. That points to the demand for TMPs for medicinal plants and the fact that the majority of the people, rural and urban alike, depend largely on herbal medicines for treating a variety of diseases (Esegu, 2002). This reliance is mainly due to the high cost of conventional medicine and inaccessibility of modern health care facilities in most areas.

Owing to TM's importance for the provision of primary health care, there is need for it to be developed, promoted and integrated into national health care systems (WHO, 1978). The government of Uganda has so far taken important steps to recognition of TM and a draft bill for a law to recognize, coordinate and regulate the practice of TM the country is under preparation (Ministry of Health, 2000). The role of TM in PHC, especially at a time when resources to access modern medical facilities are scarce, cannot be underestimated. In this study, therefore, we documented the common Traditional medicine (TM) practices; assessed the local people's preferences for TM versus western medicine (WM) and lastly to determined the local peoples' awareness about the importance of TM in Nangabo sub-county of Wakiso district, central Uganda.

The study area and Methods

The study area

The study was conducted in Nangabo sub-county located in Wakiso district of central Uganda. Nangabo lies between of latitude 0° 24’ N and longitude 32° 27’ E (UDIH, 2005). It is approximately 21.45 km² in area.

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FEATURED ARTICLES

Medicinal Plants in East and Central Africa: Challenges and Constraints

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15 February 2009

Abstract
In East and Central Africa, medicinal and aromatic plants play an important role in the health of millions of people. Demand for medicinal plants is increasing as the population grows. Over-use of the medicinal and aromatic plants cause further economic, social and ecological deterioration. The traditional knowledge, uses and economic contribution of medicinal and aromatic plants to the rural economy in the region were studied. The direct and indirect effects of the human activities on this region are discussed. This paper also discusses challenges and constraints in relation to conservation.

Strategies for enhancing the development of a medicinal and aromatic plants industry are suggestive.

Introduction
The use of traditional medicines remains widespread in developing countries while the use of complementary alternative medicine (CAM) is increasing rapidly in developed countries. Only a few African phytomedicines are available in the international market, however, African medicinal plants play a key role in basic healthcare, particularly in rural areas due to their accessibility and affordability.

East and central Africa is a region on the African continent that includes the countries of Somalia, Kenya, Sudan, Chad, Central African Republic, Tanzania, Uganda, Burundi, Congo and Rwanda, The revival of interest in the use and importance of African medicinal plants by the WHO and many developing countries has led to intensified efforts on the documentation of ethnomedical data of medicinal plants, since most traditional healers keep no records and their information is passed on, mainly verbally, from generation to generation. Research has been geared towards finding scientific evidence for the claims as to the therapeutic efficacy of African herbs by traditional healers. Most of the published and unpublished written ethnomedicine data with valuable and complementary information are scattered in many documents, some of which are not easily available. An interdisciplinary systematization, which certainly help to predict the most promising candidates for further laboratory or clinical investigations, appears as useful work.

In continuation of our work to bring up to date East and Central African ethnomedicine data, the present paper reports medicinal plants together with some traditional beliefs about them.

Methodology
I have collected and organized selected information from the literature and from our own ethnobotanical work. Major local Sudanese, Kenyan, Tanzanian, Rwandan medicinal plants were then listed with its vernacular name, scientific name, family and uses where available. Ten plant species that have the greatest number of different medicinal uses in the region with detailed information were recorded.

Results and Discussion:
In the following enumeration, plants are arranged alphabetically, followed by the local name, family name and uses or chemical constituents, where available.

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Major local Sudanese medicinal plants:

Acacia nilotica (L.) Del. ssp. nilotica (Garad), Mimosaceae. Fruit for cough, pustular diseases, catarrh, fever and measles.

Adansonia digitata L. (Gonoleis), Bombacaceae. To stop diarrhea, as febrifuge.

Ambrosia maritima L. (Damsisa), Asteraceae. To treat backache, stomach pains, malaria and for gastrointestinal disturbances.

Balanites aegyptiaca (L.) Del. (Lalob), Balanitaceae. As a laxative, antihelminthic, jaundice.

Cassia acutifolia Del., (Senna), Caesalpiniaceae. Fruit for fever, as a laxative, carminative, as antihelminthic.

Croton zambesicus Muell. Arg. (Um Gleigla), Euphorbiaceae. Antimalarial.

Citrus colocynthis (L.) Schrad. (Handal), Cucurbitaceae. For pustules in the skin.

Haplophyllum tuberculatum (Forsk.) A. Juss. (Hazza), Rutaceae. Antispasmodic, decongestant, carminative.

Hibiscus sabdariffa L. (Karkadeh), Malvaceae. As a mild laxative, cough, antihypertensive agent.

Lawsonia inermis L. (Henna), Lythraceae. To treat boils and wounds.

Nauclea latifolia Sm. (Karmodada), Rubiaceae. As antipyretic in malarial fevers.

Solanostemma argel (Del.) Hayne. (Hargel), Asclepiadaceae. Antispasmodic, digestive, to relieve menstrual pain and as appetizer in puerperum.

Tamarindus indica L. (Aradaeb), Caesalpiniaceae. To relieve fever, in cases of nausea, as laxative, to relieve malarial fever.

Major local Kenyan and Tanzanian Medicinal Plants:

Commiphora molmol. In Kenya for the resin, an oral antiseptic.

Embelia schimperi. Fruit for worms, stem bark for cramps.

Entada abyssinica. Root for arthritis, roasted seed for conjunctivitis.

Erythrina senegalensis. Root for toothache, venereal diseases.

Holarrhena floribunda. Bark for dysentery, fever, snake bite.

Kigelia africana. Parturition, splenitis.

Jateorrhiza palmata. Bronchitis, hypertension, impotence.

Mitragyna ciliata. As analgesic as codeine.

Morinda citrifolia. Dysentery, hypertension.

Picralima nitida. Fever, hypertension, jaundice, malaria.

Quassia africana. Bronchitis, dysmenorrhea, fever, pneumonia.

Sansevieria libera. Conjunctivitis, convulsions, hemorrhoids.

Stephania dinklagei. Corydine (Sedative), stephanine.

Tinospora caffra. Fever, tonic.

Trichilia emetica. Bark antidermatitis, antiinflammatory, emetic.

Zanthoxylum zanthoxyloides. Berberine, chelerythrine: antisickel cell.

Major local Rwandan medicinal plants:

Aspilia pluriseta. Worms, wounds.

Bidens pilosa. Furuncle, hepatitis, otitis, wounds.

Guizotia scabra. Agalactia, gonorrhoea, hepatitis.

Senecio maranguensis. Cough, otitis, wounds.

Spilanthes mauritian. Malaria, pneumonia, tonsillitis.

Vernonia amygdalina. Ascariasis, hepatitis, malaria.

Cassia didymobicola. Ascariasis, neuropsychopathy.

Chenopodium ugandae. Eczema, hepatitis, snake bite.

Leonotis nepetaela. Hepatitis, pneumonia, wounds.

Entada abyssinica. Ascariasis, fever.

Phytolacca dodecandra. Emetic, otitis, pneumonia.

African Medicinal Plants in World Trade:

Cassia acutifolia. Senna. The laxative synergic Sennosides.

Harpagophytum sp. Rheumatic ailments.

Jateorrhiza palmata. Root.

Phystostigma venenosum. Antiglaucomic, hysostigmine.

Pygeum africanum. Prostate remedy.

Rauvolfia vomitoria. Reserpine, yohimbine.

Tamarindus indica. Hydroxycitric acid.

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Continued from page 32– Medicinal Plants in East and Central Africa

Prunus Africana (Hook.f.) Kalkm (syn. Pygeum africanum Hook.f.), commonly known as red stinkwood or bitter almond has traditionally been used for centuries by African traditional healers to treat genitourinary disorders. In the 1960s Pygeum came to the attention of French scientists who began to investigate its benefits in the treatment of Benign Prostatic Hyperplasia (BPH). The commercial lipophilic extract of Pygeum is the favourite phytomedicine used to treat prostate cancer, prostatitis and especially BPH in Europe (Van Wyk et al., 1997).

P. Africana grows preferentially at a level of 1,000 – 2,500 m in the mountain forests of region in Ethiopia, Sudan, Kenya, Uganda, Tanzania and Eastern Congo.

2. Commiphora myrrha: The genus Commiphora (Bursaceae) comprise over 150 species, most of which are confined to Eastern Africa, with few species also occurring in Arabia and India. Myrrh, a culturally and commercially important resin product, is derived from Commiphora myrrha (Nees) Engl., a tree found in abundance in the dry and arid regions of Ethiopia and Somalia and to some extent in northern Kenya (Vollesen, 1989). The resin is masticated as antiseptic. A paint is prepared for skin diseases and pustular complaints. Resins obtained from various other species of Commiphora are used as substitute of C.myrrha (myrrh), and the practice is widespread. This complicates the characterization of myrrh, because most previous chemical studies reported on the resin were based on commercial material, and not on a product obtained from properly identified trees.

3. Plectranthus spp. Plectranthus is a large and widespread genus with a diversity of ethnobotanical uses. Monoterpenoids, sesquiterpenoids, diterpenoids and phenolics have been reported in species of Plectranthus. A survey of the ethnobotanical information by geographical area shows that 45 species are used in African continent (Kokwaro, 1993). In Africa, the most frequently used species are Plectranthus barbatus and P. laxiflorus. Plectranthus barbatus is used to treat a wide range of diseases (13 categories). P. barbatus is used to treat a wide variety of digestive problems (stomachache and as a purgative, for nausea and for gastritis and intestinal spasms.

In Kenya and the Democratic Republic of Congo, P. barbatus is used in the treatment of wounds and ringworms, to reduce swelling on bruises. P. barbatus is used to treatment a range of infections including throat and mouth infections, tonsillitis, gastro-intestinal infections and to break fevers in East Africa.

Labdane diterpenoids found in P. barbatus, include forskolin. The fact that forskolin directly activates adenyly cyclase and thus the modulation of cAMP could underlie the diversity of different traditional uses of forskolin-containing species of Plectranthus, such as P. barbatus. For example, activation of adenyly cyclase can stimulate gastric secretions and the presence of forskolin in Plectranthus barbatus could explain why extracts from the plant are used for the treatment of digestive disorders (Mukherjee et al., 2000). Forskolin is a known cardiotonic agent and it is also effective in the treatment of hypertension (Ghisalberti, 1977); Valdes et al., 1987). Thus, forskolin could explain why extracts of P. barbatus are reported to lower blood pressure of anaesthetized rat due to relaxation of vascular smooth muscle (Dubey et al., 1981).

Plectranthus laxiflorus is used in Ethiopia to treat teeth and gum disorders, as a purgative.

4. Hymenodictyon parvifolium Oliv. (Rubiaceae): The stem bark is used in Kenya folk medicine as a remedy for skin diseases, venereal diseases and dysentery. In Tanzania, an infusion from the plant in combination with other plants is used for treatment of insanity when the patient is noisy, abusive and suicidal (Mathias, 1982).

5. Solanum aculeastrum Dunal. (Solanaceae): A decoction of the root bark is used in Kenya for sexually transmitted bacterial diseases including gonorrhea while the juice from the berries used for treating jigger infestations as well as acne (Kokwaro, 1993).

6. Lippia multiflora Moldenke (Verbenaceae): Commonly known as “Tea of Gambia”, is a plant widely used in Africa as infusion preparation. In folk medicine in Congo, it finds extensive use in hepatic insufficiency and fever. The pharmacological studies showed that crude extract of this plant possess a sedative and analgesic effect. (Abena et al., 2003).

7. Vernonia amygdalina Del. (Asteraceae): Known as “bitter leaf” is a widely used medicinal plant in Africa. It is applies in various ailments (Iwu, 1993). The leaves are reputed to be an effective remedy for fevers and gastro-intestinal disorders. The fresh leaves are believed to be abortifacient and also used in purgative

Continued on page 34
enemas. The leaf extract of V. amygdalina yields a sesquiterpene lactone vernolepin which possesses antiplatelet activity (Venton et al., 1991).

8. Taddalia asiatica (L.) Lam. (Rutaceae): This plant is used traditionally in Kenya by many communities for the treatment of malaria and other ailments. All parts of the plant are claimed to have medicinal value, but the roots in particular are believed to be more potent. Decoctions or infusions of the roots are drunk to treat malaria, fever and to cure stomachache. For toothache the root is chewed whereas for the treatment of coughs the fruits are chewed (Kokwaro, 1993; Beentje, 1994; Watt and Breyer-Brandwijk, 1962). The ethyl acetate extract of T. asiatica root contain a comarin derivative, as the major antimalarial principle of this extract (Oketch-Rabah et al., 2000).

9. Entada abyssinica Steus. Ex A.Rich. (Mimosaceae): Is a tree that is found all over tropical Africa. The plant has been used for the treatment of bronchitis, coughs and to alleviate arthritic pains (Kokwaro, 1976). It is also in the treatment of miscarriage, fever and abdominal pain. The juice of E. abyssinica is employed as an instillation for eye inflammation (Watt and Breyer-Brandwijk, 1962).

E. abyssinica has been demonstrated to be antibacterial, antitrypanocidal and antifungal in various studies (Iwu, 1993).

10. Cymbopogon densiflorus Stapf. (Poaceae): The plant is traditionally used in Congo against various diseases such as asthma, fever, cold, epilepsy, abdominal cramps and pains, as well as in the culinary domain and in the making of perfumes (Takaisi-Kikuni et al., 2000).

Most East and Central African countries with frequent usage of ethnomedical treatments have many traditional healers preparing herbal remedies or providing preparation instructions to local populations. These healers could be used to great advantage if they were organized and encouraged to use only efficacious and safe herbal remedies while discouraging the use of ineffective and potentially toxic remedies. By performing scientific evaluations of efficacy for local ethnomedical preparations as well as organizing and disseminating scientific information to the local traditional healers, we could provide indigenous populations better access to efficacious drug treatment and an improved health status for those who cannot afford the benefits of modern medicines.

Industry and the conservation of medicinal plants

Medicinal plants represent a primary source of products for the pharmaceutical industry. Large quantities are used in the preparation of infusions and decoction where traditional medicine is still of great therapeutical, social and economic importance and in the so-called industrial countries, where an over-growing propotion of the population is using medicinal plants for self-medicatation. In ecological terms, the continued use of wild plants may cause incalculable damage to the environment and fauna include. The dange is still more serious when parts of medicinal plants such as the roots, seeds and flowers, which are essential to the survival of the plant itself are used. In terms of quality, wild plants are often heterogenous as regards age, zone and period of picking, drying methods and, consequently, active constituents content.

African medicinal plant resources may be doomed to extinction by over-exploitation resulting from excessive commercialisation, habitat destruction and other natural and man-made destructive influences unless energetic conservation measures are taken to ensure their continued availability.

At present, in East and Central African countries, there are no country-wide quantitative data available on the supply of, or consumer demand for, medicinal plants and an economic benefits derived by the use of medicinal plants and their contribution to healthcare. Similarly, most collectors/producers and end users are unaware of the extent to which the expanding demand in medicinal plants is threatening the survival of increasing number of medicinal plants species. The prices paid to collectors tend to be very low, and resources are frequently open-access or common property. As a result, commercial plant gatherers often “mine” the resources rather than managing them.

Urgent action needed for African medicinal plants

Many wild medicinal plants are becoming scarce in East and Central African countries. Failure to stabilize the status of these plants would negatively effect not only the environment but also the health of millions of people in this region.

The greater use of medicinal plants is for local use rather than export to foreign markets, but demand often exceeds supply and appears to be increasing. The vast majority of the plants used are taken directly from the wild, where some species are already critically endangered and the status of others becoming precarious. In many cases, the status of valued medicinal species is simply unknown.

The conservation of medicinal plant resources in East and Central Africa will require management, awareness,
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regulation and research initiatives by a range of institutions. Solutions to the problem of increasing pressure and scarcity of wild medicinal plants are:

Actions for specific species, increased collaboration with traditional healers to promote propagation of endangered medicinal plants and sustainable harvest techniques, and public awareness activities aimed at regulatory agencies in the region. Demand for wild medicinal plants appears to be increasing and as it does so it will become necessary to increase the supply. For endangered and critically endangered species, efforts should be made to discourage use of the medicinal species, until the status of the species improve. In most African countries, there is a cadre of highly-trained professionals whose talents and expertise in the field of plant chemistry, pharmacognosy, pharmacology, natural resource management, and the industrial utilization of medicinal plant-based products are underutilized. These professionals acknowledge their indebtedness to traditional healers and birth attendants and the need to work together to establish processes to manage and validate traditional medicine. At present, both levels of knowledge capital (traditional and scientifically-based) are underutilized. To maximise the potential of African traditional medicines as a source of healthcare the safety, efficacy and quality need to be assessed. There are numerous herbal remedies that could hold the potential of being effective but still need investigation.

**Recommendations**

1) The collection of medicinal plant materials from wild sources for use, trade for industrial use should be managed on sustainable bases. Efforts should be made to conserve natural resources and to domesticate selected plant species. A high level of pharmacological content should be ensured, using modern cultivation and preparation methods. The systematic cultivation of medicinal herbs could facilitate industrial scale processing.

2) The formulation of an appropriate regional strategy should constitute an important, initial step towards the utilization and industrialization of medicinal and aromatic plants. For this purpose, the governmental research organizations should establish regional/national committees comprising experts from the sectors of industry, agriculture, health and commerce as well as from related research institutions. These committees could help to promote the developmental programmes of the subsector and to formulate policies, strategies and put forward plans for its sustainability.

These policies should cover, at the minimum, aspects such as:

a. The country-wide promotion of the use of herbal medicines as well as their incorporation in the national health-delivery system such a programme could form part of the promotion of the national heritage;

b. The formulation and/or strengthening of policies for establishing national during regulatory and registration authorities for plant-based medicines;

c. The enactment of policies that will facilitate the development of small and medium-scale industries for the production of essential oils from aromatic plants for local consumption and export; this should attract a large rural sector and alleviate the living conditions of collectors, encourage cultivators and local traders.

d. The incorporation of conservation as the central theme in policies related to the sustainability and adequate development of this subsector.

3) Ethnomedical studies can be utilized to understand the social, cultural and economic factors influencing ideas and actions concerning health and illness, and also to get information on types of diseases and health problems prevalent among the people of a particular locality. Such studies may help to provide the basic health-care services to the greater part of the rural population in an effective way, provided that such studies are conducted hand-in-hand with phytochemical, pharmacological and perhaps clinical studies.

4) Processing of herbal medicines from local materials for local industries with simple dosage forms being standardised and packages at low cost using appropriate technology.

**References:**


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http://opensiuc.lib.siu.edu/cgi/viewcontent.cgi?article=1407&context=ebl

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and is divided into nine parishes of Bulamu, Gayaza, Kabubbu, Katadde, Kiteezi, Masooli, Nangabo, Wampeewo and Wattuba. The sub-county has a population of 53,426 people comprising 28,629 males and 29797 females (UBOS, 2003). The population is heterogeneous (UDHS, 2000/2001), the majority are Baganda, a Bantu-speaking group, though most inhabit-

ants understand or speak Luganda, a Bantu language dialect. The area receives an annual precipitation of about 1513mm, which is evenly distributed over the year. Mean annual temperatures are 17°C minimum and 21.9°C maximum respectively (UNCST, 2001). Livelihoods are mainly derived from subsistence agriculture comprising of arable farming and animal rearing. The study concentrated in the parishes of Gayaza, Nangabo and Kiteezi because they have a high population of traditional medicine practitioners (TMPs) in the sub-county.

Methods

Participatory Rural Appraisal (PRA) techniques including focus group discussions (FGDs), informal and formal interviews using semi-structured questionnaires were used to collect the data. Purposive sampling was used to select knowledgeable informants (herbalists, spiritualists, bone setters and traditional birth attendants) that were directly involved in traditional medicine use and promotion. Participants were identified by the first authors assisted by civic leaders from different villages in the three parishes surveyed. On-site clients were selected using quota-sampling technique while stratified random sampling was used to select resident respondents for individual interviews. A total of 12 villages in 3 parishes (4 villages in each parish) were selected and questionnaires administered to 10 resident respondents in each village. In addition, two (2) focused group discussions (FGDs) were held with TMPs in each of the three parishes. FGDs were conducted in Luganda while in-depth interviews were conducted in either English or Luganda. Data were analyzed descriptively using Statistical Packages for Social Sciences (SPSS).

Results

Socio-economic characteristics of the respondents

Most (33%) of the respondents were aged 45 years. (Table 1) Fifty one percent of the respondents were males and 45% had attained tertiary education. Only 10% of respondents did not attend any form of formal education. Most (43%) of the respondents derived livelihoods from traditional medicine practices.

Types of traditional medicine practices

Herbalism (67%) was the major TM practice reported by the people interviewed. Herbalists use traditional therapies to identify and treat various ailments such as malaria, headache, measles, importance, dermatitis and mental sicknesses. Other types of TM practices in Nangabo sub-county included spiritual counseling (23%) and bone setting (10%). In all cases of TM practices, men responded more than women. Bone
Continued from page 36- Traditional Medicine as an Alternative Form of Health Care System

Table 1. Demographic and socio-economic characteristics of respondents in Nangabo sub-county, Wakiso district, central Uganda (N=120)

<table>
<thead>
<tr>
<th>Variable</th>
<th>(%) response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>51</td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>16–25</td>
<td>24</td>
</tr>
<tr>
<td>26–35</td>
<td>29</td>
</tr>
<tr>
<td>36–45</td>
<td>14</td>
</tr>
<tr>
<td>&gt;45</td>
<td>33</td>
</tr>
<tr>
<td>Level of education attained</td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>10</td>
</tr>
<tr>
<td>Primary</td>
<td>13</td>
</tr>
<tr>
<td>Secondary</td>
<td>32</td>
</tr>
<tr>
<td>Tertiary</td>
<td>45</td>
</tr>
<tr>
<td>Main income source</td>
<td></td>
</tr>
<tr>
<td>Subsistence farming</td>
<td>20</td>
</tr>
<tr>
<td>Business</td>
<td>20</td>
</tr>
<tr>
<td>TM practices</td>
<td>43</td>
</tr>
<tr>
<td>Civil service</td>
<td>17</td>
</tr>
</tbody>
</table>

Figure 1. Types of traditional medicine practices in Nangabo sub-county, Wakiso district, Central Uganda

Table 2. Cross tabulation of education level and local preferences for traditional medicine (TM) versus western medicine in Nangabo sub-county, Central Uganda (WM) (N=120)

<table>
<thead>
<tr>
<th>Education level</th>
<th>Preferred type of medicine (%)</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>WM</td>
<td>TM</td>
<td></td>
</tr>
<tr>
<td>No formal ed</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Primary</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Secondary</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Tertiary</td>
<td>32</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 3. Reasons for preference of traditional medicine in Nangabo sub-county, Central Uganda (WM) (N=120)

<table>
<thead>
<tr>
<th>Reason for preference of TM</th>
<th>% response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males Females Total</td>
<td>27 22 51</td>
</tr>
<tr>
<td>TM in most cases has minimal side effects than WM</td>
<td>10 31 41</td>
</tr>
<tr>
<td>TM reduce prevalence levels</td>
<td>13 19 32</td>
</tr>
<tr>
<td>TM sometimes cures faster than WM</td>
<td>14 10 24</td>
</tr>
<tr>
<td>TM is a good substitute to WM</td>
<td>14 10 24</td>
</tr>
<tr>
<td>TM has complementary function</td>
<td>2 14 16</td>
</tr>
<tr>
<td>TMPs are easier to access than WMD</td>
<td>6 5 11</td>
</tr>
<tr>
<td>TM is sometimes useful for certain unique health problems</td>
<td>6 4 10</td>
</tr>
<tr>
<td>TM is crucial option as a First Aid especially in cases where health clinics are away from home</td>
<td>8 1 9</td>
</tr>
<tr>
<td>TM is cheaper than WM</td>
<td>3 3 6</td>
</tr>
</tbody>
</table>

**Note:** TMP = Traditional Medical Practitioners, WMD = Western Trained Doctors

setting as one form of TM practices was reported only by men.

Preferences for TM versus western medicine (WM)
Generally, respondents preferred western medicine to TM (Table 2). Only 45% of the respondents preferred TM. The rest (55%) wanted western medicine. The literacy level

Continued on page 38
of the patients seems to be a key factor determining the choice of treatment. Respondents who had attained primary and secondary education preferred TM to WM. Those who were more educated (attained tertiary level of education) more often preferred WM to TM.

The main reasons given for visiting traditional medicine practitioners (TMPs) rather than western trained doctors were numerous (Table 3). TM was largely (51%) considered by many respondents as having very minimal side effects on the human body as opposed to many drugs used in western medical practices. Majority (41%) of the respondents also reported that TM have a propensity to reduce the prevalence levels of ailments much faster in some circumstances than most of the prescriptions used in western-style medicine. Equally important, is the belief that most (32%) respondent that TM sometimes cure the ailment more faster than the WM. Other people (24%) simply have faith in TM as a good substitute to WM.

Traditional medicine practices were also reported by some (11%) respondents to be more accessible than the western medicine practitioners. Other reasons cited by the respondents as to why the members of their community prefer TM included amongst other things-complementarity functions of most type of TM, the uniqueness of TM to certain health problems such as health dilemmas associated with witchcrafts. TM was preferred because of the central role it plays as a First Aid especially in cases where health clinics are away from homes and the fact that TM is generally cheaper form of medicine to afford by poor households as opposed to WM.

**Awareness of the importance of traditional medicine amongst the local people**

Generally, majority (81%) of the respondents were aware of the importance of TM. Elderly people (>45 years of age) were more informed about the importance of TM compared to other age categories (Table 4). The level of awareness of the importance of TM by respondents, though high, appears to contradict their health seeking behaviors, because, most of them reportedly prefer WM more than TM. This discrepancy could perhaps because of the efforts often made government in promoting WM.

**Discussion**

The empirical results show that three major form of TM practices exits in Nangabo sub-county, some of which have been reported in earlier surveys (Mugumya, 1997; Barak et al., 2000). Like in this study, herbalism and spiritual counseling were reported to be key TM practices in central Uganda (Mugumya, 1997) and healers often use their knowledge, training and indiscernible powers from the spirit world to diagnose and treat various forms of illnesses (Barak et al., 2000). The findings of this study demonstrated that in certain circumstances, traditional medical practitioners (TMPs) have the advantage over the modern healthcare providers in that they spend more time with the patient and keep good track of them by maintaining a close personal relationship with them, a practice that is often uncommon with western trained medical practitioners. As a result, patients usually feel secure to disclose their experiences, including family matters, to the TMPs. This always enables the TMPs to guide their patients on how to deal with different ailments and at the same time on how to cope-up with the demands of life.

Given their counseling skills, most TMPs often persuade many patients or clients who claim for instance to be bewitched to take their counseling services. Most TM practices like herbalism were said to have limited side effects as compared to western pharmaceutical drugs. Side effects such as resistance to herbal therapies, body weakness and nerve damage, were said to be very uncommon with TM. This perhaps could be explained by the fact that most TMPs use herbs, which are often administered in their natural form with no added chemical preservatives or concentrates (THETA, 1998). Apart from curing opportunistic infections, the herbs probably play a preventive role by strengthening the body immunity to resist infections, restore vital body nutrients, provide energy, restore appetite and prevent body wasting.

As also reported by Namata (2000), the participants in this study noted some form of TM practices like herbalism is easier to administer than some form of WM. There is no need for patients to undergo painful treatments like injections in WM. In addition, a study by WHO (2000) reported that visiting a medical centre for injections can be irregular and expensive to some patients especially in a rural setting. In this study, it was reported that TM is relatively cheaper and easier to access
Traditional Medicine as an Alternative Form of Health Care System

compared to WM and that sometimes TM is unconsciously used especially by households that depends a lot on traditional/wild vegetables and fruits. In Nangabo sub-county, most of the herbal plants are readily available in people's gardens and the patients can easily prepare an herbal infusion on their own and use them without much supervision.

In spite of the good services provided by TMPs and the high level of awareness about the importance of TM, some respondents still did not like TM practices. The fact the majority of them preferred WM is consistent with what Namata (2000) reported “that the moment one mentions about TM practices, some members of the society especially religious leaders do not feel happy about it because they always regard it as evil and barbaric and therefore undermine its wider use”. Witchcraft is a common practice associated with traditional medicine for which western medicine claims advantage over it. As reported by Evans (1993), religious preaching is more often against TM practices and sometimes the issue of human sacrifices associated with TM practices overshadow its importance.

Nonetheless, TM will still continue to preliminary play a significant role in health care of many rural families. There is need to legitimize and monitor the practice of TM in Uganda so that useful practices can be further developed and promoted. More outreach activities on TM practices also need to be conducted if the general public is to fully appreciate the role of TM in preliminary health care system. In addition, there is a need for further research into the efficacy and safety of traditional medicines especially with regards to herbal medicine if it is to be adequately integrated into western medicine. There is a need to follow up this preliminary work with one more focusing more on of age and gender of the respondents other than sex.

References
FEATURED ARTICLES

The Prevalence of Traditional Herbal Medicine Use among Hypertensives living in South African Communities

By Gail D Hughes, Oluwaseyi M Aboyade, Bobby L Clark and Thandi R Puoane
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Abstract

Background
In South Africa, over 6 million people are hypertensive and the burden of disease shows that cardiovascular diseases (CVDs) are the leading cause of death among adults. Although treatments exist, few people comply or adhere to recommended treatment due to side effects or costs of the drugs, hence the reliance on alternative forms of treatment. Traditional herbal medicines (THM) are used for the management of hypertension but the prevalence of its use among hypertensive patients living in South African communities is not sufficiently known.

Methods
This was a cross-sectional descriptive study to determine the prevalence of THM use for hypertension, among 135 purposefully selected South African participants of the Prospective Urban and Rural Epidemiological (PURE) study, who are THM users. Data on THM use were collected by way of face to face interviews using structured questionnaires administered by trained field workers. Standard descriptive measures were used to characterize the study sample and responses to the questionnaire. Chi-square test was used when making comparisons between groups.

Results
There were 135 THM users, 21% of whom used THM to treat hypertension. Majority (82.1%) of the hypertensive THM users were females, only 29% were married or co-habitating, virtually all (96%) were unemployed and 86% were Christians. More than half (56%) of the respondents were aged between 55 and 64 years. THM was occasionally (51.9%) as a combination of tea and other mixtures (63%) and prescribed by family/ friends/self-administered. There was a significant difference in the age, marital and employment status, as well as the form and frequency of THM use of hypertensive THM users compared to other THM users.

Conclusions
The study gives an insight into the prevalence of THM use by hypertensive patients in selected South African communities. The practice of self-medication was also observed which raises concern regarding the safety of medications taken by the participants. Health care providers should however be more aware of THM use and counsel patients regarding the combination of prescribed treatment regimen and herbal medicines and the potential of herb-drug interactions.

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Several decades ago, the prevalence of hypertension in some African countries was about 1% of the population [5]. However, globalization has resulted in health transitions and has revolutionized this disease from a rare medical condition to a major problem in sub-Saharan Africa [6]. About 20 million people in sub-Saharan Africa are hypertensive [6], prompting the African Union to recognize hypertension as one of the continent’s greatest health challenges after AIDS [7]. However, significant differences exist in the prevalence of hypertension between the urban and rural black populations in this region [8].

In South Africa, approximately every one in four persons between the ages of 15 and 64 years is hypertensive [9]. Based on race, black South Africans are more at risk of becoming hypertensive [10]. A study by Connor et al., showed that the age-standardised prevalence of hypertension was 59% for blacks, 55% for Indians and coloured and 50% for whites. Several studies have reported that more men than women are hypertensive in both urban and rural areas of South Africa [11,12]. However, latest statistics show that women are more at risk of developing hypertension (2.9 million) than men (2.6 million) [13].

The awareness of hypertension, its treatment and control thereof depends on the level of wealth of the patients [13]. Conventional drugs utilised in the management of hypertension include diuretics, brinerdin and ACE inhibitors. The latest hypertension guidelines for South Africa [14], however, provide a more comprehensive management protocol for hypertensive patients. These guidelines recommend that the target blood pressure for antihypertensive management be systolic <140 mmHg and diastolic <90 mmHg, with minimal or no drug side effects. However, stricter blood pressure control is required for patients with end-organ damage, co-existing risk factors and co-morbidity, e.g. diabetes mellitus. The reduction of blood pressure in the elderly and in those with severe hypertension should be achieved gradually over 1 month and co-existent risk factors should also be controlled. A more elaborate management protocol for hypertension in South Africa is described in the South African Hypertension Guidelines 2011 [14].

The inadequacy of the health care system in Africa and the economic impact of high cost of antihypertensive drug treatment have made the use of THM common among hypertensive patients [1]. Several studies have reported the prevalence of complementary and alternative medicine use (CAM) in the treatment and management of hypertension; Morocco and Nigeria recorded 80% and 21% respectively [15,16]. However, very few publications exist about the prevalent of THM for hypertension. A study in India reported that 63.9% of hypertensive patients use THM [17]. In South Africa, surveys interviewing patients and traditional healers on the management and treatment of hypertension exists [18-22]. However, exact statistics on the prevalence of THM use by hypertensive patients in the country remain sparse. The study by Peltzer et al. showed that hypertensive patients consult traditional healers after visiting general practitioners in the Northern Province of South Africa [20]. Lokita also studied the reasons why hypertensive patients in Gauteng, South Africa consult traditional healers while using conventional drugs and found that some of the reasons for this include the positive attitude of the traditional healers compared to the health care providers, effectiveness of traditional medicine compared to conventional drugs with respect to side-effects and low cost of THM [23].

Conclusions from the study by Peltzer et al. recognised the relevant role which traditional healers play in the treatment and management of hypertension [20]. In the current study, we aimed to determine the prevalence of THM use among hypertensives in rural and urban communities in South Africa, specifically the Western Cape and Eastern Cape provinces.

Methods

Study design

A cross-sectional descriptive study was conducted utilizing a sample drawn from a population-based cohort study which involves adult males and females in South Africa. These subjects were recruited as part of the South African arm of a major prospective study – the Prospective Urban and Rural Epidemiological (PURE) Study [24], which recruited 2000 participants in total. In this study, a global cohort has been developed to investigate the impact of social and environmental transition on health and involves over 150,000 adults initially aged 35 to 75 years from communities in 17 low-, middle- and high-income countries. A detailed description of the selection of this study population has been published elsewhere [24].

Study setting

The current investigation was conducted in two communities of black South Africans namely: Langa, a township located in Cape Town in the Western Cape Province (urban), and Mount Frere, a small town located in the Eastern Cape Province (rural).
Sampling for PURE South Africa

The cohort was drawn to be representative of the adult population resident in both communities (Langa and Mount Frere) but also with mindfulness to the possibility of follow-up of participants. The communities were purposively selected on the basis of having a relatively stable (less migratory) black population thus allowing for feasibility of follow-up in a prospective cohort study.

For the urban community (Langa), households were grouped into three development areas recognized administratively by the City of Cape Town and which mirror the socioeconomic status of the residents. A street map obtained from the City of Cape Town was used to randomly select streets in each of the 3 areas. Once a street was selected, a systematic sample of every second house was approached for possible inclusion in the study.

Household’s eligibility was based on the criteria that at least one member was between the age of 35 and 70 years, and that person intended to continue living in the current home for the next four years. All households with eligible individuals were approached by trained field workers for recruitment. All individuals who were “usual residents” were considered “household members” and eligible to be selected into the study. A “usual resident” was defined as one “who eats and sleeps in the household on most days of the week and in most weeks of the year and considered the household his/her primary place of habitation”.

For the rural community (Mount Frere), the absence of delineated streets precluded the possibility to follow the same sampling approach used for the urban township. A cluster sample of houses in the community was therefore undertaken according to the division of areas by the clan heads. All households within the clusters were included provided that there was a household member aged 30 to 70 years. The initial recruitment took place between April and August 2009 with close to 1000 participants recruited in both locations. A second phase recruitment took place between April and August 2010. The response rate was 85%. All the individuals who agreed to participate provided written informed consents.

Sampling for the current study

The sampling frame for the current study was the 2000 participants who took part in the original South African PURE study. The sample size calculation performed using EPI-Info version 2007, showed that about 443 participants in total were required for the current study. An administrative spread sheet used to capture participants’ information throughout the PURE follow-up period was used to randomly select a sample of 443 participants comprising of 222 participants from the rural site and 221 participants from the urban site. These participants were then interviewed to determine the prevalence of THM use. Only 135 were found to be using THM and thus constituted further analyses to determine THM use for hypertension and other conditions.

Data collection

Data on the epidemiology of traditional medicine use for hypertension and other chronic conditions were collected from households and individuals in the study sample. Face to face interviews using structured questionnaires were conducted in these households between May and November 2010. The interviews were conducted by 8 trained data collectors in the preferred language of the respondent (English or Xhosa). Data were collected about the respondents’ demographic characteristics’ (age, sex, education, marital and employment status), clinical/medical history and traditional medicine usage (duration of use, condition for use, dosage, and form). The quality of data collected was maintained through the use of standardized protocols and centralized training.

Excerpts from the questionnaire that asked about THM use include:

1. Are you using any herbal medicine?
2. Who prescribed the traditional medicine to you?
3. What condition are you treating with traditional medicine?
4. How often are you taking traditional medicine?
5. When did you start using traditional medicine?

Data analysis

Descriptive statistics (e.g., frequencies and percentages) were used to characterize the study sample and responses to the questionnaire. Chi-square test was used when making comparisons between groups. All percent distributions were calculated based on non-missing values. No adjustments were made for missing data or multiple comparisons. A $p$ value of <0.05 was considered statistically significant where applicable. All statistical analyses were performed using SAS 9.2.

Ethical consideration

The study protocol was approved by the Senate Research Committee of the University of the Western Cape, South Africa.

Results

The socio-demographic characteristics of the 135...
respondents who reported using traditional herbal medicine are shown in Table 1. Approximately 72% were female, half (50%) were married or cohabitating, most were unemployed (55%), and an overwhelming 81% reported being Christian. Thirty-four per cent of the respondents were between the ages of 55 and 64, but only 24% were aged 44 or younger. Forty-one percent had no education or only primary education, while 54% had secondary education.

Of the 135 participants who reported using traditional herbal medicine, only 28 (21%) used THM to treat hypertension (Table 2). None of the participants was younger than 44 years of age and very few were either married/co-habiting or had no education or only primary education.

A comparison between the social and demographic characteristics of hypertensive THM users and other THM users is presented in Table 3. Hypertensive THM users were significantly less likely to be either employed (4% versus 20%; p-value=0.009), under age 45 (0% versus 31%; p-value=0.003), and married or cohabitating (29% versus 56%; p-value=0.028), but more likely to be either female (82% versus 69%) and have a higher education (secondary, tertiary, or vocational school) than other THM users. However, there were no differences in religious affiliation between the users and non-users.

Table 3 presents the usage characteristics of hypertensive THM users versus other THM users. Other THM users were three times more likely to take THM in the form of tea and about four times likely to take THM as a powder compared to hypertensive THM users. However, hypertensive THM users were more likely to take THM as tea with other mixtures than other users (63% versus 42%). The differences in THM usage forms were statistically significant with a p-value of 0.027. Hypertensive users took THM more frequently than other THM users. Forty-eight percent of hypertensive users took THM 1 to 3 times per day compared to only 27.5% of other THM users. Other THM users were more likely to take THM occasionally (59% versus 52%).

Prescribers of THM to other THM users were more than twice likely to be traditional healers, spiritualist, or diviners. This is in contrast to hypertensive THM users who were more likely to use THM based on family members and friends’ prescription, or to self-prescribed THM. These differences in THM prescribers were statistically significant with a p-value of 0.045.

| Table 1. Social and demographic characteristics of traditional medicine users (N=135) |
|-------------------------------------------|-----------------|-----------------|
| **Variable**                             | **Frequency**   | **Percent**     |
| Sex                                      |                 |                 |
| Male                                     | 38              | 28.1%           |
| Female                                   | 97              | 71.9%           |
| Age in years                             |                 |                 |
| ≤ 44 years                               | 31              | 24.2%           |
| 45-54 years                              | 27              | 21.1%           |
| 55 - 64 years                            | 43              | 33.6%           |
| 65+ years                                | 27              | 21.1%           |
| Marital Status                           |                 |                 |
| Married / Cohabiting                     | 68              | 50.4%           |
| Divorced / Separated / Widowed           | 40              | 29.6%           |
| Single                                   | 27              | 20.0%           |
| Highest formal education completed*      |                 |                 |
| No education / Primary school            | 54              | 40.9%           |
| Secondary school                         | 71              | 53.8%           |
| Vocational / Tertiary                    | 7               | 5.3%            |
| Employment status                        |                 |                 |
| Working full time / Part time            |                 | 16.3%           |
| Unemployed / Looking for a job           | 74              | 54.8%           |
| Retired / Other                          | 39              | 28.9%           |
| Religion                                 |                 |                 |
| Christian                                | 110             | 81.5%           |
| Traditional / No religion / Other        | 25              | 18.5%           |

*Missing Data: The 'education' variable has 3 missing cases.

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Table 2. Social and demographic characteristics of hypertensive traditional medicine users (N=28)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>17.9%</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>82.1%</td>
</tr>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 44 years</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>45-54 years</td>
<td>7</td>
<td>25.9%</td>
</tr>
<tr>
<td>55 - 64 years</td>
<td>15</td>
<td>55.6%</td>
</tr>
<tr>
<td>65+ years</td>
<td>5</td>
<td>18.5%</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married / Cohabiting</td>
<td>8</td>
<td>28.5%</td>
</tr>
<tr>
<td>Divorced / Separated / Widowed</td>
<td>13</td>
<td>46.2%</td>
</tr>
<tr>
<td>Single</td>
<td>7</td>
<td>25.0%</td>
</tr>
<tr>
<td>Highest formal education completed*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No education / Primary school</td>
<td>8</td>
<td>28.6%</td>
</tr>
<tr>
<td>Secondary school</td>
<td>19</td>
<td>67.9%</td>
</tr>
<tr>
<td>Vocational / Tertiary</td>
<td>1</td>
<td>3.6%</td>
</tr>
<tr>
<td>Employment status</td>
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<td></td>
</tr>
<tr>
<td>Working full time / Part time</td>
<td>1</td>
<td>3.5%</td>
</tr>
<tr>
<td>Unemployed / Looking for a job</td>
<td>13</td>
<td>46.2%</td>
</tr>
<tr>
<td>Retired / Other</td>
<td>14</td>
<td>50.0%</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian</td>
<td>24</td>
<td>85.7%</td>
</tr>
<tr>
<td>Traditional / No religion / Other</td>
<td>4</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

*Missing data: The 'age' variable has 1 missing case.


Table 3. Characteristics of hypertensive versus other traditional medicine users

<table>
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<tr>
<th>Variable</th>
<th>Hypertension*</th>
<th>Other</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5 (17.9)</td>
<td>33 (30.8)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>23 (82.1)</td>
<td>74 (69.2)</td>
<td>0.174</td>
</tr>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 44 years</td>
<td>0 (0.0)</td>
<td>31 (30.7)</td>
<td></td>
</tr>
<tr>
<td>45-54 years</td>
<td>7 (25.9)</td>
<td>20 (19.8)</td>
<td></td>
</tr>
<tr>
<td>55 - 64 years</td>
<td>15 (55.6)</td>
<td>28 (27.7)</td>
<td></td>
</tr>
<tr>
<td>65+ years</td>
<td>5 (18.5)</td>
<td>22 (21.8)</td>
<td>0.003</td>
</tr>
<tr>
<td>Marital Status</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Married / Cohabiting</td>
<td>8 (28.6)</td>
<td>60 (56.1)</td>
<td></td>
</tr>
<tr>
<td>Divorced / Separated / Widowed</td>
<td>13</td>
<td>465.4</td>
<td>27 (25.2)</td>
</tr>
<tr>
<td>Single</td>
<td>7 (25.0)</td>
<td>20 (18.7)</td>
<td>0.028</td>
</tr>
<tr>
<td>Highest formal education completed*</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>No education / Primary school</td>
<td>8</td>
<td>28.6</td>
<td>46 (44.2)</td>
</tr>
<tr>
<td>Secondary school</td>
<td>19 (67.9)</td>
<td>52 (50.0)</td>
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<tr>
<td>Vocational / Tertiary</td>
<td>1 (3.6)</td>
<td>6 (5.8)</td>
<td>0.243</td>
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<td>Working full time / Part time</td>
<td>1</td>
<td>3.6</td>
<td>21 (19.6)</td>
</tr>
<tr>
<td>Unemployed / Looking for a job</td>
<td>13</td>
<td>46.4</td>
<td>61 (57.0)</td>
</tr>
<tr>
<td>Retired / Other</td>
<td>14 (50.0)</td>
<td>25 (23.4)</td>
<td>0.0009</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian</td>
<td>24 (85.7)</td>
<td>86 (80.4)</td>
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</tr>
<tr>
<td>Traditional / No religion / Other</td>
<td>4</td>
<td>14.3</td>
<td>21 (19.6)</td>
</tr>
</tbody>
</table>

*Respondents who used TM for hypertension may also have used TM for other conditions as well. These respondents are represented in the 'Hypertension' column.


Continued on page 45
Lastly, the length of time respondents had been using THM was determined. Hypertensive THM users were more likely to have used THM for several years compared to other THM users (71% versus 57%).

**Discussion**

The purpose of the study was to determine the prevalence of THM use by hypertensives in a convenient sample of the PURE cohort. The study showed that of the 135 participants who indicated using THM, 21% used THM in the treatment and management of hypertension. This estimate is similar to that observed in a study in Nigeria (21%) [16]. However, it is lower than the estimates reported in other countries such as Morocco (80%) [15] and India (63.9%) [17]. Also, a community-based study in Nigeria reported an estimate of 29% of the participants who employed CAM to manage hypertension [1]. Interestingly, another study in Nigeria revealed that majority of hypertensive patients considered traditional medicine as the only viable cure for hypertension [16]. Although the current study is limited in terms of geographical representation, it begins to show how South Africa, particularly within the back communities, compares to other countries in terms of THM use among patients with hypertension.

The use of THM by the study participants for other varied illnesses ranged from common cough and cold to respiratory problems and diabetes. Also, some respondents indicated using THM for general well-being and maintenance of health. This, to a certain degree, reflects the role of THM in managing certain disease conditions over and above the western medical practices in South Africa. In fact, it mirrors the patterns of THM use in other regions of African and the world. For example, THM accounts for 65% of all health care in India, 71% in Chile, 40% in China and over 80% in most of the African countries [25], especially in their rural communities where traditional herbal medicine is often the most culturally acceptable choice of health care [26].

Our study revealed that age, marital and employment statuses were significantly associated with THM use for hypertension, a pattern that has also been reported in another study [1]. However, other studies that examined similar demographics did not show any association between age, marital and employment status and the use of THM [27,28]. The association observed between employment status and the use of THM for hypertension is an indication of the health seeking behaviour of the respondents. Our study showed that THM was mostly used for treating hypertension by either the unemployed or the retirees. The rising cost of for managing chronic diseases within the formal healthcare system in South Africa could be one of the reasons why the retired and unemployed participants in the current study chose to use THM for hypertension [1].

The prescription of THM for hypertension in this study was influenced by family, friends or self-administration. A similar report has shown that users of herbal medicinal products in the United States do not seek professional advice in selecting herbal medicines, but rather rely on friends’ or relatives’ recommendations [29]. The use of THM for various illnesses has been strongly associated with family influence and cultural traditions. Family expectations of receiving treatment from traditional healers and cultural beliefs are some of the reasons for continuous dependence on THM [30,31]. The practice of self-diagnosis and medication of traditional medicine knowledge is wide spread in urban areas of developing countries. Cocks and Dold, observed that all age groups and social categories of people who took part in their study medicated for both themselves and their family members [32].

The wide spread of traditional health shops offering a wide choice of medicines for diverse ailments and problems in various cities in South Africa is a source of concern with regards to the efficacy and ultimately the safety of such herbal products. The apparent lack of THM prescriptions by trained personnel for hypertension in this study is indicative of indigenous knowledge for healing purposes being handed down from one generation to another within household settings. In a review of the use and practice of traditional/complementary medicine in South Africa, Peltzer, observed a decrease in the use of traditional healers from between 3.6-12.7% to 0.1% in South Africa in the last 13 years [25]. However, in our study, we observed that the participants who use THM for other health conditions apart from hypertension were more likely to obtain their prescription from traditional healers.

While half (51%) of the participants indicated occasional THM use, 48% indicated 1–3 times a day use. The frequency of use of THM and the length of time herbal remedies have been used by the participants are indicative of a heavy dependence on THM not only in managing hypertension but also in treating it. This however poses a threat to the health of the participants as the possibility of herb-drug interaction is high among those who use dual therapy. Co-administration of herbal remedies with cardiovascular medications with narrow therapeutic index (warfarin and digoxin) has been found to potentiate or reduce the effect of these medications [33]. Health care professionals should be aware of increased THM usage.

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amongst their patients and thus be able to give proper medical advice with regards to potential adverse effects or possible herb-drug interactions.

The study had several limitations that need to be acknowledged. Firstly, the small sample size affected the external validity of the study. Thus this study cannot be generalized to a broader population. Secondly both the estimates of the prevalence of THM use and hypertension were based on self-reported behaviour, and we speculate some degree of under-reporting which is a possibility in survey of this nature [41]. Also, the types/levels of hypertension and the length of time since diagnosis were not assessed in this study. However, this study still provides insight into the use of THM among participants self-reporting hypertension.

Conclusions
This study has identified the prevalence of THM use by hypertensives living in selected South African communities. The practice of self-medication for hypertension treatment by traditional herbal medicine users was observed. Also, the length of time during which THM has been used by the participants raises questions about adherence to prescription medication. Health care workers should therefore be aware of, and inquire about THM use among hypertensive patients, in order to advise patients on the potential of herb-drug interaction and possible adverse effects. Future investigations should explore long-term use of THM within the cohort, response to treatment including changing health status while simultaneously taking THM and conventional medicines, and carefully studying the timing of initiation of THMs.

Abbreviations
CE: Angiotensin converting enzymes; CAM: Complementary and alternative medicine; CVD: Cardiovascular diseases; PURE: Prospective Urban and Rural Epidemiology; THM: Traditional herbal medicine; WHO: World Health Organization.

References


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http://www.biomedcentral.com/1472-6882/13/38

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Sironko

A traditional healer from Gombe Village, Bumasifwa Sub-county in Sironko District looks across Mt. Elgon National Park in a contemplative mood.

Mr Amnon Gidale, 67, stands aside as residents walk passed him carrying firewood, mushrooms, bamboo shoots, vegetables and firewood.

Watching in disbelief, with a sigh of relief, Gidale moves slowly on empty paths, past willows and scattered forest trees, to bamboo zone, where we could clearly see the hitherto heavy forest now reduced to a few scattered trees.

“We have killed nature, we have killed our own liveli-
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hood,” Gidale says. He adds: “This mountain provided a livelihood to at least 500,000 people in Bugisu and Sebei sub-regions and the trees provided herbal medicine but you cannot trace any herbal medicine now because the trees have been cut.”

The Mt. Elgon National Conservation Area Manager, Mr Adonia Bintorwa, says the ecosystem which provides a catchment area for lakes Victoria and Turkana and River Nile, was a home for about 400 elephants, antelopes, leopards, among other animals but all those are no more. He says, besides the displacement of animals in the park, clearances of the park forest for settlement, traditional medicinal trees like Prunus Africana, Fagalopsis, Spathodea, the huge Elgon teak, cedar and Olea which are as old as 5,000 years have been destroyed. This poses a great danger of extinction of the great traditional medicinal tree species,” Mr Bintorwa said.

Mt Elgon conservation warden Richard Matanda says the mountain is covered by red laterite soils in the forest which have adequate physical, biological and chemical properties to maintain and improve vegetation growth, hydrologic functions, nutrients cycling and slope stability but that all these are being destroyed by farmers.

Experts at National Environment Management Authority and Uganda Wildlife Authority have indicated that because of massive encroachment, Mt Elgon as a water catchment area, is facing depletion at a very high rate. They also say the soils are getting loose thus creating several cracks across the mountain because residents have encroached a large area on it.

http://www.monitor.co.ug/News/National/Herbal-plants-face-extinction-in-Mt--Elgon-park/-/688334/1431896/-/8i7gy1/-/index.html

The Increase in the Use of Herbal Medicine in Ghana Africa and the World Is Good

By VibeGhana

September 4, 2013

Long before the introduction of scientific medical care by Europeans, African nationals including Ghanaians relied on traditional medicines for the cure and treatment of tropical ailments like malaria, headaches, stomach, skin diseases and many more.

About 65 to 70 percent of the country’s population, especially the rural folks depend on herbal medicine, says Professor Laud K.N.A. Okine, Director of the Centre for Scientific Research for Plant Medicine (CSRPM). The World Health Organization (WHO) has given backing to this by saying that more than 80 per cent of the people in the world depend on herbal medicine.

Native doctors in Africa who have been responsible for curing people learned their trades from their ancestors who relied on herbs, tree backs and roots for the treatment of ailments. This method of medical care is so popular that it has been in use even now side by side the scientific medical care in our towns and villages. Dr Osafo Mensah, Former Deputy Director of the Centre for Scientific Research into Plant Medicine, said over the years, traditional medicine has played a very important role in health care delivery in the country, adding that, its potential has not been exhaustibly examined.

He emphasized that, globally the World Health Organization had stated that about 80 per cent of the World’s population use herbal or Traditional Medicine.

The practice of traditional medicine he said, had been practiced by various ethnic groups in Africa in the past, saying that over 90 per cent of drugs used in hospitals today were introduced in recent years.

Indeed to ensure their efficacies, drugs and mixtures produced by traditional medical practitioners are sent to Mampong Center for Scientific Research into Plant Medicines CSRPM for examination and approval for use by patients.

The traditional medical care has been found to be so effective that it has been incorporated in our mainstream medical training in some schools of higher learning including the Kwame Nkrumah University of Science and Technology in Kumasi. Apart from learning to diagnose diseases the training centers teach the students the art of producing herbal preparations for the cure of tropical diseases.
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So far three batches of Herbal Medical Practitioners from KNUST and other institutions have been examined and certified as Herbal Medical Practitioners. As a new model of assessment, there was bound to be review of the examination structure. It was proposed in the post-examination reviews that during the period of internship, interns would carry a log book to record the diseases encountered. The log book would also propose the kind of management undertaken for that kind of disease, or the kind of herbs used and the mode of preparation. A clear documentation of follow-up was to be done. The log book would be signed by their supervisor(s). This would form part of the examination score.

It was also noted that because candidates had difficulty in recalling common medicinal plants for the treatment of the specific diagnosis, it was suggested that there should be a lot of input from the university training up through to the period of internship about these plants and their preparations.

In this case, the special laboratory that is being created at the Herbal Medicine Unit, KNUST, should be accelerated to introduce students to the industrial preparation of the various herbal dosage forms for specific diseases.

So far, of those qualified, some are in private practice, some employed in the Clinical Department of the CSRPM as Clinical Researchers whilst others are into herbal research at the Noguchi Memorial Institute of Medical Research, Ghana. Some are still waiting for the establishment of the Ministry of Health (MOH) Herbal Clinics. This model of assessment for the graduate Herbal Medical Practitioners will be one of the models of assessment of the Traditional Medicine Practice in Ghana. Apart from KNUST one of such training centers has been established in the Ashanti Region by Sheikh Amin Bonsu the founder of Amin Scientific Herbal Hospital.

The importance of traditional method of healing has led to some Ghanaians setting up a number of hospitals and clinics in all parts of the country. One of these medical centers is the Amin Scientific Herbal Hospital at Dome Accra as an alternative medicine practice center that employs various forms of complimentary and alternative medicines such as Pythotherapy (herbal medicine), Homeopathy, Naturopathy and Osteopathy. Like all CAM practices, Amin Scientific Herbal Hospital focuses on the holistic approach to healthcare. The center has well trained staffs in various fields of practice. With Sheikh Dr Amin Bonsu as head and Director its aim has been to provide safe and effective complementary and alternative medicines through modern technology.

The Amin hospital operates in four departments of scientific diagnoses and treatment. These include ‘Non Linear Spectral Diagnosis section’ where modern technology is used in managing disease conditions; a ‘Radionics Section’ and ‘Normal Laboratory’; ‘Electronic Pulse Massaging Section’ and the ‘Massaging Section’.

The herbal hospital has 13 branches in Ghana with one at Batsoona in Spintex, Accra and others in Cote d’Ivoire, Nigeria and Burkina Faso. The hospital has successfully treated various forms of male and female infertility prostate cancer, and hyperplasia. Cardiovascular accident (stroke,) hypertension, acute renal failure arthritis, and its related diseases, osteoarthritus, lumbago, lower back pains multiple sclerosis etc. the hospital’s management of diseases is unique as clients of the hospital report of speedy healing.

The 13 medical centers have become so popular and demand more herbal preparations. Dr Sheikh Amin therefore found it necessary to set up large acres of medical in the Ashanti region to produce medical plants for the production of medicines.

Although the medical center and its branches are run on commercial basis they provide free medical screening and care periodically for the public. Massaging and some other services are free to the public at all times in the centers. Apart from the medical services the hospital centers encourage their clients to embark on physical exercises and eat moderately to ensure healthy and sound bodies at all times.

As a result of the excellent services being rendered by the hospital and centers medical officials from Burkina Faso and Cote d’Ivoire have visited Ghana during which they studied the modern methods of healing by the staffs of the hospital and its centers. They also gave awards to the director of the hospital and centers with the authorities in Burkina Faso Naming Dr Amin as ‘Naaba’ king of herbal medicine.

All well meaning people are grateful to the authorities and people of cote divoire and Burkina Faso for the honor done Dr Amin for his achievements. However the question being asked by a number of people is what are we doing to honor Dr Amin in Ghana?

Complementary and alternative medicine (CAM) use is common among patients with chronic diseases in developing countries. The rising use of CAM in the management of diabetes is an emerging public health concern given the potential adverse effects, drug interactions and benefits associated with its use. Herbal medicine, dietary supplements, prayers and relaxation techniques are some of the most frequently used CAM modalities in Kenya. Cited reasons for CAM use as adjuvant therapy include dissatisfaction and inaccessibility of allopathic medicine, and recommendations by family and friends. This article explores the pattern of CAM use in Kenya and other developing countries. It also identifies some constraints to proper CAM control, and offers suggestions on what can be done to ensure safe and regulated CAM use.

Introduction
The prevalence of diabetes mellitus (DM) worldwide is projected to rise to 552 million (representing 10% of the global adult population) by 2030 up from 366 million in 2011 [1]. The burden is worse in the developing world which represents over 80% of cases [1, 2]. In DM management, lifestyle measures, oral glucose-lowering drugs and insulin are the conventional therapies. The latter two are, however, expensive or even unavailable to many patients in developing countries [3], and are sometimes associated with adverse effects [4]. Consequently, some patients opt for complementary and alternative medicine (CAM) to manage their DM. The prevalence of CAM use among people living with DM is estimated to be as high as 80% in Africa [5, 6].

Pattern of CAM use in Africa
Commonly used CAM therapies among diabetic patients in Africa include herbal medicines, nutritional products, spiritual healing and relaxation techniques [7-10]. These CAM therapies are extensively used by patients as adjuvant or as replacement treatment to the conventional prescribed drugs [11-14]. CAM use in Africa is amplified by the presence of traditional healers, with estimates of one traditional healer present to every 200 people [15]. These traditional healers make selective use of CAM, biomedical knowledge and language to enhance the perceived effectiveness of their treatments [15]. The use of CAM in Africa has been associated with cultural beliefs, age of patient, duration of DM, degree of complications, and advice from family and friends [16, 17]. Most importantly, the inaccessibility and shortcomings in conventional healthcare provision in Africa contribute to the high use of CAM [3].

A major concern is that diabetic patients may replace clinically proven conventional diabetes treatments with CAM agents [18, 19]. These patients rarely disclose their CAM practices to their health care providers (HCPs) [20], an issue which warrants particular attention. There is a potential risk of drug interaction when these agents are used as adjuvants to allopathic medicine. They may also interfere negatively with glycemic control, and cause adverse effects and additional complications [6, 15, 19, 21]. It is a well-known fact that most CAM agents contain active ingredients for which appropriate doses and side effects have not been determined. They are therefore likely to be administered at inconsistent doses, with the potential for fatal health effects and mortalities [17].
Challenges in controlling CAM in Africa

A number of constraints exist in the control of CAM use in Africa. For instance, there is lack of integration of CAM therapies into African mainstream health care systems. This is despite the World Health Organization (WHO) recommendation to "integrate traditional and CAM therapies into national health care systems" [6].

Another major concern is the lack of regulation on CAM use in Africa and other developing countries, and therefore exposing the population to potential harm. There exists limited quality assurance with most CAM regulatory processes falling outside the scope of most government drug and therapeutic agencies in Africa. For instance, the registration of herbalists in Kenya is done by the Ministry of Social services, but in essence most of the traditional herbalists are not even aware of this.

There is also limited research on CAM use by people with diabetes in developing countries including Kenya. Some CAM products may also be beneficial and safe; but the lack of randomized controlled trials makes their use controversial [21].

HCPs are also not aware that so many of their diabetic patients use CAM therapies. HCPs should therefore have this in mind, and routinely take a thorough history to document any such therapies and discuss these practices with their patients in order to safeguard their health. HCPs should educate their patients on the importance of adherence, controlling blood sugars and avoidance of potentially dangerous CAM.

Conclusion

CAM is widely used among diabetic patients as an adjunct to conventional therapy in developing countries. This could result in ineffective diabetes management and cause adverse effects, especially since the CAM use is rarely disclosed to HCPs. Empirical evidence, integration and stringent national regulatory safe-guards should guide the safe and appropriate CAM use and sales. Legislation to govern CAM use is therefore necessary and inevitable. Above all, conventional medications should be easily accessible. HCPs should also be aware of CAM use, and educate their patients accordingly. There is a need for urgent multi-sectoral action to streamline CAM use among patients in Africa and other developing countries.

References


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Margaret Atto hopes a herbalist can cure her daughter Stella Akello, 12, who has nodding syndrome. "We are here to seek alternatives," she says. Philippa Croome / for the Toronto Star

who said he could cure the mysterious disease ailing their children.

As they waited, 12-year-old Stella Akello suddenly began to flail in her mother’s arms. The child screamed in anguish; a neighbour automatically rushed over to hold down her legs. A few short minutes later, Stella lay limp and motionless except for the rise and fall of her chest breathing deeply.

Stella is in the advanced stages of nodding syndrome, a progressive disease that is ravaging northern Uganda, killing about 200 children and affecting at least 3,000 since 2010, according to the World Health Organization. Characterized by an uncontrollable nodding of the head, it causes seizures and ultimately renders children physically and mentally disabled. It is fatal for most.

“IT has reached the point where she doesn’t know anything, she cannot even understand,” says Stella’s mother, Margaret Atto.

“We are here to seek alternatives.”

This village has become a breeding ground for the devastating epidemic. Northern Uganda was a hub of conflict during the decades-long civil war led by wanted war criminal Joseph Kony and families are still rebuilding their lives after returning from squalid displacement camps or the battlefield itself. That legacy scarred a generation, and communities are now desperate to protect the next one from being slowly eroded.

The primary school down the road estimates that 30 per cent of enrolled students have dropped out due to the disease. Parents are known to tie their children to trees when they have to leave them at home, as some have been known to wander off and disappear.

Experts, including those from the Centers for Disease Control in Atlanta, remain baffled. Though the disease has been reported for years, no cause or cure has been

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found. People are frightened, and in this isolated village of few answers and limited access to treatment, many are turning back to tradition.

On this day, he gave a handful of children a bottle containing a dark brown liquid—a mix of what he says is a powdered local vine and water. One by one they drank it down; some scrunched their faces in distaste, others gulped sternly before handing the empty bottle back.

A practising herbalist for more than 20 years, Ojara says he has used herbs to cure hundreds more from malaria, meningitis and even AIDS.

“I am now paving the way to alleviating these diseases that give so much burden,” he says.

But Ojara’s claims could land him in jail. He is now under police investigation for telling patients to stop Western treatments in place of his own.

“He needs to be taken into custody — or he’s a patient himself,” says Dr. Bernard Opar, the health ministry’s co-ordinator on nodding disease.

“This is a man who even says he can treat HIV, and he stops people from taking ARVs (antiretroviral medication), and people are dying.” Yet according to Nathan Onyachi, director of the region’s referral hospital, traditional healers have been Uganda’s first line of defence for years.

“These traditional healers have been there before any of us was born,” he says. “They must be treating something.”

For one, Ojara says his root alleviates the effects of malnourishment. Many of the worst affected children are going hungry, as even the sight of food often triggers the seizures.

Another common factor in patients is river blindness — officials say about 90 per cent of all nodding victims also carry that infectious parasite.

But health experts have only said the two diseases are related — river blindness affects an estimated 18 million people worldwide and is not limited to areas affected by nodding syndrome like northern Uganda, Tanzania and South Sudan.

Meanwhile, the current treatment based on anti-epileptic drugs is only addressing the symptoms, and activists and opposition politicians say it’s not enough to contain a further spread.

“The number is just shooting up,” says Emmanuel Kisembo, the head of Health Watch Uganda, a local NGO that recently filed a lawsuit against the government for its slow response.

Kisembo says the true number of victims is at least 7,000, but the government has stifled districts from releasing the figures to stem a widespread panic.

He and other activists have demanded that the region be declared a humanitarian disaster. That way, they say the international community would step in. Although the government has now committed about $1.5 million to improve services in the worst affected areas this year, specialized clinics were only set up in March, and they remain out of reach for those in remote rural areas such as Ojoro village.

Stella’s mother, a widow, says the last time she walked with her daughter to a health centre, it took the better part of a day and they were caught in the rain several times. They would wait hours for drugs, she says, which sometimes ran out. Stella has been making this trip for four years with no improvement.

On that day with Ojara, Stella tried traditional medicine for the first time. “When I heard he was coming, I never hesitated,” her mother says.

http://www.thestar.com/news/world/2012/06/16/ugandans_turn_to_traditional_medicine_to_treat_mysterious_nodding_syndrome.html

Could Mysterious Nodding Disease in Africa have Global Implications?

The syndrome, prevalent in parts of northern Uganda, is confounding medical researchers and scientists.

By Debra Black

January 28, 2012

Nodding syndrome — a disease with epileptic-type symptoms prevalent in parts of northern Uganda — is a medical mystery that is confounding medical researchers and scientists alike.

The disease causes young children and adolescents to nod violently in an apparent seizure. It happens frequently throughout the day, including when they eat.

Over the past year there has been a growing outbreak in northern Uganda, specifically in Kitgum, Pader and Gulu. It is believed that thousands of cases have developed, but

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officials from the U.S.-based Centers for Disease Control (CDC) have only been able to confirm a couple hundred.

A team from the Atlanta-based health organization is returning to Uganda in February to consult with local officials about a treatment trial.

Some researchers have suggested the disease may be linked to river blindness, which also affects all three communities.

River blindness, carried in bacteria inside a nematode worm known as *onchocerca volvulus*, is transmitted to humans by a bite from a black fly infected with the worm. The disease affects 18 million people, mostly in Africa.

The worms burrow into the skin, reproduce and release millions of offspring that spread throughout the body. After they die, they trigger a severe immune inflammatory response in the body which causes vision loss and severe itching.

It isn’t clear how it is related to nodding syndrome, researchers admit. At the moment all they know is there is an association between the two diseases.

The first cases of nodding syndrome — or descriptions of what could have been the disease — date back to the early 1960s in Tanzania, said Scott Dowell, director of Global Disease Detection and Emergency Response for the CDC, in a phone interview with the *Star*.

Over the past decade, clusters of the disease have popped up in South Sudan and Uganda. The onset in Uganda seems to have begun in 2003 with several thousand cases in Kitgum, Dowell said.

The disease appears to strike most children and adolescents between ages 5 and 15. Children appear healthy until about age 5 and then they begin having strange head-bobbing episodes.

Dowell describes it as a kind of perpetual motion, with the head constantly nodding up and down as if to say yes.

The nodding outbreaks differ in individuals, according to Dowell. In some patients it happens every few minutes. In other cases, it happens only three or four times a week. In many cases it makes eating and drinking difficult.

Those who experience it often appear disoriented and not aware of their surroundings when it’s happening, he explained. “It’s very unusual. There is nothing like this anywhere else in the world.”

It is 40 to 100 times more common than epilepsy, he added.

Researchers had hypothesized it might be caused by a new viral encephalitis, but that didn’t bear any fruit. They also thought perhaps it was a prion disease — such as Creutzfeldt-Jakob disease — but they have ruled that out, as well.

Now scientists are betting on the possibility that nodding syndrome is associated with river blindness. In all three CDC investigations so far, said Dowell, researchers have found an association.

Children and adolescents with the disease are more likely to have antibodies against river blindness and were more likely to be exposed to it. But scientists don’t know how river blindness transforms itself into nodding syndrome.

None of the children or adolescents who suffer from nodding syndrome recover. “Once they have it, it is forever,” said Dowell. It is very debilitating — they can’t eat, they are malnourished and they have cognitive problems, so they drop out of school and become totally dependent on their parents and the community, Dowell said.

Currently, sufferers are being treated with anti-epileptic medications and family members report the children are experiencing some relief.

The CDC has also recommended that they be treated for river blindness and malnutrition.

“Because we don’t know what causes it or its transmission routes, we don’t know what implications it may have for the rest of the world,” said Dowell.

Some diseases in Africa are local and others turn out to be globally important. He cites as an example “slim disease” — a wasting disease in West Africa. “It turned out to have been caused by HIV before HIV was discovered.”

In the case of nodding syndrome “we don’t know the implications of this for the rest of the world,” Dowell said. “It’s quite clear it has huge implications for those living in Kitgum district in Uganda, but it could turn out to have just as huge implications for the rest of the world.”

http://www.thestar.com/news/world/2012/01/28/could_mysterious_nodding_disease_in_africa_have_global_implications.html
Health Benefits that Herbal Remedies Offer

By Farahani Mukisa

July 15, 2013

In Summary
Herbal remedies are one of the oldest forms of medicine known to humanity and their use is growing because of the benefits that they offer.

From tree roots to plant leaves, it is common to find medicinal concoctions made out of these products by traditional herbalists. Many, they say are used to treat and cure illnesses such as cough, diabetes and hypertension among others.

Increasingly, a large proportion of the population also uses these herbal medicines, with a recent study by the World Health Organisation estimating that about 80 per cent of people in the developing world still use herbal medicine to treat various ailments.

According to Mr Kizito Mulwana of SEFA Organics which specialises in extracting herbal medicine from wild plants, the use of medicinal plants in Uganda, like in most developing countries has been wide spread for centuries.

“Many people are continuously flooding our medical centres, after they have tried and failed with the conventional hospitals,” he claims. Mr Mulwana said herbal medicines extracted from a wide range of green plants and tree roots cure a wide range of diseases such as asthma, epilepsy and pneumonia.

According to Mr Muhammad Kasirye, director at Hannah Islamic medical centre, a single plant concoction can treat more than one condition.

“Therefore it is possible for us now to establish standard herbal formulae for the given conditions,” he says.

The medicinal plants can be found in various places especially forests which have various plant and tree varieties.

Here are just a few examples and what they do:

**Lemongrass or Chai Ssubi**
Lemongrass can be extracted for its oil and it can be used to treat digestive tract spasms, stomach ache, high blood pressure, convulsions and relieve pain among others. In food and beverages, it can be used as a flavouring ingredient.

**Euphorbia hirta**
This hairy herb that is grown in open grasslands, roadsides and pathways, is commonly known as asthma-weed (kasandasanda) and it is used for treating diseases such as bronchitis, cough, asthma, dysentery and respiratory tract inflammations.

**Elymus repens or couch grass**
It is largely used in treating cough, bronchitis and infections.

**Taraxacum officinale Ugandensis**
It grows mostly in tropical areas and is locally called abaki or mukuzanumme. It is said to be effective in treating cough, urinary infection and memory loss.

**Ocimum tenuiflorum/Omujaaja**
This is a common plant grown in home gardens and used as flavouring for tea. It is said to have several medicinal benefits including treating malaria, ring worms, dog bites and insect bites.

**Artemisia annua**
In ancient times, it was used by chinese herbalists to treat fevers and headaches. A sweetly aromatic herb with small, yellow flower heads, sweet wormwood contains the chemical artemisinin and its aerial parts are used by scientists as an agent for making anti-malarial drugs.

Disclaimer:
While these herbal plants may have medicinal benefits, we don’t take responsibility for those who rely on them as their main source of medicine.

[Link to article](http://www.monitor.co.ug/Magazines/Health---Living/Health-benefits-that-herbal-remedies-offer/-/689846/1914832/-/3l651o/-/index.html)

Blackherbals at the Source of the Nile UG LTD.

www.BLACKHERBALS.COM
Zimbabwe is working on a traditional medicine lobby group to encourage government to invest in the manufacturing of medicine from African herbs.

By Sofia Mapuranga

23 April 2012

A director of traditional medicines in the Health and Welfare ministry, Onias Ndoro, said the lobby group idea came after realising that Africa was failing to tap fully its huge herbal medicine market in the continent, which the West was effectively exploiting.

“African governments are not investing in traditional medicines. The countries lack the capacity to develop herbs into drugs,” said Ndoro.

Yet according to the World Health Organisation, 80% of the African and Asian population depend on traditional medicines for primary health care.

“Currently, 50% of pharmaceutical drugs are from plants but it is baffling to realise that herbs in their raw form are considered ineffective and evil,” said Ndoro.

“The presentation and packaging for traditional medicines in Zimbabwe and Africa is very poor, with a few exceptions from countries such as South Africa. This makes us susceptible to counterfeits,” said Ndoro.

“Herbal medicines generate a lot of income in Asia and Europe,” he said, adding that research had shown that a new anti-malaria drug, developed from a plant in China, had the potential to be 10 times more potent if grown on African soil.

West stealing ideas

Elizabeth Mandy Mazicho, a registered herbalist, accused western countries of stealing ideas and exploiting the African herb medicine opportunity that exists on the continent.

She cited male circumcision as an African concept that was now being promoted as a western idea of reducing HIV incidences.

Help Age Zimbabwe Director, Priscilar Gavi, said there was need to deal with negative perceptions of African medicine which was often associated with witchcraft. He said there was need to promote traditional healthy life styles, which existed in the past.

A HelpAge International research in Ethiopia, Uganda, Zambia and Zimbabwe showed that there was lack of collaboration among traditional health practitioners due to lack of mutual trust and lack of inadequate knowledge.

The research, however, showed there was potential for close collaboration in improving access for health services at community levels because traditional healers were viewed influential.

Shuvai Mtore (60) in Mudzi said her clients preferred visiting her at night because of stigmatisation and pointed out that more people were turning to traditional healers because it was cheaper.

Mtore, whose healing powers were identified when she was 12, said she received clients from as far as Botswana, Mozambique and Harare who consulted her on infertility, cancer and sexually transmitted diseases among others.


Preservation and Conservation of Environment

People those who are mainly concerned with protecting the environment will often use the terms preservation and conservation. Let’s know in details what preservation and conservation of environment exactly means. These two terms are often confused and are generally used to mean the same thing, although differences exist. In this article we will briefly discuss about environmental preservation and conservation and their major differences.

Conservation of environment simply implies the sustainable use as well as management of natural resources which include wildlife, water, air, and earth deposits. There are renewable and non-renewable natural resources. Conservation of natural resources generally focuses on the needs & interests of human beings, for instance the biological, economic, cultural and recreational values. Conservationists have the view that development is necessary for a better future, but only when the changes occur in ways that are not wasteful. Read on to know more about preservation and conservation of environment.

As far as preservation of environment is concerned, it tries to maintain the present condition areas of the nature or Earth which are not yet touched by humans. This is because of the fat that mankind is encroaching onto the environment at such a rate that various wild landscapes are being given over to farming, industry, housing, tourism and other human developments. And we lose much of the natural areas.

Preservationists also strongly support the protection of
Yorubic medicine is indigenous to and widely practiced on the African continent. Yorubic medicine has its roots in the Ifa Corpus, a religious text revealed by the mystic prophet, Orunmila, over 4,000 years ago in the ancient city of Ile-Ife, now known as Yorubaland. Within the last 400 years, this healing system has also been practiced in the day-to-day lives of individuals in the Caribbean, and South America, in large part, because of the traditions brought over by African slaves arriving in the Americas.

Orunmila's teachings were directed at the Yoruba people centered around the topics of divination, prayer, dance, symbolic gestures, personal and communal elevation, spiritual baths, meditation, and herbal medicine. This ancient text, the Ifa Corpus, is the foundation for the art of divine herbology. Although Yorubic medicine has been practiced in Africa for over 4,000 years, its fundamental principles are little known to Westerners around the world. Among the various medical techniques for diagnosis and treatment, Yorubic medicine provides an important and valuable system worthy of study. The purpose of Yoruba is not merely to counteract the negative forces of disease in the human body, but also to achieve spiritual enlightenment and elevation which are the means of freeing the soul.

As with all ancient systems of medicine, the ideal of Yoruba herbology is to condition the body in its entirety so that disease will not attack it. (The term Osain is also used to describe Yorubic herbology. The word "Osain" means "the divine Orisha of plants". I will also use this term throughout the essay.) Many Westerners take it for granted that "African medicine" is a vague term for a collection of medical "voo doo". This myth about African medicine crept in over centuries of misunderstandings. What is left is the negative image of primitive "voo doo" witchdoctors.

This "voo doo" mentality is devoid of the sacred realities born of African thought in respect to religion, philosophy, and medicine. Therefore, the reader must separate witch-doctor myths from the genuine article when considering African herbal medicine.

In order to understand the system of Yoruba medicine, it is important to have some knowledge of the historical conditions that gave birth to this African art of healing. Many factors and dynamics were involved which influenced the beginnings and the development of this indigenous medicine.

The Yoruba history begins with the migration of an East African population across the trans-African route leading from the mid-Nile river area to the mid-Niger. Archaeologists, according to M. Omoleya, inform us that the Nigerian region was inhabited more than forty thousand years ago, or as far back as 65,000 B.C. During this period, the Nok culture occupied the region. The Nok culture was visited by the "Yoruba people", between 2000 and 500 B.C. These groups of people were led, according to Yoruba historical accounts, by King Odudua, who settled peacefully in the already established Ile-Ife, the sacred city of the indigenous Nok people. This time period is known as the Bronze Age, a time of high civilization of both of these groups.

According to Olumide J. Lucue, "the Yoruba, during antiquity, lived in ancient Egypt before migrating to the Atlantic coast." He uses as demonstration the similarity of identity of languages, religious beliefs, customs, and names of persons, places and things. In addition, many ancient papyri discovered by archaeologists hint at an Egyptian origin.

Like almost everything else in the cultural life of Egypt, the development of science and medicine began with the priests, and dripped with evidences of its magical origins.

Among the people, amulets and charms were more popular than pills as preventive or curatives of disease.
Disease was considered to them as possession by evil devils, and was to be treated with incantations along with the roots of certain plants and mystical concoctions. A cold for instance, could be exorcised by such magic words as: "Depart, cold, son of a cold, thou who breakest the bones, destroyest the skull, makest ill the seven openings of the head!...Go out on the floor, stink, stink, stink!" In many ways, this provided an effective cure, known today by various contemporary medicine as psychosomatic. Along side the incantations that were used, the sick patient was given a foul tasting concoction to help ward off the demon housed in the body.

The Egyptian principles of magic and medicine

There was a tendency of Egyptian physician and priest to associate magic with medicine. From such origins, there rose in Egypt great physicians, surgeons, and specialists, who acknowledged an ethical code that passed down into the famous Hippocratic Oath. The Greeks derived much of their medical knowledge from Egyptian physicians around 750 B.C. The influence of Egyptian medicine was so great on European culture that even to this day Egyptian concepts still have its signature in modern Western medicine. For example, when a medical Doctor writes a prescription he uses the Egyptian symbol for health Jupiter) with the symbol for retrograde= Rx This means, "I curse your health in retrograde" = death.

During the reign of King Menes, there developed a body of knowledge which centered around magic, medicine, philosophy and religion which is known as the Memphite Theology. Egyptian priest physicians saw the ideal of medicine as a magical principle:

```
Sky       Hot      Fire
Wet       Cold     Dry
Water     Earth
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"that the qualities of animals or things are distributed throughout all their parts". Consequently, within the universe contact is established between objects through emanations (radiation), the result might be sensation or cognition, healing or contagion.4

There is no doubt the Memphite Theology played a major role in evolving Egyptian medical theory. To them, magic and healing was "applied religion". The Memphite Theology is an inscription on a stone, now kept in the British Museum. It contains theological, cosmological, and philosophical views of the Egyptians. It is dated 700 B.C. and bears the name of an Egyptian Pharaoh who stated that he had copied an inscription of his ancestors.

According to the Memphite Doctrine, "The primate God Ptah, conceived in his heart, everything that exist and by his utterance created them all. He first emerged from the primeval waters of Idun in the form of a primeval Hill. Closely following the Hill, the God (Atum) also emerged from the waters and set upon Ptah...out of the primeval chaos contained 10 principles: 4 pairs of opposite principles, together with two other gods: Ptah, Mind, Thought, and Creative utterance. While Atum joins himself to Ptah and acts as Demiurge and executes the work of creation.

a. Water is the source of all things
b. Creation was accomplished by the unity of two creative principles: Ptah and Alum, the unity of Mind (Nous) with Logos (creative utterance).

c. Atum was Sun-God or fire-God
d. Opposite Principles control the life of the universe.
e. the elements in creation were fire (Atum), water (Nun), Earth (Ptah) and Air.

The gods whom Atum projected from his body were:
1. Shu (Air)
2. Tefnut (moisture)
3. Geb (earth)
4. Nut (sky)
Who are said to have given birth to four other Gods:
5. Osiris
6. Isis
7. Seth (opposite of good)
8. Nephthys (unseen world)
9. The Egyptian concept of cosmology, like the Chinese doctrine of Yin and Yang, and the East Indian system

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of Tridosha (Pitta, Vata, and Kapha), offered a comprehensive explanation of the natural forces of the universe. There were other ideals which the Egyptians developed such as the Doctrine of the Soul. They believed that the soul and body were not two distinct things, but one in two different aspects, just as form related to matter. The soul is the power which a living body possesses, and it is the end for which the body exist, the final cause of its existence.

10. By the time the Third Dynasty arrived during the reign of King Zoser, Imhotep, the great African physician had expanded on much of the earlier theories of medicine. Imhotep is regarded as the "real Father of Medicine". He diagnosed and treated more than two hundred diseases.

11. Imhotep and his students knew how to detect diseases by the shape, color, or position of the visual parts of the body; they also practiced surgery, and extraction of medicine from plants. Imhotep also knew of the circulation of the blood, four thousand years before it was known in Europe. His sayings and proverbs, which embodied his philosophy of life, were handed down from generation to generation. He is best known for his saying, "Eat, drink, and be merry for tomorrow we shall die."

12. Imhotep also promoted health by public sanitation, by circumcision of males, and by teaching the people the frequent ipse of the enema. Diodorus Siculus, the historian tells us: "In order to prevent sicknesses they look after the health of their body by means of drenches, fastings and emetics, sometimes everyday, and sometimes at intervals of three or four days. For they say that the larger part of the food taken into the body is superfluous, and that it is from this superfluous part that diseases are engendered."

13. The habit of taking enemas was learned by the Egyptians from observing the "ibis", a bird. that counteracts the constipating character of its food by using its long bill as a rectal syringe. Herodotus, the Jewish historian reports that the Egyptians, "purge themselves every month, three days successively, seeking to preserve health by emetics and enemas; for they suppose that all diseases to which men are subject proceed from the food they use."

A disease is viewed as harmonizing healing crisis of the body. When a person gets over-loaded with waste, toxins from constipating junk foods, drugs, alcohol, caffeine, nicotine, sodas, fried foods, bleach white flour, enriched flour, white rice, dairy products, cooked pig and blood in meat, salt, white sugar, incorrect food combinations (i.e. protein and carbohydrates=meat and bread or potatoes) the body reacts with a healing crisis (cleansing reaction).

This cleansing is called a disease by Western medicine.

Actually, the disease is the "food itself". Western medicine tries to cure the body from curing (cleansing) itself with a cure (drugs) and/or surgical mutilations.

Oddly enough, Western doctors blame the cleansing reaction.

The concept of universal harmony is characteristic to African thought. Africans believe there is a harmony in the universe - the circling of the planets, the tides of the earth, the growth of vegetation, the lives of animals and people all are related. All that is in the universe emanated from the same source, one universal Mind.

The ancient Egyptian priest looked out at the universe, and noted the ratios of the different planetary cycles, and counted the rhythmic periods in nature. They also calculated the ratios of the human body. They put together a "sacred" geometry which was a set of mathematical ratios and proportions. They believed that these ratios, if used in the sound of music and the architecture of buildings (pyramids), would resonate with the life forces of the universe and thus enhance life. The ancient physician/priests of the Nile Valley were said to have been instructed in temples which were called "Per Ankh". In today's language they would be called the "House of Life".

Of the thousands of medical papyri originally written, less than a dozen have been discovered, and of that number, the Ebers Papyrus and the Edwin Smith Papyrus are deemed the most profound. The Edwin Smith Papyrus was published in 1930 by James Henry Breasted, who had spent ten years translating the document. This papyrus describes 48 different injuries to the head, face, neck, thorax and spinal column and the appropriate surgical methods for attending to them. It is suspected that the Eighteenth Dynasty scribe who was responsible for copying the original text only wrote the first 48 cases dealing with the upper third of the body.

There are more than 90 anatomical terms referenced in the Edwin Smith Papyrus, and there are more than 200 terms listed in various Nile Valley medical literature.

This papyrus is also of great importance because of its...
use of the word "brain" and references to the neurological relationship between the brain (spinal cord and nervous system) and the body.

The Ebers Papyrus (ca. 1500 B.C.) explores a broad range of medical science and includes chapters on the pulse and cardio-vascular system, dermatology, gynecology, ophthalmology, obstetrics, tumors, burns, fractures, intestinal disorders and much more. There is also considerable evidence that physicians in Egypt (also Kemet) practiced circumcision, brain surgery and were extremely well versed in gynecology and obstetrics. By 2000 B.C. physicians in Egypt had already created an effective organic chemical contraceptive. This formula consisted of acacia spikes, honey and dates, which were mixed in a specific ratio and inserted into the vagina. Modern science has since discovered that acacia spikes contain lactic acid, which is a natural chemical spermicide.

Pregnancy and fetal sex tests were conducted by Egyptian herbalist who soaked bags of wheat and barley in a sample of a woman's urine. Urine from a pregnant woman was known to accelerate the growth of certain plants; if the barley sprouted, it meant that the woman was pregnant and was going to give birth to a female child, and if the wheat sprouted it meant that she would give birth to a male child. The urine pregnancy test was not rediscovered by modern science until 1926 and the wheat/barley sex determination test was not developed until 1933.

In 1987, the National Academy of Sciences published a report by the National Academy of Engineers entitled "Lasers: Invention to Application". In a chapter titled "Lasers in Medicine", the author, Rodney Perkins, M.D., suggests that a form of laser therapy was actually used in Egypt. Dr. Perkins states that: "The use of the laser in medicine and surgery has a relatively short pedigree of less than two decades. Although the range of laser radiation extends both below and above the visible portion of the electromagnetic spectrum, that radiation is, in a sense, only a special form of light. The use of other forms of light in medicine has a longer history."

Additionally, we have documentation that the ancient Egyptians recognized and used the therapeutic power of light as far back as 6,000 years ago. Patches of depigmented skin, now referred to as vitiligo, were cosmetically undesirable. Egyptian healers reportedly crushed a plant similar to present day parsley and rubbed the affected areas with the crushed leaves. Exposure to the sun's radiation produced a severe form of sunburn only in the treated areas. The erythema subsided, leaving hyperpigmentation in the previously depigmented areas."

When looking at Nile Valley Egypt and its contributions to natural and herbal medicine, it must be understood that we are not just talking about Egypt alone. We must consider the whole continent which extends over 4,000 miles into the geography of Africa. Many tribes and African nations contributed their share of herbal and medical wisdom. This would include the Sudan, Ethiopia, Nigeria, Mali, Libya, and dozens of other African nations. The Nile Valley, however, became something of a cultural highway which made it a great historical stopping place for wisdom and knowledge.

Out of Africa came the world's first organized system of herbal and medical science. This knowledge was so profound, much of it passed from the Egyptians to the Phoenicians, the Yorubas, to India, Syria, Babylon, the Middle East, to the Greeks, the Romans and from the Romans to Western Europe. The three major herbal systems, Ayurveda, Chinese Traditional Medicine, and Western herbology were extracted from the knowledge created by the priests and wise men in the Nile Valley. When this gigantic work is completed, I believe the evidence will reveal information that will amaze humanity.

Early in its history and its development, Nile Valley civilization created a basic way of life that attracted teachers, and priests from other parts of Africa, always enriching the original composite of the Nile Valley. By the time the Yoruba people made their journey to the Nile Valley, led by the mystic prophet Orunmila, Egyptian priests had accumulated centuries of herbal and medical knowledge. The Yorubas drew from this treasure chest of wisdom, and incorporated it into their own religious and cultural customs. The key point, in respect to the evolution of Yoruba medicine, is that Egyptian knowledge, coupled with the earlier Nok people, produced the outcome of Yoruba herbal practices.

From a conceptual standpoint, Osain herbalism is a religion, a philosophy, and a science. Born from this concept is the idea that oneness with the Creative Essence brings about a wholeness in the human essence. Seekers, or aspirants of the system of Osain, or Yoruba, seek to bring themselves into alignment (balanced health) with his spiritual being (immortal reality) and his relationship with the Divine Cause. This is achieved through herbs, spiritual baths, right living, diet, rituals and self-development which are meant to maintain a healthy and happy life. Thus, Osain is a divine journey to the inner self which encompasses all aspects of life.

As envisioned by the ancient prophet, Orunmila,
Yoruba, the Ifa Corpus (Cosmic Intelligence) is the text of Osain herbalism. Orunmila saw that dual levels of potentiality existed in the human body. Through him, we understand that the study of animate and inanimate, manifest and unmanifest, visible and invisible worlds leads to fundamental understandings of the processes of growth and life cycles of trees and plants, the lives of insects, animals, and human nature. Through the guidance of Orunmila, the principles of Yoruba Cosmology evolved: "The Self-Existent Being (Oludumare), or the One Source, who is believed to be responsible for creation and maintenance of heaven and earth, of man and women, and who also brought into being divinities and spirits (Orisha) who are believed to be his functionaries and intermediaries between mankind and the Self-Existent Being (Oludumare)."

"Orisha" as a term, is actually the combination of two Yoruba words (I discovered that the root word is from the Egyptian god Osiris who had other qualities, "Osh", meaning many, and "iri", meaning to do or many eyed. Osiris came to mean Omniscent). "Ori" which is the reflective spark of human consciousness embedded in human essence, and "sha" which is the ultimate potentiality of that consciousness to enter into or assimilate itself into the divine consciousness. From this idea, we can see that given the right encouragement of the human consciousness, man can heal himself along with the use of herbs and foods as special inducements.

From this standpoint, the Orisha assist in the development of (iwa-pele) or balanced character. This is the premise of true Yoruba medicine. The connection between one's consciousness (Ori) and one's behavior (iwa-pele) is clearly seen as a way of maintaining a correct attitude towards nutrition and lifestyles in order to ward off sickness (negative spirits) and disease.

Disease according to the theory of the Ifa Corpus, is caused by oppressive forces known as "ajogun". The Orisha are spirits of heaven-sent, to continually wrestle with the human nature in order to uplift it -- to purify it. The "ajogun" are the "demonic" beings. They are all earthly and heavenly forces whose destructive intent is to off-set the human body. It is the job of the Oloogun (medicine healer) to help the patient overcome the opposing forces that disrupt their health.

When understanding the African's use of demonic and spiritual agencies in medicine, it is important to understand that this concept is used merely as a cosmic-tool to explain physical phenomena in nature which is unique to African thought. When the Europeans came into Africa and saw the African dancing in a frenzy with their bodies covered in ashe, they did not understand or comprehend, so they labeled it primitive, savage and backward. They hadn't made the connection between the Creator, spirits and their manifestation in nature as the African had done. The Western mentality couldn't understand because of their materialistic way of seeing.

Because the Osain system has many Orisha which serve different purposes, we will only focus on Erinle-Orisha, the Orisha of medicine. The seven major Orisha are examined in table one. (The Yoruba's were obviously inspired with the seven Orishas by the ancient Egyptian's concept of the seven openings in the head.)

In the body, the Erinle-Orisha can be understood in terms of metabolic energy which activates, or stimulates the other Orisha. Each Orisha is characterized by certain attributes and is in charge of specific organ functions.

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Table 1: The Seven Major Orisha

<table>
<thead>
<tr>
<th>Orisha</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obatala</td>
<td>Creator of Human Form, White purity, Cures illness and deformities.</td>
</tr>
<tr>
<td>Elegba</td>
<td>Messenger of the Orisha, Holder of Ashe (power) among the Orisha, he is prime negotiator between negative and positive forces in body, enforces the &quot;law of being&quot;. Helps to enhance the power of herbs.</td>
</tr>
<tr>
<td>Ogun</td>
<td>Orisha of Iron, he expands, he is divinity of clearing paths, specifically in respect to blockages or interruption of the flow vital energy at various points in the body. he is the liberator.</td>
</tr>
<tr>
<td>Yemoja</td>
<td>Mother of Waters, Sexuality, Primal Waters, Nurturer. She is the amniotic fluid in the womb of the pregnant woman, as well as, the breasts which nurture. She is the protective energies of the feminine force.</td>
</tr>
<tr>
<td>Oshun</td>
<td>Sensuality, Beauty, Gracefulness, she symbolizes clarity and flowing motion, she has power to heal with cool water, she is also the divinity of fertility and feminine essence, Women appeal to her for child-bearing and for the alleviation of female disorders, she is fond of babies and is sought if a baby becomes ill, she is known for her love of honey.</td>
</tr>
<tr>
<td>Shango</td>
<td>Kingly, Virility, Masculinity, Fire, Lightning, Stones, Protector/ warrior, Magnetism, he possesses the ability to transform base substance into that which is pure and valuable.</td>
</tr>
<tr>
<td>Oya</td>
<td>Tempest, Guardian of the Cemetery, Winds of Change, Storms, Progression, she is usually in the company of her counterpart Shango, she is the deity of rebirth as things must die so that new beginnings arise.</td>
</tr>
</tbody>
</table>

Table 2: Physical Correspondences

<table>
<thead>
<tr>
<th>Orisha</th>
<th>Physical Correspondences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obatala</td>
<td>brain, bones, white fluids of the body</td>
</tr>
<tr>
<td>Elegba</td>
<td>sympathetic nervous system, para sympathetic nervous system</td>
</tr>
<tr>
<td>Yemoja</td>
<td>womb, liver, breasts, buttocks</td>
</tr>
<tr>
<td>Oshun</td>
<td>circulatory system, digestive organs, elimination system, pubic area (female)</td>
</tr>
<tr>
<td>Shango</td>
<td>reproductive system (male), bone marrow, life force or chi</td>
</tr>
<tr>
<td>Oya</td>
<td>lungs, bronchial passages, mucous membranes</td>
</tr>
</tbody>
</table>

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Each has its dual force of ajogun (demonic force) and Orisha (positive force). The Orishas also have special places or main locations in the body where they can accumulate, or cause havoc and disease. Therefore, it is important to use the corresponding herbal treatment to correct the derangement.

EWE (Herbs)
The use of herbs and plants, called ewe in Yoruba, is of great importance. Herbs are picked for medicinal, and the spiritual powers they possess. In Yorubaland, herbs are gathered by the Oloogun, or by the various types of herbalists who inhabit the regions where Osain is practiced. The population can usually obtain herbs either by private practice or from the marketplace in town. In the Americas and the Caribbeans, Osain based practitioners are also directed to use herbs as medicine. Here the Oloogun or priests, as well as devotees alike gather herbs for medicine, baths, and religious artifacts.

Because of the wide-spread practice of Osain in the New World, Nigerians and people from other African countries have begun to set up herbal businesses in increasing numbers. More and more indigenous herbs
Table 3: The Ewe and Presiding Orisha Correspondences

<table>
<thead>
<tr>
<th>Orisha</th>
<th>Ewe (HERBS) for Medicinal Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obatala</td>
<td>Skullcap, Sage, Kola Nut, Basil, Hyssop, Blue Vervain, White Willow, Valerian</td>
</tr>
<tr>
<td>Elegba</td>
<td>All Herbs</td>
</tr>
<tr>
<td>Oshun</td>
<td>Yellow Dock, Burdock, Cinnamon, Damiana, Anis, Raspberry, Yarrow, Chamomile, Lotus, Uva-Ursi, Buchu, Myrrh, Echinacea</td>
</tr>
<tr>
<td>Yemoja</td>
<td>Kelp, Squawvine, Cohosh, Dandelion, Yarrow, Aloe, Spirulina, Mints, Passion Flower, Wild Yam Root</td>
</tr>
<tr>
<td>Ogun</td>
<td>Eucalyptus, Alfalfa, Hawthorn, Bloodroot, Parsley, Motherwort, Garlic</td>
</tr>
<tr>
<td>Oya</td>
<td>Mullein, Comfrey, Cherrybark, Pleurisy Root, Elecampane, Horehound, Chickweed</td>
</tr>
<tr>
<td>Shango</td>
<td>Plantain, Saw Palmetto, Hibiscus, Fo-ti, Sarsaparilla, Nettles, Cayenne</td>
</tr>
</tbody>
</table>

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are now being made accessible to devotees here in the Americas. It is said that ewe (herbs) are for the “healing of Nations” and many health food stores provide them in powder, leaf, and capsule form. Adherents to the traditional practices of Osain are usually advised to use herbs as medicine before going to Western allopathic drugs for healing. There are many books written on the subject of herbology. Therefore, researching the possibilities of herbal use is recommended.

Table 3 above shows herbal directives. They provide examples of the ewe based on the presiding Orisha correspondence. It is best that novices seek out divination before attempting to get and prepare herbal formulas. It is also advisable to rely on priests and qualified herbalists to begin the healing process before getting involved with the properties and powers of herbs yourself.

The following is a recommended way to prepare these herbs: The herbs can be used along or in combination with other herbs. Add the herbs to a pot of mildly boiling water (to prepare a decoction). Let the herbs steep for about thirty minutes before straining. The remaining herbal solution is then prepared as a tea. In some instances the herbal solutions are used in diluted form for enemas. Enemas are among one of the most effective treatments in cleaning out the colon which is the seat of many diseases. In Osain, sugar should never be added to herbal solutions. Honey may be used, however, along with some lemon.

Diagnosis and Treatment
As one can see, we have a useful system of categorization which applies to all levels of disease and treatment. To understand the application of Osain herbology, let's take as an example a person suffering from a bronchial-pulmonary condition including cough, and spitting of white mucus. The approach of Osain herbology would be to determine which of the Orishas are out of alignment. Osain would do this by taking into account the patient's manifest symptoms along with locating the main areas in the body where the misalignment (disease) occurs. Our patient would be considered to have a mis-alignment in the "Oya" and "Obatala" Orishas. Oya Orisha pre-dominates in the lungs, bronchial passages, and the mucous membranes.

The Obatala Orisha is responsible for white fluids of the body which is located in the throat region of Orisha/Obatala (also known in Yaga as the 5th Chakra, see diagram 3). The condition can be corrected by prescribing the patient with Comfrey and Sage, as an herbal tea, or applied externally by a spiritual bath.

From this example, one can get an idea of the wholistic treatment approach of Osain Herbology. However, the emotional and spiritual causes of disease would be taken into account in order to appease the negative forces of ajogun to make the cure complete according to traditional Yoruba religious practices. This would include herbs, spiritual baths, symbolic sacrifice, song, dance, ani prayer, as well as a change of diet.

Some may argue that there is a fine line between "medicine" and "superstition" in the rituals of Yorubic healing arts.

The art of medicine, as Yorubic practitioners understand it, involves practices by which human beings hoped to be able to understand and control the forces of the universe. Myth, legend, drama, ritual, dance, in addition to whatever it may be, are vehicles for carrying profound knowledge about the human experience. Every culture has its roots in esoteric concepts, philosophies, and religious practices. Constructively using spiritual archetypes allows man to energize and intensify life to a

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surprising degree. A careful study of history will show that Europeans developed from a background of taboos, and superstitions, as well as mythical beliefs. The Chinese thought Westerners barbarians and made no attempt to learn from them until recently.

The Yorubas believed that the Orishas of the celestial world were emanations of Oludumare (The One Source) who conceived the universe by a series of emanations, and in this way it is possible to reconcile the unity of God with multiplicity. The One Source was the First Cause or Creator, the necessary Being in whom essence and existence were one. It is through incantations, drums and dance, and special herbs that one can communicate to the human body by awakening the internal Orishas, and thus return to unity, spiritual light, and health.

Western medicine deals in the area of eliminating the symptoms that have manifested in the physical body, while Yorubic healing deals with the elimination of the root source of the problem. All illness is the result of imbalance of the physical, mental, and spiritual aspects in the body. The Yorubic healer who cures the person of the symptoms has to dissipate the negative energies. Unless he addresses the cause of the disease, the sickness will eventually come back.

The only complete healing for an ailment must include a change of "consciousness" (Ori) where the individual recognizes the root cause and does not wish, or feel compelled to violate its pain. So the Western doctor, by removing the discomfort through drugs, has temporarily taken away the motivation (iwa-pele) for their patient to look for the true healing. However, as the patient’s state of consciousness asserts itself, they will again violate the same natural law and eventually have another opportunity to receive motivation in the form of a new ailment to learn what they are doing wrong. Whenever we listen to our bodies, it moves to provide us with the training and the appropriate knowledge that we need to regain our balance.

The Integration of Yoruba medicine into Planetary Herbology

I have tried in this essay to accomplish the first part of a pleasant assignment which I rashly laid upon myself about two years ago: to integrate African medicine into the scheme of Planetary Herbology. It is no exaggeration to say that this work would not have not been possible without the pioneering work of Dr. Michael Tierra. My goal was to add to the tremendous work Dr. Tierra laid out in integrating Eastern and Western philosophies and the principles of Chinese, Japanese, Ayurvedic, and North American Indian herbal medicine.

After close study of the herbal principles applied in African medicine, I noticed the fundamental unity and similarities within and between other herbal systems. Namely, Ayurvedic, North American Indian herbology, Western, and Chinese herbology. This was due partly because of the historical and cultural links of each of these systems. Yet, it is well to remember that the meeting of cultures has also triggered tremendous creative explosions in medicine and philosophy. East Indian medicine was born in a meeting of the Black Dalilia (the Black Untouchables) and Indo-Europeans. Chinese herbology adopted some of its principles with the meeting of Egypt. Japanese medicine was born in a meeting with Chinese culture, and Western herbology sprang from a meeting of the ancient Greek and Egyptian priests. These are only a few illustrations; much of what I find exciting and interesting.

Let us look at the correspondence between Western herbology and the Egyptian system. The Hypocritic humoural theory was taken from Egyptian Magical Principles (see diagram 1). The basis of this theory was the belief that the human body was made up of the four elements of which the whole material world was composed: fire, air, earth and water. It was also believed that each element possessed certain qualities: hot, dry, wet, and cold. These elements could be mixed in more ways than one, and the various mixtures gave rise to different temperaments and "humours". The proper balance of elements preserved the health of the body, and a lack of balance led to illness which called for the doctor's healing magic. The Yoruba priests adopted this same system with slight modifications. In the Yorubic
system, the four elements became: Shango (the fire element), Oya (the air element), Yemoja (the water element), and Elegba (the Ashe, or earth element).

Traditional Chinese Medicine places primary emphasis on the balance of qi, or vital energy. There are 12 major meridians, or pathways, for qi, and each is associated with a major vital organ or vital function. These meridians form an invisible network that carries qi to every tissue in the body. Under the Yoruba system, the major meridians are the 7 Orishas. The flow of vital energy is represented by Ogun, which is the divinity of clearing paths, specifically in respect to blockages, or interruption of the vital energy at various points in the body (see Table 1).

Upon close study, it becomes evident that the Orisha modes correspond very easily to the Chinese concept of qi. Also in Traditional Chinese medicine, the vital energy comprises two parts: Yin and Yang. They are considered opposites masculine and feminine, heavenly and earthly. The theoretical equivalent of Yin and Yang in Yoruba is represented by Oshun (the divinity of feminine essence), and Shango (the divinity of virility, and masculinity). It is interesting to note that just as Yin represents the quality of cool and Yang the quality of hot, Oshun represents the power to heal with cool water, and Shango is represented by fire (heat).

Physical and spiritual balance in Yorubic medicine is best described by the concept of "Aba", or human development. Aba is a circle in the center which is aligned with the seven Orishas, each of which is represented by smaller circles of the opposite colors of black and white. The smaller circles represents the ever changing nature of Orisha (spirit) and ajogun (demon), and each Orisha demonstrate that each contains the potential to transform into its corresponding demon (or disease). (See diagram 4) It is the job of the African healer to bring the internal Orishas into alignment. This coincides with the Chinese belief that the universe is forever changing through Yin and Yang.

In the Yoruba system, the seven Orisha's have many counterparts, or partners that bring about various qualities or spiritual forces. This reciprocal relation-ship, in turn, gives rise to the four elements, and other attributes which influence the physical world. (See diagram 5)

Western and Chinese herbology, the Yoruba system incorporates environmental and emotional states. Yoruba priests believe that the Orishas govern a law of human passions and desires which, if improperly indulged, or violated, will prevent a person from gaining spiritual benefit from the external acts of rituals. Demons, or negative spirits enters the body through the five senses, the imagination and the carnal appetites.

The Chinese also recognize the "seven emotions" as causes to disease. The "seven emotions” or "evil vices” approximate "the law of human passions and desires” in Yoruba medicine. For example, under the Yoruba system, someone suffering from guilt can bring on a multitude of evil spirits, or illnesses. The Elegba Orisha,
is the primary negotiator between negative and positive forces in the body. The emotion of guilt can put Elegba into a negative disposition, which in turn, can effect the sympathetic and parasympathetic nervous system.

Physically, the negative disposition can cause chronic digestion problems, and a weakening of the immune system.

- Shango Orisha represents the fire element and is hot and dry in nature. It is considered to be the Protector/Warrior, and possesses the ability to transform base substance into that which is pure and valuable. It is associated with the color red. It's season is summer.

- Elegba Orisha represents the earth element and is dry and cold in nature. It is the Messenger of the Orisha, Holder of Ashe among the Orisha, and is associated with the colors red, black, and white.

- Yemoja Orisha represents the water element and it is cold and wet in nature. It is the Mother of Waters, and is associated with the color blue and crystal. It's season is winter.

- Oya Orisha represents the wind or air element and is hot and wet in nature. It is responsible for the winds of change, and is associated with the color reddish-brown. It's season is spring.

The Oloogun (priest) may prescribe the patient various herbal combinations to be included in a spiritual bath to cleanse the person of negative influences which have impacted upon their aura essence. The spiritual bath is given along with prayers and incantations especially designed to help ward off the negative spirits. As in Tradition Chinese Medicine, the Yorubic priests help to cure physical symptoms by treating the emotional vice that lead to the ailment in the first place. Like other traditional medicines with a long history, Yorubic medicine focuses on the individual and what imbalances may be contributing to or causing illness or disease.

Now let's look at Ayurveda in light of Yorubic herbal principles. I found that there were many comparisons between the two systems. As I mentioned earlier, racially and linguistically, the East Indians and Africans have a common origin, going back to the ancient Sumerians, Babylonians, Egyptians, Phoenicians, and Dravidians. Ayurveda developed in contemporary contact and mutual influence from these ancient societies. Note the startling resemblance between the linguistic terminology of Yoruba and Ayurveda, very often the same sounding words, meanings, and similar spellings. These similarities in names can hardly be coincidental:

<table>
<thead>
<tr>
<th>Yoruba</th>
<th>Ayurveda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osiris</td>
<td>Iswara</td>
</tr>
<tr>
<td>Ishtar</td>
<td>Ishvara</td>
</tr>
<tr>
<td>Samad</td>
<td>Samadhi</td>
</tr>
<tr>
<td>Orisha</td>
<td>Dosha</td>
</tr>
<tr>
<td>Maye</td>
<td>Maya</td>
</tr>
<tr>
<td>Ogun</td>
<td>Guna</td>
</tr>
<tr>
<td>Obatala</td>
<td>Vata</td>
</tr>
<tr>
<td>Khepsh</td>
<td>Kapha</td>
</tr>
</tbody>
</table>

Ayurveda holds that the body is governed by three basic biological principles, or doshas, that control the body's functions. These doshas and the functions they govern are:

- vata -- movement
- pitta -- heat, metabolism
- kapha -- physical structure

The Indians believe that each individual has a combination of doshas. Imbalance of these doshas is the cause of disease. A Vaidya (Ayurveda doctor) seeks to achieve health through the balancing of the three doshas. The Oloogun's under the Osain system utilize a similar concept. They believe that the body is composed of seven Orishas which exist in focal points of the body.

These Orishas are in harmony when in perfect alignment, and the result is balanced health. They believe that when a person is in spiritual alignment, demons cannot produce illness. At the very foundation, both systems draw from religious and philosophical view points, which brings a mind/body approach to medicine and life. Ultimately, the beliefs of Indians are similar to those of the Africans. Both are also rooted in the belief of supernatural forces for the minor ills of life.

Oblations, charms, exorcisms, astrology, oracles, incantations, vows, divination, priests, fortune-tellers, and demonic spirits are a part of the historic picture of Africa and India. It should come as no surprise, then, that in Osain and Ayurveda, symptoms and diseases that could be viewed as mental thoughts, or feelings are just
as important as symptoms and disease of the physical body.

In terms of therapeutic approaches, both systems have many comparisons. Ayurveda uses the Panchakarma for purification and removal of toxins in the body. Osain utilizes the spiritual bath for this same purpose. Ayurveda and Osain saw purification as a means of purging the body of possible infections and impurities, a practice which has proven to have a rational basis. It is recorded that the ancient Hindus used ritual purification in minor cases by such simple ceremonies as being sprinkled with holy water, and in major cases by more complicated methods, culminating in the Pancha-karma. This purification consisted in drinking a substance called ghee, or clarified butter. A little more to the taste of Africans was the religious precept to use the spiritual bath; here again a hygienic and spiritual measure, highly desirable in Osain medicine, clothed in a religious form to expel the evil spirits that might have entered the body.

According to Osain herbology, medicinal herbs, spiritual baths, prayers, and meditation is the cornerstone of health. Many of the herbs users in Osain are specifically selected to affect a particular Orisha in the body, including the energies and therapeutic properties inherent in the nature of the herb. The herbal properties are absorbed into the human dimensions and assist in the dissipation of negative influences. The ewe (herbs) are also classified and used in order to enhance one's Ashe.

This is essential in Yoruba medicine in order to bring one's nature back in contact with the inherent force of all creation. This "contact" with the inherent force involves a tri-lateral process which includes:

1. Nature (Ashe)
2. Angelic forces (Orisha) -------------- ewe (herbs)
3. Humans (Physical forms)

By enhancing the ashe in the human form, the spiritual channels are increased in power in order to allow the internal Orishas to gain leverage over the oppressive negative forces which are upsetting the balance of the body. Now let us compare the Western system of classification with the herbal properties of the presiding Orisha correspondence:

- Obatala: Antispasmodic, stimulants, nervine, diaphoretic
- Elegba: All herbs (herbs used for harmonizing)
- Oshun: Alteratives, blood tonics, cholagogues, emmenagogues, antipyretics, expectorants, carminatives
- Yemoja: Perturient, tonics, diuretics, cholagogues
- Shango: emmenagogues, astringents
- Ogun: Rubefacients, antianemicse, antihemorrhagics, nutritive tonics, cardiac tonics, diuretics

The Planetary system of herbology also recognizes environmental energies at the core of its principles. Environmental energy is also categorized in herbs using the Osain system of herbology. Furthermore, herbs are categorized according to numbers, colors, and directions.

<table>
<thead>
<tr>
<th>Orisha</th>
<th>Color</th>
<th>Number</th>
<th>Natural Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obatala</td>
<td>White</td>
<td>8, 24</td>
<td>Mountains, Woods</td>
</tr>
<tr>
<td>Elegba</td>
<td>Red and Black, White and Black</td>
<td>1, 3, 21</td>
<td>Woods, Crossroads, Gateways</td>
</tr>
<tr>
<td>Yemoja</td>
<td>Blue and Crystal</td>
<td>7</td>
<td>(salt water) Oceans, Lakes</td>
</tr>
<tr>
<td>Oshun</td>
<td>Yellow</td>
<td>5</td>
<td>(fresh water) Rivers, Lakes</td>
</tr>
<tr>
<td>Ogun</td>
<td>Green and Black</td>
<td>3</td>
<td>Railroads, Woods, Forges</td>
</tr>
<tr>
<td>Shango</td>
<td>Red</td>
<td>6, 12</td>
<td>Places struck by lightning, base of trees</td>
</tr>
<tr>
<td>Oya</td>
<td>Reddish-brown, Rust, earth tones</td>
<td>9</td>
<td>Cemetery, places hit by Hurricanes, Storms</td>
</tr>
</tbody>
</table>

It is believed by Africans that where a plant grows also affects its spiritual powers (energy) to heal. For instance, the Oya Orisha is considered the Guardian of the Cemetery. Any plants that are found growing in cemeteries, are said to have the enhancing powers of Oya. More specifically, the Oloogun priest will search for cemetery plants growing in brownish-rusty areas which is believed that Oya Orisha hides its spiritual powers. The number nine is associated with the number of Orisha counterparts which also accompany Oya Orisha. Yemoja Orisha, the Mother of Waters, is said to contain her powers in Lakes, and oceans (salt water). Plants in these areas are used to help protect energies of...
Continued from page 63 – Yorubic Medicine

the feminine force. Examples of some of the herbs used under this classification is kelp, aloe, and Squawvine which have traditionally been used to treat female imbalances in the amniotic fluids in the womb of pregnant women. The direction that a plant is picked in a particular area is also important under Yorubic medicine.

The Orishas are said to concentrate their spiritual energies in particular directions just as the internal Orishas reside in different parts of the body. After comparing the Yoruba system of direction with the "four directions of herbs" classified in the North American Indian medicine wheel, I discovered striking similarities.

- Oshun, is represented by the color yellow. This Orisha indicates medicines which affect the circulatory system, digestive organs, and the elimination system. Its direction is east.
- Ogun, is represented by the color green. This Orisha indicates medicines which tone the tendons, and sinews. Its direction is south.
- Elegba, is represented by the color black. Medicines indicated are herbs which effect the Brain and nervous system. Its direction is west.
- Obatala, is represented by the color white. This Orisha indicates white purity, and herbs that cure human deformities. Its direction is north.

The four directional energies that correspond perfectly with the wisdom of the Native Americans were: 1) Oshun; 2) Ogun; 3) Elegba; and 4) Obatala. Again, Yoruba medical principles give us a system which harmonizes with the directional energies given in Planetary Herbology. One can perceive a universal wisdom that is common in every culture and system of herbal medicine. If the universal energy is One, then the foundation on which the four energies rest is Universal Energy. In other words, if the universal center is the source of all great herbal inspirations, then these four directional energies are the vehicles through which the inspiration becomes manifest.

There is no other explanation for the similarities between herbal systems around the world. Every ancient culture taught the "sacred four". They indicated that we must pass through all four aspects, or directions, if we are to be complete and balanced human beings.

In earlier times, working these herbal principles into universal energies was something that was done by the great medicine men. Today, we are left to work these things out on our own. This can be an illuminating process. The essay I have given is by no means complete. It is merely a basis to establish the integration of African Medicine into the family of Planetary herbology.

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5. Nile Valley Contributions to Civilization by Anthony T. Browder (The Institute of Karmic Guidance, Inc; 1992)
6. Omosade Awolalu, Yoruba Beliefs and Sacrificial Rites (White Plains, NY: Longman Groups, 1979) p. 3
7. The Handbook of Yoruba Religious Concept , ibid., p. 23

Tariq Sawandi is a Master herbalist, nutritionist, and consultant on holistic health. Dr. Sawandi is renown for his in-depth knowledge of African holistic medicine, including Chinese and Japanese medicine, Ayurveda, Naturopathy, and North American Indian herbology. He is the author a of new book titled, "African Medicine: A Guide to Yoruba Divination and Herbal Medicine." Available at Blackherbals.com

http://www.blackherbals.com/Yorubic_Medicine.htm
The Challenges of Indigenizing Africa’s Environmental Conservation Goals - Excerpts

By Patrick M. Dikirr
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Binghamton University, State University of New York

Abstract
This paper takes a critical look at a proposal which is increasingly gaining currency in sub-Saharan Africa: and that is, the suggestion that in order for Africa to cultivate an environmentally supportive culture, respective African governments — working in cooperation with the multilateral donor agencies, must thoughtfully reconcile imported environmental conservation interventions with the tried and time tested collective intelligence of Africa’s village lore. As salutary as this goal is, I here nevertheless argue that its actual implementation will be more than a Herculean feat. Amongst these obstacles, to mention a few, would include: the obviously predatory tendencies of the free market (knows best) ideology; behind-the-scene political power games of Africa’s ruling elite; Africans fractured sense of self; Africa’s crushing dependency on Industrialized Nations of the North and, last but not least; the technocratic paternalism (‘expert-knows-best’ mentality) of both African and non-African elite. This list of obstacles is, of course, not exhaustive; it is only indicative.

However, in a paper of this length, we cannot obviously fully explore how each of the aforementioned hurdles will hinder Africa’s aspirations for indigenizing her environmental conservation goals. Consequently, we here only then direct our focus primarily on the extent to which the predatory tendencies of free market ideology will get in the way of Africa’s determination of Indigenizing her environmental conservation goals.

Introduction
Lately, in Africa, a consensus has been emerging around the idea of reconnecting Africa’s environ-mental conservation goals with the reservoir of its up-to-now neglected indigenous lore. This task must, however, contends William Ochieng’, “originate from within, not from outside.” In other words, solutions to Africa’s accelerating environmental crises should, above all, come out of Africa’s own roots, not through grafting on to Western implanted interventions.

Once Africans learn and begin to tenaciously embrace homegrown interventions — as the Chinese, Japanese and Malaysians did before they eventually acquiesced to America’s McDonald-alization of the world — then, argues Ochieng’, Africa’s monumental problems, which are largely exacerbated by an over reliance on Western models, will also come to pass. Short of falling back on homegrown solutions, Ochieng’ contends, the continent of Africa and its people will continue to remain under the yoke of the all too often manipulative, exploitative and abusive tutelage of political and economic elites of industrialized nations of the north.

To be sure, Ochieng’ is not the only person who has been in the forefront of raising this awareness. Other equally distinguished Africanists had earlier-on expressed a similar concern. For example, with an undue optimism, the celebrated Nigerian writer, Chinua Achebe, had forewarned Africans by insisting that “if alternative histories must be written, and the need is more apparent now than ever before, they must be written by insiders, not ‘intimate’ outsiders. Africans, Achebe counseled, must [without further ado begin to] narrate themselves in their own context and in their own voices…” Franz Fanon, an ardent critic of colonialism and imperialism, had too expressed a similar view.
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voices…” Franz Fanon, an ardent critic of colonialism and imperialism, had too expressed a similar view. Pleading with Africanists to avoid the temptation of realigning third world discourse with the parameters of Western conceptual/epistemic models, Fanon forewarned about the dangers of especially, “paying tribute to Europe by creating states, institutions and societies which draw their inspiration from her.” He noted:

> Humanity is wanting for something other from us than such an imitation, which would be almost an obscene caricature. If we want to turn Africa into a new Europe…then we must leave the destiny of our countries to Europeans. They will know how to do it better than the most gifted among us. But if we want humanity to advance a step further, if we want to bring it up to a different level than that which Europe has shown it, then we must invent and we must make discoveries. If we wish to live up to our people’s expectations, we must seek the response elsewhere than in Europe.

> Moreover, if we wish to reply to the expectations of the people of Europe, it is no good sending them back a reflection, even an ideal reflection, of their society and their thought with which from time to time they feel immeasurably sickened. ...²

Indigenous Wisdom: Its Exclusion and Impact

Despite Fanon and others’ counsel, practically all governments in Africa – perhaps, with the exception of Tanzania under Julius Nyerere – have since securing their “political independence” continued to heavily depend on imported interventions.³ It therefore comes as no surprise that externally generated (imported) ideas, which governments in Africa obediently turn to or are forced to implement by donor agencies and multilateral institutions, have in almost every case engendered mixed results is beyond dispute. While pushing Africa’s poorer segments of society further deeper into poverty, and bringing a ton of discernible benefits for a few, they have least helped Africa in preventing, let alone reversing, its inexhaustible catalog of challenges.

Thus, against this grim background, one then begins to understand and even to appreciate why lately there has been an swelling interest in promoting a communitarian, village grounded, discourse of environmental conservation and socio-economic development. At the core of this discourse is a conviction that the poorer majority in Africa, whose lives and aspirations are dictated by the struggle for survival, should first be empowered if they are to indeed become savvy political actors and principal architects of their own socioeconomic development. In addition to this belated realization is also a recognition that the preponderant top-down approaches to socioeconomic development should henceforward be abandoned in favor of bottom-up, local specific communitarian discourses of socio-economic development and environmental regeneration. Put into question as well is the “know-alism,” the “fix-it” mentality, especially of Africa’s ruling elite, senior government bureaucrats and international development consultants who typically decide and influence the direction of Africa’s recovery.

Washington Post columnists, Stephen Rosenfeld, could perhaps not have put it better. Indicting international consultants who work (or previously worked) in Africa for their culpability in exacerbating most of the crises now bedeviling the continent of Africa and its people, Rosenfeld notes: “it is hard to look at black Africa without feeling that something has terribly gone wrong. It is not the spectacle of suffering that troubles us. It is the sense that we, of America and the West, who thought we knew how to help these people, did not know well enough, although we acted as we did … our advice has been deeply flawed.”⁴

Of course, there are other reasons that would account for the renewed interest in recovering and then putting into use the collective, cumulative intelligence of Africa’s village lore, systems of governance and technologies of exploiting and managing natural resources. According to Ali A. Mazrui, the going back to Africa’s roots movement seeks to also respond to at least two major perennial challenges: the debilitating impact of Westernization in Africa and the seemingly interminable Western arrogance of treating Africans as children, constantly in need of parental guidance.

The debilitating impact of Westernization, Mazrui observes, has occasioned a widespread cultural amnesia, as many Western educated Africans — ashamed of their tribal heritage — repeatedly scramble back a reflection, even an ideal reflection, of the people of Europe, it is no good sending them back a reflection, even an ideal reflection, of their society and their thought with which from time to time they feel immeasurably sickened. ...²

Hence, following the trajectory of this formulation, one could then argue that the going back to Africa’s roots movement is a form of protest, rebellion against two forces: the tyranny of Westernization and values that it has promoted and the condescending attitude of the West of treating Africans as children who are constantly in need of parental guidance. But there is even a more...
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substantial goal sought by the exponents of going back to Africa’s roots movement. And that is, “to shore up a viable sense of identity and selfhood in the face of the ruptures — real or perceived — which colonialism [and imperialism, of course] has wrought on the African psyche.”

In addition to this goal, it could be plausibly also argued that the dramatic turn around (from top-down to bottom-up strategies of socioeconomic development and environmental recovery) that is certainly gathering momentum world-over was fundamentally triggered put into motion by the recommendations of the Brundtland report of 1987. Immediately after this report was released, with a follow-up conference of world leaders in Rio de Janeiro in 1992, a new kind of imagination quietly but rapidly began to capture the attention of virtually every scholar and student of the African predicament. Stated in a fairly standard language, this imagination runs as follows:

“while top-down interventions are more than welcome, genuine solutions to most (if not all) of the problems plaguing the continent of Africa and its people will really only come from the bottom-up.”

Put in another way, the future of Africa, according to this logic, lies ultimately not so much in slavishly emulating Western models, skills and ideas but, rather, in developing and implementing homegrown, local specific, corrective responses.

But such responses, as Chinua Achebe rightly points out, must fulfill, at the very minimum, three requirements.

Firstly, they must come from Africans themselves — singly or in concert with one another — and not from ‘intimate outsiders.’

Secondly, they must be sensitive to long history of Africa’s contact with the outside world, developmental challenges and values of Africa’s versatile multiethnic composition.

Thirdly, and perhaps more important, they must, while keeping on the front burner the survival needs and legitimate aspirations of populations that are locked in poverty and underdevelopment, not compromise the goals of environmental conservation. In short, envisaged solutions must not only accommodate legitimate survival needs of poorer populations in Africa but must also help bring to an end the excessive destruction and pillaging of Africa’s asserts.

Rationale for Indigenization

Indeed, attempting to justify why, for example, Africa’s environmental conservation goals ought to be principally grounded on the wisdom of how local communities in Africa traditionally managed and also exploited resources found within their surroundings,

Darrol Bryant writes:

“It is essential that this wisdom be recovered if Africans were to address the environmental problems and other challenges facing the continent and its people … This is because, African traditions understood nature more than just matter for exploitation. Nature was a natural home. Being in harmony with nature meant living in close contact with the deeper sources of divine life… It was necessary to listen to the voices from nature [implicit as they indeed were in] the rhythm of the seasons, the coming of the rains, the flowering of crops and the fruits of the earth.”

Archbishop Desmond Tutu voiced a similar opinion. In a keynote speech delivered at the World Future Studies Federation conference held in Nairobi, Kenya, in 1995, Tutu argued:

“We [Africans] need to re-awaken our memories, to appropriate our history and our rich heritage that we have jettisoned at such a high cost as we rushed after the alien and alienating paradigms and solutions. We must determine our own agenda and our own priorities. To recover our history and to value our collective memory is not to be engaged in a romantic nostalgia. [Far from it], it is to generate in our people and in our children a proper pride and self-assurance.”

Moreover, drawing parallel insights from Judeo-Christian and Islamic religious traditions to vindicate his position, that Africans ought not be ashamed of reconnecting with their ancestral heritage and [perhaps] modern capacities, Tutu pointed out that:

Although the Jews live in the present (at least for the most part), they (often) look back to the Exodus and they have been shaped in their remembrances of the holocaust to become a peculiar people. Muslims (too) look back to Muhammad and his encounter with Allah, and they commemorate events that were significant for him. Christians [as well] look back especially to the death and resurrection of Jesus who commanded them to do this in remembrance of

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Him as what hope and theme distinguish them from those who do not have these memories.

Furthermore) nations and people have their common collective memory, official or historic, and we need to (therefore) remember where we come from to know where we are going (and) how to get to our destination.\(^\text{11}\)

Likewise, Basil Davidson offered an equally illuminating account as to why Africa’s renaissance should and must be grounded on the recovered collective intelligence of Africa’s village lore. He argued, “the facts as they come today suggests that there was and there remains, in the ethos of African communities, a fountain of inspiration, a source of civility, a power of self-correction; and these qualities may yet be capable, even in the miseries of today, of great acts of restitution.\(^\text{12}\)

Projected Benefits: Localized Relevance

This far, the message is clear and cogent. Several benefits are indeed expected to flow from the going back to Africa’s roots movement. Amongst such benefits would include:

- Empowerment of individuals, sub-groups and local communities in managing their own resources and affairs;
- Helping individuals and their communities to reasonably adapt to “the shifts and changes that are now taking place in our increasingly globalizing, mutually influencing world;
- Restoring the rapidly eroding kinship networks of solidarity;
- Providing individuals and their communities with a “fountain of inspiration, a source of civility and a power of self-correction” as Basil Davidson observes;
- Overcoming the seemingly intractable limitations of western implanted ideas/models and the restrictive outlook, which they engender;
- Providing individuals and their communities with a more promising escape route from what Wendell Bell calls recalcitrant horrors of modernity: artificially induced economic inequalities, acute adulteration of the physical environment, despicable human rights violation, widespread indifference to the concerns of interests of future generations—born and unborn—and, last but not least, the triumph of rational, causal thinking;
- Cultivating a more genuinely grounded sense of belonging to a place;
- Boosting Africans pride in themselves and dignity in their hitherto immobilized cultural values;
- Strengthening virtues of collaboration, teamwork and cooperative problem solving mechanisms. And, last but not least;
- Providing individuals and their communities with a renewed sense of hope, audacity to dream new dreams and the confidence in not only creating their own futures but also in determining their own destiny.

Vortex of Suspicion

Notwithstanding these and many other anticipated benefits, several questions must first be fully addressed. Can Africans retreat, even if minimally, into their traditional worldviews and epistemologies under the conditions of current global regime without risking further impoverishment and marginalization? Can the back to Africa’s roots movement genuinely take off given Africa’s long history of contact with the outside world, its economic dependency on industrialized nations of the north and international donor agencies, and its infant (or lack thereof) of a techno-scientific culture? Given Africa’s resistance to land reforms, increasing rural-urban migration, and conspicuous deficiency of visionary political leadership, will the going back to Africa’s roots movement help Africans achieve the aforementioned anticipated benefits?

More poignantly, precisely who should steer the going back to Africa’s roots movement?

Should this task be entrusted to Africa’s political elites who, as Franz Fanon aptly pointed out, “have nothing better to do than to take the role of managers for Western enterprises and often in practice set up their countries as the brothels of Europe”?\(^\text{13}\)

Should international non-governmental organizations and other Western funded development agencies facilitate, as it is the case today, the task of recovering and utilizing traditional Africa’s knowledge and accumulated experience? In what ways would entrusting such an important task to ‘Africa’s outside friends’ further deepen and even perpetuate existing paternalistic – although sometimes benign – relationships? Can individuals who work for non-governmental organizations and international development agencies, and who in the first place have in many ways generated and exacerbated the problems confronting the continent and its people, conceivably promote a genuinely grounded discourse of reciprocal partnership?

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What, one might also ask, will Africans lose — now and in the future — by going back to their cultural roots in light of what we now know; our present world is increasingly shrinking and becoming more interdependent? Will the going back to Africa’s roots movement not, in fact, further isolate Africa from the global body politic? Furthermore, given the predatory tendencies of free-market (knows best) ideology, will the movement of going back to Africa’s roots not end up helping to further prepare the ground for the eventual penetration (takeover?) of global capitalism in Africa?

Conclusion

Granted the foregoing, what then can one say in conclusion? It seems to me that an ‘exit option’ or even a relative retreat into self sufficiency which would consign populations in Africa back to their cultural roots as a route to development (or ecological renewal) may not be a viable option for Africa’s renaissance. Despite its salutary imperative, the going back to Africa’s roots movement would be obviously impractical in today’s Africa, given, among other concerns, the many challenges and tensions associated with living in our rapidly globalizing, mutually influencing, world. What scholars and students of Africa need to do, in order for Thabo Mbeki’s prophecy of Africa’s renaissance coming to fruition in this 21st century, is to figure out how a creative synthesis between Africa’s village-level of cooperative ethic, system of local governance, indigenous technologies of managing natural resources and Western techno-scientific skills might be realized.

Endnotes

1 William Ochieng’ is the current director of research at Maseno University, Kenya.


3 According to Julius Nyerere, the philosophy and policy of Ujamaa was meant “to recreate a society premised on customary adherence to principles derived from traditional African cultures such mutual respect, mutual responsibility and equality in accessing the material needs of subsistence.” For more details, consult Julius K. Nyerere’ book: Ujamaa: The Basis of African Socialism, Dar-es-Salaam: Oxford University Press, 1968.

4 Consult, for more details, Timberlake, L. Africa in Crisis, the Cures of Environmental Bankruptcy, London: Earthscan, 1985.


6 Mazrui identifies two forms of cultural nostalgia: Romantic Primitivism and Romantic Gloriana. The former, he argues, tries to capture and then defend with exceptional pride Africa’s past life of simplicity. The latter, Romantic Gloriana, not only celebrates Africa’s heroic ancestors (“kings, emperors, and eminent scholars of the past) but also salutes what these ancestors bequeathed to Africa and the rest of the world: their complex knowledge of the world and architectural accomplishments. For more details on these two forms of cultural nostalgia, consult Ali Mazrui, The Africans: A Triple Heritage, Boston: Little, Brown and Company, 1986, pp. 63-79.


8 This position has now become a new mantra in Africa. It is even championed by the newly formed organization, in Africa, The New Partnership for Africa’s Development (NEPAD). Under its umbrella, African Heads of States and Governments have agreed, based on a common vision and a firm and shared conviction, to eradicate poverty and to place their respective countries on a path of sustainable growth and development while also participating actively in the world economy and body politic [http://www.nepad.org](http://www.nepad.org) (June 14, 2003)


11 Ogutu and Malaska, Ibid.p.18.


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naturally for purely human-centered reasons.

However, some adopts less human-centered approach to environmental protection, placing a value on nature that does not relate to the needs and interests of human beings. But is a fact that by preserving and conserving environment we can make a healthy atmosphere to live in.

Considering preservation and conservation of environment, the United States Environmental preservation is viewed or seen as the setting aside of earthly resources for preventing damage normally caused by contact with humans or by certain human activities, such as logging, mining, hunting, and fishing, only to replace them with new human activities such as tourism and recreation. Furthermore regulations and laws may be enacted for the preservation of natural resources. Being earth friendly is very essential as this will save our planet at the time making a better place to live in for us, for future generations.

http://feelfriendly.com/information-preservation-conservation.html

Traditional Methods of Conserving Medicinal Plants in Zimbabwe

By S. Mavi & S. Shava
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The rural people who constitute the bulk of Zimbabwe's 10.4 million population are heavily dependent on the vegetation around them for fuelwood and for medicine. They are mainly subsistence farmers, and cannot afford alternative fuels, let alone the high prices of modern medicine. As a result vegetation is lost and environmental degradation takes place.

Major steps have been taken towards conserving the environment in Zimbabwe. They include: discouraging cutting down indigenous trees and encouraging the local people to plant fast-growing exotic and indigenous trees for domestic use, the inauguration of a national tree planting day and the creation of nature reserves. However, despite this intensified drive towards conservation, it is still difficult to prevent local people from destroying the plants around them.

The planting of fast-growing exotics is not a complete solution to the problem of environmental degradation, mainly because the locals still need indigenous plants as a source of medicine and for crafts such as carving. Local people do not approve of the planting of medicinal plants because of their belief that indigenous plants lose their curative properties when cultivated.

The local people are not likely to readily accept new doctrines thrust upon them in the form of modern environmental conservation strategies, which most of them do not understand. But something can be done however, in particular about the utilization of indigenous plants for medicinal purposes. For example, it is clear that certain conservation techniques are implicit in the traditional methods of obtaining medicines from plants.

This article discusses some of the conservation measures that have been applied by traditional herbalists in the past. They are grouped under two headings: traditional ways of collecting plant medicines, and plants protected or planted because they are associated with certain traditional beliefs.

Traditional Methods of Collecting Medicinal Plants Used by Herbalists

Collection of bark - It was traditionally believed that bark from a tree should only be collected for medicinal purposes from the east- and west-facing parts of the trunk. Bark taken from the north and south faces was believed to be ineffective for curative purposes. This method ensured that the plant, although ring-barked, was not killed and could be collected from again in the future.

Collection of roots - When collecting roots for medicinal use, not all the plant's roots were collected. The plant could therefore still feed from its remaining roots and survive. It was believed that if part of a plant was collected for medicinal use and as a result that plant perished, then the patient being treated using that medicine would also die.

Use of plants which have already been collected from - The collecting of bark, roots branches etc. from a plant that showed signs of having been collected from by another n'anga (traditional healer) was prohibited. It was believed that when a n'anga used a plant to treat a patient, the patient's disease was transferred into that plant. When another n'anga subsequently used the same plant to treat a patient, the disease of the previous patient would be transferred to the new patient. This belief ensured that the plant recovered from the effects of collection.

Use of annuals - Whenever a n'anga collected annuals for medicinal use they had to leave behind some

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individuals of the species at the collection site. It was believed that if a species was completely destroyed in a particular area, then the patient to whom the medicine from the species was administered would also die. By leaving behind some representatives of the collected species, localised rare species were protected from extinction.

**Use of seeds** - Seeds were rarely used for medicinal purposes. When they were used, it was usually as a lucky charm placed in a pocket or hung around the neck. This limited use of seeds allowed the perpetuation of plant species through seeding.

Plants protected or planted because they were associated with certain protective or evil properties.

**Kirkia acuminata Oliver**
A truncheon from this species was specially propagated by every newly-married man to appease his ancestral spirits so that they would protect him from witchcraft and evil. It was believed the ancestral spirits would come to reside in the tree.

**Gardenia spp.**
Trees of this genus were not cut down when clearing land for cultivation or constructing a home. They were believed to prevent people or a place from being struck by lightning, and thus it was an advantage to have them around the house. It is interesting to note that trees of this genus are used for the same purpose in other parts of Africa, such as Angola.

**Euphorbia ingens Boiss.**
This tree was believed to be capable of warding off lightning and so is not tampered with if found growing near the home. The plant was also grown on graves to prevent witches from exhuming the bodies of the deceased.

**Oxytenanthera abyssinica (A. Rich.) Munro**
As with Gardenia spp. and E. ingens, this species was grown around the house to protect it from lightning strikes.

**Lonchocarpus capassa Rolfe**
It is believed that this tree was used by witches for casting evil spells. It was also said to cause discord within the family if used as fuelwood. For these reasons the tree was never cut down or used as fuelwood.

In Botswana the belief version of *L. capassa* differs from the Zimbabwean one in that the tree is associated with the production of rain. This belief stems from the fact that this tree species is usually invaded in early summer (before the rains break) by an insect, a frog hopper, which feeds on the sap of the tree. Since the sap is very dilute in nutrients, the hoppers have to consume large quantities of it, passing out drops of water which then fall from the tree branches. Where the insects are very profuse on a tree, they release numerous drops of fluid, with the resulting effect looking like rain from the tree. When someone stands below that tree, they may get wet, hence the name 'rain tree'. It was believed that if anyone cut down this tree then no rain would fall on their fields. The whole area around Makarikari in Botswana is denuded of trees - except for the rain tree.

**Psorospermum febrifugum Spach**
As with 'rain tree' mentioned above, it was believed that, when used as fuelwood, this tree would bring about unrest within the family. It was therefore left untouched.

**Pseudolachnostylis maprouneifolia Pax**
This tree was believed to be used by witches for casting evil spells and it was therefore a taboo to use it for any purpose.

**Conclusion**
From the above discussion it is apparent that our ancestors in Zimbabwe did practice conservation, and that environment conservation is not a new concept to our local people. Some of the above practices are still carried out today. However many of them have fallen out of use, because of the mixing of cultures through migration and urbanization, which has resulted in the depreciation of local people's knowledge of their ancestors' beliefs and traditions. This is being aggravated by population pressure on the land, which has resulted in clearing of vast areas of vegetation to make way for cultivation and the construction of houses. Local people have always depended on nature and the land for their survival and it is difficult to convince them otherwise. They expect the land to permanently provide for all their needs without any reciprocal care by them. By the time they wake to realise the effects of their actions on the environment, they will have nothing left to salvage from it.

In spite of the difficulty of making people appreciate modern teachings on the need to conserve their environment, not all hope is lost. People have a tendency to understand and appreciate improvements that relate to their traditional ways of thinking, rather than newly-introduced ways of thinking that do not take into consideration their way of life. By reintroducing and trying to highlight the value of traditional conservation methods, some improvement can be made in the attitude of local people towards their environment.


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**Continued from page 74 - Traditional Methods of Conserving Medicinal Plants in Zimbabwe**
Introduction
Environmental conservation has been hailed as one of the major contributions of the United States to World Reform Movements in that its ideas, based on the ‘National Park’ concept, were eventually exported to Britain and elsewhere. Britain was the conduit for these ideas to reach Africa.

The prevailing conservation and development philosophies and policies in Africa reflect the culture and thinking of the Western world (Anderson and Grove, 1987; Parker, 1972; 1982), ignore the broader social and political implications they embody (Areola, 1987) and deny or suppress value considerations. For example, the environmental conservation blueprint, World Conservation Strategy (1980), completely avoided any mention of any social and political dimensions of conservation (Boyd, 1984). Consequently, little attention has been paid to indigenous conservation and development innovation, creativity and initiatives (Richards, 1985).

Western conservation and economic development strategies are likely to continue to permeate the African environment well into the 21st century. This will be achieved through the education (or condition) of Africans into accepting Western economic and conservation philosophy and laying greater stress upon the economic value of natural resources at the expense of social-cultural values or costs of natural resources conservation. One school of thought in Africa believes that recent ideas emanating from the

West, such as Our Common Future, Our Common Heritage, North-South Survival, Global 2000, Structural Adjustment Programme, and the National Environmental Action Plan (NEAP) process, reflect enhanced geo-politico-socio-economic strategies of environmental domination and access to the resources of the gene-rich countries of the South (Altieri, 1989).

In Africa, environmental and development policies show strong continuity between those of the colonial state and the independence government. The policies have not only been economically, socially and politically unsuccessful; they have also been harmful to the natural environment, and thereby to the prospects of human bio-cultural diversity and survival in the long-term.

It is a fact that in Africa the greatest ecological damage has come about through Western-oriented education, industry and monocultures, all of which have a bearing on the present state of poverty in the country. Orthodox politics, which has encouraged the maintenance of a materialistically acquisitive and epicurean political culture and process, is to blame.

The idea of environmental conservation
Today, we have a global environmental conservation movement and, in some countries, national environmental conservation movements exist (Lowe and Goyder, 1983). The movement is rated among the new social movements (Hornstein, 1985) and political movements (Lowe and Goyder, 1983). It has evolved its own advocacy (Crowford and Bunyan, 1980) and diplomacy (Moore, 1985). Although it lacks the coherence of an ideology, the movement sets environmentalists apart from mainstream political culture and process in all countries (Rosenbaum, 1991).

In its cultural stance, the movement criticises marketplace economics generally and the materialistically acquisitive and epicurean culture, unrestrained technological optimism and the political structures supporting them.
Today, there is such a thing as conservation politics for a new environmental era. This emphasises the importance of participatory democracy, decentralised political power, grassroot base for political advocacy, public involvement in the design and implementation of environmental regulations at all levels of government, and a reordering of cultural values (Rosenbaum, 1991). Social, economic and political dimensions of environmental conservation are thus very much alive and require consideration everywhere, every time.

Environmental conservation, however, means different things to different people and from time to time (Ratcliffe, 1976). It has become increasingly clear that the concept is nothing but an exercise in intercultural persuasion. Unfortunately, it has assumed an up-bottom orientation (Parker, 1972) with an essentially urban leadership. It has also become a personal belief, or even a religion, for many laymen who have detected personal (or socio-economic and political) survival in it, and now provide the bulk of its leadership in many countries.

The idea has even been associated with political and emotional overtones, with some political regimes using it as a political weapon for acceptance in the community of civilised nations while doing actually little to conserve, or as a means to divert attention from such problems as poverty, ignorance, illiteracy and backwardness that have yet to be tackled effectively.

**Past environmental conservation in Africa**

Exclusion or social control of the people was a pragmatic guiding principle, if not the original motivation, of conservation policies. In essence, conservation policies were alienation policies. Most were evolved in total ignorance of the long-established ways in which Africans had ensured their own survival and that of the soils, plants and the creatures that they need in order to survive (Richards, 1985). Many of the prescriptions for environmental management, and for conservation in particular, proved hazardous for the people and wildlife. People were separated from their land by inappropriate technology and the establishment of national parks and other reserves; and women from control over household resources. Cultural practices that evolved to sustain production and contemporary perceptions of the aims of modernisation (Oweyegha-Afunaduula, 1992). Pastoralists were also regarded as wasteful of available resources regardless of the fact that such resources were often marginal and incapable of viable exploitation by other means (Anderson and Grove, 1987).

The overall result of such approaches was an environmental crisis and its attendant social, intellectual, economic, political, ecological and cultural dimensions. To the local people, conservation became a real political issue with serious socio-economic and cultural repercussions. The excessive concern of colonial governments with wildlife was incongruous and unbalanced (Parker, 1982) and set man and wildlife apart, thereby destroying the historical, biological and cultural link between the two. Increasingly, there were conflicts arising between conservation and legitimate human demands for rural development that ensure people of their basic needs. This issue demanded political justification just as the exclusion of the rural poor from gazetted lands did. But conservation practice ignored both, opting for the military approach to conservation thereby setting in and sustaining the chain of social and political phenomena with far reaching consequences.

In the recent past, it became clear that the Western-influenced conservation practice was socially unresponsive and divisive, promoted environmental degradation and had a role in the generation and enhancement of poverty - the worst of all pollutants of the environment. It became easily discernible that a link existed between environmental degradation and poverty; that at one point environmental degradation translated into economic decline; and that, ultimately, social and political disintegration were the product of economic, social and political collapse. It was also possible to see the link between the human discontent that resulted and the lack of interest in the political culture and process, social and political unrest, human rights violations and coups and environmental refugee malaise. A point of no return was perpetuated in the environment in which further environmental risks and decay were inevitable. This was a vicious circle - the antithesis of development and conservation. The manifestation of the vicious circle resulted in more human discontent to which response was often military. And so the vicious circle was maintained in the African environment, with all its social, economic, intellectual, political and ecological ramifications.

**Present environment conservation practice in Africa**

A strong continuity persists between the conservation policies of the colonial states and the independence governments of Africa. For example, while virtually no or little attention is paid to the environmentally destructive government policies, misuse and deterior-
The professional staff of land management and co-operating agencies in environmental conservation are, by and large, products of a disciplinary curriculum in forestry, wildlife, biology, fisheries, range management, botany, zoology, geography, etc. They have not been trained to simplify ecosystems for efficient generation of trees or activities such as recreation.

Frequently, changes of government reflect an unstable political process and culture. Such changes have far-reaching consequences for the environment. Those aspiring to take over government often wage guerrilla or bush war in wildlife areas as did happen in the Luwero Triangle of Uganda in the early 1980s. Or else an incoming government, less or symbolically committed to conservation, can easily frustrate the good achievements of a previous government. This may, for example, be achieved by the government exercising its right to withdraw from or disregard international conventions.

Also, countries may leave their conservation laws to be anti-people and disjointed, without a comprehensive and integrated land policy, although this is a necessary pre-requisite for environmentally sound resource policy. Consequently a country’s political leadership functions as a roadblock to conservation. It is unable to provide environmental leadership.

There is increasing geo-social, geo-political and geo-economical influences on conservation in the underdeveloped world. This is being achieved through Western concepts of environmental management such as Our Common Future, Our Common Heritage, North-South Survival, Structural Adjustment Programme and NEAP. Being foreign concepts they tend to take up-bottom orientations, ignoring the time-tested environmental conservation and management strategies of the local people.

One school of thought holds that such concepts are being used as a convenient rationalisation for gene-poor countries of the North who desperately need resources enabled from the gene-rich countries of the South (Altieri, 1989). According to the school such rationalisation has enabled developed countries to maintain maximum access to genetic resources of the South under the façade of altruism that is neither aid nor assistance (Altieri, 1989). This is a massive programme of foreign aid from the countries of the South for countries of the North (Altieri, 1989).

Among the nascent environmental movements in Africa today are those who think and reason that the North has realised that its own survival may be threatened by the global environmental degradation process that it
initiated and continues to maintain. These people believe that it is for this reason that a concern to conserve ecosystems in the South has become a global issue. According to them, the geo-politically, geo-economically and geo-socially-powerful World Bank is erasing its former image of an environmentally destructive institution for the same reason by setting in motion the NEAP process in Africa.

A number of African countries have, under the political, economic and social might of the World Bank, been compelled to accept the arguments of environmental management policies that favour securing the ecological resources and service of the ecosystems of the South for continual subsidy of the affluence and profligacy and, at times, selfishness of the North.

Through NEAP process, Africa is being asked to engage in urgent and strict conservation but the North is not being asked to drastically reduce its level of consumerism and waste. For the most part, environmental conservation ideas from outside are always finding easy acceptance by political leaders and land managers. This is because the majority was never trained to handle the current environmental crisis. They are ready to accept any idea without question.

The lack of creativity and critical analysis among Africa’s adapted conservationists and policy makers is confounding the issue. What is happening has consequences for the sovereignty of Africans over their natural resources and the direction of conservation in the continent.

The area of crop genetic conservation is crucial to the protection of Africa’s sovereignty and efforts to ensure food security and a wholesome environment. Unfortunately, this has attracted the full social, political and economic might of multinationals whereby a few foreign crops such as rice, wheat and Irish potatoes, are being encouraged in our environment at the expense of more traditional foods, such as sweet potatoes, yams and cassava, through farming systems research strategy of nutritional domination.

**Future environmental conservation practice in Africa**

Indications are that conservation in Africa will be increasingly influenced by Western ideas of environmental management. The products of disciplinary knowledge will continue to manage the resources of the continent. Governments will continue to be preoccupied with economic and balance of payments problems on the one hand, and ensuring political survival on the other.

They will not act to introduce appropriate conservation programmes until they are forced, perhaps by a series of environmental disasters or by a wave of social unrest (Areola, 1987). The tendency, therefore, will be to erect short-term, reactive, rather than anticipatory, plans. Programmes related to conservation, which do not yield immediate results will not enter the order of priorities.

Non-Governmental Organisations (NGOs) are likely to become the main actors in promoting conservation because they are accumulating the cultural skills, and are gaining access to rural communities and agro-ecological expertise, to address the food security problems of the rural people (Altieri, 1989). They are also increasingly showing the commitment to agricultural productivity and health security in a way that significantly benefits the local people. Their research, training and education efforts aimed at linking crop genetic conservation and rural development should be supported, complemented and expanded by national and international organisations (Altieri, 1989).

Foreign aid including environmental aid, will in future, as in the past, be instrumental in sustaining environmentally corrupt and unaccountable leaderships in Africa. Such sustenance will give these leaderships an image of legitimacy, respectability and enhanced powers to exploit and oppress the poor and suppress the growth of environmental awareness, whether political, economic or social.

The result will be new environmental risks and decay as governments respond to purely environmental risks and decay as governments respond to purely environmental issues with military might. At the same time, geo-political, geo-social and geo-economic interests in environmental conservation by multinationals will increasingly ensure that the African environment is dominated by foreign capital well into the 21st century. With this trend environmental conservation will remain a real and sensitive political and social issue for the rural poor of Africa.

**Conclusions**

The ultimate goal of conservation is to succeed. It is the attitude of local people that will ultimately count. The present conservation dilemmas in Africa are due to sets of rules and patterns of behaviour that have been imposed from outside local cultural traditions. Building from indigenous knowledge, experience and skills, Africa can find a way of improving the lot of its people. The full participation, and not just the artificial mobilisation or manipulation of the people is necessary.

There is need for a progressive reorganisation of the
knowledge accumulated in the areas of resource use and management and the creation of new educational programmes that cater for a wider variety of persons who analyse environmental issues and make decisions. If bad policies have been the cause of African’s environmental crisis, environmental bankruptcy has been its driving force. Whatever professionals recommend, decision-making will always remain the prerogative of politicians. Politicians must be convinced that solutions to the problems of the environment and development are to their advantage.

African Traditional Medicine struggles to find its Place within Health Care

September 26, 2012

It was to have been the "Decade of African Traditional Medicine," a curious, hybrid mix of herbalism and spirituality, in which disease is perceived to be a function of imbalance between a person and his social environment or spiritual state, i.e., a person's guilt or sin, or even the direct retribution of god. Treatment, in turn, ranges from incantations to fasting and bleedings but is most often an herbal concoction imbued with metaphysical significance.

The African Union Summit of Heads of State and Government vowed in 2001 that the forthcoming decade would incorporate the practice of African traditional medicine into their health care systems by increasing institutional capacity and developing national regulatory frameworks.


"The number of countries with national traditional medicine policies increased from eight in 1999/2000 to 39 in 2010 and those with national traditional medicine strategic plans rose from zero to 18. Country regulatory frameworks increased in number from 1 in 1999/2000 to 28 in 2010. Within these frameworks various instruments such as the code of ethics and the legal framework for traditional medicine practitioners were established."

But major impediments remain, the progress report added, including "(i) limited financial and human resources; (ii) weak regulatory capacity which has led to malpractices in traditional medicine in some countries; (iii) insufficient scientific data on the safety, efficacy and quality of traditional medicines; and (iv) unfavorable policy, economic and regulatory environments for local production of traditional medicines."

The lack of scientific validity has definitely been an impediment, says Dr. Kofi Annan, head of the Department of Herbal Medicine at the Kwame Nkrumah University of Science and Technology in Kumasi, Ghana.

As a consequence, in Ghana, efforts at integration have been confined primarily to some of the herbal aspects of African traditional medicine, he says. "From [a] scientific point of view, aspects of African traditional medicine that cannot be proven by science — such as spiritism, psychic healing, soothsaying, and fortune telling — are not part of the training of the medical herbalists, and thus are not part of the integration."

Annan's department has trained 112 medical herbalists since 2001, some 30 of whom are working in public hospitals. Some of those have been and will be involved in a pilot project established in 2010 by the nation's ministry of health that designated 18 public hospitals for integration of some of the herbal components of African traditional medicine into their daily practice.

Despite some initial skepticism about the role of herbalists, there has been some progress, says Ama Kyeara Amoh-Barimah, head of the herbal medicine unit at the Cape Coast Metropolitan Hospital. "We even have internal referral systems so that when physicians identify patients who need alternative forms of treatment for diseases such as hypertension and diabetes, they refer them to us and we also refer cases that need orthodox treatments to physicians."

Amoh-Barimah says that among the herbal remedies that have most readily been incorporated into the hospital's offered treatments is a mixture of herbs that has Cryptolepis sanguinolenta (a root traditionally used as an antimalarial) as an active ingredient and is used to treat hypertension. Others include "asenadecocction," which is derived in part from Kigelia africana and used to treat arthritis; a powdered extract of the plant Bridelia ferruginea that is used to treat diabetes; a mixture called "ulcerplex oral" that is derived from Tetrapleura tetraptera and used to manage peptic ulcer; a "diagel-
African traditional medicine struggles to find its place within health care

lates elixir" made from the plant Psibium guajava that is used to manage intestinal worms, peptic ulcer, and dyspepsia; as well as a mixture called "campa T" that is derived from Thonningia sanguinea and used to manage asthma and waist pain.

The government of Ghana has approved a list of 86 herbal remedies for use in hospitals, says Peter Arhin, director of the Traditional and Alternative Medicine Directorate of the Ministry of Health.

But most are not popular among patients as they are liquid preparations and are often thought to be inconvenient, Arhin says. "We are looking for support to build pharmaceutical infrastructure to enable us prepare herbal medicines in convenient dosage forms like tablets and capsules and to also help us conduct more observational studies on the efficacy and safety of the medicines."

Many people prefer tablets and capsules to liquid herbal medicines, explains Nana Yaa Agyeman, executive director Sharecare Ghana, a patient advocacy organization. "I don't trust the quality of the water used for preparing liquid herbal medicines but for tablets and capsules, I don't have such fears."

In the long-term, integration of African traditional medicine with Western medicine will require a more scientific approach and more scientific training of herbalists, says Dr. Kofi Busia, traditional medicine officer at the West African Health Organization, based in Ouagadougou, Burkina Faso. To that end, the organization has been funding workshops for training traditional practitioners and has piloted software designed to facilitate access to the services of traditional African medicine practitioners "because they are integral to primary health care in Africa," Busia says.


Continued from page 3 – The Ancient Cults of Power

Eyptians refered to as, 'A Theory of Everything' that was implicit in the iconography of ancient Egypt. It is indeed shown that this extends to the pyramid building of the Old Kingdom and to their mathematics.

Energy Healing:
The Earth, our continents, oceans, in fact every living thing depends on light to be able to exist. Ancient Egyptian healer Priests knew that light is in fact emitted by every cell in our bodies. We live in a sea of energy where colour and light is working within us. It shines within our self, and radiates upon us from the sun.

The Egyptians did not philosophize or rationalize in the way that we do.

Animism was imported from earlier times into a concentrated and highly developed civilization. Tribal peoples of earlier times were forced to congregate in river valleys after the last ice age. Over the next several thousand years following the ice age, vertical air currents rising at the equator and descending about latitude 30 (Hadley Cells) created broad bands of desert around the planet, north and south of the equator. The Nile valley was very convenient, being nestled between high cliffs that sliced across the advancing Sahara. Collective organization required systems of writing and mathematics. Yet the ancient peoples remained more intuitive while we have become preoccupied with reason, cause and effect. Our minds are cluttered with the historical accumulation of knowledge and theories. Their perceptions were much more direct. And they displayed profound intuitive insights in their works, especially in the early dynasties.

According to the ancient Stella: "Every divine word has come into existence through the heart's thought and tongue's command..."

That last sentence is profound... every reader will interpret it according to their individual beliefs.... And that is the paradox!!

http://timeless-wisdom.blog.co.uk/2011/01/04/title-10301197/

Christianity, African Religion and African Medicine

Gordon L. Chavunduka

Early European Christian missionaries tried to destroy African religion and African medicine. Many African traditional religious rites and rituals were regarded as against the Christian faith and morals. It was also believed that African religion promoted the belief in witchcraft and encouraged people to worship their ancestors instead of worshiping God. African medicine was regarded as unscientific and some of its treatment methods were considered anti-Christian. Traditional healers were regarded as heathens because of their participation in African Traditional Religion. Thus, Africans who became Christians were discouraged by the church from taking part in African traditional religious

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Studies conducted by folklorists and ethnobotanists demonstrate that as late as the final decades of the twentieth century, many African Americans in the rural South continue to maintain substantial knowledge of herbal medicine. Due to slavery’s fragmented history, the origins of African-American traditional medicine during the colonial and antebellum periods are obscure.

In the following essay several issues pertaining to African-American traditional medicine are considered. Relevant ethnohistorical information is first presented. Botanical remains recovered from African-American sites and their medicinal uses are then summarized.

This study concludes with a discussion of archaeological features and contexts at African-American sites that have the potential for containing material related to herbal medicine.

Beginning in the late 1980s (Adams 1989 Ferguson 1989), interest in the material expressions of belief systems became a prevalent trend that has developed among archaeologists excavating African-American sites in the 1990s (e.g., Orser 1994; Singleton 1995; Singleton and Bograd 1995). The persistence of African-inspired beliefs among slaves on southern plantations has been documented archaeologically at numerous sites. Relevant examples of artifacts associated with African-American contexts and worldviews consist of the ritual use of folk ceramics in the South Carolina Lowcountry (Ferguson 1992), a cache of healer’s paraphernalia encountered at Levi-Jordan Plantation in Texas (Brown and Cooper 1990), and the subtle yet consistent recovery of personal items, such as perforated silver coins, brass charms, glass beads, quartz crystals, and polished stones, that were probably imbued with special meaning (LaRoche 1994; McKee 1992; Patten 1992; Russell 1996; Sarnford 1996; Savaceni 1996; Smith 1976, 1977; Stine et al. 1996; Weintraub 1997; Wilkie 1995, 1996).

The above artifacts illustrate the complex character of enslaved African-Americans material culture. A significant quality of these items is that although they all contained cultural meaning, perhaps more importantly, they were probably associated with African-American folk medicine during the era of slavery. Although archaeologists have adroitly identified items that were possibly elements of traditional African-American beliefs, researchers have only recently begun to consider the botanical remains from archaeological sites that were an integral part of day-to-day folk medicine.

Studies conducted by folklorists, anthropologists, and ethnobotanists (Guthrie 1996; Mitchell 1978; Morton 1974; Vernon 1993) demonstrate that elderly African Americans in the rural South continue to maintain knowledge of traditional medicine and particularly the beneficial properties of locally available plants.

Beyond the South, ethnomedical studies have also identified the persistence of home remedies and the use of healers among rural and urban African-American communities across the United States (Bailey 1991; Hill 1973; Snow 1974; Stewart 1971; Tinling 1967). For example, Bailey’s (1991) recent research in Detroit suggests that the contemporary use of home remedies and healers is substantially more prevalent among African Americans compared to European Americans.
Continuing with ethnographic inquiry conducted by Ferguson (1995) in Sierra Leone, West Africa, and the subsequent research of Ogata (1995), historical archaeologists have likewise begun to consider the origins and development of traditional medicine among enslaved African Americans in South Carolina. In the following essay we attempt to contribute to this research trend by addressing several issues pertinent to African-American herbal medicine and the archaeological record. We first present ethnohistorical information relevant to folk medicine.

The botanical remains recovered from a small sample of African-American sites and the plants' medicinal uses are then summarized. We conclude with a brief discussion of archaeological features and contexts at African-American sites that are likely locations of botanical material used for herbal medicine. Our research concentrates on southern plantations since most African-American archaeology has been conducted in these settings.

ETHNOHISTORIC CONTEXT

During the era of slavery African Americans relied upon a dual health care system (Cabak et al. 1995; Savitt 1978). This system was composed of both formal medical knowledge provided by whites, and folk knowledge maintained within slave communities. Planters, overseers, and plantation doctors provided formal medical care for slaves. However, Mitchell (1978:14), in her study of herbal medicine along the Sea Islands of South Carolina, emphasizes that formal medical care for slaves on plantations was typically inadequate.

Mitchell (1978: 15) states that: The average slave master was fairly ignorant of the importance of good health measures; many limited medical expenditures for the sake of economy. Except in the most severe cases, these masters and overseers made their own diagnoses and prescribed remedies without the aid of the doctor, who was employed as infrequently as possible.

This conclusion is likewise echoed by Fanny Kemble who visited an antebellum Georgia rice and cotton plantation infirmary and observed firsthand that:

The floors were merely the hard damp earth itself; most of the windows were unglazed, the rooms were dirty and malodorous, and the inmates lay prostrate on the floor, without bed, mattress, or pillow, buried in tattered and filthy blankets. Sick and well alike were literally encrusted with dirt and infested with swarms of fleas. . . A condition of more complete indifference toward the invalids and disregard for the most elemental rules of sanitation could scarcely be imagined (Mitchell 1978:14).

Given the stark realities of health care on plantations, enslaved African Americans therefore often relied upon traditional healing skills. The prevalence of herbalism among slaves on plantations and the skills of African-American healers and midwives were abundantly documented by numerous medical professionals and observers during the colonial and antebellum periods (Cauthorn 1857; Goodson 1987; Savitt 1978). For example, during the eighteenth century the Carolina Gazette announced that:

The [South Carolina] General Assembly has purchased the negro Caesar's freedom and granted him a pension of 100 pounds per annum during life, as a reward for the discovery of the means by which he acquired so much celebrity in curing persons who had swallowed poison or been bitten by a rattlesnake (Mitchell 1978:13).

Herbalism handed down from the era of slavery in South Carolina likewise persisted among rural African Americans in the recent past, as indicated by the recollections of Mrs. Janie Hunter, a lifelong resident of Johns Island. In the 1960s Mrs. Hunter recalled that:

We doesn't go to no doctor. My daddy used to cook medicine-herbs medicine: seamuckle, pine top, life everlasting, shoemaker root, ground moss, peachtree leaf, big-root, bloodroot, red oak bark, terrrywuk. All this from old people time when they hardly been any doctor. People couldn't afford doctor, so they had to have and guess. Those old people dead out now, but they worked their own remedy and their own remedy comes out good (Carawan and Carawan 1989:27)

The folk medical system used by African-American healers divided the causes of illness into three interrelated categories composed of occult, spiritual, and natural illnesses (Mitchell 1978:19-21). Occult illnesses are considered to be the product of supernatural causes, typically a hex or curse, intentionally induced by a conjurer through the techniques of hoodoo, conjure, or juju.

Although conjurers are specialists in inducing and curing occult illness, root doctors treat both natural and occult ailments. Yet, both the conjurer and root doctor use herbal medicines in their work.

Concerning the use of charms to protect individuals from occult illness, Mitchell (1978:20) states that, "a hoodoo amulet or hand will protect the wearer financially and

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Continued from page 83 – "THEY WORKED THEIR OWN REMEDY": African American Herbal Medicine

occupationally, as well as medically." Personal items, such as brass figus or hands, perforated silver coins, and glass beads, recovered from plantations during excavation are probably material testimony to-the apparently widespread belief in occult illness among enslaved African-Americans (Stine et al. 1996). Prevalent among most traditional societies (Child and Child 1993), belief in the harmful influences of thoughts or even glances apparently endured among some African-American residents of the Sea Islands in the late twentieth century. For example, based on fieldwork conducted in the 1970s, anthropologist Patricia Guthrie (199653) states that:

In addition to staying on the good side of older women by following their wishes, Kathryn Heyer (1978) reports that should a person look into the eyes of an older woman, that person might receive a visit from 'Hag.' Out of fear, then, as well as respect, young people always lower their eyes when speaking to an older woman.

The second type of illness recognized within the traditional African-American medical system is spiritual affliction. Derived from Christian influence, the cause of spiritual illness is considered to be the result of sin or "bad living."

Preachers, by utilizing the healing power of God, are typically the individuals that cure spiritual illness. In contrast to conjurers and rootworkers, spiritual leaders and teachers tend to have limited knowledge of herbal medicine.

As the name implies, natural illnesses, the primary focus of this study, were attributed to natural conditions such as bad weather or cold air.

These illnesses were treated by herbalists or root doctors that specialized in the application of various medicinal plants for common ailments.

Often the root doctor would not treat a patient, but instead would give instructions on how to make specific medicine for an ailment. From these instructions, the patient would administer the medicine themselves (Spector 1991). For example, catnip tea consisted of 1-ounce leaves to 1- pint water.

Catnip tea is given to teething children to avoid colic and diarrhea. It is also given to women in labor. Mashed (beaten) leaves are spread on the chest for fever. Fresh catnip is put in a cloth sack which is tied around the neck of irritable infants; the odor keeps the baby’s stomach settled (Morton 1974:101).

Regarding gender-based divisions and the learning process among African-American healers, individuals that specialized in occult and spiritual illnesses were often men. Conversely, herbalists, or those individuals that focused upon natural illness, were usually women. Conjurers and herbalists usually learned medicinal information through apprenticeship. For example, herbalists were typically taught plant lore by an elder healer in a community (Mitchell 1978).

ETHNOHISTORIC DATA

As stated previously, in African-American communities herbalists using locally available botanical resources often treated natural illnesses.

This study therefore attempts to identify those plants within archaeologically recovered botanical assemblages that might have been used as medicine. Put another way, this study attempts to determine if the potential for African-American traditional medicine can be discerned archaeologically via plant remains.

To generate a comparative data set for plant remains from African-American contexts, the botanical information in two ethnohistoric sources was summarized (Table 1). These two sources are Julia Morton's Folk Remedies of the Low Country, written in 1974, and Hoodoo Medicine: Sea Islands Herbal Remedies by cultural anthropologist Faith Mitchell, written in 1978. The use of these sources presents several important analytical considerations, consisting of chronological, geographic, cultural, and functional issues.

Chronologically, the information presented in the two books was assembled from both eighteenth- and nineteenth-century documents, such as formal medical texts and studies, from period observers, and informants interviewed in the 1960s and 1970s. The resulting botanical information therefore spans an approximately 270-year interval. However, given the stubbornly conservative nature of folk cultures, it is expected that a significant element of continuity will be present concerning traditional uses of medicinal plants by African Americans.

A second consideration is geographic context. As the titles of their works indicate, the ethnohistoric and ethnographic data gathered by Morton and Mitchell were collected from the South Carolina Lowcountry. Archaeological data discussed in this study were likewise recovered from South Carolina, with the exception of one site from Middle Tennessee. Thus, it is not unlikely that specific subregions in the plantation South may have relied upon geographically specific botanical complexes. However, it

Continued on page 85
is likewise reasonable to assume that residents of the
Atlantic Rim and Gulf Coast first amassed botanical
knowledge of North American plants. This knowledge
was then subsequently dispersed to western frontiers,
such as the middle South, as settlement expanded.

A third analytical concern consists of the multicultural
character of life in the colonial and antebellum South.
For example, archaeology suggests that seemingly
mundane cultural elements, such as architectural styles,
foodways, and textile manufacturing methods, were
vigorously exchanged and recontextualized among
different groups in South Carolina, particularly during
the frontier era (e.g., Crass and Penner 1992; Groover
1991, 1992, 1994; Steen et al. 1996). This same
transformative or syncretic process also apparently
occurred in the area of botanical knowledge and folk
medicine. Although Africans and Europeans both
maintained well developed traditional medical systems
prior to inhabiting the New World, a portion of their
subsequent botanical knowledge originated from Native
Americans (Mitchell 1978). The exact mechanism of
this transference is as yet poorly understood and hence
archaeology represents an important means of
potentially clarifying the origins and transformation of
traditional medical knowledge in North America.
Further, many of the remedies presented by Mitchell
and Morton were not used exclusively by African
Americans, yet due to cultural conservatism and
possibly the grim economic conditions associated with
slavery and the tenant farm era, these traditions
apparently persisted much longer among African
Americans than other ethnic groups.

A final important interpretive issue is the
multifunctional quality of plants. Most plants have
many uses that might include subsistence, heating,
cooking, clothing, material for tools, or medicine.
Concerning the medicinal use of plants, portions of the
same plant (e.g., the fruit, leaves, roots, and seeds) often
have multiple medicinal properties, were used for
varying ailments, and administered in numerous ways.
Identifying a specific plant thus suggests many potential
uses at a given site. Archaeologists sometimes
automatically and perhaps simplistically infer that most
plants from sites were used for subsistence, yet in
reality the actual function of plants in a specific
systemic context or past household is usually unknown
and based on culturally based assumptions. Likewise,
some plants, often recovered in charred conditions from
hearths or other culturally active features, are labeled
weeds or incidentals by paleoethnobotanists and dis-
missed as having no known cultural uses in the past.

Careful reading of ethnohistoric sources, such as Mitchell
(1978), indicates many people in the past used "weeds" or
other nonsubsistence plants for medicine. Thus, in this
essay we emphasize the analytical distinction between
potential and actual botanical use at specific sites. One
important potential use of plants—medicine—is the focus
of our analysis.

Information summarized from Morton and Mitchell for our
analysis consists of the common plant name, its formal
Latin name, the parts of the plant used for medicine, the
way the plant was prepared, and the primary ailment or
medicinal use. Although Mitchell listed primary and
secondary uses for each plant discussed in her study,
Morton did not. As a result, we included the first plant use
listed by Morton in our tabulations. This analytical
discrepancy may therefore have introduced error or bias in
our summary of plant uses, yet the tabulation probably
reflects an approximation of general trends that were active
in the past.

The ethnographic data set consists of 108 species. Eighteen
plants, representing 17 percent of the data set, contain
officially recognized medicinal properties. These plants,
formerly or currently listed in the United States
Pharmacopeia or The National Formulary, which are
physician's reference manuals, consist of blackberry, wild
black cherry, cotton, elderberry, fragrant waterlily, galax,
sweet gum, jimson weed, life everlasting, brown muckle,
mullein, persimmon, pine, pokeweed, queen's delight,
sassafras, silkweed, and speedwell.

The distribution of plants by primary parts used for
medicinal purposes consists of leaves, 42 percent (n = 43),
roots, 28 percent (n = 29), bark, 8 percent (n = 8), fruit, 8
percent (n = 8), and other, 15 percent (n = 15).

The distribution of plants by primary method of prepar-
ation is represented by tea, 64 percent (n = 67), ingested,
14 percent (n = 15), poultice, 11 percent (n = 11), salve, 3
percent (n = 3), and other, 6 percent (n = 6).

The primary uses for the plants consist of fevers and colds,
39 percent (n = 41); digestion and elimination, 13 percent
(n = 14); skin irritation, 8 percent (n = 8); vermifuge, 7
percent (n = 7); reproduction and contraception, 5 percent
(n = 5); arthritis and rheumatism, 4 percent (n = 4);
circulation, 4 percent (n = 4); diuretic, 3 percent (n = 3);
snakebite, 3 percent (n = 3); general hygiene, 3 percent (n =
3) (hair rinse n = 1, toothbrush n = 1, foot soak n = 1);
and other, 12 percent (n = 12) (headache n = 2, teething
pain n = 2, general health n = 2, nerves n = 1, eye initiation
n = 1, sprains n = 1, body pains n = 1, asthma n = 1, and
emetic n = 1).
Table 1. Medicinal Botanical Resources, South Carolina Lowcountry

<table>
<thead>
<tr>
<th>PLANT</th>
<th>PARTS USED</th>
<th>PREPARATION/PRIMARY USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloe (<em>Agave virginica</em>)</td>
<td>Leaves</td>
<td>Ingested/rattlesnake bite</td>
</tr>
<tr>
<td>Angelica T rec (<em>Aralia spinosa</em>)</td>
<td>Root Bark</td>
<td>Ingested/rattlesnake bite</td>
</tr>
<tr>
<td>Artichoke, Jerusalem (<em>Helianthus tuberosus</em>)</td>
<td>Leaves</td>
<td>tea/diuretic</td>
</tr>
<tr>
<td>Ayshaberry (<em>Cimicifuga racemosa</em>)</td>
<td>Leaves</td>
<td>Tea/fever</td>
</tr>
<tr>
<td>Basil (<em>Ocimum basilicum</em>)</td>
<td>Leaves</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Bitter Apple (<em>Cucumis colocynthis</em>)</td>
<td>Fruit</td>
<td>Ingested/fever</td>
</tr>
<tr>
<td>Bitter Root (<em>Apocynum cannabinum</em>)</td>
<td>Root</td>
<td>Tea/colds, induce abortion</td>
</tr>
<tr>
<td>Blackberry* (<em>Rubus trivialis</em>)</td>
<td>Root</td>
<td>Tea/stomach pains</td>
</tr>
<tr>
<td>Blackgum (<em>Nyssa sylvatica</em>)</td>
<td>Twigs</td>
<td>Chewed toothbrush</td>
</tr>
<tr>
<td>Blackroot (<em>Pterocaulon pycnostachyum</em>)</td>
<td>Root</td>
<td>Tea/colds, menstrual cramps</td>
</tr>
<tr>
<td>Black Walnut (<em>Juglans nigra</em>)</td>
<td>Husk</td>
<td>Tea/vermifuge</td>
</tr>
<tr>
<td>Bloodroot (<em>Ceanothus ovatus</em>)</td>
<td>Root bark</td>
<td>Tea/poor circulation</td>
</tr>
<tr>
<td>Boneset (<em>Eupatorium perfoliatum</em>)</td>
<td>Leaves</td>
<td>Tea/colds, fever</td>
</tr>
<tr>
<td>Brassicaceae</td>
<td>No data</td>
<td>Poultice/croup</td>
</tr>
<tr>
<td>Calamus (<em>Acorus calamus</em>)</td>
<td>Root</td>
<td>Tea/stomach pain</td>
</tr>
<tr>
<td>Canna (<em>Canna indica</em>)</td>
<td>Leaves</td>
<td>Poultice/headache</td>
</tr>
<tr>
<td>Castor Bean (<em>Ricinus communis</em>)</td>
<td>Leaves</td>
<td>Poultice/fever</td>
</tr>
<tr>
<td>Catnip (<em>Nepeta cataria</em>)</td>
<td>Leaves</td>
<td>Tea/teething pain</td>
</tr>
<tr>
<td>Cherokee Root (<em>Erythrina herbacea</em>)</td>
<td>Root</td>
<td>Poultice/skin irritation</td>
</tr>
<tr>
<td>Cherry, Wild Black* (<em>Prunus serotina</em>)</td>
<td>Bark</td>
<td>Tea/arthritis</td>
</tr>
<tr>
<td>Chinaberry Tree (<em>Melia azedarach</em>)</td>
<td>Root</td>
<td>Tea/vermifuge</td>
</tr>
<tr>
<td>Comfrey (<em>Symphytum officinale</em>)</td>
<td>Leaves</td>
<td>Tea/general body pains</td>
</tr>
<tr>
<td>Cotton* (<em>Gossypium herbaceum</em>)</td>
<td>Root bark</td>
<td>Tea/reproduction, induce abortion</td>
</tr>
<tr>
<td>Dogwood Tree (<em>Cornus florida</em>)</td>
<td>bark</td>
<td>Tea/nerves</td>
</tr>
<tr>
<td>Elderberry* (<em>Sambucus canadensis</em>)</td>
<td>Flowers, berries, bark, root</td>
<td>Poultice/sores</td>
</tr>
<tr>
<td>Fennel (<em>Helenium amarum</em>)</td>
<td>Leaves</td>
<td>Tea/fever</td>
</tr>
<tr>
<td>Fig (<em>Ficus carica</em>)</td>
<td>Ripe fruit</td>
<td>Ingested/laxative</td>
</tr>
<tr>
<td>Fragrant Waterlily* (<em>Nymphaea odorata</em>)</td>
<td>Root</td>
<td>Tea/diarrhea</td>
</tr>
<tr>
<td>Gallberry (<em>Ilex glabra</em>)</td>
<td>Leaves</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Glasswort (<em>Salicornia virginica</em>)</td>
<td>Leaves</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Gourd (<em>Hexastyris arifolia; Lagenaria siceraria</em>)</td>
<td>Seeds</td>
<td>Tea/rheumatism</td>
</tr>
</tbody>
</table>

Continued on page 87
<table>
<thead>
<tr>
<th>PLANT</th>
<th>PARTS USED</th>
<th>PREPARATION/PRIMARY USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gum, Sweet* (Liquidambar)</td>
<td>Leaves</td>
<td>Ingested/diarrhea</td>
</tr>
<tr>
<td>Holly (Ilex)</td>
<td>Leaves</td>
<td>Tea/colds, fever</td>
</tr>
<tr>
<td>Honeysuckle (Lonicera)</td>
<td>Leaves</td>
<td>Tea/diarrhea</td>
</tr>
<tr>
<td>Heartleaf (Lonicera japonica)</td>
<td>Roots</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Horehound (Eupatorium</td>
<td>Entire plant</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>hyssopifolium)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horsenettle (Solanum</td>
<td>Root</td>
<td>Ingested aphrodisiac</td>
</tr>
<tr>
<td>carolinense)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ironweed Indian Tobacco (</td>
<td>Leaves</td>
<td>Bath/fever</td>
</tr>
<tr>
<td>Lobelia inflata)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ironweed, Common (Vernonia</td>
<td>Root</td>
<td>Ingested/snake bite</td>
</tr>
<tr>
<td>augustifolia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jerusalem Oak (Chenopodium</td>
<td>Leaves</td>
<td>Ingested/vermifuge</td>
</tr>
<tr>
<td>ambrosioides)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jimson Weed* (Datura</td>
<td>Leaves</td>
<td>Ingested/vermifuge</td>
</tr>
<tr>
<td>stramonium)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidney Weed (Polygona</td>
<td>Dried stalk</td>
<td>Tea/diuretic</td>
</tr>
<tr>
<td>verticillata)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lady's Slipper (Cypripedium</td>
<td>Leaves</td>
<td>Poultice/fever</td>
</tr>
<tr>
<td>acaule)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laurel, Hairy (Kalmia</td>
<td>Leaves</td>
<td>Salve/parasites</td>
</tr>
<tr>
<td>hirsuta)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Everlasting* (Gnaphalium</td>
<td>Entire plant</td>
<td>Tea/colds, menstrual cramps</td>
</tr>
<tr>
<td>polyccephalum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maize (Zea mays)</td>
<td>Leaves</td>
<td>Tea/fever</td>
</tr>
<tr>
<td>Marsh Rosemary (Limonium</td>
<td>Root</td>
<td>Tea/diarrhea</td>
</tr>
<tr>
<td>carolinanum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mint, American Wild (Mentha</td>
<td>Leaves</td>
<td>Steeped hair rinse</td>
</tr>
<tr>
<td>arvensis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mistletoe (Phoradendrom</td>
<td>Leaves</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>flavescens, Pursh.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muckle, Brown* (Myrica</td>
<td>Leaves</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>cerifera)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muckle, Marsh (Borrichia</td>
<td>Leaves</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>frutescens)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muckle, White (Baccharis</td>
<td>Leaves</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>halimifolia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mullein* (Verbascum thapsus)</td>
<td>Leaves, flowers</td>
<td>Tea/colds, fevers</td>
</tr>
<tr>
<td>Nightshade (Solanum nigrum)</td>
<td>Root</td>
<td>Tea/fever</td>
</tr>
<tr>
<td>Oak, Red (Quercus falcata)</td>
<td>Bark</td>
<td>Tea/menstrual pain</td>
</tr>
<tr>
<td>Oil, Bush (Laurus benzoin)</td>
<td>Leaves</td>
<td>Poultice/fever</td>
</tr>
<tr>
<td>Okra (Hibiscus esculentus)</td>
<td>Blossoms</td>
<td>Poultice/sores</td>
</tr>
<tr>
<td>Old Hag's Table (mushroom)</td>
<td>Entire mushroom</td>
<td>Poultice/sores</td>
</tr>
<tr>
<td>Onion, Red (Allium)</td>
<td>Bulb</td>
<td>Ingested/chest colds</td>
</tr>
<tr>
<td>Parsnip (Pastinaca sativa)</td>
<td>Root</td>
<td>Tea/no data</td>
</tr>
<tr>
<td>Pennyroyal (Hedeoma</td>
<td>Leaves</td>
<td>Tea/stomachache</td>
</tr>
<tr>
<td>pulegioides)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persimmon* (Diospyros</td>
<td>Unripe fruit</td>
<td>Eaten/teething pain</td>
</tr>
<tr>
<td>virginiana)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Continued on page 88
Table 1. Medicinal Botanical Resources, South Carolina Lowcountry – Cont.

<table>
<thead>
<tr>
<th>PLANT</th>
<th>PARTS USED</th>
<th>PREPARATION/PRIMARY USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peach (Prunus persica)</td>
<td>Leaves</td>
<td>Tea/colds, vermifuge</td>
</tr>
<tr>
<td>Pine* (Pinus)</td>
<td>Needles, sap</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Pitcher Plant* (Sarracenia minor)</td>
<td>Roots</td>
<td>Salve/skin imitation</td>
</tr>
<tr>
<td>Pokeroot* (Phytolacca decandra)</td>
<td>Leaves, root</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Pomegranate (Punica granatum)</td>
<td>Entire plant</td>
<td>Tea/diarrhea</td>
</tr>
<tr>
<td>Pumpkin* (Cucurbita pepo)</td>
<td>Seeds</td>
<td>Tea/edema (dropsy)</td>
</tr>
<tr>
<td>Queen's Delight* (Stillingia sylvatica)</td>
<td>Roots</td>
<td>Tea/stomachache</td>
</tr>
<tr>
<td>Red Cedar (Juniperus salicicola)</td>
<td>Branchlets</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Rignum (Monarda punctata)</td>
<td>Leaves</td>
<td>Tea/fevers</td>
</tr>
<tr>
<td>St. John's (Hypericum hypericoides)</td>
<td>Entire plant</td>
<td>Tea/rinse bums, sores</td>
</tr>
<tr>
<td>Sassafras* (Sassafras albidum)</td>
<td>Root bark</td>
<td>Tea/general health</td>
</tr>
<tr>
<td>Sea Ox-Eye (Borrichia frutescens)</td>
<td>Leaves</td>
<td>Tea/cold</td>
</tr>
<tr>
<td>Sedge (Cyperus articulatus)</td>
<td>No data</td>
<td>ingested/vermifuge</td>
</tr>
<tr>
<td>Senna, American (Cassia marilandica)</td>
<td>Leaves</td>
<td>Poultice/sores</td>
</tr>
<tr>
<td>Silkweed* (Asclepias tuberosa)</td>
<td>Root</td>
<td>Tea/rheumatism</td>
</tr>
<tr>
<td>Silvergrass (Chrysopsis graminifolia)</td>
<td>Leaves</td>
<td>Tea/kidneys</td>
</tr>
<tr>
<td>Sinkfield* (Ipomoea pandurata)</td>
<td>Vine</td>
<td>Tea/chills, fever</td>
</tr>
<tr>
<td>Smartweed (Polygonum pennsylvanicum)</td>
<td>Leaves</td>
<td>Poultice/headaches</td>
</tr>
<tr>
<td>Smilax* (Smilax laurifolia)</td>
<td>Root</td>
<td>Ingested/aphrodisiac</td>
</tr>
<tr>
<td>Snakeroot, Bunon* (Eryngium yuccifolium)</td>
<td>Root</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Snakeroot, Sampson's root* (Gentians ochroleuca)</td>
<td>Leaves</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Snakeroot, Virginia* (Aristolochia serpentaria)</td>
<td>Root</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Snakeroot, White* (Eupatoriurn rugosum)</td>
<td>Root</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Sourgrass* (Rumex spp.)</td>
<td>Root</td>
<td>Tea/general health</td>
</tr>
<tr>
<td>Spanish Moss (Tillandsia usneoides)</td>
<td>Entire plant</td>
<td>Tea/high blood pressure</td>
</tr>
<tr>
<td>Speedwell* (Veronica officinalis)</td>
<td>Leaves</td>
<td>Tea/coughs</td>
</tr>
<tr>
<td>Stargrass (Aleuris aurea)</td>
<td>Root</td>
<td>Tea/colds</td>
</tr>
<tr>
<td>Stinging Nettle (Cnidoscolus stimulosus)</td>
<td>Root</td>
<td>Ingested/potency</td>
</tr>
<tr>
<td>Sumac (Rhus copallina)</td>
<td>Root</td>
<td>Ingested/diarrhea</td>
</tr>
<tr>
<td>Sutras</td>
<td>Leaves</td>
<td>Brewed.eye drops</td>
</tr>
<tr>
<td>Swamp Grass (Aristolochia serpentaria)</td>
<td>Leaves</td>
<td>Poultice/sprains</td>
</tr>
<tr>
<td>Sweet Leaf (Symplocos tinctoria)</td>
<td>Root</td>
<td>Tea/beverage</td>
</tr>
</tbody>
</table>

Continued on page 89
Table 1. Medicinal Botanical Resources, South Carolina Lowcountry – Cont.

<table>
<thead>
<tr>
<th>PLANT</th>
<th>PARTS USED</th>
<th>PREPARATION/PRIMARY USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweet Pepperbush (Cletra alnifolia)</td>
<td>Root</td>
<td>Boiled/soak feet</td>
</tr>
<tr>
<td>Tadawas (Aster)</td>
<td>Leaves</td>
<td>Tea/fever</td>
</tr>
<tr>
<td>Verbena (Verbena hastata)</td>
<td>Roots</td>
<td>Tea/expectorant</td>
</tr>
<tr>
<td>Vetch (Vicia sativa)</td>
<td>No data</td>
<td>No data/general health</td>
</tr>
<tr>
<td>Watermelon (Citrullus vulgaris)</td>
<td>Seeds</td>
<td>Tea/diuretic</td>
</tr>
<tr>
<td>White Cedar (Chamaecyparis thyoides)</td>
<td>Berries</td>
<td>Steeped/asthma</td>
</tr>
<tr>
<td>Whiteroot (Aralia spinosa)</td>
<td>Root</td>
<td>Tea/arthritis</td>
</tr>
<tr>
<td>Wild Leek (Allium ampeloprasum)</td>
<td>Bulb</td>
<td>Steeped/high blood pressure</td>
</tr>
<tr>
<td>Wild Okra (Viola palmata)</td>
<td>Entire plant</td>
<td>Ingested/emetic</td>
</tr>
<tr>
<td>Willow (Salix caroliniana)</td>
<td>Inner bark</td>
<td>Tea/colds, fever</td>
</tr>
<tr>
<td>Witch-Hazel (Hamamelis virginiana)</td>
<td>Leaves, bark</td>
<td>Salve/skin irritations</td>
</tr>
<tr>
<td>Yaupon (Ilex vomitoria)</td>
<td>Leaves</td>
<td>Tea/emetic, diuretic</td>
</tr>
</tbody>
</table>

*Officially recognized properties; formerly or currently listed in United States Pharmacopeia or The National Formulary. (Primary Sources: Mitchell 1978; Morton 1974; Secondary Sources: Hamel and Chiltoskey 1975; Meyer 1981;)

Continued from page 85– “THEY WORKED THEIR OWN REMEDY”: African American Herbal Medicine

In summary, the majority of herbal medicine along coastal South Carolina apparently consisted of the leaves of plants that were brewed into teas and consumed for colds and fevers. However, ethnohistoric data also indicate a significant number of plants were used by African Americans for a broad range of illnesses and were applied in numerous ways. This information in turn provides an ethnohistoric baseline for archaeological comparison. Data, from excavations are now presented to assess the potential visibility of African-American traditional medicine within archaeologically recovered botanical assemblages.

ARCHAEOLOGICAL DATA

For the following analysis extant archaeological data are summarized from botanical information in excavation reports. The sites comprising the archaeological data set are primarily South Carolina Lowcountry plantations and consist of Archdale Hall (Trinkley 1985), Cotton Hope Plantation (Trinkley 1990), Greenfield Plantation (Trinkley 1983), Haig Point Plantation (Newsom 1988), Lesesne and Fairbank Plantations (Gardner 1986), Spiers Landing (Trinkley 1979), Stoney-Baynard Plantation (Adams et al. 1995), and Yaughan and Curriboo Plantations (Gardner 1983).

The Gowen Farm (Shea 1993) is located in Middle Tennessee. The study sites were mainly occupied between the eighteenth and nineteenth centuries.

Excavation and botanical recovery contexts consist of middens and features associated with the main houses, kitchens, quarters for house servants, and dwellings in slave settlements. Although European Americans resided at the above sites, we assume that enslaved African Americans comprised the majority of the site inhabitants and in large part were responsible for the daily operations of the plantations. As a consequence, it seems more likely that most of the archaeological deposits (and botanical remains) encountered at the study sites were probably associated with the activities of African Americans.

Analysis methods consisted of tabulating by site and species those plants with medicinal uses based on information in the ethnohistoric data set (Table 2). In our analysis, medicinal plants were considered to be botanical remains with medicinal properties, including plants with multifunctional attributes such as medicine, subsistence, heating, or clothing fiber. Medicinal plants were tabulated only on the basis of presence and were not quantified by weighted counts. The distribution of botanical remains is also undoubtedly biased by different collection techniques on each site.

Continued on page 90
Despite these limitations, the archaeological data set indicates that, on average, 14 species of plants are typically identified at African-American sites. The per site average for medicinal plants is six. Proportionally, medicinal plants on average comprise 43 percent of the botanical species identified in African-American contexts. The maximum proportion of medicinal plants present at a single site consists of 75 percent, or 6 out of 8 plants, at Archdale Hall, and the minimum proportion is 31 percent, or 8 out of 26 plants, at the Gowen Farm near Nashville.

When the botanical data from all of the sites are combined (Table 3), 29 plants with possible medicinal uses are represented, and comprise 27 percent of the ethnohistoric data set. Within the combined site sample, 8 or approximately half of the 18 plants with officially recognized medicinal properties are represented, and comprise 28 percent of the archaeological data set. Interestingly, Mitchell (1978) states that most informants were aware of approximately 20 plants with medicinal uses, which represents about 19 percent of the ethnohistoric data set. In contrast, archaeological analysis by site average typically identifies 6 plants with potential medicinal use, comprising 6 percent of the ethnohistoric data set or approximately one-third of the 20 plants utilized by individuals.

Concerning plant uses and preparation methods, overall the distributions between the ethnohistoric and archaeological data sets are proportionally similar (Tables 4 and 5). Interestingly, the proportion of plants used as a vermifuge and for contraception or reproduction is twice as large in the archaeological data set as the ethnohistoric data set.

The general similarity between the two data sets is probably due to the fact that the combined list of botanicals from all of the study sites contains 29 plants. This total closely approximates a data set composed of 30 cases, which is considered to be a statistically reliable or recommended sample size. Thus, based on the general functional correspondence between the archaeological and ethnographic data sets, the combined site sample appears to be a relatively accurate composite assemblage of botanical resources used by enslaved African Americans, particularly along the South Carolina coast where the majority of the study sites are located.

Put another way, the combined site sample probably represents an accurate botanical complex that can be expected to be present in reduced form at most archaeological sites. Results suggest approximately six of the plants in the composite assemblage will usually be found or identified at individual Lowcountry plantations.

**CONCLUSION**

The results of our cursory ethnohistoric and archaeological comparison, generated from a very small number of sites, are by no means conclusive, yet tentatively suggest plants with potential medicinal uses are typically recovered from African-American sites. Several individuals, such as Zierden and Trinkley (1984) and Gardner (1983, 1986), have consistently noted and discussed the presence of medicinal plants in botanical assemblages from specific African-American sites. The preceding comparison thus attempted to contribute to these observations and synthesize extant data within the context of herbal medicine. The results suggest that traditional African-American herbal medicine is accessible or potentially visible in the archaeological record.

We conclude this essay with a few suggestions to aid in the future archaeological study of African-American folk medicine. First, archaeologists must budget for botanical analysis, which is too often an afterthought on historic sites.

The paucity of historical excavation projects that routinely conduct botanical analysis suggests that despite the best intentions, much of this information, unfortunately, is never considered or recovered through archaeological inquiry. Second, archaeologists should routinely take flotation samples from different excavation contexts such as features, unit levels, and middens. Third, where can we locate medicinal plant remains? One historic reference concerning an enslaved woman in Missouri is particularly informative and states that:

*Lin, the Negro cook in my grandfather's home, had dug out a hole, lined and roofed it with poles and dirt, and in it kept her 'roots and arbs,' as she called them, along with various trinkets and some mysterious powders believed to be effective in working charms and conjurings (Moore 1958).*

This quote suggests that root cellars and pits are likely locations to look for both medicinal plant remains and caches of personal items used in folk medicine. Other relevant deposits and features include hearths, middens, wells, and cisterns.

A final research suggestion concerns the geographic dispersion and persistence of traditional medicine in North America. The data set in this study relied upon botanical remains from plantations since the majority of

*Continued on page 92*
Table 2. Distribution of Botanical Materials from Study Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>Number of Plants</th>
<th>Number of Medicinal Plants</th>
<th>Percent of Medicinal Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archdale Hall</td>
<td>8</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td>Cotton Hope Plantation</td>
<td>3</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>Gowen Farmstead</td>
<td>26</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td>Greenfield Plantation</td>
<td>14</td>
<td>6</td>
<td>43</td>
</tr>
<tr>
<td>Haig Point Plantation</td>
<td>11</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Lesesne and Fairbank Plantations</td>
<td>41</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Spier's Landing</td>
<td>7</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>Stoney-Baynard Plantation</td>
<td>7</td>
<td>5</td>
<td>71</td>
</tr>
<tr>
<td>Yaughan and Curriboo Plantations</td>
<td>11</td>
<td>6</td>
<td>55</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>128</strong></td>
<td><strong>55</strong></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>

Table 3. Medicinal Botanical Resources in Archaeological Data Set

<table>
<thead>
<tr>
<th>Brassicaceae</th>
<th>Blackberry*</th>
<th>Maize</th>
<th>Smartweed (Knotweed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Walnut</td>
<td>Nightshade</td>
<td>Smartweed</td>
<td>Smartweed (Knotweed)</td>
</tr>
<tr>
<td><em>Cherry</em></td>
<td><em>Persimmon</em></td>
<td>Stinging Nettle</td>
<td><em>Sweetgum</em></td>
</tr>
<tr>
<td>*Chinaberry</td>
<td>Pine*</td>
<td>Sumac</td>
<td></td>
</tr>
<tr>
<td><em>Cotton</em></td>
<td><em>Poke</em></td>
<td>Verbena</td>
<td></td>
</tr>
<tr>
<td>*Dogwood</td>
<td><em>Polygonum hydropiperoides</em></td>
<td>Watermelon</td>
<td></td>
</tr>
<tr>
<td>*Euphorbiaceae</td>
<td>Red Cedar</td>
<td><em>Wax</em></td>
<td>Myrtle (Brown Muckle)*</td>
</tr>
<tr>
<td><em>Ironweed (Sida)</em></td>
<td><em>Sedge</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Officially recognized properties; formerly or currently listed in *United States Pharmacopeia* or *The National Formulary.*

Table 4. Comparison of Primary Plant Uses, Ethnohistoric and Archaeological Data Sets

<table>
<thead>
<tr>
<th>Plant Uses</th>
<th>Ethnohistoric Data Set</th>
<th>Archaeological Data Set</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Fevers-Colds</td>
<td>42</td>
<td>39</td>
</tr>
<tr>
<td>Digestion-Elimination</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Skin Irritation</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Vermifuge</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Reproduction-Contraception</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Arthritis-Rheumatism</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Circulation</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Diuretic</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>General Hygiene</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>108</td>
<td>101</td>
</tr>
</tbody>
</table>

*Error due to rounding
Table 5. Comparison of Primary Preparation Methods for Medicinal Plants, Ethnohistoric and Archaeological Data Sets

<table>
<thead>
<tr>
<th>Preparation Methods</th>
<th>Ethnohistoric Data Set</th>
<th>Archaeological Data Set</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Tea</td>
<td>71</td>
<td>66</td>
</tr>
<tr>
<td>Ingested</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Poultice</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Salve</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100</td>
</tr>
</tbody>
</table>

Continued from page 90– "THEY WORKED THEIR OWN REMEDY": African American Herbal Medicine

African-American archaeology has been conducted in contexts associated with the slavery period. However, we suggest that folk medicine used by African Americans is not unique to the South or the colonial and antebellum periods. Ethnobotanical remains found on African-American sites in urban settings or dating to the twentieth century might also have been used for medicine. For example, Yentsch (1994) identified a unicorn plant seedpod from an eighteenth-century well in Annapolis, Maryland. Cheek and Friedlander (1990) likewise identified plant remains with medicinal uses from a late nineteenth-early twentieth-century midden in Washington, D.C. Recent studies conducted by cultural anthropologists indicate that herbalism continues in urban regions in the Midwest and Northeast that experienced large influxes of African Americans from the South during the Great Migration (Bailey 1991; Hill 1973; Snow 1974; Stewart 1971; Tinling 1967). Herbal medicine therefore illustrates a relevant example of an African-derived cultural element that persists to the present among some African Americans in North America. The archaeological contexts briefly considered in this essay perhaps represent geographically points of origin or cultural hearths for this folk tradition.

In conclusion, a detailed framework of ethnohistorical information is required to contextualize and effectively interpret botanical remains from African-American sites. This study represents an initial step in constructing such a framework and comparing it to the archaeological record.

ACKNOWLEDGMENTS

This paper was presented at the 1997 Society for Historical Archaeology Conference in Corpus Christi, Texas. Lectures presented to the Department of Anthropology, University of Tennessee, Knoxville by Leland Ferguson for the department's annual Visiting Lecturer Program in 1996 served as the impetus for this essay. The authors thank Charles Faulkner and Melanie Cabak for commenting upon earlier versions of the manuscript.

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Continued from page 81 - Christianity, African Religion and African Medicine

rituals and from consulting traditional healers. This attempt to destroy African religion and medicine has not succeeded. Many African Christians have continued to participate in traditional religious rituals; they have also continued to consult traditional healers. In other words, many African Christians have dual membership/membership in the Christian church and membership in African religion.

It is difficult to separate African medicine from African religion. There are two main reasons for this. Firstly, the African general theory of illness is very broad; it includes African theology. In other words, the theory not only attempts to explain illness and disease but also the relations between God and the universe. The second reason, related to the previous one, is that many traditional healers are also religious leaders and vice versa.

The traditional medical sector has continued to grow despite the attempts by early Christian missionaries and others to suppress it; and it has continued to grow because traditional healers are successful in curing a large number of illnesses. Traditional healers use both scientific and non-scientific or subjective knowledge. Scientific medicines are obtained mainly from plants. Many plant medicines

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recommended by traditional healers are correct even when judged by modern scientific methods. This empirical knowledge has been developed through trial and error, experimentation and systematic observation over a long period of time. The major sources of non-scientific or subjective knowledge are the various spirits believed to play a part in health. The social and psychological methods of treatment developed from this unscientific base often bring good results.

Participation in traditional religions is increasing. The point that was often made by early Christian leaders that many African religious rites and rituals and many of their cultural practices are against Christian faith and morals is, in fact, not correct. In recent years a number of African scholars have shown that many traditional practices that Christian churches eliminated or tried to eliminate were not, in fact, against Christian faith and morals. African religion does not encourage belief in witchcraft; it merely accepts the fact that witches exist in Africa.

Witches are regarded as sinners and it is the duty of religious leaders to talk about witchcraft and to attempt to discourage its practice. African religion does not encourage people to venerate their ancestors instead of worshipping; members of African religion talk to their ancestors but worship God. African religion says, God is for everyone everywhere. God takes very little interest in the day-to-day affairs of individuals. God is not concerned with purely personal affairs but with matters of national and international importance. The ancestral spirits, on the other hand, are concerned with the day-to-day affairs of their descendants. They are the intermediaries between the living and God. People pray to God through their ancestors. Many Africans who became Christians found it difficult to abandon their religion and medicine completely. Christian conversion was, therefore, shallow; it did not always change the African people's understanding of life and their relationship to their ancestral spirits and God.

Prof. Gordon L. Chavunduka is president of the Zimbabwe National Traditional Healers' Association.


Continued from page 100 – State of the Art

We touched on Pan-African indigenous herbal medicine – Technology Transfer in a recent August issue, http://www.blackherbals.com/pan_african_indigenous_herbal_medicine_technology_transfer.htm

In that paper we demonstrated the importance of traditional knowledge to enslaved Africans in Jamaica and the Caribbean who were provided no other form of health care by their oppressors and its derivation from African sources. As it was in the Caribbean, so it was in the United States, as acknowledged by enslaved Africans and their descendents in South Carolina called ‘Gullah’ or ‘Geechi’.

Yes, there is a definite need in Africa to preserve the indigenous knowledge of medicinal plants, traditional medicine and environmental conservation. Many of these plants are becoming extinct due to pollution, gmo’s, land grabbing for industrial agriculture, environment degradation, urbanization, carbon credits, etc., and exploitation of Africa’s herbal market. In a global program featured on page 5, in this issue, on conservation of useful plants and traditional knowledge, we notice that there is not one representative from Africa. How can you have a global program and not include Africa?

Throughout this issue and in many of our other health issues you can see how indigenous traditional medicine is used in the community in various ways. The pharmaceutical/medicinal systems from other countries are failing us. The environmental conservation programs in many African countries are failing us. Why? Did anyone ask the African what is good for him? Did you think he does not know or cannot figure it out? Why is help from the West, which condemns what Africa does because it is not in the best interest of the West, so important to the African? Africa has been conserving and preserving nature for centuries. It is a part of who we are, to live with nature, not against it, not in total control of it, but to work within it. Environmental programs in Africa funded by the West, are built on Western culture, Western ideals. Let’s not deal with the political, economic, physiological, philosophical or psychological reasons why it cannot work, when it has worked in the past and is working in the present. We are not saying that there is no need for a coming together of indigenous knowledge and Western technology. There is, but it needs to be on Africa’s terms, conditions and indigenous knowledge. The use of indigenous knowledge does not take us backwards, but will move us forward in the right direction.

Next year will be 2014. Let’s make it the Year of the African Ancestor (5). It is going to be a significant year with many, many health and environmental problems never seen before. Let’s honor our African ancestors and beseech them to show us the way.

Blackherbals – A Marcus Garvey Pan-African University’s Community Site of Knowledge
There is a definite need to conserve and preserve the indigenous plants we use in traditional medicine. The concept of "State of the Art" is defined as "the level of knowledge and development achieved in a technique, science". According to this definition, ‘state of the art’ is basically a unique art which includes specific knowledge of the people who provided a particular unique framework. Wikipedia

African Traditional Medicine has been around since the dawn of mankind. It is still being used by 80% of the rural population in Africa and is based on cultural and scientific observations. Observations play a role in the second and fifth steps of the scientific method. The idea of measurement evolved to allow recording and comparison of observations made at different times and places by different people. Measurement consists of using observation to compare the thing being measured to a standard; an artifact, process or definition which can be duplicated or shared by all observers. Measurement reduces an observation to a number which can be recorded. Reproducibility also plays a big role. Reproducibility refers to the degree of agreement between measurements or observations conducted on replicate specimens in different locations by different people, as part of the precision of a test method.

Today, African Traditional Herbal Medicine is considered complementary or alternative medicine if it is considered at all. Natural plant-based medicine was the forerunner of today’s synthetic pharmaceuticals. Our ancestors’ knowledge of plants and the natural world in which they lived span millenniums of use. Allopathic medicine is only 200 years old. Studies all over Africa are showing us the benefits of herbal medicine, not just with tropical diseases but also with chronic and man-made diseases. African Traditional Medicine is intrinsically involved with African spirituality. Our health is much more than our physical being; it is tied to our spiritual being as well.

For example, Yorubic medicine has its roots in the Ifa Corpus, a religious text revealed by the mystic prophet, Orumila, over 4,000 years ago in the ancient city of Ile-Ife, now known as Yorubaland. Within the last 400 years, this healing system has also been practiced in the day-to-day lives of individuals in the Caribbean, and South America, in large part, because of the traditions brought over by African slaves arriving in the Americas. They were experts in botany and the medicinal importance of plants.

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