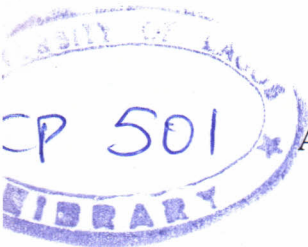


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ETHNOBOTANICAL RESEARCH: I. AN APPRAISAL OF THE CONTRIBUTIONS OF

HERBALISM TO PRIMARY HEALTH CARE DELIVERY IN THE SOUTH WEST

NIGERIA



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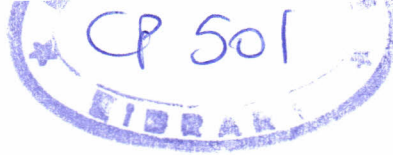
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#### ABSTRACT

Herbalism contributes significantly to the primary health care delivery system in the southwest Nigeria through sale and administration of different herbal medicinal preparations which are available in a number of ways like tinctures, herbal wine and elixirs, tisanes, decoctions, macerates, topicals, poultices, whole herb consumption, syrup, extracts, inhalation, local rings, incision and rubbing, charm belt, and other charm apparels. Medicines may be hawked by the ambulatory vendors (apothecary) or patients consulting practitioners. Charges are relatively cheap, consultation is prompt and the medicines are reportedly efficacious. Non-exclusion of anybody from patronizing and being organized around people's needs and expectations, which are two of the key elements of WHO to achieve the ultimate goal of primary health care of better health for all are affectively entrenched in the practice. We adopted and employed basic scientific method, anthropological training skills and study approaches in Humanities to elicit our findings. Government support is highly solicited

Keywords: Primary health care, hebalism, Nigeria

## INTRODUCTION



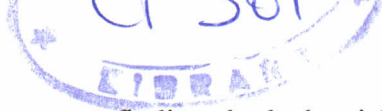
Ethnobotany is the scientific study of the relationships that exist between people and plants (Cunningham, 2001). It aims to document, describe and explain complex relationships between cultures and uses of plants: focusing, primarily, on how plants are used, managed and perceived across human societies such as foods, medicines, tools, currency, clothing, textiles, in divination; in cosmetics; in dyeing; in construction; in literature; in rituals; and in social life (Cunningham, 2001). John William Harshberger, a US botanist coined the name in 1895. Dioscorides, the author of "*De Materia Medica*" provided information on how and when some 600 plants were gathered, whether or not they were poisonous, their actual use, and whether or not they were edible, he also provided recipes and stressed the economic potential of these plants in the Mediterranean. Leonhart Fuchs, cataloged 400 plants native to Germany and Austria in 1542. Leopold Glueck in 1896, published the first modern ethnobotanical work on traditional medical uses of plants done by rural people in Bosnia. The field of ethnobotany requires a variety of skills: botanical training for the identification and preservation of plant specimens; anthropological training to understand the cultural concepts around the perception of plants; linguistic training, at least enough to transcribe local terms and understand native morphology, syntax, and semantics (Cunningham, 2001). The information on the traditional uses of plants is still intact with the natives who reluctantly or almost totally decline information sharing with researchers (Sofowora, 2006). Herbalism is a traditional medicinal or folk medicine practice based on the use of plants and plant extracts. Herbalism is also known as botanical medicine, medical herbalism, herbal medicine, herbology, and phytotherapy. The scope of herbal medicine is sometimes extended to include fungal and bee products, as well as minerals, shells and certain animal parts (Sofowora, 2006). The ultimate goal of primary health care is better health for all (WHO, 2007, 2008, 2009). WHO has identified five key elements to achieving that goal:



- reducing exclusion and social disparities in health (universal coverage reforms);
- organizing health services around people's needs and expectations (service delivery reforms);
- integrating health into all sectors (public policy reforms);
- pursuing collaborative models of policy dialogue (leadership reforms); and
- increasing stakeholder participation.

All of these key elements are entrenched in the practices of traditional medicine which is wildly gaining popularity in the country because of the intrinsic advantages of efficacy, prompt delivery, cost effectiveness and easy accessibility.

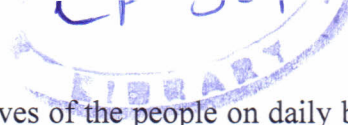
Public health is battered by the consequences of bad policies made in other sectors Already, the costs of health care push an estimated 100 million people below the poverty line each year; the market does not solve social problems but public health does (WHO, 2007, 2008, 2009). The world health watch dog has declared that people should not be denied access to life-saving and health-promoting interventions for unfair reasons, including those with economic or social causes. And, that it should be pursued for its own sake, its own intrinsic worth as a condition that allows people to develop their human potential (WHO, 2007, 2008, 2009). In fact, as a basic human right, the Declaration of Alma-Ata launched primary health care as the route to health for all (WHO, 2007, 2008, 2009), this was a deliberate effort to tackle huge, and largely avoidable, differences in the health status of populations. The declaration put health equity on the international political agenda for the first time (WHO, 2007, 2008, 2009). By this declaration, it means that health is of life-and-death importance. Traditional medicine has bridged the differences the inequalities in health outcomes, access to care, and what people pay for care. All too often, people who are well-off and generally healthier have the best access to the best care, while the poor are left to fend for themselves.



However, it is noted in the present finding, both the rich and the down trodden poor seek medical treatment in the traditional way. They have boycotted the unnecessary tests and procedures, more and longer hospital stays, higher costs, and the exclusion of people who cannot pay. As observed by WHO, 2007, 2008, 2009, primary health care is a people-centred approach to health that makes prevention as important as cure; the approach is expected to tackle the root causes of ill health, also in non-health sectors, thus offering an upstream attack on threats to health. With the proper mechanism being in place, it can prevent much of the disease burden, and also prevent people with minor complaints from flooding the emergency wards of hospitals. Health is the very foundation of productivity and prosperity and a contribution to social stability; in fact the practice of herbalism in the cosmopolitan south west Nigeria has offered this. The practice has the crude but rapid delivery system that is capable of reaching those in greatest need, If the world desires to have health to work as a poverty-reduction strategy; then, the exploit has to be extended beyond the modern medicine but cover the whole gamut of the operations of the herbal traders in the delivery of primary health care in all countries of the world. A serious research work on scientific and humanistic study of herbalism as well as anthropogenic and cultural investigations should be funded by government to achieve these laudable goals. Similarly, govt should help in conservation, setting up herbal drug manufacturing centres and establishment of traditional medical centres. Herbalism is a traditional medicinal or folk medicine practice based on the use of plants and plant extracts. Herbalism is also known as botanical medicine, medical herbalism, herbal medicine, herbology, and phytotherapy. The scope of herbal medicine is sometimes extended to include fungal and bee products, as well as minerals, shells and certain animal parts. Long practiced outside of conventional medicine, herbalism is becoming more mainstream as improvements in analysis and quality control along with advances in clinical research show their value in the treatment and prevention of disease. Countries in Africa, Asia and Latin



America use traditional medicine (TM) to help meet some of their primary health care needs. In Africa, up to 80% of the population uses traditional medicine for primary health care. In industrialized countries, adaptations of traditional medicine are termed "Complementary" or "Alternative" Medicine (CAM). Medicinal plants are able to produce substances that have therapeutic properties. Such plants are able to produce and accumulate substances that have medicinal properties (Oliver, 1960). In rural areas where access to orthodox medical care is difficult to get, knowledge of herbal medicine is commonly shared such that most people know which plants to harvest in their environment for minor ailments which may be symptomatic for a more a more serious one. Plants were collected from nearby bush as at when needed. For a number of more serious ailments, people consult herbalists who are specialized in herbalism; they collect plants from far and near, administer their preparations and charge a fee. However, in urban areas sick people either go to herbal homes or patronize ambulatory vendors (Kadiri, 2008). The ambulatory vendors (male and female) hawk and dispense already prepared drugs from plants for several ailments to users belonging in all the social strata. The contributions of herbalism: herbal trade, usage and handling to primary health care delivery system in the south-west Nigeria is investigated with the view to evaluate and document the various ailments that are attended to by the practitioners; to report all the plant specimens which are used and transported on daily basis within the southwest and from other parts of the country to this area and to shed more light on the activities of the herbal traders, users and government with a view to determine how far traditional medicine has become contributory to health care delivery in the south west Nigeria. We adopted and employed basic scientific method, anthropological training skills as well as study approaches in Humanities to investigate the phytomedical practices of the herbalsits and their consequences on primary health care delivery system in the study. In the area, herbalism has been revitalized and attracts more people in recent times than before. Many of the activities



of the herbalists have touched the lives of the people on daily basis because the health issues that are addressed have direct link to productivity at work, reproduction, body immunity, common vector borne ailments, few congenital maladies, minor injuries and mishaps, sound health maintenance, inexplicable acclaimed uses such as protection from witchcraft and accidents, undue favouritism or luck, spiritualism and so on.

## MATERIALS AND METHOD

The data were obtained from herbal traders across the south west Nigeria (Lagos, Ogun, Oyo, Osun, Ondo and Ekiti states) by means of oral questions and structured questionnaire, which was sometimes interpreted in order to cater for communication inadequacies. Some difficulties were encountered in getting information from the respondents because of their loss of confidence in government and previous questioners who promised to help present their issue of patency and better livelihood among others to the government. The following Table 1 contains some of the questions that were asked. A total of 1,861 people were interviewed out of which 549 (29.5%) are males and 1,312 (70.5%) are females. Many of the plant used for treatment were collected and bought for nomenclatural determination in the herbarium of University of Lagos and Ibadan, and Yoruba names of the plants given were confirmed and scientific names were obtained from Gbile, 1984.

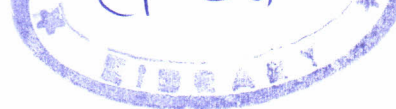


Table 1: Ethnobotanical Research Questions

Question	Response
Name of Market	
Sex	
Tribe	
Age / Level of education	
Year of experience / Have you attended any refresher course(s)	
Source of Knowledge	
Method of transferring knowledge	
Any training cost?	
Do you have another source of income aside herb selling?	
Source of plant material and plant parts that are commonly used	
Which do you prefer to treat, early ailments or late (advanced) ailments	
Position as to release of information to government	
Known common ailments that have been cured by herbs	
Daily financial gains / Name of herbal association membership	
Cost of herbs and in what quantity	
Names of commonly used plant specimens	
Do you think the supply of the plants can diminish? Any reason your answer?	
How do you think the business can improve?	
What do you think about owning a medicinal plant farm?	
If invited, will you like to share your knowledge with government? If no Why? An advice for government	
What time of the day do you collect plant specimens? What's the reason for the choice?	

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## RESULT

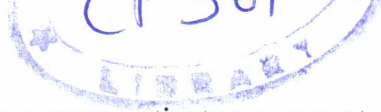
The medicinal plant specimens that are used on daily basis and the various ailments that are treated almost on daily basis too are presented in Tables 2 and 3. 1,861 health services providers were interviewed, out of which 29.5% were males and 70.5% were females. Both males and females use herbal medicine. The ages of the service providers range from 32 to



85, their year of experience varies from 7 to 55 years and 89.7% of them are literate with the minimum educational level of first school leaving certificate or its equivalent, while 0.9% of the respondents have university education and the rest are stark illiterates. Knowledge transfer is usually from parents to children, sometimes some of the respondents enrol as apprentices where they either receive training free of charge or pay a reasonable fee for tuition. Plant materials are obtained from neighbouring forest areas within the country and the surrounding countries like Cameroon and Republic of Benin. The respondents are all inclined to early treatment of ailments, less than 5% accept late ailments for treatment. Charges are largely dependent on the nature of sickness. 95% of the respondents agreed to own medicinal farms to cultivate their plants whereas 5% believe that plants are nature's gift, and so they cannot be depleted. All the respondents suggested funding by government, teaching of traditional medicine in schools, supply of incentives such as machines for drug processing, establishment of medicinal plant garden across the country, provision of good roads, consistent public enlightenment and availability of bank loans as means of improving the contributions of herbalism to primary health care delivery. 85% of the respondents are afraid of meeting with government for fear of depriving them of their knowledge, according to them, government is deceptive and exploitative. We found out from the study that the preparations marketed are available in the following forms:

- Tinctures - Alcoholic extracts of herbs.
- Herbal wine and elixirs - Herbal wine is a maceration of herbs in wine, while an elixir is a maceration of herbs in spirits.
- Tisanes - Hot water extracts of herb.
- Decoctions - Long-term boiled extract of usually roots or bark.
- Macerates - Cold infusion of plants with high mucilage





- Vinegars - Prepared at the same way as tinctures, except using a solution of acetic acid as the solvent.
- Topicals: This involves soaking in plant oils to extract certain phytochemicals. Ointments used for dressing wounds are prepared this way.
- Poultices and compresses - Whole herb (or the appropriate part of the plant) is usually crushed or dried and re-hydrated with a small amount of water and then applied directly in a bandage, cloth or just as it is.
- Whole herb consumption - This can occur in either dried form (herbal powder), or fresh juice, (fresh leaves and other plant parts).
- Syrups - Extracts of herbs made with syrup or honey.
- Extracts - Include liquid extracts and dry extracts. Liquid extracts are liquids with a lower ethanol percentage than tinctures. Dry extracts are extracts of plant material which are evaporated into a dry mass. They can then be further refined to a capsule or tablet.
- Inhalation as in aromatherapy can be used as a mood changing treatment to fight a sinus infection or cough or to cleanse the skin on a deeper level.

Other preparations include local rings that have been soaked in many plant concoctions, incision and rubbing, charm belt, and other charm apparels which are worn.

Table 2: Scientific names of plants used in primary health care delivery in the south west

Nigeria

*Dracaena surculosa, Aristolochia repens, Lannea welwitschii, Xylopia aethiopica, Euphorbia lateriflora, Cassia tora, Hannoa undulate, Cymbopogon citratus, Calotropis procera, Mangifera indica, Citrus medica, Bambusa arundinae, Alstonea congensis, Ageratum conyzoides, Kigelia africana, Camellia sinensis, Pseudocedrela kotschy, Dioscorea sp., Carica papaya, Aloe vera, Eugenia aromaticum, Zingiber officinale, Parkia biglobosa, Azadirachta indica, Cassia occidentalis, Allium sativum, Anacardium occidentale, Cassia podocarpa, Cassia alata, Garcinia kola, Nauclea latifolia, Abrus precatorius, Annona senegalensis, Ficus exasperata, Cola spp., Morinda lucida, Imbricaria, Caesalpinia bonduchia, Mucuna pruriens, Mucuna poggei, Sere, Piper guineense, Rauvolfia vomitoria, Lawsonia inermis, Abelmoschus esculentus, Adansonia digitata, Nicotiana glauca, Mondia whitei, Xanthoxylum xanthoxyloides, Ocimum spp., Cocos nucifera, Acalypha wilkesiana, Colocynthis citrullus, Allium ascalonicum, Terminalia, Vernonia amygdalina, Telfaria, Jatropha curcas, Elaeis guineensis, Zea mays, Talinum triangulare, Bryophyllum pinnatum, Musa spp., Croton retusa, Citrus spp., Dioclea reflexa, Thaumatooccus danielli, Sorghum bicolor, Ricinus communis, Sida acuta, Tetracarpidium Conophorum syn Kenettia conophora, Vitex doniana, Ananas comosus, Pterocarpus ossun, Capsicum spp., Anthocleista nobilis, Baobab, Croton penduliflorus, Cissampelos owariensis.*

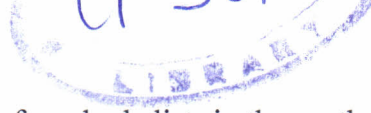


Table 3: Ailments that receive daily attention from herbalists in the south west Nigeria

Dysmenorrhea, Cancer, Arthritis, Ear pains (ache), Malaria, Gonorrhea, Sores, Worm infestation, Jaundice, Cough, Baby body rashes, Heat rashes, Diabetes, Typhoid, Sexually transmitted diseases, Pile, Rheumatism, Pregnancy, Body care, Convulsion, Constipation, Diarrhoea, Dysentery, Early mental illness, Excruciating pain in the stomach, Wounds, Epilepsy, Toothache, Weak erection, Yellow fever, Eczema, Fibroid, Staphylococcus, Leprosy, Amnesia, Blood sugar, Asthma, Night blindness, Hypertension, Obesity, Sickle cell, Stroke, Low sperm count, Bone setting, Syphilis, Common cold, Mistletoe, Low blood content, Anemia, Insomnia, Leucorrhea, Tummy blasting, Female infertility, Measles, Ringworm, Flu, Liver diseases, Ulcer, Menstrual disorders, Blood clotting problem, General body weakness. Body pains, Vermifuge.

Based on their mode of operation, the herbalists are either sedentary or mobile; the former are visited by the people while the latter hawk their wares, moving from one place to the other, this approach may be regarded as a form of apothecary. The patients interviewed unequivocally agreed to the efficacy of the medicine. They also supported the view that the charges are affordable, that they are given prompt attention and that the herbalists' contribution to the nation's health care delivery system is remarkable in nipping in the bud diseases which otherwise would have held patients down.

## DISCUSSION

The herbalists in the southwest Nigeria have risen to nip in the bud a number of illnesses which afflict the people of the area. More females are into the services than males, knowledge transfer is from parents to children in most cases while a few undergo apprenticeship and people of different ages from twenties to eighties act as the experts. The



medicines are available in many forms and the use though crude in some instances; the efficacy of the medicines is applauded by the people. Government intervention in uplifting the standards of the practice is highly desired because of its complimentary role in the nation's health care system.

## CONCLUSION

The herbalists have localized trade unions which have prevented them from speaking in a singular voice to express their desires to government. To solve this unwarranted dichotomy, there should be a nation-wide association with branches scattered all over the states to discuss issues of common interest. With this on ground, government will take their requests more serious and provide incentives to them; it will also check the mistrust which they have in government. With total government support and the recent inclination, herbalism is most likely to wean customers off the orthodox hospital.

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