

APPRECIATING *THE* VALUES OF MEDICINAL PLANTS

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Abstract

The paper points out the ways in which medicinal plants have been of great value in human society. The paper explained what medicinal plants are. The values of medicinal plants can be seen in areas like: fostering of health, use of medicinal plants ("or socio-economic "development, promotion of indigenous technology. There is also a discussion on the use of medicinal plants in African traditional medicine. Certain recommendations are made for sustainable appreciation of the value of medicinal plants for nation building.

Introduction

There are some natural resources in man's environment. These natural resources are used in various ways and in various degrees for the good of man. They help man have-some level of comfort and pleasant life.

Among the natural resources very useful to man are medicinal plants and their natural products. Medicinal plants can be seen as a great treasure in the life of man for the great role they play in the well-being of man. This implies that there are some values of medicinal plants and their natural products throughout the development of human culture.

The focus of this paper is to reveal the socio-economic and technological value of medicinal plants. For explicit understanding, the paper discusses on: understanding what medicinal plants are; value of medicinal plants in fostering health; socio-economic value of medicinal plants; using medicinal plants for promotion of indigenous technology; application of medicinal plants in African traditional medicine.

Understanding What Medicinal Plants Are

Plants are among the natural matters found in our environment. Plants serve various purposes for man's survival in the environment: food, shelter, clothing, erosion prevention, health etc. However, those plants that have medicinal values are termed medicinal plants.

It can be said that medicinal plants are primarily used for provision of health. There is the fear of disease and death among people. So, medicinal plants are greatly used for they are abundant gift of nature found in every nook and cranny and are obtained at low or no cost. Plants have medically sustained man from time immemorial up till now. They are the core of traditional medicine. The biggest price is the mystery of identification of these plants for treatment of a particular disease. Some of the price was paid by our forefathers and the identification is made known to us.

Plants are generally regarded as producers while animals are considered as consumers. Plants can turn the relatively simple ingredients of air and water into sugar, protein, cellulose, oil, scent possessing substances to attract pollinating insects. Plants cells are basically "chemical factories". Many possess a rich supply of therapeutically useful constituents. There is a keen awareness of the value of plants as source of medicine for the most important drugs in the history of medicine are derived directly from plants. The uses to which medicinal plants can be put to are attributed to some chemically active and naturally occurring substances in these plants (Mabcy, 1977).

Value of Medicinal Plants in Fostering Health

Good health is among the primary need of human. It is said that a healthy nation is a wealthy nation. Good health is highly desirable because health is essential in ensuring effectiveness and efficiency in carrying out day to day activities in human life. Achalu and Achalu (1999) noted that health is more than the mere absence of disease or infirmity; rather it is a phenomenon that keeps the body and mind at the highest level of functioning and living at ones best physically, socially, mentally and otherwise. The three dimensions {physical, Social, mental) of health are interrelated with existing interaction among them. It then imply that malfunction in any of the dimension

naturally affects the other, resulting in lowering of the individuals well-being and human efficiency (Achugbu, 2004).

It can be said that based on the worth of medicinal plants in advancing health, the plants are great source of enhancing productivity. The use of medicinal plants in illness prevention and treatment are numerous. Medicinal plants and their natural products have actually played a great role in health care delivery to man throughout the development of human culture. The medicinal use of herbs in the treatment of ailments also represents an important aspect of the history of medicine as well as a contribution to the development of modern pharmacotherapeutics (Essman, 1984).

Farnsworth (1996) revealed some medicinal plants and their uses, of which some of them are shown below:

Medicinal plants	Uses
Ocimum gratissimum	Diarrhea, anti-microbial activities
Hagenia abyssinica	Antihelmintic
Digitalis purpurea	Cardiotonic activity
Cinchona sp(Quinine)	Anti malarial activities

A lot of drugs affect the brain and mental state. From ancient civilization of South America came cocaine from the leaves of *Erythroxylan coca*. The leaves were known for both pleasure and to delay the development of mental and physical fatigue. The drug curare paralyzes skeletal muscles. From extracts of species of different cacti, mushrooms are drugs that affect the functions of the brain and produce a state of unreality including hallucinations. From Calabar, in Nigeria, Calabar beans yield eserine that is now used in eye drops (Ayoola, 1979).

There appeared to be a state of therapeutic realism. This was before the advent of orthodox medicine. For example, the use of the bark of the willow tree was believed to be a panacea for all fever, aches and pains in the 18th and 19th centuries and today it still remains one of the most popular drugs. Quinine has medicinal value for it is used in treating fever and serves as general remedy for malaria (Ayoola, 1979).

Socio-Economic Value of Medicinal Plants

Apart from satisfying the health of people, medicinal plants provide socio-economic value for they provide work (employment) for people. Workers engage in production for the socio-economic well-being of people, Mba (1990) observed that worker may be working for himself in self-employment, generally assigning duties and responsibilities to himself and executing the tasks or be in paid employment in a government or non-government organization. Nwosu (2005) pointed out that "no meaningful economic development can occur in the 21st century without workers because they are providers of human resources required for such development. The human resource is the labour required in production".

In human society, people seek for employment in various jobs or works. Based on division of labour, a person settles for a particular work. In engaging for a work, people have involved themselves in works involving the use of medicinal plants in researches and production. People have used the knowledge of biological activities and/or chemical constituents of plants for the discovery of new therapeutic agents and obtaining useful information that discloses new sources of such economic materials as essential oil, glycosides, saponins, tannins, resins, and precursors for the synthesis of complex chemical substances (Iwu, 2000).

Medicinal plants provide employment for medical practitioners especially the people we refer as traditional doctors. The traditional doctors are involved in traditional medicine. The use of traditional medicine is very common in Africa and probably in other developing countries (Ayoola, 1979). Traditional medicine is concerned mainly with curative practices. Medicinal plants are very

vital in sustaining pharmaceutical works needed for production of drugs used in health care delivery using orthodox (modern) medicine.

It can be said that knowledge and use of medicinal plants creates employment opportunities in medical fields. It is an axiom that "the essence of employment is provision of income and prevention of idleness. Income is needed for economic satisfaction" (Nwosu, 2005). A worker keeps himself or herself busy and so, avoids idleness which leads to social vices. Economic development is usually inhibited by social vices. Nwosu (2003) pointed out that "good moral life is means of societal or national development. No nation can progress effectively under moral degradation". Based on a research made, Mba (1990) noted that workers work for money to enable them maintain themselves, train their children and build houses.

Effectiveness and efficiency of workers depends on physiological fitness (power, ability, or strength to work) and psychological fitness (willingness, interest, and attitude to work). It is only when workers are physiologically and psychologically sound that they can make impacts in socio-economic development. However, the use of medicinal substances from plants enables the workers to be of good health and mind.

Using Medicinal Plants for Promotion of Indigenous Technology

The issue of nation-building calls for development in indigenous technology. Nwosu and Nnabuenyi (2005) noted that "indigenous technology deals with the use of available local resources (both material and human) in creation of materials or devices for solving human needs". A nation that wants to advance and be self sufficient needs to tap her raw materials and process them into finished goods.

Promotion of indigenous technology can be achieved by using the medicinal plants in our environment. Existence of medicinal plants has brought about "traditional art of healing" or "herbal medicine" which involves the preparation of crude extracts and their administration to patients. Essman (1984) defined herbal medicine as, a subject that incorporates botanical knowledge and practice, whether explicable or not, used in the diagnosis, prevention or elimination of physical, mental and social disease, which may be based on past experiences and observations handed down from generation to generation verbally or in writing.

Fortunately., Nigeria has many natural resources, which include medicinal plants, for her technological development. Using medicinal plants, Nigeria can evolve a truly Nigerian technology for production and consumption of her medicinal goods and services. Nigeria ought to be exporters of medicinal products and services and not to depend heavily on their importation.

By focusing on indigenous technology, researches can be made on how to improve the usefulness of medicinal plants. It is a fact that if a plant is useful, it can be eaten, turned into healing medicine, made into a valuable product. To appreciate the technological value of medicinal plants, traditional medicine should no longer be surrounded by a lot of secrecy and fetish ceremonies. Care should be taken to ensure that social structures and attitudes do not cause the rejection or loss of such local knowledge concerning medicinal plants and their products. In fact, the loss of information and skill on the use of medicinal plants, carefully and painfully acquired by process of trial and error over the centuries, is a setback in indigenous technology.

Indigenous technology in the use of medicinal plants can be improved through technology education because most people who try to practice indigenous technology are not well informed or educated.

Application of Medicinal Plants in African Traditional Medicine

A great deal of traditional medicine in African society involves the application of medicinal plants. However, a lot of arguments have emerged concerning the recognition of traditional medicine. Those who argue against its recognition base their contention on the simple reason that alternative medicine is not founded on scientific analysis and as such, there can be no yardstick for the measurement of its efficacy (Okafor, 1979)

As practiced in traditional or folk medicine, some people (at least ten percent) in Africa rely in the use of medicinal plants for their health needs (Okafor, 1979; Ayoola, 1979). It is a truism that a greater percentage of our population live in the rural areas while ironically, our health institutions are concentrated in the urban areas. Therefore, rural dwellers rely on traditional medicine

and see it more handy for their health needs.

Okafor (1979) described African traditional medicine as the total body of knowledge and techniques for preparation and use of substances; measures and practices for diagnosis, prevention or elimination of imbalances in physical, mental or social well being. It is a knowledge and skill, whether explicable or not, that is based on socio-cultural and religious bedrock of African communities and is found on personal experience and observation handed down from generation to generation, either verbally or in writing. African traditional medicine is a distillation of African culture, but the spirit that moves it is that shared by all forms of medicine: provision of health to man. Traditional medicine, using medicinal plants, concerns itself mainly with curative practices. These practices are carried out by the native doctors. The native doctors is believed to work with supernatural power for he is seen as one who get the support of the gods in the use of medicinal plants for the curing of numerous problems affecting his clients. He can cure diseases which the Africa people consider to be adversely imposed upon them by the outside forces they do not comprehend. Some traditional measures are difficult for scientists to accept bill the underlying concept of "the intangible" deserves some consideration. These intangible forces, which may be termed protective and restorative forces, are as difficult to generate as the force of hypnosis and which must be sustained by the inductive power of the traditional healer (Mabey, 1977).

Recommendations

For sustainable appreciation of the value of medicinal plants for nation building, the followings are recommended:

- 1- Our scientists should rise up and ascertain the veracity of medicinal plants in health care delivery with more researches. Approval to the usefulness of medicinal plants is a means to alleviate the suffering of people and sustain good health especially in Africa.
2. The traditional medicine practitioner should work hand in hand with the scientific researchers for the production of more purified and scientifically acceptable drugs that are affordable and readily available. Such work can encourage promotion of indigenous technology needed for nation building.
3. The general public should desist from actions that lead to removal of natural resources like medicinal plants in a wasteful manner. For example, bush burning, exposure of lands to erosion should be avoided.
4. Individuals, organizations and government should make impact in promotion of knowledge and skills in the use of medicinal plants by providing quality education to traditional doctors, equipping schools and research centres with enough and quality scientific equipments.

Conclusion

Medicinal plants are vital plants for many people rely on them to meet primary health care needs. Although, modern medicine may be available, herbal medicine has often maintained popularity for historical and cultural reasons.

Socio-economic value can be obtained from the use of medicinal plants for people (like traditional medical doctors, pharmacists) involve themselves in various medical works. The question of recognition of traditional or alternative medicine should not be allowed to suppress a more fundamental question of whether that form of medicine has ever been found to be useful.

A deeper focus on the use of medicinal plants creates an avenue for promotion of indigenous technology. African society is blessed with numerous medicinal plants and so effective use of the plants will elevate Africa society like ours (Nigeria).

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