

Establishing the Efficacy of Traditional Medicine in Accordance with Modern Scientific System

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ABSTRACT

Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being. In the last decade traditional medicine has become very popular in Cameroon, partly due to the long unsustainable economic situation in the country. The high cost of drugs and increase in drug resistance to common diseases like malaria, bacteria infections and other sexually transmitted diseases has caused the therapeutic approach to alternative traditional medicine as an option for concerted search for new chemical entities (NCE). The World Health Organisation (WHO) in collaboration with the Cameroon Government has put in place a strategic platform for the practice and development of TM in Cameroon. This platform aims at harmonizing the traditional medicine practice in the country, create a synergy between TM and modern medicine and to institutionalize a more harmonized integrated TM practices by the year 2012 in Cameroon. An overview of the practice of TM past, present and future perspectives that underpins the role in sustainable poverty alleviation has been discussed. This study gives an insight into the strategic plan and road map set up by the Government of Cameroon for the organisational framework and research platform for the practice and development of TM, and the global partnership involving the management of TM in the country.

1. Introduction

Cameroon has about 90% of the African ecosystems which includes; the Sahelian, Sudan, humid tropical forest, afro mountains, coastal and mountain eco-regions. There is a significant diversity of flora and fauna and ranks the 5th in Africa after the republic of Congo, South Africa, Madagascar and Tanzania. This rich biological biodiversity is associated with the diversity of the ethnic groups in which each contributes a unique ethno pharmacopoeia and to Cameroon a national therapeutic patrimony, which is the richest in Africa.

2. Priorities for promoting use of TM in cameroon

In Cameroon the advent of economic crisis in the late 1980 has created a shift towards consumption of medicinal plant as an increasing practice in herbal medicine. In order to integrate TM into the national healthcare system of Cameroon the WHO in collaboration with the Cameroon Government has put in place strategic route map for TM integration by 2012. The limited scientific evidence about TM/CAM's safety and efficacy as well as other considerations make it important for governments to step into the TM practice, research and development within the frame work of integration into the primary, communal and the national health care system in Cameroon.

3. Traditional Medicine platform in Cameroon

The focus of the implantation strategies for the promotion of traditional medicine research, development and practice in Cameroon is as follows;

1-Formulation of national policy and regulation for the proper use of TM/CAM and its integration into national health care systems in line with the provisions of the WHO strategies on Traditional Medicines; 2-Establish a regulatory mechanisms to control the safety and quality of products and of TM/CAM practice; 3-Create awareness about safe and effective TM/CAM therapies among the public and consumers; 4-Cultivate and conserve medicinal plants to ensure their sustainable use. 5-Develop national policies on the evaluation and regulation of TM/CAM practices; 6-Create a stronger evidence base on the safety, efficacy and quality of the TAM/CAM products and practices; 7-Ensure availability and affordability of TM/CAM including essential herbal medicines; 8-Promote therapeutically the sound use of TM/CAM by providers and consumers; 9-Document traditional medicines and remedies

4. Interest in medicinal plants and phytomedicines in Cameroon

Although the main consumers of medicinal plants in Cameroon have been, until recently, the local population, the field has started to attract a number of local and foreign researchers who have discovered the value of traditional healing. There is active development in TM most especially in the West and Northwest regions of Cameroon where there is an amalgamation of tradi-practitioner to create strong regional associations and organs of operation. Early studies were undoubtedly on ethno-botanical survey and exploration, but since the 90s' the fields of study have expanded to include ethno-pharmacology, phytochemistry, chemistry of natural products, organic synthesis and the usefulness of medicinal

and aromatic plants. This interest has increased over the years because of the effort the state has put into natural product research through the University post-graduate research programmes and the Ministry of Research and Innovation's natural products research and development. Some selected medicinal plants for the treatment of malaria under ongoing research for new chemical entities have been shown in figure 1, the destruction of medicinal plants through abusive harvesting is also highlighted.

Plants Used For Malaria Treatments



Figure 1 Some selected medicinal plants used from malaria treatments



Figure 2 showing destruction of the forest by abusive harvesting

The pharmaceutical industry has come to consider traditional medicine as a source for identification of bio-active agents that can be used in the preparation of synthetic medicine. However, they are not looking to study the rare plant species; they want to test the most commonly-used species. The valuable medicinal plants are those with the longest track record of use in most or wider locations or distribution in Cameroon. Many of the more commercial pharmacologically interesting medicinal plant species in use around the world are employed in more than one community, and often in more than one country, for multiple uses.

5. Cameroon Traditional Herbal Medicine and Public Health Sector

The majority of African countries and Cameroon in particular, as the case may be, are currently geared towards the privatisation of State corporations and government services. This includes the privatisation of large hospitals where goals of financial independence have precluded the dispensation of free care and free medicine. Analysis of various national policies related to public health and medicinal plants usage has highlighted some important issues. Among them is the failure to meet basic health conditions due mainly to the following factors in Cameroon: inadequate decentralisation of health services; isolation of some rural communities; and persistence of traditional beliefs regarding pathology. This has led to underutilisation of available services in health centres and high cost of services provided by hospitals in relation to the income of the rural population. Another issue that can be singled out is the absence of local pharmaceutical production. Since the '60s since Cameroon had its independence, the country has not been blessed with a single Drug discovery owned by the state. Purchase of pharmaceutical imported drugs lead to a heavy loss of state revenue, and the development policy has not been focused on available local resources (mainly medicinal plants). The current trend of government policy in Cameroon to pay for the health care services shows the inability of government to ensure provision of quality services at an affordable price to everyone and especially to the most vulnerable groups.

In the rural areas of Cameroon, one sometimes travels for several days before finding the nearest dispensary and pharmacy or health clinic for consultation. In addition to losing working days, transport fares the high cost of medicine must also be taken into consideration. In the past few years, Cameroon joined most of the developing countries in recognising that they do not have the means to provide comprehensive health care like some industrialised countries, and have started taking more interest in promoting the use of traditional remedies.

In order to solve the problem of drug shortage or high cost in part, many health-oriented ministries are now encouraging the use of local medicinal plants for disease treatment. The Cameroon ministries of health have established departments of traditional pharmacopoeia within the ministerial organigram so as to implement this policy of TM. Education ministries, the Ministries of Forestry and Wildlife, Research and Innovation have started to introduce conservation and bio-diversity of medicinal plants into their school programmes and the general sensitization of the population. The recent establishment of the Ministries of Environment and Nature Protection and the creation of National Parks, and mapping of protected forest areas, in various parts of the country also demonstrates the political will of the Cameroon governments towards the conservation of nature and the sustainable management of bio-diversity.

The lack of health care systems in rural areas forces local people to treat themselves, either by using medicinal plants or by buying high-cost medicine in the rural markets, or still further, going for cheap road side medication, predisposing themselves to health dangers caused by the unknown source of these poor medications. In the rural areas,

as a whole, people begin by treating themselves before going to a traditional practitioner or a modern doctor. Medicinal plants are used at an early stage of the disease at low cost and conveniently replace the indiscriminate consumption of drugs without prescription.

Many Cameroonians today, especially the rural people and the urban poor, rely on the use of herbal medicine when they are ill. In fact, many rural communities in Africa still have areas where traditional herbal medicine is the major and in some cases the only source of health care available. Thus there can be no doubt about the acceptability and efficacy of herbal remedy within African society.

6. How the Western Medical Systems has declined in Cameroon

In some urban areas the average waiting time at a hospital or clinic to consult a doctor can be as much as 8 hrs. - The staff is poorly trained and unmotivated. Many staff members believing they hold superior knowledge, treat patients inconsiderately. -Patients are frequently not told the nature and cause of their illness. -There are inadequate technical services leading to poor quality care. -The treatment costs in clinics are too much, even for state run hospitals and clinics, where consultation and treatment is assumed subsidized. The doctor to patient ratio is approximately 1: 150 per day in the national territory. -Government spends a large proportion of the Per Capita gross national product on western health care. -Treatment is divorced from the patient's culture; family and community. Patients are removed from the family and community, stripped of their identity and forced into a sterile hospital setting. The treatment only addresses a patient's biological manifestation of the illness and does not attempt to heal spiritual aspects of illness. This is the place and the role of traditional medical practitioners, in contrast with western medicine, which is technically and analytically base.

It is difficult to characterize a typical Cameroonian healer, because there are many different kinds, and the cultural diversity and complexity of their practices are encyclopaedic, when considered in detail. Most Cameroonian healers have in common, however, that they describe and explain illness in terms of social interaction and that they act on the belief that religion permeates every aspect of human existence.

Their concepts of health and illness are more comprehensive than those of biomedical doctors. Other prominent features of traditional healers are a deep personal involvement in the healing process, the protection of therapeutic knowledge by keeping it secret, and the fact that they are rewarded for their services. The social context of the therapeutic process requires reciprocity and this payment contributes to the effectiveness of the treatment.

7. Traditional Practice fee in Cameroon

Over the years, the types and methods of payments for traditional healing have changed. In urban settings, practitioners are increasingly demanding monetary payments. Some healers have learnt their trade by undergoing treatment

themselves as a patient. The magical inclination of Cameroonian traditional medicine takes nothing away from the fact that some of the healers now are days, are experienced and skilled in biomedical components of their profession. They have an array of biomedical methods at their disposal, ranging from fasting and dieting to herbal therapies and from bathing and massage to surgical procedures. Some of the practitioners are graduates who have undergone third level education in the sciences and biomedical sciences. Through hardship, economic downturn and lack of employment in state structures, some educated young Cameroonians have resulted in learning through workshops and short training some ethno-botanical and ethno-pharmacology techniques of medicinal plants. There has been a tendency in Western medical journals to play down the expertise of African healers by predominantly presenting the iatrogenic risks of their traditional therapies. It cannot be denied, of course, that sometimes there is genuine cause for concern. It would be unfair, however, to pass judgement on the biomedical merits of African traditional medicine on the basis of its worst outcomes. Instead, African healing should be considered with a sympathetic eye and with emphasis on its best biomedical manifestations. Urbanization has increasingly concentrated large numbers of Cameroonian traditional healers and practitioners in an environment where there is stronger competition with the Western medicine. Traditional healing is flourishing in urban settings because it adapts itself to these new surroundings. In other words, Cameroonian traditional medicine is more than a static and inflexible institution, which cannot survive the test of time. When a Cameroonian patient is taking an herbal infusion, he expects to benefit from the life force of its ingredients and from the power of his ancestors or any other spirits which may have been invoked. This spiritual significance is more important than the bioactive properties of the remedy.

8. WHO-Cameroon collaboration to valorize TM

The WHO and the Government of Cameroon has signed a convention to draw up a strategic plan for the valorisation of TM in Cameroon. However, despite this programme in progress, the sector is plague with numerous constraints relating to the development of traditional medicine that can be summarised as follows: The lack of institutional support for production and dissemination of key species for cultivation; The low prices paid for traditional medicinal plants by herbal medicine traders and urban herbalists; Lack of appropriate technology for post-harvest and pre-processing purposes adapted productively and effectively; Insufficient documentation and scientific experimentation for verification of the herbalist's claims; Lack of preservation of medicinal extracts for extended shelf life. The National Strategic Plan for the development and integration of Traditional Medicine in Cameroon and other member countries by the WHO in general and the Africa Union in particular, adhere to the recommendation of the organization to valorise traditional medicine. The political engagement of Cameroon is strongly translated by the official recognition of TM as one of the three main health sectors. The main players of the government convened to put a strategy for the development and integration of traditional medicine in the health system within the framework of the millennium development goal in

reducing poverty, morbidity and mortality and sustainable health care development. Medicinal plants are sold locally as plants parts, in powder, dry bark of trees in solutions as shown in Figure 3.

Commercialization of medicinal plants



Figure-3 Medicinal plant products on sale in local markets in Cameroon

9. Organization of Health Care in Cameroon

The health system in Cameroon is organised in three levels, represented in the form of pyramid. At the summit is the Central level, the intermediate and the operational level at the base. Three types of structures are integrated into each level namely: the administrative and finance healthcare and community participation (dialogue structure)

The Central Level: The administrative and management structures are represented by the minister of Public Health. The health care structures consist of the three general and reference hospitals, a university teaching hospital and four assimilated central hospitals.

The Intermediate Level: The administrative and management levels consist of the ten regional delegation of public health. The health care structures consist of nine regional hospitals and affiliate structures and the communication structures are made of the regional management commission or regional funds.

The Operational Level: The administrative structures and management structures consist of 173 District health services. The existing structures have 154 district public

hospitals, 87 private hospitals, 148 divisional health centre, 1700 health centres and 620 private health centres

The Traditional Medicine Sub-Sectors: Currently Cameroon have at all levels, a non -structured or poorly organized organogramme of TM.

The conference of Regional Governors organized in 1976, by the Ministry of Public Health for putting an Organizational structure to valorize TM permitted the establishment of 3 organs in Operation such as:

1-The National Commission for TM, in charge of helping the government in the definition and exploitation of TM;

2-Permanent committee of TM in charge of coordinating the research activities and practice of TM; -3-The Medical Institute for the study of medicinal plants in charge of operational research. The Political engagement was validated by the ministerial decision No 031/D/MSP/DS/BT of 31 July 1979 creating and organizing the TM sector within the jurisdiction of the Ministry of Public Health.

10. Conclusion

Traditional medicine occupies a very important place in health care in the world in general, in Africa and Cameroon in particular: In Cameroon the process to effectively develop TM is in progress due to a favourable integrated environmental, national and international framework set up by the Government. The Governments should establish the necessary institutional and financial support to promote the potential role of herbal medicine in primary health care delivery. Priority should be given to the development of herbal medicine by means of the following measures: -inventorying and documenting the various medicinal plants and herbs which are used to treat common diseases in each region of Cameroon; -establishing local botanical gardens for the preservation of essential medicinal herbal plants in different parts of each country, in order to ensure a sustainable supply of safe, effective and affordable medicinal herbs; -setting up testing laboratories with adequate facilities for the assessment of the efficacy of medicinal herbs, and establishing dosage norms for the proper administration. If the Cameroonian society is out to fight poverty by exploring our natural environment, then research should be focused on the use of plants for our welfare for it is said "a healthy man is a wealthy man".

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