

TRADITIONAL HERBAL INFORMATION MANAGEMENT AND TRANSFER FOR COMBATING COVID-19 PANDEMIC

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Abstract

The paper examines the traditional herbal information management and transfer for combating COVID-19 pandemic currently troubling the world. The significance of preserving the traditional medicine cannot be stressed as it has proved to be a worthy solution to a variety of ailments across all human societies from time immemorial. Acquisition, management and transfer relevant information pertaining to traditional medical practices are very vital for globalizing the entire process of finding a cure to any ailment, especially the COVID -19. The emergence of coronavirus COVID 19 was discussed with efforts made by traditional medical practitioners towards finding a lasting solution to the problem of the scourge which is yet to be realized. There is the need to partner with the traditional herbal medical practitioners with a view to putting an end to the COVID 19 scourge. Hence it was recommended that the government of each country should encourage the traditional herbal medical practitioners by allowing them to contribute their own quota to producing drugs and disseminate information that will halt the pandemic.

Keywords: Traditional Herbal, Information, Management, Combating Covid-19

Introduction

The Traditional Herbal Medicine (THM) involves the preparation of biologically active natural products which are made up of herbs or herbal materials such as leaves, barks and roots of trees. Some recipes may contain materials such as fungal and bee products, and these are used for the maintenance of human health and management of different types of ailment. The benefit of THM as a means of health care hinges largely on correct and adequate knowledge, and experiences; while misuse and misunderstanding have been traced to the knowledge gap in the herbal medicines particularly as it relates to the merits, benefits and demerits by the primary health care professionals (Bodeker & Burford, 2007).

The attraction to traditional herbal medicine is very likely to continue to increase across the entire globe for various factors: the reasons for the upsurge in the use of traditional herbal medicine (THM) include: Personal preference, perception of safety, easy accessibility, relatively low cost, perceived efficacy of treatment and the fact that the THM is utilised as the last resort in the management of certain ailments that defy the application of conventional (orthodox) drugs (Fasinu, Bouic & Rosenkranz, 2012).

In stressing the place of THMs in health care system in Nigeria, the minister of state for health (Osagie, 2018) stated that "Nigeria has over 8,000 plant species with potential benefits in ethno-medicine or ethno-pharmacy, and that up to 70% of Nigerians use traditional medicine either wholly or in combination with modern drugs".

Importance of Traditional Knowledge in Nigerian Society

In the assertion of Fagbola (2013), the term traditional people is in itself a contested category of people. The former refers to culturally distinct ethnic group with a different identity from the national society that draws existence from local resources and are politically non-dominant. Rural communities people and

nations are those having historical continuity with pre-invasion and pre-colonial societies that developed on their sectors of the societies now prevailing in those territories, or parts of them.

Traditional peoples of the world possess an immense knowledge of their environment based on centuries of living close to nature. Living in the richness and variety of complex ecosystems, inhabitants have an understanding of the properties of plants, animals, the functioning of ecosystems and the techniques for using and managing them, which means particular and often detailed in rural communities in developing countries, locally occurring species are relied on for many, sometimes all foods, medicines, fuels, building materials and other products. Equally, paper knowledge and perception of the environment and their relationships with it are often important elements of cultural identity. Furthermore, the traditional knowledge is more than simple compilation of facts drawn from local and remote environments. It is a sophisticated system of knowledge acquisition from centuries of wisdom and experience. It grows and changes with new information. Indigenous knowledge varies in its contents and style which have a great deal in sustaining the planet (Ragassa, 2013).

African Indigenous Knowledge can be used in resolving current developmental problems. For example, the United Nations (UN) and its organs such as UNESCO, World Health Organization (WHO) and the World Bank have since recognized the place and relevance of Indigenous Knowledge in development and have been advocating for its use in modern practices. It was due to the recognition of the value and relevance of Indigenous Knowledge that the UN adopted Agenda 21 of the Rio Earth Summit to cover indigenous practices and knowledge in natural resources, environmental management and healthcare services (UN:1992). Similarly, Arowolo, (2012) maintained that the modern challenge to humanity is to adopt new ways of thinking, new ways of acting, new ways of organizing itself in society, in short, new ways of living. According to him, the new way is in the use of traditional knowledge to promote the paths of development. To this end, documentation of traditional knowledge in Nigeria is important because it plays important role in identifying traditional practices that are useful with the view to make the knowledge accessible so that all can benefit.

In addition, traditional Knowledge in medical practices is gaining attention because it has value in solving health-related problems of many communities in the world. (Hillenbrand, 2006) reported that in China, traditional herbal medicine played a prominent role in the efforts to contain and treat Severe Acute Respiratory Syndrome (SARS). They also noted that 80% of African populations use some forms of traditional herbal medicine. The worldwide annual market for those products approaches US \$60 billion. This resulted in worldwide interest among countries and industries on investment in traditional medicine where industries are investing millions of dollars on promising medical herbs and novel chemical compounds. This suggests the need to document and make accessible the knowledge with a view to enhance its use in healthcare delivery services so as to improve the life and living standard of the people.

Methods of Acquiring Information for Traditional Medical Practice

Information acquisition presupposes that knowledge already exists and that there is a desire to capture that knowledge because of some perceived benefit for the acquirer. An organization might, for example, want to capture the knowledge of another firm by acquiring the firm, hiring employers from that firm, request for engineering one of their products, reconstructing information by examining papers and articles published by the firm because it is perceived that there is important information to be acquired (Umoh & Amah, 2013).

The major sources of professional knowledge in traditional medical practice are through their fathers, masters, healers, relatives and mothers. Other sources are from friends and colleagues of traditional medicine. This implies that, all the practitioners claimed that knowledge of traditional medicine is handed down through transmission from one generation to generation (Mafe, 2015). Informal communications are also frequently used for obtaining information. This means that, people tend to use readily accessible

sources more than other sources. Knowledge may not be acquired by naturalistic trial and error, but through direct revelation through conversation with the creator, spirits or ancestors.

Knowledge acquisition could be viewed that knowledge already exists and that there is a desire to capture that knowledge because of benefits for the acquirer, for instance a company might want to capture the knowledge of another firm by acquiring the firm, hiring employees from that firm, reverse engineering one of their products because it is perceived that there is important knowledge to be acquired. According to Umah and Amah (2013) knowledge acquisition means the development or creation of skills, insight and relationships. Effective knowledge acquisition depends on user relationship management. Information technology can be used in the context both as a means of collecting feedback and enhancing communication and cooperation between partners. It is also used to gather data and information regarding discussion of new discoveries, patronage of customers and so on, which can be used to create new knowledge in organization.

Frost (2014) maintained that Knowledge acquisition can be said to be data and information which can be processed and used to create knowledge. For instance, data on new herbs, it's name and functions, then how to people use it and the positive results could be analyzed to create knowledge that could improve the use and practices. He further stated that knowledge acquisition can also include data and information which can be processed and used as building blocks for new knowledge creation. This implies that in order to satisfy needs of users and to be properly sound it is high time for traditional herbal medical practitioners to decide new method of knowledge acquisition in addition to the existing ones.

The Importance of Preservation of Traditional Medicine

Preservation of traditional herbal medicine is very necessary because of its usefulness and sustainable development in the country, aims to recognize, respect, protect and promote the practices and expressions of traditional medicine in all specialists, the purpose of this law is noted for promoting the use of traditional medicines based on derivations of plants, animals and minerals or any combination thereof, items of quality, safety, accessibility and accountability (Busari, 2011). The traditional role of the library is to preserve knowledge from all facets of human endeavors. The library acquires various types of records of information that emanate as a result of various interactions in social, economic, educational, cultural and political sources and also preserve the records that are already in existence. Going through this assertion, it can be deduced that the record of information by the indigenous traditional herbal medical practitioners, be it book or non-book materials, can be given to the libraries for proper preservation. Thus, this can be referred to by the students, and researchers can make reference to them and pass them from generation to generation. Therefore, knowledge acquired would be transferred easily without a waste.

Preservation of herbal resources, protecting the planet's natural resources is essential for the long-term future of Chinese medicine. In ancient times, wild plants were widely used in Chinese medicine, and many herbs were primarily collected from wild sources. According to the World Health Organization (WHO) "as many as 80% of the world's population depends on traditional medicine for their primary health care needs" (Fagbola, 2013). Traditional herbal medicine is the sum total of all knowledge and practices, whether explicable or not, used in diagnosis, prevention and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observations handed down from generation to generation, whether verbally or in writing, (Chavunduka, 2017).

Records from information resources could easily be lost in case of disasters such as man-made and natural disaster; for example: fire, flood, war, mutilation, theft, insects, rodents attack and micro-organisms as well as deteriorate as a biological organism there by losing the information they contain. As a result of this, preservation programme is put in place to protect information resources. According to Joan (2010) Concise Dictionary of Library and Information Science, "preservation" means preservation or being

preserved while conservation means the act of keeping free from depletion/decay or injury especially works of arts.

Traditional medicine is not what should be neglected if the developments of the traditional medical system are to be achieved. It is therefore necessary to protect the indigenous traditional herbal medical practitioners from fading away. Dorai (2012) noted that one of the most notable features of medicine in the latter part of the preceding century were vigorous criticisms against traditional systems of healthcare delivery, almost to the point of suffocation. The consequences are that vital knowledge that might contribute to the future survival of man and animals are gradually being lost. Equally, the gradual extinction of indigenous knowledge system in African communities including traditional herbal medical knowledge (TMK) may stem from the fact that individuals, usually elders, in the communities are the repository of traditional medical knowledge will be lost with the death of the individual. Some solutions have been proffered to arrest this negative trend.

One of such is the resolution by world health organization Executive Board held in January 2009 which emphasized the needs for national policies to support integration of Traditional Medicine into health system (Economic and Social Councils, 2009). The prevalent theme of the meeting was ensuring that traditional herbal medical knowledge is not lost (preservation) and that it preservation of Traditional Medical knowledge therefore involve developing systems that will ensure the continued existence and viability of traditional medical knowledge as well as passing them on to future generation, (Anyaku, Nwafo & Eneh, 2015)

Method of Transferring Information among Traditional Medical System

Knowledge transfer is the deployment of knowledge, expertise, skills and capabilities from universities, as the academic knowledge, to companies or organizations such as non-government organisation. Commercial and industrial sectors and various non academic beneficiaries in needs of the knowledge (Hong Kong Baptist University, 2015) knowledge transfer refer to the mutual interaction that can take place for knowledge to move from one point to other. It occurs when an individual is willing to assist as well as to learn from others in the development of new competencies. The assistance referred to here, is the area of collaboration either within outside the organization (Animashaun, 2008). Proper method of knowledge transfer among organizational members have several benefits. It among others. It frees information, enhances social interaction, eliminates or reduces duplication of efforts and forms the basis for problem-solving and decision-making (Soewu & Ayodele, 2009).

Furthermore, free access to information facilitates knowledge acquisition and contributed to the development of the people in the society. Udensi (2010) opined that, it is only when available information is easily accessible that information utilisation is possible. Therefore; Africa information resources, are available in different forms in the universities that have them in the language, and in the different formats that can easily be attracted to its usage. The study asserts that the poor and development rate of Africana literature is not without reasons, for a long time was on European Literature. One of the reasons for poor recognition accorded to Africana could be the fact that in those colonial years, the educational system did not emphasize the Africana culture. They were taught by English teacher and was given English books to read which had foreign culture at the background. These have affected the perceptions of library users, who in turn influence the choice of collections in the library. However, indigenous traditional herbal medical is not left out in this challenge.

Indigenous knowledge system is defined as the accumulation and dissemination of information in this form of shared environment knowledge, beliefs, rules and techniques for productive activities (Adeshina & Olatokun, 2014). This means, it may be related to common practice seen in communities. Conventional approaches imply that development processes always require technology transfer from locations that are perceived as more advanced. This often Ethiopia food security programme has illustrated that the

consequences of if local knowledge is not considered-adequately. In this wise, one can deduct that integration of indigenous with foreign knowledge is what is needed for the success of a project.

Knowledge transfer in the past referred to commercialization, but the new term is knowledge transfer and know-how in the arts, education, humanities and the like. The ultimate goal of knowledge transfer is to implement impacts on organisations knowledge and aspects so as to generate strategic innovations. Apart from seminars and public enlightenment. Knowledge transfer is a very broad range of activities, including research work, collaborative research, consultancy services, facilities and testing, continuous professional development; training, work force development, social, cultural, and testing, community engagement (Hong Keng Baptist University, 2015).

Knowledge transfer and knowledge sharing are applied and used interchangeably to mean the same (John, 2008). In view of the foregoing, it is very clear that knowledge transfer is very important in all disciplines as stated above, including on the culture which is related to research on new discoveries and association of community need to be carried out by traditional herbal medical practitioners as part of modernisation.

Ibrahim *et al*, (2016) studied medicinal plants and the perception of plant endangerment by the traditional herbal medical practitioners of Nasarawa State, Nigeria. A pilot study was conducted to document the medicine plants used by traditional herbal medical practitioners (TMPS) and those they perceived to be scarce or endangered in Nasarawa State, Nigeria. Sixty traditional herbal medical practitioners were interviewed orally with the use of structured questionnaire. A total number of 120 medicinal plants species were identified from the 150 specimen surveyed for treatments of various ailments. Forty eight percent (48%) of the respondent did not agree that wild collection of medicinal plants without replacement can increase extinction risk of such plants of the medicinal plants mention by the traditional herbal medical practitioners to be scarce. Only 23 were identified taxonomically and 75% of them are trees, while 3% are herbs the study reveals the urgent need for raising of awareness level of the traditional herbal medical practitioners on plant endangerment, training on good collection practice, sustainable collection, and as well as sensitisation on sustainable biodiversity conservation practice.

The study revealed that the growing role of traditional medicine practice in the health care delivery system of most countries of the world cannot be over emphasized. Needless to say, more than 90% of the remedies used by the practitioners of traditional herbal medicine are medicinal plants based. The growing demand for these plants for medicinal use and the subsequent unsustainable harvesting, livestock browsing and infrastructural development has led to endangerment of some of the species. The findings are also useful to this paper since they deal with the role of the traditional medicine in the healthcare delivering system.

Investigation carried by Lemu (2013) on documentation and access to information on Hausa Indigenous Knowledge Practices in States of Northern Nigeria. He adopted survey research method to collect the data use in analyzing the problem investigated. Questionnaire, Interview and documentary analysis were used for data collection. The population of the study comprised traditional herbal medical practitioners who generated information on Hausa Traditional Knowledge in medical practices documentation agencies, research institutes and departments or units or University teaching or researching on aspects of the subject in any State of Northern Nigeria.

The study discovered that the major type of knowledge generated by Hausa Indigenous Medical Practitioners was knowledge on medicinal plants and herbs were recorded in response of 41 (14.2%) respondents. He also found that Hausa Indigenous Medical Practitioners categories the knowledge they generated by name of plants as recorded in responses of 72 (25.0%) respondents. He establish that the agency vested by law with responsibility for documentation of information on Hausa Indigenous Knowledge in Medical Practices Nigeria was the Nigerian Natural Medicine Development Agency

(NNMDA) as revealed in the responses of 17 (31.5) respondents. Ten of the respondents (18.5) responded that the method of providing access of information on Hausa Indigenous Knowledge in Medical Practices in States of Northern Nigeria was by publishing the information collected in books and journals, and newsletters.

The obstacle that were identified are: lack of worthwhile libraries to assist the documentation centers to manage the resources and larger chunk of the knowledge generated on indigenous knowledge in medical practices remained undocumented as a result of lack of identified indigenous knowledge sources by the agencies documenting the knowledge. Findings are related to this paper, since it will help in the area of identifying indigenous knowledge in medical practices to document. Therefore, it can be employed in the paper of place of traditional herbal medicinal information, dissemination, management and transfer in combating the corona virus (COVID-19) pandemic.

The library is saddled with the responsibilities of storing, managing and transferring information contained in these media for easy retrieval by users who are the traditional herbal medical practitioners. The medical science libraries serve as information resources, services, classes and tutorials to the medical practitioners. They provide the following services to their clients; digital library services, books and videos. Medical libraries can help their clients to search for their latest and greatest literature (Ibegwan, 2013). Other services provided by the medical science libraries are: document delivery, online standard, remote access to electronic journals, alerting services such as table of contents alerts: medical, libraries feed or customized search updates under the Selective Dissemination of Information (SDI) and provide training in online searching skills or critical appraisal techniques.

The Corona Virus Pandemic

The corona virus pandemic disease 2019 is an infection caused by severe acute respiratory syndrome corona virus 2 (SARS-COV-2). It was first identified in December 2019 in Wuhan, Hubei, China and resulted an ongoing pandemic across the world. The first confirmed case has been traced back to 17th November 2019 in Hubei. As of 25th July 2020, more than 15.7 million cases have been recorded across 188 Countries and territories, resulting in over 639,000 casualties (deaths). However, over 9.05 million persons have recovered (Wikipedia, 2020). The symptoms include, fever, cough, fatigue, shortness of breath, loss of smell of taste, sometimes no symptoms at all. Complication that can arise from corona virus are: Pneumonia, viral sepsis, acute respiratory distress syndrome (ARDS), Kidney failure, cytokine release syndrome (CRS).

The usual onset of the diseases is 2-14 days (typically 5) from the date of infection. The methods of diagnosis are RT-PCR testing and CT scan. The prevention methods include constant hand-washing, face (nose and mouth) coverings, quarantine, and distancing. Treatment of infected person is symptomatic and supportive. Such treatment is management in nature; which involves treatment of symptoms, supportive care, isolation and experimental measures. The World Health Organisation (WHO) declared the COVID-19 outbreak a "public health emergency of international concern" (PHEIC) on 30th January 2020 and a "pandemic" on 11th March 2020. Local transmission of the disease has occurred in most countries across all six WHO regions of the six WHO regions of the world (WHO,2020).

The Covid-19 spreads primarily when people are in close contact, and a person inhales small droplets produced by an infected person (whether symptomatic or not) coughing, sneezing, talking or singing. Hence the WHO recommends 1metre (about 3 feet), while the United State Control and prevention (CDC) recommends 2metres (about 6 feet) social distancing (WHO, 2020).

Effort of Traditional Herbal Medical Practitioners towards combating Covid-19 Scourge.

Efforts have been made (and are still being made) by the Traditional Herbal Medical Practitioners (THMPs) to have solution to the COVID-19 pandemic, by preparing herbal medicines to combat the

disease. It can be recalled that a form of herbal medicine was prepared by a medical practitioners based in Madagascar. The medicine was widely reported to helping a lot in combating the COVID-19 symptoms. Samples of the medicine were imported into Nigeria and reports, after several weeks of testing COVID-19 effectively has not been established.

Moreover, in Nigeria, several traditional herbal medical practitioners (THMPs) have claimed that they could find Local medications to treat and cure the disease. Hence in may 2020 a set of 19 local herbal samples submitted by the THMPs were received by the National Agency for Food and Drugs Administration and Control (NAFDAC. Out of this number, three were sampled and reserved for medical analysis. It was not reported yet the efficacy of three samples (National primary Health Care Development Agency, 2020).

The role of Traditional Herbal Medical Practitioners (THMPs) in forming partnership with the orthodox medical practitioners cannot be dismissed with a wave of the hand. This is because as reported by the UN, UNESCO and WHO, there should be partnership between the orthodox medical practitioners and the traditional herbal medical practitioners because of the value of natural ingredients in herbs. According to these international organisation, while the orthodox medicines mostly have some side effects, the natural herbs do rarely have any, and this is a major merit of herbal medicines over orthodox ones.

The procedure prescribed by the WHO entails subjecting the new herbal medicine into laboratory analysis, with a view to determined its efficacy/potency, ingredient, preparation, dose, side effects, and contra indication etcetera. Virtually all THMPs do make use of tree barks, leaves, fruits, seeds, roots, honey and some other natural items in their preparations Some of them have begun preparation of these local medicines in forms of tablets, syrup, capsules, and caplets. They also state on the covers the basic information such as the production date, expiry date, dosage (for children and adults), exemption of pregnant/lactating women (where necessary), etcetera, (Oluwole, 2020).

In view of all the above, the governments all over the world should allow the THMPs contribute their own quota to the COVID-19 pandemic solution. This will definitely pave way for a faster and efficient Corona-Virus free citizens all over the world.

This paper has examined the definition and important of traditional herbal medicine over the globe. It also examined several empirical studies pertaining to traditional medicine emphasizing is troubling the entire world; but the role of traditional herbal medical practitioners (THMPs) in assisting to combat it cannot be over-emphasised.

Recommendations

In view of this, it is recommended that:

1. The health agencies such as WHO should partner with the THMPs in finding solution to the COVID-19 pandemic;
2. The government of each country should set aside a sum of money for the THMPs for their own researches.
3. The government of each country should allow members of the THMPs to be part of the COVID-19 committee and other health-related bodies.
4. Annual budget should take into consideration development of traditional herbal medicines.
5. The THMPs as a body should publish monthly magazines to enlighten the citizens about their medical practices.
6. The process of making their various medicines must not be shrouded in unnecessary secrecy. Ingredient used and proportion of mixtures should be concisely stated.
7. Lastly dissemination of herbal information by means of the library, internet, newspaper, newsmagazines, journals and books should be intensified.

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