

Challenges Associated with the Documentation and Digital Preservation of Traditional Medicine by Traditional Health Practitioners in Katsina State, Nigeria

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Abstract

The Paper sought to explore challenges associated with the documentation and digital preservation of traditional medicine by the Traditional Medical Practitioners in Katsina State of Nigeria. Traditional Medicine is the indigenous and culturally developed response to the health problems that threaten man's existence. WHO therefore defines Traditional Medicine as diverse health practices, approaches, knowledge and beliefs incorporating plant, animal, and/or mineral based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being, as well as to treat, diagnose or prevent illness. Its reach encompasses ancient practices such as acupuncture, ayurvedic medicine and herbal mixtures as well as modern medicines. (WHO, 2002; 2000; 2022). On the other hand the Traditional Health Practitioner or Healer, as defined by the WHO (1976), is a person who is recognized by the community in which he lives as competent to provide health care by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious background, as well as on the knowledge, attributes and beliefs that are prevalent in the community, regarding physical, mental and social well-being and the causation of disease and disability. It was therefore recommended that in order to improve the use of traditional medicine and its heritage there is the need for proper documentation. Traditional medical practices are still shrouded with much secrecy, with few reports or documentations on the profession and on the other hand the adverse reactions of the medicine. In conclusion, documenting and digital preservation of traditional medical knowledge was considered the most important factor that would encourage patronisers to use the medicine and the ascendants' of the traditional medical practitioners to continue with the practice.

Keyword: Documentation, Digital Preservation, Traditional Medicine, Traditional Health Practitioners.

Introduction

The history of humanity is vast and amazing. Records, archives, publications, and other materials that establish documentary sources make the past famous. In the ever changing world, it is a necessity to record the past in an attempt to understand the present and to some extent predict the future for the purpose of planning and execution of policies towards societal development. (Lawal, 2017). Human past is splendid and full of wonders. The past is known by records, archives, books, and other library materials that constitute documentary sources. (Lakshminarasimhappa & Veena, 2014). The oral

tradition of passing Information is now being transformed and recorded in print and/or digital formats, especially with the application of modern gadgets known as information and communication technologies (ICTs). These processes as embarked upon by individual local professionals ensures the transfer of indigenous knowledge to the next generation, thereby sustaining and preserving traditional values in the areas of culture and tradition which include but not limited to traditional medicine and especially in the rural areas.(Lawal,2017). The documentation and digital preservation of traditional medical information should be given the needed attention in order to conserve traditional heritage.

Documentation

Documentation is primarily a process by which information is identified, collected, organized, registered or recorded in some way, as a process of dynamic management, storage, usage and, dissemination of information and knowledge transfer (Abbott, 2014). Documentation of indigenous knowledge about utilization of medicinal plants is important for a plethora of reasons. Firstly, it ensures that indigenous culture heritage is preserved from being lost for the use of both present and future generations. (Middleton & Buadoa, 2013)

Documentation is an amount of information on one or more related topics prepared for a specific purpose and presented as a unit used to explain some attributes of an object, system, or procedure.

Documentation According to Wikipedia the free Encyclopaedia is any communicable material that is used to describe, explain or instruct regarding some attributes of an object, system or procedure, such as its parts, assembly, installation, maintenance and use. As a form of knowledge management and knowledge organization, documentation can be provided on paper, online, or on digital or analog media, such as audio tape or CDs.

Through documentation we create and provide evidence and we convey information. Documentation is meant to provide an interpretive infrastructure to a whole organization. Referring to the various definitions of the term “Documentation” provided by Webster’s Dictionary, Third International Edition, let us especially focus on the following ones: “documentation is the provision of footnotes, appendices or addenda referring to or containing documentary evidence in verification of facts or in support of theory in a piece of writing” and “the assembling, coding and disseminating of recorded knowledge, comprehensively treated as an integral procedure utilising semantics, psychological and mechanical aids, techniques of reproduction for giving documentary information maximum accessibility and usability.”

Despite the significance of information documentation and digital preservation of traditional medical information it is observed that the number of Traditional Medical Practitioners in Katsina States of Nigeria are declining and there may be no proper documentation and digital preservation of their records due to many challenges that may be associated with the process and this may lead to losing vital knowledge with regards to such long standing vital and beneficial practices hence there is the need to investigate the trends and offer useful hints towards salvaging the profession .

The Nation Newspaper of August 2012 states that ‘lack of documentation, inadequate coordination of the practitioners’ activities, poor communication between the practitioners and their patients, secrecy of actual contents and/or difficulty in determining actual ingredients is setting the occupation back. Other drawbacks of traditional medicine as identified by Akinleye, (2008) include the absence of written records.

Emmanuel et al (2015) also states that, The traditional medicine practice systems of Katsina State Nigerian is bedeviled with the double throng challenges of inadequate documentation and lack of

clinical evidence bases for use since their uses by many cultures have not been properly and extensively documented, and various practice centres fall short of meeting the basic standard requirement for clinical practice.

As a result of lack of appropriate record documentation and digital preservation knowledge is being lost every day, culture and tradition is lost, unemployment for the children of the deceased traditional medical practitioners and other members of the society, increase death rate as a result of illness that could have been easily cured using traditional medicine, as well as rapid spread of diseases. These and more are the perceived negative consequences of lack of proper record documentation and preservation of such knowledge.

Digital Preservation

Information and Communication Technologies are predominantly used to carry out business activities and for transmitting information, thereby contributing to the need to manage and preserve the resulting records (Luyombya, 2010). In most cases, while great effort is being put into embracing the adoption and implementation of ICT tools through digital preservation, the same cannot be said with regard to creating a favourable environment for the documentation and digital preservation of traditional medicine records. Increased use of digital records has therefore presented additional and new challenges in these areas (Lemieux, 2016). Digital preservation is about a series of actions that need to be taken and managed to make sure there is continued access to digital materials for as long as necessary. (Velmurugan 2013).

Digital preservation by definition means a process by which data is preserved in digital form in order to ensure the usability, durability and intellectual integrity of the information contained in them. Digital preservation can be seen as the series of adopted management activities necessary to ensure a continued access to digital materials for as long as necessary (DPC, 2015). The general consensus seems to be that digital preservation involves the management of digital information over a period of time, it is ongoing, continuous and is far embracing than the mere attention to storage media. It thus involves a set of activities and processes that guarantee access to information and all kinds of records; scientific as well as cultural heritage that exists in digital formats (United Nations Educational, Scientific and Cultural Organization [UNESCO], DPC, Kirchhoff, Maemura et al cited Kalusopa, (2018). It involves the planning, resource allocation and application of preservation methods and technologies to ensure that digital information of continuing value remains accessible and usable (Day, 2006). It combines policies, strategies and actions to ensure access to reformatted and born digital content regardless of the challenges of media future and technological change. The preservation enterprise in the cultural heritage sector now functions largely within an environment of digital technologies, organised digital content and tools to find and use digital information (Conway, 2010). Digital preservation is informed by digital collection building but encompasses the acquisition, ongoing maintenance, periodic transforming and persistent delivery of digital assets. Atkinson, (2005) predicts that the outcome of digital preservation actions will be “new special collections, which like its traditional counterpart, will be very expensive and will be warranted for only a small, selected subset of publications. Digital preservation is a process and activities which stabilize and protect reformatted and digital authentic records in forms which are retrievable, readable and usable overtime (National Archives & Records service of South Africa, 2016). In the digital world, preservation must be concerned with entire technological systems, not one or

another component such as a film or a storage disk. Digitization is characterised by multiple subsystems (scanners and transmission devices) (Council on Library and Information Resources, 2014).

Traditional Medicine

Traditional medicine has a long history; African traditional medicine is as old as nature itself and has been in use for centuries in the prevention, treatment and management of many acute and chronic diseases. (Oguntibeju OO, 2019). It is holistic in approach involving the body and mind; usually diagnosis is made, followed by treatment which is based on psychological foundations prior to prescribing medicines (Mahomoodally, 2013). On Islamic perspectives it is believed that Allah has always provided us with trees for shelter, plants for nourishment, and flowers for healing. He also says, "O men! Eat the lawful and good things out of what is in the earth, and do not follow the footsteps of the Shaitan; surely he is your open enemy." (Surat Al- Baqara: 2:168).

The Prophet Muhammad laid down the foundation for a social order in which every member of society was advised to maintain a healthy life, physically, psychologically, and spiritually. No aspect of life was to be disregarded. Prophet Muhammad PBUH had a firm belief in the existence of a cause and a cure for every disease and that was described in many prophetic hadith such as: "Make use of medical treatment, for Allah has not made a disease without appointing a remedy for it, with the exception of one disease, namely old age." Narrated by: Abu Dawud, Sunan Abu Dawud. There are many Prophetic hadiths in Bukhari, Muslim and others that show that people were accustomed to go to the Prophet regularly and tell him about their ailments. He would advise them to resort to medicine first and then pray to God to get rid of the disease. On several occasions he would himself suggest certain medicines. For instance, in case of loss of appetite he frequently advised his followers to take talbina, a preparation made from barley. For constipation he used to recommend the use of senna. He was also in favour of regular use of honey for keeping fit. Similarly, for different ailments he would advise the use of olives, black cumin, chicory, endive fenugreek, ginger, marjoram, saffron, vinegar, and watercress. Abu Na'im reported that Abu Hurayrah narrated that the Prophet (PBUH) stated, "Eat the olive oil and apply it (locally), since there is cure for seventy diseases in it, [and] one of them is leprosy." Hadith on these medicines and others show the concern of the Prophet for the welfare and good health of his followers. (OnIslam.net website 2014). If not because all these Prophetic sayings are documented we will not be able to have knowledge on any, so documentation it's an integral part in preservation knowledge as well as cultural heritage of any society.

The World Health Organization (2000) described traditional medicine (TM) as the sum total of knowledge, skills and practices that are based on the theories, beliefs and experiences, indigenous to different cultures and used to maintain health, as well as to prevent, diagnose, improve or treat physical and mental illnesses. Traditional Medicine is the indigenous and culturally developed response to the health problems that threaten man's existence. Like its western alternative, traditional medicine has different categories of practitioners, including traditional bonesetting, diviners, medical ingredient sellers, traditional surgeons, traditional psychiatrists, traditional birth attendants, faith healers and the general practitioners (Abdullahi, 2011). In spite of modernization in African societies, Amzat and Razum (2018) noted that about 80% of people in Africa rely on Traditional Medicine for their primary health needs. All these practitioners do not have uniform approaches to healing. To start with, their expertise vary across the different health problems that threaten man's existence.

Traditional medicine ultimately aims at restoring the physical, mental and social wellbeing of the patient, through alternative health care delivery to the orthodox medical system (Diouf, 2013).

Types of Traditional Health Practitioners

The traditional health Practitioner or healer, as defined by the WHO (1976), is a person who is recognized by the community in which he lives as competent to provide health care by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious background, as well as on the knowledge, attributes and beliefs that are prevalent in the community, regarding physical, mental and social well-being and the causation of disease and disability the following are the different types of healers in traditional African society:

Section 1 of the Act [1] defines a traditional health practitioner as a person who is ‘registered under this Act in one or more of the categories of traditional health practitioners’. The categories of traditional health practitioners include ‘diviners, herbalists, traditional birth attendants and traditional surgeons’

Practitioners of Therapeutic Spiritism: These practitioners include diviners or fortune tellers, who may be seers, alfas and priests, and use supernatural or mysterious forces, incantations, may prescribe rituals associated with the community’s religious worship and adopt all sorts of inexplicable things to treat various diseases. The practitioners are usually consulted for diagnosis of diseases, their causes and treatment. With their ability to deal with the unseen, and the supernatural, they are usually held in high esteem in the community. They are believed to have extra-sensory perception and can see beyond the ordinary man. They can receive telepathic messages, can consult oracles, spirit guides etc. and perform well where other traditional healers and orthodox doctors fail. Their activities include, making prayers, citing and singing of incantations, making invocations and preparing sacrificial materials to appease unknown Gods.

Traditional Herbalists: Herbalists use mainly herbs, that is, medicinal plants or parts of such plants—whole root, stem, leaves, stem bark or root bark, flowers, fruits, seeds, but sometimes animal parts, small whole animal — snails, snakes, chameleons, tortoises, lizards, etc: inorganic residues -alum, camphor, salt, etc and insects, bees, black ants etc. is such herbal preparations may be offered in the form of (i) powder, which could be swallowed or taken with pap (cold or hot) or any drink, (ii) powder, rubbed into cuts or incisions made on an part of the body with a sharp knife, (iii) preparation, soaked for some time in water or local gin, decanted as required before drinking; the materials could also be boiled- in water, cooled and strained (iv) preparation pounded with native soap and used for bathing; such ‘medicated soaps’ are commonly used for skin diseases, (v) pastes, pomades or ointments, in a medium of palm oil or shea butter, or (vi) soup which is consumed by the patient. The herbalist cures mainly with plants which he gathers fresh. When seasonal plants have to be used, these plants are collected when available and are preserved usually by drying to eliminate moisture.

Traditional Birth Attendants (TBAs): The World Health Organization defines a traditional birth attendant (TBA) as a person who assists the mother at childbirth and who initially acquired her skills delivering babies by herself or by working with other birth attendants. In the northern parts of the country, TBAs are of the female sex only, whereas in some other parts both males and females are

involved. TBAs occupy a prominent position in Nigeria today as between 60-85 per cent of births delivered in the country and especially in the rural communities are by the TBAs.

Traditional Surgeons: The various forms of surgery recognised in traditional medical care include: (i) the cutting of tribal marks: traditional surgeons usually cut tribal marks into the cheeks, bellies, etc. and charred herbal products are usually rubbed into these bleeding marks to effect healing, (ii) male and female circumcision (Clitoridectomy): traditional surgeons carry out these simple surgical operations with special knives and scissors: blood-letting operations and wounds that result from these operations are usually treated with snail body fluid or pastes prepared from plants.

These practices are, however, fast dying out in urban areas; (iii) removal of whitlow: diseased toes or fingers are usually cut open and treated. Piercing of ear lobes: particularly in the youth to allow the fixing of ear rings. Extraction of tooth: infected teeth or teeth with holes, that bring pain to the mouth are removed and treated with herbal medicines prepared in local gin.

Challenges Associated with Documentation and Digital Preservation of Traditional Medicine.

Africans can use their knowledge to peacefully trade with their neighbours and govern themselves. However, because it is inaccessible, the knowledge they have is not being utilised. In the absence of any organised attempt to record conventional medical knowledge in some kind of irreversible form, there is a risk that a significant portion of it will someday vanish. Secretiveness, superstition, and inadequate documentation of the use of herbal remedies have also resulted in the loss of many priceless traditions in herbal therapy. WHO *Traditional Medicine Strategy 2014–2023* states that In the African Region, Traditional Medicine knowledge and practices have been passed on orally among traditional health practitioners for many generations. The question now is what are the challenges to the documentation and Digital preservation of such knowledge?

The documenting and digital preservation of traditional medical practise in the Katsina State of Nigeria face a number of significant obstacles. The Nigerian states Katsina included, has continued to face some issues that hamper the institutionalisation of traditional medicine into our National Health Care Systems and hinder its ability to compete globally, despite the fact that much progress has been made in implementing the regional strategy on promoting the role of traditional medicine in our society and Health Care System. These challenges include:

Oral Documentation: The oral nature of the knowledge of traditional medicinal herbs transmitted in various forms from one generation to another without proper documentation poses a serious challenge in the documentation and digital preservation of such knowledge.

Improper documentation of traditional medicine knowledge and practices has not only created a vacuum in access to traditional medicine knowledge but has also made such knowledge vulnerable to attrition.

Further investigation revealed that, traditional medical practitioners in the North West States of Nigeria have the knowledge in their brain as well as in written form which they personally penned down (manuscripts) in case of forgetfulness (Lawal, 2017)

Poor Organizational Arrangement: There is limited Organizational arrangement for the institutionalization of traditional medicine such as, Poor allocation of financial resources for implementation of traditional medicine activities.

Delay in the establishment of mechanisms for the official recognition of traditional health practitioners.

Limited national strategic plans for policy implementation

Lack of mechanisms of collaboration between practitioners of conventional and traditional medicine.

Limited Research Data: There is also a challenge of limited research data on the safety, efficacy and quality of traditional medicines, lack of formal documentation of traditional medicine practices due secrecy by the practitioners Non Inclusion in School Curriculum: Majority of the States and Local Government Councils are yet to include some aspects of traditional medicine in the curricula of Health Science Students and other institutions of higher learning.

Lack of National Policy: Majority of countries are yet to develop National Policies on the conservation of medicinal plants and get engaged in large-scale cultivation of medicinal plants in botanical gardens.

Quality Control: There is the challenge of ensuring the safety and efficacy of herbal medicines, the quality of the source of raw materials, cultivation and harvesting, field collection, transport and storage, correct identification of species of medicinal plants as it not documented.

Lack of Knowledge: There is challenge of lack of knowledge of herbal medicine by Health Care regulatory authorities and agencies. (Augustine & Azubuike 2017) Other challenges include non-adherence to any existing records management standards, lack of adequate and proper infrastructure and lack of a skilled workforce (Chikomba, et al 2020, cited Matlala et al 2022). Generally In developing countries, the challenges include digital divide, lack of institutional support, lack of awareness of the challenges surrounding digital preservation, lack of standards, lack of funds, lack of skilled manpower, and lack of equipment. (Gbaje, & Mohammed 2013 cited Sadiku, et al 2017).

The Way Forward

Actions that are clear-cut and decided must be made if all the therapeutic and curative resources that Mother Nature (the Supreme Being) has divinely infused in our medicinal plant are to be adequately maximised in improving the health services provided to our people. These consist of:

- **Research:** Research in traditional medicine and development need to be included in the national health research agenda.
- **Curriculum:** Traditional Medicine should be included in the curricula of our primary, secondary and tertiary institutions.
- **Collaboration:** There should be a forum and enabling environment provided for effective collaboration between Orthodox Medical and Traditional Medicinal Practitioners. The gulf existing between them which give room for jealousies and destructive criticisms should be narrowed.
- **Protection:** Mechanisms for the protection of intellectual property rights and indigenous herbal knowledge should be developed.
- **Training:** Establishment of regular training programmes or National Institute for Traditional or Alternative Medicine, for traditional medicine practitioners should be encouraged.

- **Budget:** Countries should be encouraged to create a budgetary allocation for traditional medicine in their National Health Budget and include the expenditure of traditional medicinal care in National Health Accounts.
- **Legislation:** Legislative framework and national policy for the protection of the knowledge of medicinal plants as well as its preservation from wanton destruction through reckless bush burning and tree-cutting should be put in place.
- **Documentation:** Government should establish units or departments for formal documentation of the details of the working of medicinal plants from the existing oral tradition in order to guard against its extinction or possible adulteration.
- **Packaging & Marketing:** The Federal Government and the Federal Ministry of Health should establish governmental agencies that will take care of both the packaging and the effective marketing of the traditional herbals productions both within and outside the country. A Department of Traditional/Alternative medicine should be created in all Health Ministries at all levels of government.
- **Trade Fairs and Exhibition:** Annual National and International Trade Fairs and Exhibition on traditional medicines should be organized and co-sponsored by government and non-governmental agencies, philanthropists and various stakeholders. This should be institutionalized as it has already commenced.

Conclusion

In order to prevent its extinction or potential adulteration, the government should create units or departments for the formal documentation of the specifics of how medicinal plants work from the current oral tradition. All Health Ministries at all levels of government should establish a Traditional/Alternative Medicine Department.

For the benefit of everyone, there is also a need for improved cooperation between practitioners of traditional medicine and orthodox mainstream medicine. The sooner this is completed, the better for everyone.

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