

Traditional and Orthodox Medicine Systems in Nigerian Rural Health Service Delivery: A Comparative Analysis

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ABSTRACT

Traditional Medicine organically evolved from the quest of indigenous people globally: to maintain a healthy life, prevent diseases, prolong life, diagnose and resolve disease conditions in culturally accepted manner. This practice continues to play a prominent role despite swift civilization and increment of more researched and formulated Orthodox Medicines in Nigeria health care delivery system. This is due to the failure of Orthodox Medicine to meet the basic health problems of the poorest and the most vulnerable population in rural part of Nigeria. Hence the need for a health system that is holistic in function and practice on both Orthodox Medicine and Traditional Medicine. This paper presented a systematic and comparative review of Orthodox Medicine and Traditional Medicine. Their peculiar roles in rural health service delivery were highlighted. The exceptional usefulness of Orthodox Medicine in acute cases requiring urgent and intensive care were mentioned. It identified that the dearth of resources, inadequate and decaying infrastructure, and inequality in resource distribution, workers strikes and excessive levels of health worker migration—rural to urban/abroad have led to a deplorable Orthodox Medicine system in Nigeria. Traditional Medicine characteristics such as -availability, accessibility, affordability and effectiveness made it an indispensable health care delivery for rural dwellers, coupled with being a good source of foreign investment, socio-economic development and national prosperity. The paper concluded that it becomes imperative to infuse Traditional Medicine into Orthodox Medicine to bridge deficiencies and produce a health care system that will ensure safe health for all. It is recommend that Traditional Medicine should be officially recognized, tolerated and integrated into Nigeria's orthodox health policy to meet the needs of both rural and urban population.

Keywords: Medicine, Traditional, Orthodox, Health Care delivery, and Comparative Analysis.

INTRODUCTION

Since antiquity, cultures and indigenous norms have shaped the way and manner health problems become resolved. Practices such as prayer, invocation, use of plant parts, balms, soils, ointments, and liquids were developed/used. Today, most of this knowledge are regarded as archaic by a large percentage of the world; however, efforts have been made in the last fifty years by individuals, communities, organisations and governments across the world to reclaim this knowledge and modernize the practice (Kayne, n.d.; Edwards, *et al.*, 2012) which has led to the popularity of herbal powders, teas, cream, acupuncture, Ayurveda, Kampo, Unani, Sa-sang, and other traditional medicine products/services with many establishing tradopharmas, natural health

clinics and chiropractic centers in Africa, Asia and the rest of the world (Limonier, *et al.*, 2017). In a recent study, more than 80 per cent of Asians, Latin-Americans and Africans reportedly rely solely on traditional medicine products/services for their health needs (Ekeopara and Ugoha, 2017). This Karimi, *et al.* (2015) attributed to the accessibility, affordability, and deep connection of users to the form of and ingredients used in resolving the medical problem. Ajala, *et al.* (2018) reported wide usage of alternative or complimentary medicine among arable crop farmers in rural Nigeria while a wide usage of the same is reported among both rural and urban dwellers in Nigeria (Ajala, *et al.* 2019).

Following analysing the trends of the extent and effectiveness of traditional medicine facilities, products and services globally, the World Health Organization (WHO) proceeded to draw frameworks, produce guidelines and policy briefs as well as white papers on the importance and relevance of the sector to global health and defined it as the total combination of knowledge and practices, whether explainable or not, used in diagnosing, preventing or eliminating physical, mental or social diseases in people and which may rely exclusively on past experience and observations passed down from generations long gone to current generation either verbally or written form (Kasilo, *et al.*, 2019). Today, many countries run traditional medicine practices along with Orthodox ones together either formally or informally while others operate the two sectors separately, Nigeria not exempted. However, despite the country's strategic position in Africa, the country's healthcare need is still greatly underserved. The worst is that between 50 to 70 per cent of Nigerians who live in rural areas are the most affected (Otu, 2018; Sato, 2019). Majority of public health facilities located in the urban areas have been crippled by numerous strikes and counter strikes, while the few located in the rural area are poorly furnished with medical equipment and personnel thus hindering their effectiveness (Asakitikpi, 2018). In the face of this deficiency, evidences from studies carried out globally prove that Complementary Alternative Medicine use is not only common but has increasing usage and growing popularity among population depending on the available and accessible medicinal plant species in each location (Eaton, 2018; Ray, *et al.*, 2018; Sharp, *et al.*, 2018). In Nigeria, there are many Traditional Medicine Practitioners operating at private level majority of whom whose conduct, and practices are unregistered and unregulated (Ekeopara and Ugoha, 2017; James, *et al.*, 2018). Reports have it that more than 80 per cent of Nigerians could still not access orthodox medicine and rely almost exclusively on traditional medicine while an estimated 86% of Nigerians use traditional medicine (Asakitikpi, 2018; Edet, 2018).

Considering the breadth of usage, effectiveness and rapid uptake of Traditional Medicine in Nigeria, efforts are being made to integrate herbal medicines into the orthodox health facilities to provide alternative system for individuals who for some reasons would want to access alternative medicines for their healthcare needs (Akanle, Adesina and Adesoka, 2017; Murray Last, 2018; Ezekwesili-Ofilu and Okaka, 2019). Hence, the need for a comparative analysis of Orthodox Medicine and Traditional Medicine to highlight their strength and weaknesses that can be bridged if integrated.

Traditional Medicines and Orthodox Medicines: A Comparative Analysis

There are a number of advantages and disadvantages associated with using Traditional Medicines and Orthodox Medicines. The comparative is as follows:

Medical Accuracy: Without disagreeing with Raji (2018) on the fact that Orthodox Medicine still remain the most effective, efficient and most preferred healthcare system among others in Nigeria due to its precision, quantitative and qualitative medication and facilities. Appositely, Orthodox Medicine practice is also an inexact science (Lippman, 2016; Shelley, 2019). There are clinical conditions that have defiled scientific explanation, resulting to wrong diagnosis and treatment (prescription and dosage) or rightly diagnosed ailments that defiled medications. Sometimes patients that do not need surgery have undergone the scalpel and did not survive; and even persons with very minor or simple cases have ended up with complicated cases after orthodox medicine treatments/procedures (Lioce, *et al.* 2019). At other times, such operations have been marred with the use of wrong procedures, wrong medications/treatments, or opening of wrong sites which can be attributed to incompetence, stress, sheer human error, poor diagnosis, or the ineffectiveness of known methods, tools, equipment to diagnose a medical problem on the part of the medical/surgical team (Sellke, Nido and Swanson, 2015). To assuage this, it is possible that Traditional Medicine could be synergized with Orthodox Medicine as is already the case across the world even as reported by Ameade, *et al.* (2018).

Side effects and contraindications: Although, approximately 100,000 people each year die due to adverse or side effect of synthetic drug toxicities, none has been recorded so far from traditional medicine users (Karimi, *et al.*, 2015) although reports by Lüde, *et al.* (2016), Tsai, *et al.* (2018) has it that a sizeable number of people die yearly from the intake/uses of traditional medicines such as in China where 156 out of 508 died in a study conducted using chronic Hepatitis B patients who have been suffering from concurrent liver cirrhosis. Other cases includes, endocrine and nervous system disorders in Singapore and skin and hypersensitivity reactions in Sweden. This is consistent with the fears of Baruelo (2019) and James, *et al.* (2018) report, however, Sultan, *et al.* (2018) consider them safe. For instance, an herbal mixture from honey and lime/lemon used to treat cough does not have any side effect so also are garlic and honey mixture as well as Hibiscus flower tea which are used to treat hypertension (Jahan, *et al.*, 2015).

Effectiveness: The intensive care and facilities of Orthodox Medicine made it a superior option in emergencies and accidents scenario. However, the incidence of drug resistance and substandard drugs mounts a huge barrier to the effectiveness of Orthodox Medicine (Anyanwu, 2017; WHO, 2018; Ledingham *et al.*, 2019) reported that vast number of drugs in African pharmaceutical markets are substandard which is unlikely with Traditional Medicine as patients themselves have sound knowledge of the herbs and they use the herbal/treatment prescription as given to them since the patients know that if the content of the preparation are not prepared as prescribed, the likelihood of their problem(s) not been resolved is very high (Farukh *et al.*, 2018; Paramita, *et al.*, 2019) Elsewhere, it has proven to be effective for critical diseases that are resistant to Orthodox Medicine treatment (Yuan, *et al.*, 2016).

Cost comparison: As effective as Orthodox Medicine medications are, its tests, treatments and medications are costly in all ramifications especially for low income rural dwellers. A national survey from Ghana revealed that the average total household cost in the last twelve (12) months of 2010 for Orthodox Medicine care was slightly higher (\$33.43) than the costs incurred in seeking Traditional Medicine treatment (\$30.33) – (Oyebode *et al.*, 2016). A similar trend was observed among cancer patients in Nigeria in which the cost of traditional medicine treatments they sought and received ranged from nil to \$31.25 while the cost of Orthodox Medicine began from \$250 (Asuzu *et al.*, 2015; Obuaku-Igwe, 2015). Elsewhere in Mali, half of orthodox medicine malaria treatment costs ranged from none to \$116, whereas Traditional Medicine treatment ranged from \$0 to \$100 for three-quarter of the patients (Graz, *et al.*, 2015). Furthermore, several published article has it that Traditional Medicine users are more common among individuals with a lower socioeconomic status, who are unemployed and unskilled than those with higher socioeconomic status and or the highly skilled and employed (James *et al.*, 2018). This therefore indicates that the low-cost nature of Traditional Medicine makes it a high/first choice among people of low socioeconomic status compared with allopathic medicine.

Availability and Accessibility: Both Asakitikpi (2018) and Edet (2018) have reported that only 14 per cent of Nigerians have ready access to orthodox health facilities while the remaining, majority of whom are concentrated in rural areas, do not have proximal access to such facilities. However, Kanmodi, Oluwafisayo and Adesina (2018) have reported that there are more than 200,000 traditional medicine practitioners and therefore 200,000 traditional medicine access points in the country which means that these 86 per cent of Nigerians who do not have direct access to Orthodox Medical facilities have up to between 10 and 946 traditional medical practitioners that they consult concerning their health challenges. Therefore, Traditional Medicine is more easily accessible by most Nigerians and consequently readily available to the citizens of the country depending on individual citizen's interest.

Standardized dosage: The aims of the Traditional Medicine Strategy WHO launched in 2002 which was to assist countries to achieve the following purpose: harnessing the potential contributions of Traditional Medicine to health, wellness and people-centered health care and promoting the safe and effective use of Traditional Medicine through regulation, research and integration of Traditional Medicine products, practitioners and practice into national and global health systems as appropriate (WHO, 2011) This has helped Traditional Medicine practitioners in Nigeria to modernize by conducting research and utilizing scientific methods in their operations some of whom includes : Oko-Oloyun TradoMedical Home, YemKem Nigeria, and New Age Herbal Services Ltd (Nigeria Natural Medicine Development Agency – NNMDA, 2020; National Association of Nigerian Traditional Medicine Practitioners –NANTMP, 2020). This was sequel to the declaration and

implementation of policies by African countries to support practitioners in the field as well as to increase patronage by their citizens that the years 2001 to 2010 will be the Decade of African Traditional Medicine (Mawere, Munyaradzi, Awuah-Nyamekye, 2015; African Union Specialised Technical Committee on Health, Population, and Drug Control – AUSTCHPoD, 2017). These two initiatives in addition to those of Nigeria's indigenous designs have led to the standardization of herbal and alternative medicine products in the country (National Agency for Food and Drug Administration and Control – NAFDAC, 2019; Ajayi, 2019). Moreover, this has led to the creation of the Center for Research in Traditional, Complementary and Alternative Medicine (CRTCAM) by the Nigerian Institute of Medical Research (NIMR) in collaboration with the Nigerian Council of Physicians of Natural Medicine (NCPNM) in 2017 (NIMR, 2018).

Comparison of Appropriate Usage: Orthodox medicines are of high importance and effectiveness in emergency situations such as epidemics. The role of immunization in rural health service delivery cannot be overemphasized, therefore as diseases such as polio and measles which used to devastate rural dwellers in the past have been considerably checked. Despite this, orthodox medicine practitioners are still not able to handle mysterious diseases and health problems that does not have scientific explanations and such cases traditional medicine has proven time and time again to have answers to. For example, Stacey, *et al* (n.d.) and Hunter, *et al*. (2016) reported that Traditional Medicine has been useful in treating a kind of convulsion called degedege (convulsions) in rural Tanzania while Hughes, *et al* (2015) and Amaju (2017), also affirmed the simultaneous usage of Traditional Medicine products among hypertensive patients in Benue State, Nigeria and Western Cape Province, South Africa. Also, the only orthodox cure for Pile (Hemorrhoidal Disease) was a surgical process called an hemorrhoidectomy which involves the cutting of the hemorrhoids from the anus, but this has been treated with traditional medicine products in Africa, India, and Turkey (Hashempur, *et al*, 2017; Koca, Aka and Oz, 2017; Ray-Offor and Amadi, 2019).

Activities of Charlatans and unscrupulous practitioners: At the moment, the activities of Traditional Medicine practitioners in Nigeria are not strictly regulated so the activities of dubious elements are on the rise because both the National Association of Nigerian Traditional Medicine Practitioners and the Nigeria Natural Medicine Development Agency do not have enforcement powers although two bills are currently at the National Assembly for the enactment of a law which would create the Traditional Medicine Council of Nigeria as well as the Complementary and Alternative Medicine Commission in order to fill this void (Egharevba, *et al.*, 2015). However, this is not the case with Orthodox Medicine practices in the country as they are adequately regulated.

Documentation of practices and procedures/secrecy: While Traditional Medicine procedures are poorly documented because the practice is sometimes enmeshed in secrecy and lack of creative discipline to keep records of ingredients/formulas used, diagnosis and tests/observations made due to the low level of education of most of the practitioners since the knowledge was aforesaid passed down informally, Orthodox Medicine procedures are clearly stated, documented, precise and scientific (Boadu and Asase, 2017). However, despite the poor documentation practices of the traditional medicine practitioners, some of the practitioners stands out namely. For example, Dr. Joseph O. Mume who established the JOM Tradomedical Naturopathic Hospital and the JOM Nature Cure Centre (a research centre) in Agarho, Delta State, Nigeria in 1969 and c. 1983 respectively, publishing more than nine (9) books as well as other literatures on various aspects of the practice (Young; Grant; Ingelise, 1988; WorldCat, 2020). Worthy of mention also are: Dr. Akintunde Ayeni who has a tradopharm and a research institute in Lagos (Yem Kem International Centre for Alternative Therapy), Dr. Isaac Ayodele who established the Ayodele Slimmers and Naturopathic Clinic, Ayodele Herbal and Ayodele Public Health/Resort Clinic between 1996 and 2016 and who has published more than twenty-five (25) books in the field, and Dr. Aibinuola Osunwole who is a published author in the field and practice (Ogbor, 2009; Ayodele Herbals, 2015; Institute of African Studies, 2019).

Oath of Ethics: As there are no oath of ethics that traditional medicine practitioners swear before the commencement of their practice, most often than none there is no assurance of the confidentiality of patients medical diagnosis and indeed medical history, although efforts are been made to incorporate such in the field whereas in orthodox medicine, it is a standard requirement (Norman, 2016; Chatfield, *et al.*, 2018). Therefore, there is the need for this code of ethics to be implemented in traditional medicine so that it can be widely accepted by the populace most especially in rural areas where everyone know each other to kit and kin.

Diagnostic procedures: Alternative Medicine have some peculiar diagnostic procedures that digs into the root cause of a sickness or infirmity that science has not been able to explain as it is becoming accepted that health and thus illnesses have spiritual dimensions (Chirico and Magnavita, 2019; Lynch, 2019). Consequently, some sicknesses which orthodox medicine have not been able to proffer solutions to have been solved through traditional medicine practices. For example, a 26 year old female who had a strange ailment in Tanzania and who had consistently received treatment in an orthodox medicine hospital but did not get better, rather was getting worse was healed after being given traditional medicine following traditional medicine practice (Stanifer, *et al.*, 2015). Also, Puchalski (2001) reported that a female patient who was dying of breast and ovarian cancer who had depression and had been administered with anti-depressants did not get relief until she participated in spirituality activities. Furthermore, in a study by the American Pain Society, it was found that 66% of respondents in that study reported being able to cope with their pain through prayer compared to any medical method or self-coping techniques (McNeil, *et al.*, 1998) and recent reports have confirmed that medical treatments combined with spirituality or religiosity was better at treating or at the least alleviating patients health problems than one without it (Illueca and Doolittle, 2020).

Infrastructure and equipment: Dearth of resources like drugs and supplies, inadequate or decadent infrastructure, inequity in resource distribution, and access to care alongside the deplorable quality of care are part of what has fraught Orthodox Medicine system in Nigeria. Also the excessive levels of health worker migration – from the public to the private sector, rural to urban settings, or to more welcoming and lucrative destinations abroad, has caused acute shortages and inordinate distribution of health workers, geographically and professionally (Karan, DeUgarte and Barry, 2016; Imafidon, 2018) This is largely due to misplaced priorities on the part of all concerned. Infact, a study reported in 2013 stated that Nigerians receiving medical treatment in India represent 20% of the number of expatriates who receive medical treatment in India (Association of Medical Laboratory Scientist of Nigeria – AMLSAN, 2013). Traditional Medicine however does not have such problems as the sector has been attracting medical tourists into the country since the 2000s.

Pathogenic resistance: While it is difficult for pathogens to develop resistance to Traditional Medicine, drug-resistant microbes are no longer a news in Orthodox Medicine today (WHO, 2018; Ledingham *et al.*, 2019). A notable example is the fact that most indigenous treatment used for malaria in the country have remained the same with little or no modification, orthodox treatment for the illness has changed from Choroquine phosphate to ACT treatments.

Evidences And Proven Need For Synergy

Concurrent Usage of Both Medicines by Patients: In many countries today, traditional medicine products/services are used together with orthodox medicine products/services. Examples includes, India, China, UK, Ghana and even Nigeria where levels of between 50-80% of healthcare users reported the two forms of medicine (Ameade, *et al.*, 2018; James, *et al.*, 2018). This means that it is already the practice and efforts to officially integrate the two as well as promote and develop traditional medicine will not be resisted by citizens globally.

Concurrent referral by both practitioners: In Nigeria, it is common practice for Orthodox doctors to advise patients whose case have been longstanding to seek help from GOD and use alternative medicine. Infact, Moshabela, *et al.* (2017) and Lampiao, Chisaka and Clements (2019) reported the same in their studies in Eastern and Southern Africa. This means that there is an existing synergetic relationship between the two forms which can be built on and perfected.

Herbs as sources of new drugs: According to WIPO (2020), about 75% of all orthodox medicine active ingredients come from plants and other natural sources that traditional medicine practitioners use and majority of these plants are in Africa and South America. Tis means that the drugs used by majority of people globally are traditional medicine based and this indicates that there is an existing synergy between the two industries howbeit exploitative.

International recognition and usage of traditional medicine: It has been reported by Hexa Research (2017) and Market Research Future (2019) that globally the size of the *formal* traditional medicine market was worth

\$71.19 billion in 2016 and is projected to grow to \$129.69 billion by 2023 and that the biggest drivers of this market would be demand for products that would be used in treating digestive, respiratory and blood disorders and the product forms they would be demanded in tablets and capsules, powders, and extracts and that the largest market for the industry's products will be Europe. This presents a big opportunity for the Global South especially Africa as majority of the world's medicinal plants are found there in addition to the spin-off potentials which would come as a result of developing the industry.

CONCLUSION AND RECOMMENDATION

On the basis of sources reviewed in this work and based on on-ground realities, it is hereby concluded that a synergy existed between the traditional and orthodox medicine in delivering effective health care to the rural areas. It is recommended that traditional medicine be integrated into the national health system of Nigeria and that the synergetic relationship currently existing between the practitioners of traditional and orthodox medicine be developed further while the linkages existing in the two industries be further advanced and institutionalized so that more jobs, foreign direct export earnings, and internally generated revenues can be generated from the two industries. Furthermore, it is recommended that a definite and sustainable policy thrust has to be established to achieve this.

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