SOCIOECONOMIC PULL-FACTORS RESPONSIBLE FOR THE USE OF TRADITIONAL MEDICINE IN ADAMAWA STATE, NIGERIA

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Abstract

In reality, modern healthcare services in Nigeria have fall below expectation in meeting the health demands of majority Nigerians particularly those in rural areas. Traditional Medicine is a general discipline that combines natural concoctions/herbs and spiritual tactics for treatment of diseases. The world is remarkably witnessing increase in Demand for the traditional medicine (TM) particularly in developing countries like Nigeria. This creates a window to investigate the possible reasons behind the huge patronage of the traditional medicine in Adamawa state. The main objective of this paper is to examine the acceptability, usage, reliability, effectiveness, availability, safety, cost, and other social, economic and health system factors influencing the usage of the TM in Adamawa state Nigeria. Multistage and purposive sampling, focus group discussion and interview were the main data collection techniques used. The qualitative and quantitative data collected were descriptively analyzed. The result indicates that, the use of TM in Adamawa state is discovered to be very high with 88.6% recorded patronage level across all socioeconomic status of the study population. Education, culture, marital status, gender, easy access, cheap price, proximity, health worker attitude and income level were the socioeconomic pull factors identified to be responsibly influencing the use of traditional medicine (TM) in Adamawa state. The identified push factors that discourages the use of TM were; lack of precise dosage and negative side effects. The policy implication of this study is that, healthcare services facilities must be readily available particularly in rural area, health workers must be properly trained, people must be educated and well sensitized about the negative effects of TM. Lastly practice must be properly regulated and modernized.

Keywords: *Socioeconomic, Traditional, Medicine, Pull-factors.*

Introduction

Traditional Medicine is a general discipline that combines natural concoctions/herbs and spiritual tactics for treatment of diseases. It is based on the cultural knowledge and experience, with or without safe bet, they are used for diagnosis, prevention and treatment of all physical, psychological and mental disease and other general health challenges. This practice has a widespread scope covering treatment with herbs, bone setting, midwifery, and pediatric care.

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Traditional Medicine, Alternative Medicine and Complementary is a treatment approaches that are entirely different from the conventional medication that is widely acceptable globally. The traditional, Complementary or alternative Medicine (TM/CM/AM) are defined as health practices, knowledge, approaches and belief combining herbs, trees, animal, mineral medicine, spiritual remedies, physical procedure, exercise applied separately or in a mixture to diagnose, treat and prevent disease or maintain well-being (WHO, 1976). Moreover, Lewington (1993) defined complementary medicine (CM) as a canopy term casing complementary therapies that are well-defined as acceptable treatments. whereas alternative medicine (AM) is defined as a preparation used as a substitute to standard medical treatment. It must be noted that what is known as complementary in one locality might be conventional in another, for example acupuncture and herbal medicine are embraced as complementary in the USA and UK but in China they are considered as conventional medicine.

NCCAM (2008) categorized Complementary and alternative Medicine into mind/body-based medicine. Biological based remedies, manipulative based and energy-based remedies.

The world is remarkably witnessing increase in Demand for the TM not only in third world countries like Nigeria but also in the developed countries. Countries that decided to integrate TM into their healthcare systems include: Mexico, Thailand and China. Researches on the value, practices and administration of TM in these countries have well documented. Traditional medicinal methods like acupuncture negative perception of the west have been completely changed through the TM researches and documentation. Nowadays, acupuncture is positively perceived and accepted various countries across the globe. Complete herbal medicines comprise of dry extracts, liquid preparations, granules powders, capsules, tablets preparations. Studies in many parts of Nigeria have embraced the application of AM/CM/TM for cancer and pregnancy related diseases Aydin, Bozkaya , Mazicioglu , Gemlmaz , Ozcakir, & Ozturk (2008); Fakeye, Adisa, Musa (2009); Tamuno, Omole-Ohonsi., Fadare (2011); Achema, Emmanuel, Oguche (2012).

Scientific investigation on the most commonly used traditional medicine to ascertain the most effective herb for diseases is very few in the pool of the existing literature. In spite of the advantages of using TM as an alternative method of healthcare medication, its usage comes with challenges to the healthcare system. Majority of the diseases do not receive proper diagnoses, which could lead to wrong treatment (kimhecop, 2013).

The main objective of this paper is to examine the acceptability, usage, reliability, effectiveness, availability, safety, cost, and other social, economic and health system factors influencing the usage of the TM, CM and AM in adamawa state. Similarly, to verify the common sicknesses or ailments being treated and how the consumers feel after the treatment. This expectantly, shall reveal and guide the knowledge of health seeking people behavior in the study area. However, researches of such in my state Adamawa State is very limited.

Reviewed of Existing Literature

It is observed and verified by Sunshine (1996), that many conventional or orthodox therapies such as physiotherapy originates from the practices of traditional medicine methodologies. Secondly, psychosomatic technique of curing mental illnesses by psychiatrics nowadays is also sourced from traditional medical practices. Up to the present time, traditional medicine is continuously modified/refined to the contemporary

medical practices and medicines we use in both preventive and curative therapies. For example, Lewington (1993a) opined that in Thailand distillation of beach morning glory, Ipomoea Pescara or Convolvulaceae is for long been certified approved to be anti-inflammatory treatment.

The acceptance and application of traditional medicine has been investigated to some extent, for the purpose of establishing its effectiveness and efficiency (Firenzuoli & Gori, 2007; Ogwang, Nyafuono, Agwaya, Omujal, Tumusiime, Kyakulaga, 2011; Furst & Zundorf, 2015;). Never the less, majority of the TM being used in Nigeria received negligible number of proper investigation nor properly regulated.

In sub-Saharan Africa, many factors have been identified to be responsible for the common use of the traditional medicine in the region. Easy access to the traditional healthcare providers is, generally, greater in number than the conventional healthcare providers. Moreover, majority of conventional medical practitioners and facilities are concentrated in urban centers whereas people in rural areas are left with no option than to patronized traditional healers (Abdullahi, 2011).

Studies have shown that age and gender is correlated with higher usage of the traditional medicine. whereas there are contradictory findings on how factors like culture, religion, level of education marital status and spiritual beliefs, influence the usage of the tractional medicine. However, beliefs is identified as core influencer in the use of TM. Similarly, there are research findings showing TM usage is not unconnected with easy access since, the medicinal herbs are usually found in gardens or bushes near their houses and they are also free of charge without financial stress (Asante, Abass, Yeboah, Adu-Gyamfi, Amoah, 2016; Stjernberg, Berglund & Halling, 2006; Kamatenesi, Oryem, 2006; Astin, 1998).

Ogunsola & Egbewale (2018) posit that demand for herbal medicine for illnesses treatment has been increasing and has received a credit for healthcare services. Statistics indicate that about 80% of people in African depends on traditional medication through medicinal plants largely, besides about US$60 billion is recorded as the global annual market value for these products (WHO, 2010). Furthermore, in both developed and developing countries, the traditional medicine (TM) usage has recorded tremendous increase. The TM practice contribute immensely to both preventive and curative healthcare services, particularly in the sicknesses such as small pox, malaria and infertility diseases (Jegede, Opata & Jegede 2019). Higher patronage of TM by majority of people in developing countries might be because it is accessible, affordable, available, and acceptable (Duru, Uwakwe, Chinomnoso, Mbachi, Diwe, Agunwa, Iwu and Marenu, 2016).

Bukar, Dayon, & Uguru (2016) conclude that, bad economic situations and the wide economic gap between the developed and the developing countries forced the latter to be absolute dependent on the developed for virtually all of their health demands. Medicinal plants remain strategically important to the economies of less developed countries for the remedies are key to preserving a healthy workforce/labor that drives the economy (Ekeanyanwu, 2011). In the same vain, Ekeanyanwu (2011) also reported that herbal usage received a serious condemnation from modern medical physicians on an account that the practice lack proper regulation, standardization and dosage for suitable consumption in Nigeria.

In reality, modern healthcare services in Nigeria have fall below expectation in meeting the health demands of majority Nigerians particularly those in rural areas. The health system in the country points to the actual

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unfortunate living habits of the people. Unemployment, Poverty, and ignorance have all aggravated the health problems of common Nigerian, making it difficult for them to have reasonable healthcare services. This situation forced people to resort to traditional medicine (Opatola & Kolawole, 2014). The country has witnessed multiplication of traditional medicines (TM) manufacturing companies few decades ago. Advertisements of the TM have also been on the increase in mass media stations such as radio, television, channels, stations, newspapers, flyers, posters and other social media outlets. Some traditional medicine sellers use sound-sets whereas others hire personal selling strategy to reach their customers. With the intervention of world Health Organization (WHO) and other donor agencies, there is modern healthcare facility in all district communities in Nigeria. The existing modern healthcare facilities can be categorized into primary, secondary, and tertiary health facilities many private health providers. Despite the availability of these health facilities, people patronage to traditional medicine is still huge. It is then timely to investigate the possible reasons behind the huge patronage of the traditional medicine.

Methods

In selecting adult male and female participants for the study, multistage sampling technique was used. In stage one, three local governments were selected from each of the three geopolitical zones in the state (Adamawa North: Mubi North, Mubi South, Maiha; Adamawa South: Toungo, Ganye, Demsa; Adamawa Central: Yola North, Girei, Fufore). In the second stage, three wards were selected from each local government [Adamawa North; Mubi North, Kolere, Digil and Yelwa); Mubi South(Gella,Lamorde, Kwaja); Maiha(Maiha gari, Pakka, Sorau)} Adamawa South{ Toungo(Toungo 1, Dawo1, Gumti); Ganye(Ganye1, Gamu, Gurum); Demsa(Demsa, Dilli, Borong)} Adamawa Central{ Yola North(Ajiya, Luggere, Jambutu); Girei(Girei 1, Jera Bakari, Modire viniklang); Fufore(Fufore, Beti, Gurin). Thirdly, respondents were randomly selected to form the sample of the study from twenty seven (27) wards drawn from Nine(9) local governments drawn from the three (3) geopolitical zones in Adamawa state.

Table 1: Sample Design of the Study Area

zone	**Local Government**	**Ward**	
Adamawa North	Mubi North	Mubi North	Kolere, Digil, Yelwa
	Mubi South	Mubi South	Kolere, Digil, Yelwa
	Maiha	Maiha	Maiha gari, Pakka, Sorau
Adamawa South	Toungo	Toungo	Toungo 1, Dawo1, Gumti
	Ganye	Ganye	Ganye1, Gamu, Gurum
	Demsa	Demsa	Demsa, Dilli, Borong
Adamawa Central	Yola North,	Yola North,	Ajiya, Luggere, Jambutu
	Girei,	Girei,	Girei 1, Jera Bakari, Modire viniklang
	Fufore	Fufore	Fufore, Beti, Gurin
Total: 3	9	9	27

Source: Author's computation

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Study Population

The population of Adamawa State is projected to be 4,902,100 within the area of 23940km^2 and 122.7/km^2 population density. The annual growth is 2.7% from the 2006 population census(www.citypopulation.de/en/nigeria/admin/NGA002_adamawa/)

Sample Size

Based on the projected study population of Adamawa state as at 2023 as 4,902,100. In this study Taro Yamane sample size formula was used to come up with exact number of respondents required for this study. With an assumed error or level of significance to be 2%;

Taro Yamane's sample size formula is expressed as:

$$n = \frac{N}{1+N\,(e)^2}$$

Where:
n = sample size
N = Total Population
1 = Statistical constant
E = assumed error or level of significance

Given : total population is 4,902100 = N and significance level 0.02 = e

$$n = \frac{4{,}902100}{1+4{,}902100\ \ (0.02)^2}$$

$$= \frac{4{,}902100}{4{,}902101\ (0.0004)}$$

$$= \frac{4{,}902100}{1{,}960.8404} = 2500 \text{ to 2dpls}$$

Based on the above result, 2500 respondents are statistically required for this study. This implies that $\frac{2500}{27}$ =93 questionnaires are required. Moreover, with this approximation, 2,511 questionnaires were used

Results

Table 2 presents the respondents demography, socioeconomic and other pull factors that influence the patronage and usage of traditional medicine in Adamawa State Nigeria. 2511 questionnaires were released and 2258 returned. Out of the retrieved questionnaires, 2000 (88.6%) use traditional medicine. The recorded frequency, i.e. always using was 55%, 32% rare and 13% often. TM usage is positively correlated with level of education since 85% with at most primary education and 97% possessed at least secondary education. This

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implies that in Adamawa State, the most educated use TM more than the less educated. Likewise, consumers income is also related with TM usage but those that earned less than ₦30,000.00 monthly has the highest patronage (89%) than those that earned above that income level.

Health workers attitude also discovered to be closely related with an increased patronage traditional medicine but negative attitude of the workers toward the patients dominate with 98% influence (P=2.27* CI 95% 1.02-4.48). This unwarranted attitude of the health workers contributes to the seeking alternative medication by the consumers of the medical services within the state.

The numerical data and the positive correlations were involved in the focus groups to investigate the findings causality. It was revealed through the group discussion that, in the analysis, causality exist among the study variables. Some respondents registered their feelings that they are so much culturally attached to the traditional medicine that they can't do without it. But their dismay is the TM doctors do not teach nor train the young ones for sustainability of the practice in the future.

In another vain, a respondent that is anti TM usage posits that it is dangerous to use a medication without accurate measurement of doses. Lack of standard dosage, to him, renders TM risky for human health and such usage is tantamount to modern drug resistance which might let to fatality in treatments. Availability of the herbs or medicinal plants around homes also contribute to the TM patronage even with the limited knowledge of its application in essence. These herbs are just being administered on the basis of trial and error and on many occasions results to severe reactions by damaging vital human organs like lungs, heart kidney, and liver in particular.

The group discussion also revealed other important factors that discourage people from patronizing modern health facilities. These include cost of the conventional drugs and payment for services in both public as well as private health facilities. This implies that, considering the economic realities in the country and the state in particular, poverty is a key pull factor that led people to use TM in the study area. Proximity to the health facility is also a pull factor since (98%) of the respondents that patronized TM leave more than a kilometer away for modern health facilities.

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Table 2. Socioeconomic Pull-Factors responsible for the patronage of traditional medicine (TM) in Adamawa State

			TM PATRONAGE			
Variable	**Desc.**	**Number**	**Yes, I use TM**	**%**	**95% CI**	**95% CI (Adjusted)**
Total		2258	2000	88.6		
Sex	M	1450	1241	85.6		
	F	808	759	93.9	0.90 (0.62-1.61)	1.00 (0.76-1.53)
Age	18-49	1100	1050	95.5		
	≥ 50	1158	950	82.0	7.75**(1.74-31.5)	5.84*(1.25-17.84)
Level of education	At most Primary	1600	1360	85.0		
	At least Secondary	658	640	97.3	1.67*(1.03-2.63)	1.88* (1.01-3.00)
Religion	Islam	1058	969	91.58		
	Christianity	1200	1031	85.9	2.01** (1.13-3.39)	1.45 (0.87-2.90)
Marital Status	Single	800	700	87.5		
	Married	1458	1300	89.2	2.47** (1.36-4.13)	2.18* (1.10-4.40)
Accessibility	Easy	1800	1560	86.7	1.72** (1.11-3.01)	1.69* (1.00-3.02)
	Difficult	458	440	96.1		
Culture	Yes	1720	1540	89.5		
	No	538	460	85.5	1.64* (1.05-2.46)	3.00* (1.40-5.30)
Proximity to health center	≤1km	1129	890	78.8		
	>1km	1129	1110	98.3	9.66**(4.17-21.13)	6.65** (2.19-17.17)
Affordability	Affordable	1000	950	95.00		
	Not affordable	1258	1050	83.5	1.26 (0.64-2.10)	1.01 (0.53-1.6)
Health workers attitude	Positive	1450	1410	97.2		
	negative	608	590	98.0	2.27* (1.02-4.48)	1.73 (0.57-4.86)
Monthly income (₦)	≤30,000	1450	1300	89.7		
	>30,000	808	700	86.6	1.70* (1.13-2.10)	

* Statistically significant at 10% (p<0.05), ** statistically significant at 5%(p<0.001), CI= confidence interval at 95%.

Discussion

The above findings are in line with some reviewed studies like Kakudidi , Bukenya, & Kasenene (2000) where majority of people of Uganda patronized and use TM for the treatment of all of their ailments. Furthermore, some literature reported high usage of only traditional medicine or a mixture of the TM and conventional medicine in Sub-Saharan countries (James, Wardle, Steel, and Adams, 2018). Similarly, in conformity of this study findings, Nxumalo, Alaba, Harris, Chersich, Goudge (2011) and Pouliot(2011) at a time, documented that

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youths patronized TM more than the old in semi-urban settlements, but on the contrary, Chintamunnee, Mahomoodally (2012) and Ladele & Bisi-Amosun (2014) differ in their report that reverse is the case. Impliedly, the aged higher usage might be unconnected to culture and their fragility in terms of prone to sickness.

In conformity with this study findings, Okoronkwo, Onyia, Okpala, Agbo, Ndu(2014) also reported that married individuals use TM more than the singles even though the single individuals may be influenced by the practices of their old parents, guardians or relatives they expertly stay with. Likewise, married individuals might be influenced by their couple background. Consequently, the marital status influence on the usage of TM depends on the background and behavior of the spouse.

Conclusion

The use of TM in Adamawa state is discovered to be very high with 88.6% recorded patronage level across all socioeconomic status of the study population. The patronage is influence by level of education, culture, marital status, gender, easy access, cheap price, proximity, health worker attitude and income level. The identified push factors that discourages the use of TM were; lack of precise dosage and negative side effects.

Recommendations

To discourage the use of TM, healthcare services facilities must be readily available particularly in rural area, health workers must be properly trained, people must be educated and well sensitized about the negative effects of TM. TM practice must be properly regulated and modernized.

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