ASSESSMENT OF TRADITIONAL MEDICINE PATRONAGE IN KADUNA STATE

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ABSTRACT

In Nigeria, the increase in level of patronage of traditional medicine is substantial due to the unmet healthcare needs of people. This study focused on traditional medicine (TM) patronage in Kaduna State for healthcare maintenance. Structured questionnaire was used as instrument of data collection. Multistage sampling technique was used to select the wards and snowball technique was used to identify the patronisers of traditional medicine in the study area. The data collected were analysed using descriptive statistics. The result showed that there are more male patrons (66.4 %) of TM, with tertiary level of education (41 %) and income below ₩100,000 (70 %). Information on TM is obtained mostly from friends (57.6%) and family members (29.7%). Despite that all the respondents have patronised traditional medicine, the most preferred choice of healthcare is orthodox medicine (42 %). Although about 48 % of the respondents identified their health status as very good, only 6.5% did not use TM in the last three months prior to the study. The ailments for which TM were most frequently used include malaria, Sexually Transmitted Infection, haemorrhoids and stomach related diseases. The study recommended that government policies should be more considerate of traditional medicine practices due to the growth in patronage. Orthodox medicine practitioners should be more accommodating to traditional medicine practices in order for the patients to be more comfortable in revealing their usage.

Keywords: Traditional Medicine, Patronage, Usage

INTRODUCTION

The desire for good health has led to the development of an indigenous medical system referred to as traditional medicine, in which the health needs of the people are met through interaction with the environment (Adefolaju, 2014). Traditional medicine is the emergency or first point of contact for the treating of fever, pile, and children's ailments especially in Africa (Okigbo and Mmeka, 2006; Darko, 2009). Traditional medicine has aided in developing the world by meeting the health needs of the people through using locally available resources to ease their health crises. Traditional medicine represents a natural form of healthcare that has been used through generations (WHO, 2013). Traditional medicine involves the treatment of diseases by physical or spiritual means, such as divination, incantation, exorcism, sacrifice, and herbs (Mahomoodally, 2013).

Health is a significant element that affects the development of a nation. Traditional medicine as a medium of healthcare service provision is widely available globally. Traditional medicine apart from being used for disease prevention and treatment, it is used as a means of providing mineral and vitamin supplements. These are

provided through concoctions, balms and ointments, as well as soap from medicinal plants and animal parts. Traditional medicine is an interdependent system, concerned with the physical, spiritual and mental health as a whole. It is classified into three segments, which are Divination, Herbalism and Spiritualism (Ezekwesili-Ofili and Okaka, 2019). Traditional medicine is a necessary arrangement in the bid to obtain universal health coverage. It is utilized due to individual's belief, as complementary healthcare, emergency treatment, and source of disease prevention. World Health Organisation (2020) described the integration of traditional and contemporary medicine to be essential in providing healthcare services in the pursuit of achieving universal health coverage.

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There are two major healthcare delivery systems in Nigeria namely, the traditional and orthodox medical practices. Nigeria is blessed with abundant medicinal herbs used for the treatment of chronic diseases which could be exported either as processed or finished products, if only enough value is attached to it by both the government and the citizens (Edema, 2024). The Federal Ministry of Health (FMOH) in Nigeria is continuously trying to improve the traditional medicine practices in Nigeria through training, seminars, laboratory experiments and registrations. National Agency for Food and Drugs Administration Control (NAFDAC) in Nigeria is in charge providing guidelines for efficacy, regulates the production, advertisement, sales and of traditional medicines (Kenechukwu *et al.*, 2022). In the bid to determine the health seeking behaviour of people, this study aims to identify the patronage of traditional medicine in Kaduna State, Nigeria.

MATERIALS AND METHODS

Study Area

Kaduna State is located between Longitudes 6° 05' and 8° 38' East of the Greenwich Meridian and Latitudes 9° 03' and 11° 32' North of the Equator. It is situated in the mid-central region of Northern Nigeria with a landmass of 46,020km² (Kaduna State Government, 2021). It is bounded to the north by Zamfara, Katsina and Kano Sates. It is bounded by Niger State to the west, Bauchi and Plateau States are to the east and Nasarawa as well as FCT to the south. Kaduna State has 3 senatorial districts namely, Kaduna North, Kaduna South and Kaduna central, 23 Local Government Areas (LGAs) and 255 political wards.



Figure 1: Kaduna State Map

Kaduna State possesses a tropical continental climate which is more pronounced during the dry season especially December to January. The wet season is usually a period characterized with high sunshine and rainfall. Rainfall ranges from 816mm in May to a peak of 1900mm in August. The southern part has an average annual rainfall of over 1,733mm while the northern part has an average of 1,032mm (Abaje *et al.*, 2016). The soil types in Kaduna State consist of heavily weathered and marked laterite red-brown to red- yellow ferruginous tropical soil. The soils are formed mostly on granitic and gneiss parent material and sedimentary deposits. The soil is mainly loamy and sandy but with a reasonable amount of clay soil. This soil type is of high resistance to erosion with good physical properties thus encouraging the agricultural practices in the state because it is relatively fertile (Ezeamaka, 2020).

Methods

This study was conducted using a multistage sampling technique. The first stage involved using the three senatorial district headquarters in the state. The local government areas were selected using hat and draw sampling between urban and rural areas, thus randomly choosing 2 LGAs from each senatorial district. The wards were selected using systematic random sampling of which the wards were arranged alphabetically and every other third was selected. The patronisers of traditional medicine were identified by the traditional medicine practitioners. Cochran (1963) formula was used to determine the sampled population of traditional medicine patrons since the total population of people using traditional medicine is not known (Dougherty et al., 2020). About 60 – 70 % of the world's population are dependent on traditional medicine for their primary healthcare (Carvalho (2020); Msomi (2018). This study thus modestly assume that about 50 % of the population in Kaduna State are patronisers of traditional medicine practitioners. It was used to obtain a calculated sample size of 384 respondents. Cochran formula is

$$No = \frac{Z^2 pq}{a^2} = 384.16$$

Where N₀ denotes Sample size, Z = Z value to the desired level of confidence (95 % confidence = 1.96); p = Estimated proportion (50 %); e = Margin of error or Level of precision (5 % = 0.05); q = 1 – p Structured questionnaire was administered to the literate respondents while it was read to people with little or no formal education. It contained information on the patronage of traditional medicine practitioners (TMPs), frequency of patronage and ailment for which Tm was sought. The data collected from the survey were processed using the Statistical Package for Social Sciences (SPSS) and Microsoft excel 2013 software for processing and

presenting data in tables.

RESULTS

Three hundred and eight four (384) respondents all of which have or are still patronising traditional medicine practitioners consented and participated in the survey. Table 1 shows the sociodemographic distribution of the respondents. There were 255 (66.4 %) male and 129 (33.6 %) female respondents. Majority of the respondents were between the ages of 18-40 years (64.8 %) while 90 (23.4 %) were within 41-50 years and 45 (11.7 %) were above 51 years. Two hundred and twenty-three (58.1 %) are married, 126 (32.8 %) are single, 15 (3.9 %) are widowed and 20 (5.2 %) are separated.

Most of the respondents 228 (59.4 %) are Muslims, 153 (39.8 %) are Christians and 3 (0.8 %). There are 189 (49.1 %) of the respondents from the Hausa ethnic group, 34 (8.9 %) are Igbo, 59 (15.4 %) are Yoruba, 48 (12.5 %) from northern minority groups and 54 (14.1 %) from other ethnic groups in Nigeria. The educational status of the respondents was: No formal education (7.5 %), primary education (16.9 %), secondary education (34.1 %) and tertiary (41.4 %).

Variable	Frequency (Percentage)
Gender	
Male	255 (66.4)
Female	129 (33.6)
Age (years)	
18-30	133 (34.6)
31-40 41-50	116 (30.2) 90 (23.4)
51 and above	45 (11.7)
Marital status	
Single	126 (32.8)
Married	223 (58.1)
Widowed	15 (3.9)
Divorced	20 (5.2)
Religion	
Christian	153 (39.8)
Muslim Traditionalist	228 (59.4)
	3 (0.8)
Ethnicity	
Hausa	189 (49.1)
lgbo	34 (8.9)
Yoruba	59 (15.4)
Hausa minority	48 (12.5)
Others	54 (14.1)
Educational level	
None	29 (7.5)
Primary	65 (16.9)
Secondary	131 (34.1)
Tertiary	159 (41.4)

There were 86 (22.4 %) civil servants, 80 (20.9 %) farmers, 130

(33.9 %) traders, 66 (17.1 %) students and 22 (5.7 %) engaging in other form of occupations as shown in Table 2. The highest number of respondents 152 (39.6 %) earn below \$50,000 monthly, 120 (31.3 %) earn between \$50,000 and \$100,000 monthly, and 112 (29.1 %) earn above \$100,000 monthly.

Table 2: Occupation and Income of Respondents

Occupation	Frequency	Percentage
Civil servant	86	22.4
Farming	80	20.9
Traders	130	33.9
Student	66	17.1
Others	22	5.7
Income		
Below ₩50,000	152	39.6
₩50,001 –	120	31.3
₦100,000		
₩100,001 –	69	18.0
₩150,000		
Above ₦ 150,000	43	11.1
Total	384	100

Most of the respondents obtained information about traditional medicine from friends (221; 57.6 %) while the least respondents 63 (16.4 %) obtained information from religious centres as shown in Table 3. There are 114 (29.7 %) respondents whose source of information include family members and 83 (21.61 %) got information on traditional medicine from mass media such as social media, radio, and internet.

Table 3: Source of Information

ource	Frequency	Percentage (%)
ass media	83	21.61
eligious centres	63	16.4
amily	114	29.7
riends	221	57.6
	221	07.0

Multiple response

There are 152 (30.4 %) of the respondents who preferred to patronise traditional medicine whenever they are ill while 163 (42.4 %) respondents preferred the usage of orthodox medicine for the treatment of ailments (Table 4). About sixty-nine (18.0 %) respondents make use of both orthodox and traditional medicine for healthcare maintenance.

Patronage	Frequency	Percentage (%)
Traditional medicine	152	39.6
Orthodox medicine	163	42.4
Both	69	18.0
Total	384	100

Most of the respondents 187 (48.8 %) believed their health to be in a very good state and 12 (3.1 %) believed that their health condition was in a very bad state. There are 143 (37.2 %) who believe they were in good state of health while 42 (10.9 %) believed they were within average health status (Table 5).

Table 5: Health Status Perception	Table 5: Health Sta	tus Perception
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Health Status	Frequency	Percentage (%)
Very good	187	48.8
Good	143	37.2
Average	42	10.9
Bad	12	3.1
Total	384	100

Prior to the study, 13.5 % of the respondents use TM daily while 16.4 % use traditional medicine weekly in the last three months. Furthermore, 27.3 % and 26.6 % of the respondents use traditional medicine once every two weekly and monthly respectively in the last three months. About 6.5 % of the respondents did not use traditional medicine in the last three month while 9.6 % only used traditional medicine once in the last three months as shown in Table 6.

Patronage	Frequency	Percentage (%)
Daily	52	13.5
Weekly	63	16.4
Twice a month	105	27.3
Monthly	102	26.6
Once	37	9.6
Not at all	25	6.5
Total	384	100

The respondents patronise traditional medicine practitioners for all forms of ailments most of which are Malaria (208; 54.1 %), Sexually Transmitted Infections (STI) (135; 35.2 %) haemorrhoids (128; 33.4 %) and stomach related ailments (125; 32.6 %). The least ailments for which traditional medicine is sought are hepatitis (6; 1.6 %) and epilepsy (11; 2.9 %).

Diseases		Diseases	Respondents
	Respondent		
	S		
HIV	19 (4.9 %)	Eye	44 (11.5 %)
STI	135 (35.2 %)	Ear	33 (8.6 %)
Malaria	208 (54.1 %)	Teeth	16 (4.2 %)
Hepatitis	6 (1.6 %)	Skin	51 (13.3 %)
Animal bites	52 (13.5 %)	Bone related conditions	77 (20.1 %)
Diabetes	19 (4.9 %)	Child delivery	22 (5.7 %)
Hypertensio n	33(8.6 %)	Circumcisio n services	23 (6.0 %)
Respiratory	18 (4.7 %)	Fibroid	14 (3.6 %)
Epilepsy	11 (2.9 %)	Cancer	18 (4.7 %)
Mental conditions	17 (4.4 %)	Haemorrhoi d	128 (33.43 %)
Infertility	91 (23.7 %)	Stomach	125 (32.6 %)

Table 7: Diseases for which Traditional Medicine was Patronised

Pregnancy 37 (9.6 %) related conditions	Children ailment	65	16. 9 %)
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Multiple responses

DISCUSSION

This study interviewed people that have previously patronized traditional medicine practitioners for health care maintenance which includes treatment of ailments and preventing diseases. In this study, the male patronise traditional medicine more than the female gender, thus contradicting other findings (Usifoh and Udezi , 2013) that females are more sensitive to illness and more prone

, 2013) that remains are more sensitive to illness and more prone to taking action. The respondents in reproductive age groups patronise more traditional medicine than the older population, this is due to the need for reproductive healthcare remedies such as STI and fertility.

The most frequent occupational group who patronise TMPs are the traders, farmers and civil servants. The traders, farmers and students are with earnings below \aleph 100,000 monthly. This corroborates with the findings of Onyemachi *et al.* (2015) that traditional medicine patronisers are financially dependent and low income earners. The ability of people to share their health concerns with family members and friends yielded the high response of the respondents that most of the information on traditional medicine is received from friends (57.6 %) and family members (29.7 %). They may likely be directed by family members or friends on how to obtain the products or a times be provided with the traditional medicine product for certain health conditions.

There are about 60 % of the respondents who will rather use orthodox medicine for healthcare maintenance than traditional medicine. Although 18 % of them will rather prefer to use traditional medicine together with orthodox medicine. This indicates that although traditional medicine patronage is high, there are greater factors propelling the respondents to utilise orthodox medicine more than traditional medicine. This finding contradicts with the study of Akinyooye and Oyebami (2019) which revealed that about 60 % of the respondent will rather utilise traditional medicine for healthcare maintenance than orthodox medicine. It was in line with the study of Ladele and Olamide (2014) that orthodox medicine was mostly patronised for healthcare maintenance due to its availability.

Despite that about 50 % of the respondents are optimistic that the status of their health is very good, it is significant to note that about 50 % of the respondents have used traditional medicine about six times or thrice in the past 3 months. There are also only 15 % whom revealed they have not used traditional medicine at all or at most once in the last three months prior to the study. In furtherance, there are 14 % of the respondents who rated their health as average or below, this could be as a result of reoccurring ailments or chronic ailments that requires management, thus leading to the usage of traditional medicine daily or weekly.

The prevalence of diseases in the study area such as malaria (54.1 %) with the highest patronage of traditional medicine is also responsible for the level of traditional medicine usage. The high patronage of malaria with traditional medicine is also revealed by Ladele and Olamide (2014) whom attributed it to the development of resistant chain mosquito parasites to malarial drugs in Nigeria. It is also due to its affordability and perceived efficacy in the management of malaria as revealed by Bamgboye *et al.* (2025).

Conclusion

The study assessed the patronage of traditional medicine in Kaduna State, Nigeria. It was observed that traditional medicine was mainly patronised by the male gender with tertiary level of education and from amongst the low income earners. It was evident that most of the respondents despite patronising traditional medicine will rather prefer orthodox medicine for their healthcare needs. Although disease such as haemorrhoid, malaria, and STI are perceived to be best treated with traditional medicine. From the study, it can be established that there is an average patronage of traditional medicine and there are ailments for which TM is most sought in Kaduna State. The study recommended that, to improve the patronage of TM, government policies should be more interested in traditional medicine practices and orthodox medicine practitioners should be more accommodating to traditional medicine practices in order for the patients to be more comfortable in revealing their usage.

REFERENCES

- Abaje, I. B., Sawa, B. A., Iguisi, E. O., and Ibrahim, A. A. (2016). Impacts of Climate Change and Adaptation in Rural Communities of Kaduna State, *Nigeria, Ethiopian Journal of Environmental Studies and Management*, 9(1):97-108
- Adefolaju, T. (2014). Traditional and Orthodox Medical Systems in Nigeria, *American Journal of Health Research*, 2(4):118-124
- Akinyooye, F. E and Oyebami, M. O. (2019). Patronage and Effect of Herbal Medicine on Resident of Bodija Community in Ibadan Metropolis, International Journal of Literacy Education, 9(2)
- Bamgboye, E. A., Ogunwale, A. O., A-Muktar, A, and Ozodeigwu, I. D. (2025) Understanding Malaria Treatment Patronage from Informal Healthcare Providers in Nigerian Urban settlements: Insight from Community Members and Providers, *Malaria Journal* 24-26 https://doi.org/10.1186/s12936-025-05255-3
- Carvalho, J. C. T. (2020). Market Analysis on Traditional Medicine, Herbal Medicine, 6(2)
- Cochran, W. G. (1963). Sampling Techniques, 2nd edition, New York: John Wiley and Sons, Inc
- Darko, I. N. (2009). Ghanaian Indigenous Health Practices: The Use of Herbs, M.A. Thesis, University of Toronto, Toronto
- Dougherty, L., Gilory, K., Olayemi, A., Ogesanmola, O., Ogaga, F., Nweze, C., Banerjee, J., Oduenyi C. and Pacque, M. (2020). Understanding Factors Influencing Care Seeking for Sick Children in Ebonyi and Kogi State, Nigeria, *BMC Public Health*, 20(746)
- Edema, G. (2024, March 5). UNILAG VC, Iwu Canvass Awareness on Medicinal Plants, *Punch Newspaper*, retrieved from <u>https://punchng.com/unilag-vc-iwu-canvass-</u> <u>awareness-on-medicinal-plant/</u>
- Ezeamaka, C. K., Bala, D., Oluwole, O. A., Adewuyi, T. O., Joel,A., Daful, M., and Sadiq, Q. (2020). Assessment of the Condition of Educational Fsacilities in Selected LGAs in Kaduna State, Nigeria, *Researches Reviews of the Department of Geography, Tourism and Hotel Management*, 49(1):81-98
- Ezekwesili-Ofili, J. O. and Okaka, A. N. C. (2019). Herbal Medicine in African Traditional Medicine Book, Chapter 10, Intech

https://dx.doi.org/10.4314/swj.v20i2.1

Open Access, 191-214

- Kaduna State Government (2021). Kaduna State Sustainable Development Plan, Kaduna Bureau of Statistics (2021-2025)
- Kenechukwu, S. A., Ogah, A. and Ifeanyichukwu, A. C. (2022). Health Information and User's Beliefs, A Study of Herbal Medicine User's Attitude to Efficacy of Herbal Medicine, International Journal of Current Research in Humanities: 26(1):293-304
- Ladele, A. A. and Olamide, B. (2014). Level of Utilization of Traditional and Orthodox Medicine by Rural Dwellers in Ile-Agbo Community of Osun State, Nigeria, *Journal of Agricultural Extension* 18(1);155-168
- Mahomoodally, M. F. (2013). Traditional Medicines in Africa: An Appraisal of Ten Potent African Medicinal Plants, *Evidence Based Complement Alternative Medicines:* 1– 14. 10.1155/2013/617459
- Msomi, N. Z. and Simelane, M. B. C. (2018). Herbal Medicine, Intechopen Publishers, 216; DOI-10.5772/intechopen.72816

- Okigbo, R.N. and Mmeka, E.C. (2006). An Appraisal of Phyto-Medicine in Africa *KMITL Science and Technology Journal*, 6(2):83-94
- Onyemachi, N. O. C., Lasebikan, O. A., Elachi, I. C., Popoola, S.O., and Oluwadiya, K. S. (2015). Patronage of Traditional Bonesetters in Makurdi, North Central Nigeria, *PubMed Central*, 9:275-279
- Usifoh S. F. and Udezi, A. W. (2013). Social and Economic Factors Influencing the Patronage and Use of Complementary and Alternative Medicine in Enugu, *Journal of Pharmacy and Bio resources*, 10(1);17-24, https://dx.doi.org/10.4314/pb.v10i1.3
- World Health Organization (2013). WHO traditional medicine strategy: 2014-2023. Geneva: World Health Organization Press. Available at (www.who.int)
- World Health Organization (2020): What is universal health coverage? //www.who.int/news-room