Knowledge, attitude and practice of traditional medicine among people of Jos South Local Government Area of Plateau State, Nigeria

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Abstract

Studies and documentation on the current knowledge and practices of traditional medicine among African communities are lacking particularly in this era of modern health care expansion. This study aimed at assessing the knowledge, attitude and practice of traditional medicine in Jos South Local Government Area (LGA) of Plateau State, Nigeria. A systemic random sampling technique was employed for this study. A semi-structured open and closed ended questionnaire was used to collect data through house to house interview among 300 participants identified for the study. The data was then analysed using Statistical Package for Social Sciences (SPSS) Version 20.0 (Chicago, SPSS Inc.). The studies revealed two hundred and seventy four (94.8%) have heard about traditional medicine, while two hundred and forty two (83.7%) of them have used traditional medicine once or more in their life time, especially for the treatment of malaria and fever. One hundred and eleven (38.4%) of the respondents preferred using both traditional and modern medicine. The prevalence of Traditional Medicine patronage in Jos South LGA, Plateau state is high and this may be related to the socio-cultural acceptability, easy accessibility, and affordability of Traditional Medicine.

Keywords: Knowledge; Attitude; Practice; Traditional Medicine; Nigeria

INTRODUCTION

Since the beginning of human civilization, medicinal plants have been used by mankind for its therapeutic value. For thousands of years, Natural products (plants, minerals and animals) have been a major source of medicines, as several modern drugs have been isolated from it [1]. The traditional medicine system continues to play an essential role in the health care system, with about 80% of the world's inhabitants relying mainly on it for their primary health care [2, 3]. Traditional Medicine (TM) enjoys wider acceptability among the people of developing countries than modern medicine because it blends readily with the sociocultural life of the people. There has also been increasing popularity of TM in developed countries because of its diversity, flexibility, relatively low cost, low level of technological inputs, and relatively low side

effects [4-6]. A study in Nigeria showed that herbal medicine is the first choice for home treatment of nearly two-thirds of children with hay fever [7]. The practices across Africa tend to be characterized by a holistic and highly individualized approach to treatment. Emphasis is based on maximizing the body's inherent healing ability, by involving patients as active participants in their own care, while addressing the physical, mental, spiritual, and supernatural attributes of a disease [8, 9]. The World Health Organisation (WHO) has acknowledged that "traditional, complementary, or alternative medicine has many positive features, and that traditional medicine and its practitioners play an important role in treating chronic illnesses, and improving the quality of life of those suffering from minor illness or from certain incurable diseases"[10].

The WHO had stated that national policies on TM, which is a major challenge facing the appropriate use of TM are needed in order to define the role of Traditional Medicine/Complimentary Alternative Medicine (TM/CAM) in national health care delivery system and how it can contribute to health sector reform. These policies will also ensure that necessary regulations and legal mechanism are in place for promoting and maintaining good practice, the authenticity, safety and efficacy of any government oversight [11].

The main purpose of this study was to identify the gaps in the knowledge, attitude, and practice of TM in Jos South Local Government, Plateau State, Nigeria through cross sectional study. Data obtained from this study will serve as a baseline for concerned governmental and non-governmental bodies to undertake intervention on the use and control of TM, as well as provide important information that can help in the development of TM policies. This study will also provide important data for further investigations by researchers.

METHODS

Study design. Descriptive cross-sectional study was adopted to capture respondents' information to assess the knowledge, attitude and practice of the community in Jos South L.G.A. towards Traditional medicine (TM).

Study area. Jos South is a Local Government Area in Plateau state, Nigeria with eleven (11) wards. It houses the Governments office in Rayfield and can then be referred to as de facto capital of Plateau state. Its headquarters is in Bukuru town. It has an area of 510 km^2 and a population of 306,716 based on the 2006 census, and it is the second most populated Local Government Area in Plateau state after Jos North.

Study population. The study population consisted of adults who were 19 years and above and have been resident in the community for not less than six months.

Sampling methods and sample size calculation. A systematic random sampling technique was used to select household which was done at the intervals of six houses by lottery method, and adults of $\geq$ 19 years in the households were interviewed. Sample size was calculated using sample size determination formula.

$$n = \frac{Z^2 p(1-p)}{d^2} \; \text{....... [12]}$$

Where: n= the estimated sample size

Z= is the standard normal value corresponding to the desired level of confidence (1.96)

d=error of precision (5%)

p= people getting health care from traditional medicine that is 80%.

Therefore, adding the non-respondent rate (20%) the final sample size 295 but 300 was used as the sample size for the study.

The study instrument. The questionnaire was divided into four sections which included:

Section A: Socio-demography
Section B: Knowledge of the Respondents on Traditional Medicine
Section C: Attitude of Participants toward Traditional Medicine

Section D: Practice of the study subjects on TM

The questions asked were both open and close-ended. The open-ended questions were used to obtain information on the source, benefit, adverse effect and name of TM used. It also allowed participants to give multiple responses to the open-ended questions.

Data collection procedure. Data were collected using semi-structured interviewer administered questionnaire adapted from standardized questionnaires used by international organizations, national studies such as Demographic and Health Survey, and published articles in peer-reviewed journals [13]. Data were collected by trained data collectors using face-to face interview.

Data quality control. Intensive training was provided to data collectors about data collection techniques. Detailed orientation was given to the data collectors about the study before data collection procedure started. A pilot test was done on 30 (10% of the sample population) households to validate consistency of the questions and data collection tool.

Study variables. The outcome variables of the study were knowledge, attitude, and practice of the community on TMs; while the explanatory variables were age of interviewee, monthly family income, educational status, religion, and ethnicity.

Ethical issues. Formal letter of approval was obtained from Jos South LGA secretariat. Each participants of the study was informed about confidentiality. Each participant of the study agreed to participant voluntarily. Participants were allowed to discontinue the interview when they needed. All the participants of the study declared their willingness to participate and approval was gotten by verbal consents.

Data management and analysis. Data were checked for completeness and consistency and entered into SPSS version 20 by principal investigator, cleaned and analysed. The results were presented using simple frequencies with percentages in appropriate tables and figures to display the descriptive part of the result.

RESULTS

Socio-demographic characteristics of study subjects. From a total of 300 participants who were identified for the study, 289 of them participated in the study, yielding the response rate of 96%. The details socio-demographic characteristics of the respondents are as presented in Table 1.

Knowledge of the respondents on traditional medicine. Table 2 presented respondents' responses to items used to assess their knowledge on TM. Two hundred and seventy four (94.8%) of the respondents answered that they have heard about TM and 62.3% of them knew about herbal while 10.4%, 10%, 13.1%, and 4.2%, knew about bone setters, traditional birth attendance, both, and others respectively. Majority of the respondents reported that they have heard about more than three types of TM, and one hundred and ninety seven (68.2%) of them reported to have ever visited modern health care service after visiting TM practitioners. Ninety five (32.9%) of those who visited modern healthcare facilities after visiting TMP was because of no improvement in their health, while 55 (19.0%) and 36 (12.5%) was because of peer influence and side effects of the orthodox drugs respectively. The highest main source of herbal product 96 (33.2%) was from their relatives, with malaria 73 (25.3%) and fever 72 (24.9%) as the reasons as major reasons for the use of herbal products. 155 (53.6%) believe no adverse effect in use of herbal medicine, 100 (34.6%) experienced adverse effects while 20(6.9%) had inexplicable adverse effect.

Attitude of participants toward traditional medicine. Table 3 showed that 189 (65.3%) of the respondents had planned to use traditional medicine in the future with 100 (34.7%) not willing to use it because of fear of side effects

58 (20.1%), access to modern medicine 33 (11.4%), and religion 5 (1.7%) and others 14 (4.8%). The use of traditional medicine in the community was acceptable among the respondents with 123 (42.6%) of them who agreed and 71 (24.6%) strongly agreed with it usage. Two hundred and thirty three (80.6%) of the respondents encouraged others to use traditional medicine with few 56 (19.4%) discouraging others from the use of the medications, based on various reasons including religion 32 (11.1%), cost 82 (28.4%), availability 77 (26.6%) and others 49 (17.0%); and many of them 227 (78.5%) believed that there are disease that are not cured by modern medicine. Similarly, majority of the respondents 204 (70.2%) considered herbal medicine as safe to use, while others 85 (29.4%) believed otherwise, without any reason. Many linked herbal medicine safety its natural origin 240 (83.0%), efficacy 35 (12.1%) and lack of adverse effects 14 (4.8%). On a generally note, 239 (83.7%) of the respondents accepts traditional medicine practices with only 50 (17.3%) not accepting the practice.

Table 1: Socio-demographic characteristics (N = 289)

	Variable	Frequency	Percentage
Age group (in years)	19 – 28	161	55.7
	29 – 38	53	18.3
	39 – 48	32	11.1
	49 – 58	30	10.4
	$\geq$ 59	13	04.5
Marital status	Married	105	36.3
	Separated/divorced	4	1.4
	Widow/ Widower	15	5.2
	Single	165	57.1
Occupation	Housewife	19	6.6
	Farmer	22	7.6
	Government employee	30	10.4
	Private employee	25	8.7
	Business man/woman	39	13.5
	Student	128	44.3
	Unemployed	24	8.3
	Others	2	00.7
Ethnicity	Hausa	91	31.5
	Yoruba	43	14.9
	Igbo	49	17.0
	Others	101	34.6
Family income per month (Naira)	<10,000	57	19.7
	<50,000	115	39.8
	>50,000	110	38.1
Family size	1 – 2	19	6.6
	3 – 4	80	27.7
	5 – 6	110	38.1
	>7	76	26.3
Highest Education Level	None	28	9.7
	Primary	29	10.0
	Secondary	77	26.6
	Higher education	155	53.6
Religion	Traditional	22	7.6
	Christian	186	64.4
	Muslim	79	27.3
	Others	2	00.7

Table 2: Knowledge of the study subjects on traditional medicine (N =289)

	Variable	Frequency	%
Have you ever heard about TM?	Yes	274	94.8
	No	15	5.2
Which one do you know?	Herbal medicine	180	62.3
	Bone setters	30	10.4
	Traditional birth attendance	29	10
	All	38	13.1
	Others/specify	12	4.2
Have you or any person you know visited modern health care service soon after visiting TM practitioner?	Yes	197	68.2
	No	92	31.8
Why he or she did?	No improvement	95	32.9
	Peer influence	55	19.0
	Side effect	36	12.5
	Other	31	10.7
What were the main sources of herbal products?	From practitioners	89	30.8
	Relatives	96	33.2
	Neighbour	24	8.3
	Friends	25	8.7
	Themselves	37	12.8
Why did you use herbal medicine?	Fever	72	24.9
	Malaria	73	25.3
	Hypertension	13	4.5
	Diabetes	26	9.0
	Infection	38	13.1
	Constipation	26	9.0
	Others/specify	29	10.0
What do you know about adverse effect of TM	No adverse effect	155	53.6
	Had adverse effect like skin rash, vomiting, dizziness	100	34.6
	Users experienced inexplicable adverse effects	20	6.9
	Others	5	1.7
Health education about risks and benefits of traditional medicine is important?	Yes	261	90.3
	No	22	7.6
Traditional medicines are more effective and safer than modern health services	Yes	108	37.4
	No	177	61.2

Respondents' practice related to traditional medicine. Table 4 showed majority of the respondents 246 (85.1 %) had used traditional medicine at least once. They reported oral products as the most widely used form of TM 223 (77.2 %), with many of them 198 (68.5 %) mentioning improvement in the outcome of therapy, although, some of them 11 (3.8 %) reported exacerbating outcomes with others 31 (13.1%) indicating no change. Several participants preferred using both TM and modern medicine 111(38.4%) and more than half of the population 152 (52.6 %) said that the use of TM was mainly encouraged due to its availability and 27.0% linked it to the affordability of the products. About 50.3 % of the study population had visited TM practitioners before the time study, with 78 (27.0 %) reporting visiting TM practitioners over a year ago, 64 (22.1 %) over 6 months ago, 35 (12.1 %) 2 weeks ago and 3 (1.0 %) the day of filling this questionnaire. Figure 1 showed commonly used plants in herbal medicine, with neem and moringa plants being ranked as the most frequently used.

Table 3: Attitude of participants of the study towards traditional medicine (N =289)

	Variables	Frequency	%
Do you have plan to use TM in the future	Yes	189	65.3
	No	100	34.7
If No to question above, why don't you have?	Access of modern medicine	33	11.4
	Fear of side effect	58	20.1
	Religion	5	1.7
	Others	14	4.8
Do you agree the usage of TM among community?	Strongly agree	71	24.6
	Agree	123	42.6
	Neutral	67	23.2
	Disagree	23	8.0
	Strongly disagree	5	1.7
Do you encourage others to use TM?	Yes	233	80.6
	No	56	19.4
Why do you encourage others to use TM?	Religion	32	11.1
	Cost	82	28.4
	Availability	77	26.6
	Others	49	17.0
Do you think that there are diseases not cured by modern medicine?	Yes	227	78.5
	No	62	21.5
How do herbal medicine users consider herbal medicine?	Herbal medicine is safe for use	204	70.6
	Believe otherwise without reason, uncertain	85	29.4
Why is herbal medicine is safe to use	Their natural origin	240	83.0
	Efficacy	35	12.1
	Lack of adverse effect	14	4.8
Do you accept traditional health practitioners?	Yes	239	82.7
	No	50	17.3

Table 4: Practice of the study subject on traditional medicine (N = 289)

|	Variable	Frequency	%
Have you ever used TM products?	Yes	246	85.1
	No	43	14.9
In what form was the TM product?	Oral	223	77.2
	Topical	14	4.8
	Others	12	4.2
So what was the outcome?	Improved	198	68.5
	Exacerbated	11	3.8
	No change	38	13.1
Which one do you prefer?	Traditional medicine	81	28.0
	Modern medicine	92	31.8
	Both	111	38.4
Why do you prefer it?	Its availability	152	52.6
	Affordability	78	27.0
	Others	53	18.3
Have you ever visited TM practitioner?	Yes	146	50.5
	No	135	46.7
When was the last time you visited TM practitioners?	One year ago	78	27.0
	6 months ago	64	22.1
	2 weeks ago	35	12.1
	Today	3	1.0
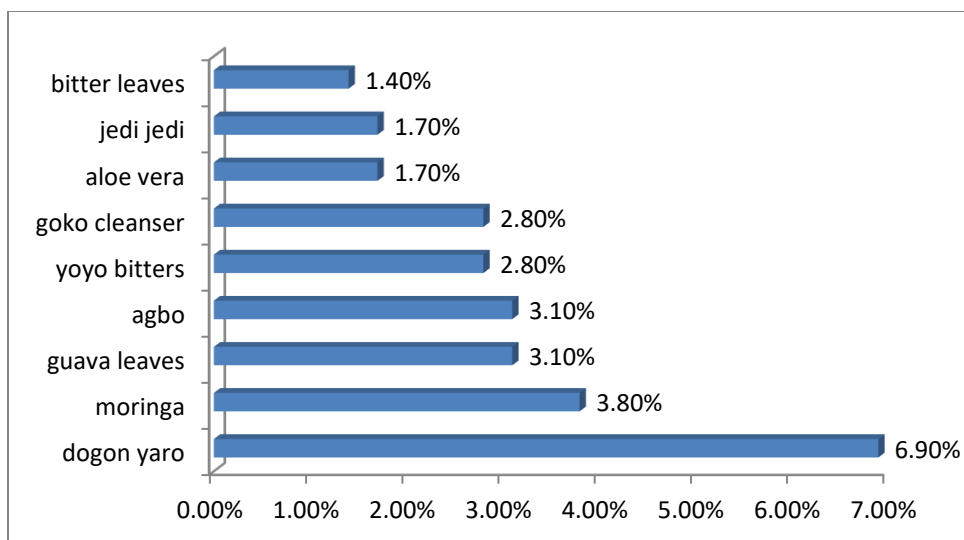
Figure 1: Top 9 commonly used herbal medicine

DISCUSSION

This cross-sectional study explored the knowledge, attitude and practice of traditional medicine usage in Jos South Local Government Area, Plateau State, Nigeria. The prevalence of TM use was 85.1 %. This finding is closely related to the study conducted in Ethiopia which indicated the prevalence of traditional medicine used as 80 % [14]. The observed high prevalence in the present study could be due to fact that majority of the population accept (82.7 %) TM use due to its availability (52.6 %) and the belief that it is safe due to its natural origin (83.0 %). The age group of 19 – 28 years formed the largest proportion (55.7%) of the respondent of which 82.0% had ever used TM; and this was higher than the result of work done in Merawi town of Ethiopia [15].

Among the known TM, herbal medicine (62.3%) was the most commonly used; and this agreed with outcome of a study conducted in urban areas of South-Western part of Nigeria, with herbal medicine prevalence of about 66.8% [16]. Similarly, the 80.6% acceptance of traditional medicine/practice among the study population was quite higher than the result obtained in a similar study done in Jara Town of Bale Zone, South East Ethiopia, which showed an almost

equal percentage of 50.18 % and 49.8 % for those who accepted and those who did not accept, respectively [15]. The observed high response in acceptance in the present study could also be as a result of increasing adverts on radios and televisions with the notion that traditional medicine cures all illness, safe for use, no adverse effects, and or cost effective .

Majority of the respondent used TM mainly in the treatment of malaria and fever; this explains why neem tree ('dogonyaro') was most frequently used plant as shown in figure 1. A high percentage of the respondents 227 (78.5 %) agree to the fact that there are diseases that cannot be cured by modern medicine with HIV/AIDS and liver disease being the most mentioned as it was seen in the study done in Ethiopia. The reported high percentage on the safety of herbal medicine (70.6 %) among the users was consistent with the study done in Nigeria and Ethiopia [15, 16].

The reported high patronage of TM by majority (85.1 %) of the respondents with oral form as the highest dosage form used (77.2 %) was similar to the result of similar studies carried out in Bale zone, Mana Angetu district, Ethiopia[15, 17] . The high preference for the use of both traditional and modern medicine agreed with the outcome of a similar study carried out in Lagos, Nigeria where majority of

the respondent also prefer to combine traditional and modern medicine [18].

Conclusion

This study revealed high prevalence of TM used in Jos South LGA, Plateau state and this could be related to the socio-cultural acceptability, easy accessibility, and affordability of the practice; and also due to the acclaimed safety and effectiveness of the products largely because of its natural origin,. The population had good knowledge of traditional medicine especially herbal medicine, especially in the management of fever and malaria.

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