

Knowledge, Attitude and Practice of Traditional Medicine Among People of Jos North Local Government Area of Plateau State, Nigeria

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ABSTRACT

Traditional medicine (TM) status in population with access to modern medicine is not well clear in the whole country, even though the acceptance of TM is a well-established fact. TM has gained popularity in all regions of the developing world. This study is aimed at accessing the general knowledge, attitude, practice, the extent of use, benefits and safety of TM among people of Jos North L.G.A.

A descriptive cross sectional study was carried out on 300 residents of Jos North L.G.A. A systematic random sampling was used to select households at intervals of six. Data was collected through the use of structured open and closed ended questionnaires and interview and the data were analysed using SPSS 20. 274 out of 300 questionnaires were valid. Among the respondents, 56.9% are between 19-28 years. 100% of the participants have good knowledge of TM, 62.8% had no adverse effect from the use of TM, while 70.1% do not agree that TM is safer than modern medicine. 70.4% of the participants plan to use TM in the future. 29.9% of the respondent prefer TM, 31.8% prefer modern medicine while 38.3% prefer both. The population in Jos North has good knowledge with high acceptability and use of TM. The main reasons for the high acceptability are due to lesser cost, availability, effectiveness and efficacy.

Keywords: Knowledge, Attitude, Practice, Traditional Medicine, Jos North.

INTRODUCTION

Practices of traditional medicine vary greatly from country to country and from region to region, as they are influenced by factors such as culture, history, personal attitude and philosophy. In many cases, their theory and application are quite different from those of conventional medicine¹.

Long historical use of many practices of traditional medicine including experience passed from generation to generation, has demonstrated the safety and efficacy of traditional medicine. Different types of TM include herbal medicine, bone setting, Traditional birth attendance. The use of folk beliefs and knowledge of traditional healers is a short cut to the discovery and isolation of pharmacologically active compound².

80% of population in some Africa and Asian country relies on TM for their primary health need³. Although, modern medicine may exist side-by-side with such traditional practice, traditional medicine has often maintained their popularity for historical and cultural reasons

Traditional medicine (TM) essentially represents a natural form of health care which has been used through generations. It is a practice derived from the values and perception of the members of the community⁴. This is a practice that goes beyond the maintenance of good health of the populace as it also protects the people from the

menace of wild animals, evil spirits, motor accidents, bountiful harvests and other human activities^{5,6}.

Traditional medicine is an evolutionary process as individuals and communities continue to discover new techniques that can transform practice in the field of medicinal sciences⁷. Traditional medicine and drug discovery using natural products is still an important issue in the current target-rich lead-poor scenario⁸.

Traditional medicine has given useful synthetic clue of modern drugs in the past⁹. Most of these plant derived drugs were originally discovered through the study of herbal cures and folk knowledge of traditional people and these could not be substituted despite the enormous advancement in synthetic chemistry¹⁰.

Herbal medicine is the most commonly used TM worldwide¹¹. Aside the direct usage of plant secondary metabolites in their original forms as drugs, these compounds can also be used as drug precursors, templates for synthetic modification, and pharmacological probes. Despite the recent interest in newer methods of drug discovery, natural-product-derived compounds are still proving to be an invaluable source of medicines for humans¹².

Another reason for growing popularity of herbal medicines is that many people believe they are safer and more natural than pharmaceuticals. However, studies have

Table 1: Socio-demographic characteristics of respondents; Jos North L.G.A town.

Variables	Frequency	Percent
Age		
19-28	156	56.9
29-38	43	15.7
39-48	43	15.7
49-58	18	6.6
59-68	11	4.0
69-78	1	0.4
>78	2	0.7
Marital status		
Married	95	34.7
Widow	10	3.6
Single	169	61.7
Occupation		
House wife	20	7.3
Farmer	20	7.3
Government employee	16	5.8
Private employee	6	2.2
Business man/woman	49	17.9
Student	132	48.2
Unemployed	30	10.9
Others	1	0.4
Ethnicity		
Hausa	149	54.4
Yoruba	29	10.6
Igbo	12	4.4
Others	84	30.7
Family income per month		
Less than 10000	58	21.2
Less than 50000	110	40.1
Greater than 50000	105	38.5
Family size		
1-2	5	1.8
3-4	52	19.0
5-6	106	38.7
>6	111	40.5
Level of Education attained		
Non	52	19.0
Primary	49	17.9
Secondary	70	25.5
Higher education	103	37.6
Religion		
Traditional	12	4.4
Christian	111	40.5
Moslem	151	55.1

shown that not all natural products are safe as some poisons are also natural⁷.

A study of the roll back malaria initiative in Nigeria revealed herbal medicine is the first choice for home treatment of nearly two thirds of children with high fever. The new health agenda in Nigeria and Africa focuses on the institutionalization of the natural medicine in parallel

with orthodox medicine into the natural health care scheme in order to move the health agenda forward since, effective health cannot be achieved in Africa by orthodox medicine¹³.

Although traditional medicine plays an important role in Nigerian society, knowledge about the extent and characteristics of traditional healing practices and practitioners is limited and has frequently been ignored in the national health system. Hence, this study aims at identifying the knowledge, perceptions, and practice of TM through cross-sectional study in Jos north local government, Plateau State, Nigeria. This study will provide important data for the State Ministry of Health, which will enable them to take appropriate controlling measures regarding the quality and safety of the practices. The study will also provide the baseline data for researchers for further investigations to determine the determining factors of TM uses.

METHODOLOGY

Study Design

This is a descriptive cross-sectional study which was conducted in Jos North L.G.A, this design was used to assess the knowledge, attitude and practice of the community towards Traditional medicine (TM)

Study Area

Jos North is one of the seventeen Local Government Area (LGA) in Plateau state, Nigeria. Jos North was created in 1987 with twenty political wards. Jos is an administrative and cosmopolitan city consisting of diverse ethnic groups including: Berom, Anaguta, Rukuba, Afizere, Irigwe. There is also Hausa, Fulani, Yoruba, Igbo and other minorities. Civil services, farming, small scale business are the predominant occupation and majority of the population are members of the Christianity or Islam religions. It has an area of 291km² and a population of 429,300 at the 2006 census.

Study Population

The source population of the study includes households Jos North L.G.A. The study population included individual from the age of 19years and above and are living for not less than six months in the community. It excluded visiting individual and also included community residence with hypertension and diabetes. The sampling units were households, while the study units were adult individual available in the household during the interview.

Sample Size

Sample size was calculated by using sample size determination formula.

$$n = Z^2 p (1-p) / d^2$$

Where:

n= the estimated sample size

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

d=error of precision

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.

Table 2: Knowledge of the study subjects on traditional medicine.

Variables	Frequency	Percent
Have you ever heard of TM?		
Yes	274	100
Which one do you know?		
Herbal medicine	176	64.2
Traditional birth attendance	17	6.2
Bone setting	17	6.2
All	57	20.8
Others	7	2.6
Have you or anyone you know visited modern health care service soon after visiting TM practitioner?		
Yes	223	81.4
No	51	18.6
Why he/she did?		
No improvement	140	51.1
Peer influence	34	12.4
Side effects	37	13.5
Others	19	6.9
What are the main sources of supply of herbal products?		
From practitioner	100	36.5
Relatives	121	44.2
Neighbor	14	5.1
Friends	16	5.8
Themselves	23	8.4
Why did you use herbal medicine?		
Fever	92	33.6
Malaria	72	26.3
Hypertension	17	6.2
Diabetes	17	6.2
Infection	39	14.2
Constipation	12	4.4
Other	25	9.1
What do you know about adverse effect of TM?		
No adverse effect	172	62.8
Had adverse effect like; skin rash, vomiting, dizziness.	82	29.9
User experienced inexplicable adverse effects	17	6.2
Others	3	1.1
Health education about risks and benefits of traditional medicine is important		
Yes	270	98.5
No	4	1.5
Traditional medicines are more effective and safer than modern health services?		
Yes	82	29.9
No	192	70.1

The Questionnaire

The questionnaire was divided into four sections which includes;

Section A: Socio-demography

Section B: Knowledge of the study subjects on TM

Section C: Attitude of participants of the study towards TM

Section D: Practice of the study subjects on TM

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

Sampling and Data Collection Procedure

A systematic random sampling technique was used to select a household which was done at the intervals of six houses by lottery method. The adults in the households were interviewed.

Data were collected using 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. 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. Detail orientation was given to the data collectors about the study before data collection procedure starts. 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. The explanatory variables were age of interviewee, monthly family income, educational status, religion, and ethnicity

Ethical Consideration

Before data collection, a letter of permission was obtained from Jos North L.G.A headquarters and verbal consent was obtained from each participant. Each respondent was assured of the confidentiality of their responses and also agreed to participate voluntarily. Participants were allowed to discontinue the interview when they needed.

Data Analysis

Data were checked for completeness and consistency and were properly entered. Data were analysed using SPSS version 20. Results were presented in frequency and percentage.

The number of questions which the respondent gave correct responses was counted and scored. The results were analysed, interpreted and presented in tables and figures

RESULTS

Socio-demographic characteristics of respondents; Jos North L.G.A town

A total of 274 respondents, with response rate of 91.3% were studied. Ages of participant ranges from 19 to greater or equal to 79. With respect to marital status, 169 (61.7%) are single while 95 (34.7%) are married. Regarding occupation, 49 (17.9%) are into business, 149 (54.4%) of the respondents are Hausa, 29 (10.6%) are Yoruba. With

Table 3: Attitude of participants to the study towards traditional medicine.

Variables	Frequency	Percentage
Do you have plans to use TM in the future?		
Yes	193	70.4
No	81	29.6
If No to question above why don't you have?		
Access to modern medicine	36	13.1
Fear of side effects	43	15.7
Religion	1	0.4
Others	1	0.4
Do you agree to the usage of TM among the community?		
Strongly agree	41	15.0
Agree	142	51.8
Neutral	66	24.1
Disagree	18	6.6
Strongly disagree	7	2.6
Do you encourage others to use TM?		
Yes	212	77.4
No	62	22.6
Why do you encourage others to use TM?		
Religion	5	1.8
Cost	109	39.8
Availability	75	27.4
Others	27	9.9
Do you think that there are diseases not cured by modern medicine?		
Yes	244	89.1
No	30	10.9
How do herbal medicine users consider modern medicine?		
Herbal medicine is safe for use	194	70.8
Believed otherwise without reason, uncertain.	80	29.2
Why herbal medicine is safe for use?		
Their natural origin	220	80.3
Efficacy	41	15.0
Lack of adverse effect	13	4.7

respect to family income per month, 105 (38.3%) of participants earns greater than 50,000 per month. From the total respondent about 106 (38.7%) have family size of 5 to 6. 52 (19.0%) of respondent are non-educated while 103 (37.6%) have attained higher education. 151 (55.1%) are Moslem followed by 111 (40.5%) Christians and 4.4% are traditional worshippers

Knowledge of the study subjects on traditional medicine

All respondent 100% have heard of TM, of which 176 (64.2%) knows herbal medicine, 223 (81.4%) respondents have visited modern medicine or modern health care

service soon after visiting TM Practitioner, out of which 140 (51.1%) reason is due to no improvement and 37 (13.5%) is related to side effect. 36.5% sources of supply of herbal products from practitioner. Herbal medicine was used for fever 92(33.6%), 26.6% for malaria, 6.2% for diabetes, 6.2% for hypertension. 172(62.8%) of participants had no adverse effect and 82 (29.9%) had adverse effect. Regarding importance of health education about risks and benefit of TM 270 (98.5%) answered yes while 4 (1.5%) answered No. 2 (29.9%) of the participants agreed that TM is more effective and safer than modern health services and 192 (70.1%) disagreed.

Attitude of participants to the study towards traditional medicine

193 (70.4%) participants have plans TM in the future, 81 (29.6%) have no plans to use TM to which 36 (13.1%) reasons is due to access to modern medicine, religion 1 (0.4%), fear of side effects 43 (15.7%). 142 (51.8%) agree to the usage of TM among the community, 212 (77.4%) encourage others to use TM out of which 109 (39.8%) of their reason is due to cost 75 (27.4%), availability and 27 (9.9%) others which includes safety, efficacy, and effectiveness. Participants that said there are diseases not cured by modern medicine are 244 (89.1%). 194 (70.8%) herbal medicine users consider modern medicine to be safe for use and 220 (80.3%) reason is due to natural origin, 14(15.0%) is due to efficacy.

Practice of the study subjects on traditional medicine

217 (79.2%) have used TM, which are mostly drinkable 195 (71.2%) and others 15 (5.5%) which includes smoking, inhalation. The outcome was improved in 191 (69.7%). 2 (29.9%) prefer TM and 105 (38.3%) prefer both. Their preference is due to availability 160 (58.4%), 146 (53.3%) have visited TM practitioner, 66 (24.1%) visited one year ago, 61 (22.3%) 6 months ago.

DISCUSSION

Traditional medicine (TM) in Nigeria has come a long way, the practitioners services are believed and relied on by most people for the relief of physical illnesses as well as psychological and spiritual comfort. Their success is enhanced by their understanding of the personal, social, cultural, and political conditions of the individuals, families, and communities⁵. Therefore to majority of the developing countries population, TM is indispensable as it is more accessible, cheaper, and more holistic than the western.

The age group of 19 – 28 years formed the largest proportion (56.9%) of the respondents. This is consistent with the study done in Jara town, Ethiopia¹⁴. This present study reported that all the respondent 100% have heard of TM and it serves as an alternative way of getting treated of ailments apart from modern medicine this finding is similar to the research conducted in west Ethiopia 98.22%¹⁵. Among the TM known by the respondents includes herbal medicine 64.2%, bone setting 62% and Traditional birth attendant 6.2%.

The prevalence of TM use in this study is 79.2%. This finding can be compared to a study done in Ethiopia in which the prevalence of TM use is 80%¹⁶, which can be

Table 4: Practice of the study subjects on traditional medicine.

Variables	Frequency	Percent
Have you ever used TM?		
Yes	217	79.2
No	57	20.8
Which one did you use?		
Drinkable	195	71.2
Ingestible	1	0.4
Ointment	9	3.3
Others	15	5.5
So what was the outcome?		
Improved	191	69.7
Exacerbated	1	0.4
No change	25	20.8
Which do you prefer?		
Traditional medicine	82	29.9
Modern medicine	87	31.8
Both	105	38.3
Why do you prefer it?		
Its availability	160	58.6
Affordability	74	27.1
Others	39	14.2
Have you ever visited TM Practitioner?		
Yes	146	53.3
No	128	46.7
When was the last time you visited TM Practitioner?		
One year ago	66	24.1
6 months ago	61	22.3
2 weeks ago	23	8.4
Today	1	0.4

related to the fact that majority of the respondent believed that TM is very much important in the community and this is because of easy accessibility, availability, affordability and benefits compared to modern medicine. TM is highly use among the young adults despite their level of education and access to modern health services, which is to show that the knowledge and usage of TM is evergreen regardless the ancient age of TM. Herbal medicine use (64.2%) is the commonest type of TM practice, this is the same to that conducted in Merawi Town of Northwest Ethiopia 64%¹⁷ and almost the same to studies carried out in Urban residence in Lagos Nigeria that reported 66.8%¹⁸. TM that involves spiritual healing is most common amongst the Moslem women who are said to be possessed of evil spirit and it is also believed to drive away bad luck. Herbal medicine from study was majorly used for the treatment of fever 33.6% which is much higher compared to the study conducted in Urban residence in Lagos 26%, this may be due to availability of herbal medicine in most community. Almost every household has the neem trees (Dogon yaro) growing around and can easily get the leaves to prepare and then take to cure fever. Other diseases for which the respondents use herbal medicine include diarrhea, gonorrhoea, typhoid, bleeding, and bone fracture.

62.8% of the respondents did not experience any adverse effects, only 29.9% had adverse effects like skin rashes, dizziness, vomiting which is lower than the research conducted in Ethiopia where 54.21%¹⁴. Even with the lack of adverse effect, 70.1% of the respondents do not agree that TM is more effective and safer than modern medicine; so 98.5% believed that health education about the risk and benefit of TM is important. Previous studies have, however, associated severe acute renal failure¹⁹ and hepatic failure²⁰ to the use of herbal medicine. Herbal medicines are considered safe by more than half of the respondents, and this is attributed to their natural origin 80.3%, but then, facts still remain that natural source does not guaranty their efficacy. Out of 79.2% that used TM, 69.7% of the outcome was improved. 29.9% prefer TM because of its availability 58.4% and affordability 27.0%. 29.6% do not plan to use TM in the future because of access to modern medicine 13.1%, fear of side effects 15.7%. Majority of the respondent agreed to the usage of TM among the community and 77.4% encouraged others to use TM and this is related to the benefit they obtained from TM. 38.3% prefer both TM and modern medicine; because not all sicknesses are cured by either TM or modern medicine, and 70.8% consider herbal medicine safe for use. The route mostly used for administering TM is oral 71.2% similar to a study which was done in Jara, Ethiopia¹⁴. Comparing family size, family income per month and TM use, majority of the respondents have large family size of greater or equal to 7 and income per month is less than 50,000 40.5%, this could be another reason for the higher use of TM.

RECOMMENDATION

TM is widely used and very popular, further studies should be carried out in Nigeria to access the extent of use, knowledge, benefit and safety of TM in other communities.

The federal Government has to also set up and financed the Federal College of Complementary and Alternative Medicine, Lagos under the Federal Ministry of Health to train herbalist on its use and practices.

CONCLUSION

From the study, it revealed that majority of the respondent has good knowledge of TM and uses TM. Herbal medicine is the most commonly type of TM used. TM is highly acceptable in the community because it is affordable, available and effective.

Most of the population encouraged the used of TM and also education on the risks and benefit of TM in the community. Low level of income per month and increase in family size can be associated with high prevalence of TM use.

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