

Original Research Article

Perception, Knowledge and Challenges of the Use of Traditional Medicine among Residents of Jos South Local Government Area of Plateau State, Nigeria

ABSTRACT

Aim: To determine the knowledge, perception and challenges associated with the use of traditional medicine among the residents of Jos south Local Government Area of Plateau state, Nigeria

Study design: This is a cross-sectional descriptive study conducted using a systematic random sampling technique

Place and study duration: Jos south Local Government Area, Plateau state, Nigeria. Between October 2019 and March 2020

Methodology: A total of 204 residents of Jos South participated in this study. The sample units were households within the study location while the study units are individuals 18 years and above living in those houses who have been residents of the study location for at least six months. A structured self-administered questionnaire was used for data collection from the study participants

Results: A total of 204 individuals participated in this study (117 women and 87 men). More than half of the study participants (64%) use traditional medicine and about 60% of them believe that it is safe. Nevertheless, 32% of the respondents are of the opinion that traditional medicine is more effective than orthodox medicine but only 26% of them believe that it is safer than orthodox medicine. Meanwhile, 61% of them would support the integration of traditional medicine into the conventional healthcare delivery system, whereas nearly one-third (74%) of the study population is convinced that government should set-up and fund facilities that provide traditional medicine services. Also, majority of the study participants (54%) believe that the availability of traditional medicine enhances access to healthcare

Conclusion: There is a high acceptability and patronage of traditional medicine among the residents of Jos south LGA of Plateau state, Nigeria. Majority of the population also supports the integration of traditional medicine into the conventional healthcare delivery system

Keywords: *traditional medicine, orthodox, belief, safe, use and healthcare*

1. INTRODUCTION

“Traditional Medicine has developed the world over in response to the health needs of the people, and it involves the development of various traditional systems of using locally available resources to alleviate health needs. Consequently, different societies have evolved different forms of indigenous healing methods captured under traditional Medicine, for example, Chinese, Indian, and African traditional medicines. This explains why there is no universally accepted definition of the term” [1]. WHO defined “traditional Medicine as including diverse health practices, approaches, knowledge, and beliefs incorporating plant, animal, and mineral-based medicines, spiritual therapies, manual techniques, and exercises applied singularly and in combination to maintain well-being as well as to treat, diagnose, or prevent illness” [15]. One of the most acceptable definitions of traditional Medicine, as provided by the World Health Organization (WHO), is the “total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health, as well as the prevention, diagnosis, improvement or treatment of physical and mental illness” [3]. “The use of herbal medicinal products and supplements has increased tremendously over the past three decades, with not less than 80% of people worldwide relying on them for some part of primary healthcare. Although therapies involving these agents have shown promising potential, with the efficacy of many herbal products established, many remain untested, and their use is either poorly monitored or not even monitored. The consequence is an inadequate knowledge of their mode of action, potential adverse reactions, contraindications, and interactions with existing orthodox pharmaceuticals and functional foods to promote both these agents’ safe and rational use” [4]. “Several plants have been used in traditional Medicine for many years. Some seem to work, although there may not be sufficient data (double-masked trial, for example) to confirm their efficacy. Traditional Medicine is perceived as affordable, accessible, and acceptable to the communities in which it operates. In low-income countries, the number of practitioners of modern Medicine may not be enough to meet the country’s healthcare needs” [5]. “Traditional Medicine in Nigeria has come a long way; most people believe and rely upon the services of practitioners for the relief of physical illnesses and psychological and spiritual comfort. Their success is enhanced by their understanding of individuals, families, and communities’ personal, social, and cultural conditions” [6]. “To many, traditional Medicine is indispensable as it is more accessible, cheaper, and more holistic than the Western alternative. The World Health Organization has also recognized the central position traditional Medicine plays in the 21st century, specifically in preventing and managing diseases such as malaria, tuberculosis, and HIV/AIDS, among others. Hence, 2002 it launched its first-ever comprehensive traditional medicine strategy” [7]. “Although Traditional Medicine greatly influences healthcare practice worldwide, little reliable information exists regarding its safety, quality, and efficacy because most governments do not regulate or officially recognize its therapies. For example, a cross-sectional population survey in Australia found that less than half (46.6%) of traditional herbal medicine users were even aware of potential risks associated with product use. In addition, traditional medicine products are more likely to be affected by environmental factors such as light, temperature, soil quality, period and time of collection, and plant age” [8]. Governments will continue to take different approaches in recognizing and regulating Traditional Medicine practices unless an international framework is established for evaluating and regulating these practices. Traditional medicine practice in Nigeria has faced great challenges at the hands of Government officials who look at it with disdain and disrespect [7]. “The World Health Organization in 1978 recognized traditional Medicine as a vital and essential resource in achieving universal health coverage for people in the developing world during its Alma Ata Declaration on Primary Health Care” [9]. However, the increasing poor perception, knowledge, and challenges of traditional Medicine and its effect on the community with health implications as also reported in a similar study conducted in Ethiopia [17] necessitated the need to ascertain the perception, knowledge, and challenges of using traditional Medicine in Jos South Local Government Area of Plateau State, Nigeria. Traditional Medicine has the potential to contribute to a better healthcare system; however, several challenges must be overcome to avoid the emergence of more costly, less safe, and effective healthcare. The findings of this study would help inform the decisions of policymakers in the health sector regarding the use of traditional medicine among the general population.

2. METHOD

2.1 Method

The study population included individuals aged 18 years and above who lived in the study area for at least six months. The sampling units were households, while the study units were adult individuals available in the home during the interview. A cross-sectional descriptive study design was adopted to examine associations between variables of interest such as educational background, socioeconomic status, prevalence, perception, knowledge, and challenges of using traditional medicine as they exist in the study population.

2.2. Sampling procedure/data collection technique

A systematic random sampling technique was used to select households. The participants in the selected households who consented to participate in the study were interviewed through a structured questionnaire designed to generate quantitative data. The questionnaire was used to create information on the perception, knowledge, and challenges of using traditional medicine.

The questions were arranged into sections as follows:

- Demography of respondents, e.g., age, sex, religion, occupation, marital status
- Perception of respondents on the use of traditional medicine
- Knowledge of the use of traditional medicine
- Challenges associated with the use of traditional medicine

2.2.1 Materials

- Questionnaire
- Writing materials/stationary
- Vehicle
- Tricycle

2.2.2 Data analysis

Data was analyzed using Statistical Package for Sciences Software (SPSS version 20). The results were presented using simple frequencies with percentages in appropriate tables to display the descriptive part of the result.

3. RESULTS AND DISCUSSION

3.1 Results

TABLE (1): PERCEPTION OF THE USE OF TRADITIONAL MEDICINE

S/N	VARIABLE	SA	A	N	D	SD
		N (%)	N (%)	N (%)	N (%)	N (%)
1.	Traditional medicine is safe	28 (13.7)	81 (39)	52 (25.5)	33 (16.2)	8 (3.9)
2.	Traditional medicine is not an appropriate treatment for any	13 (6.4)	61 (29.9)	35 (17.2)	69 (33.8)	24(11.8)

disease

3. Traditional medicine has fewer side effects compared to conventional medicine 26 (12.7) 65 (31.9) 43 (21.1) 47 (23.0) 18 (8.8)
4. Traditional medicine is a threat to public health 11 (5.4) 35 (17.2) 49 (24.0) 77 (37.7) 27(13.2)
5. It is important to consult a healthcare professional before traditional medicine use 73 (35.8) 87 (42.6) 25 (12.3) 11 (5.4) 6 (2.9)
6. The lack of scientific evidence is a barrier toward traditional medicine use 50 (24.5) 97 (47.5) 32 (15.7) 17 (8.3) 6 (2.9)
7. Healthcare delivery should integrate traditional medicine with conventional medicine5 37 (18.1) 87 (42.6) 36 (17.6) 36 (17.2) 6 (2.9)
8. The Pharmacist should be able to counsel patients on traditional medicine use 62 (30.4) 92 (45.1) 20 (9.8) 27 (13.2) 2 (1.0)
9. Traditional medicine is essential for prevention of diseases 31 (15.2) 63 (30.9) 52 (25.5) 47 (23.0) 7 (3.4)
10. Traditional medicine is useful for only chronic diseases 13 (6.4) 14 (6.9) 29 (14.2) 105(51.5) 41(20.1)

Traditional medicine is useful for

11.	ailments not responding to conventional medicines	23 (11.3)	67 (32.8)	41 (20.1)	51 (25.0)	17 (8.3)
12.	Traditional medicine will enhance availability of healthcare	223 (11.3)	73 (35.8)	35 (17.2)	50 (24.5)	21(10.3)
13.	Traditional medicine will enhance affordability of healthcare	29 (14.2)	81 (39.7)	32 (15.7)	43 (21.1)	14 (6.9)
14.	I support the creation of Traditional Medicine Department in the Federal Ministry of Health.	58 (28.4)	96 (47.1)	13 (6.4)	27 (13.2)	10 (4.9)
15	Government should fund or setup traditional medicine healthcare facilities	58 (28.4)	93 (45.6)	23 (11.3)	20 (9.8)	8 (3.9)
16.	Traditional medicine should be restricted to only primary healthcare facilities	9 (4.4)	30 (14.7)	28 (13.7)	101(49.5)	32(15.7)
17.	Traditional Medicine Practice Council should be constituted	52 (25.5)	105 (51.5)	26 (12.7)	17 (8.3)	2 (1.0)
18.	I will like to know more about traditional medicine	78 (38.2)	92 (45.1)	22 (10.8)	5 (2.5)	1 (0.5)
19.	Traditional medicine should be covered by the National Health Insurance Scheme	56 (27.5)	72 (35.3)	43 (21.1)	30 (14.7)	2 (1.0)

Cumulative % < 100 for any subgroup is due to non-response; SA=Strongly Agree; A=Agree; N=Neutral; D=Disagree; SD=Strongly Disagree

Table 1 above describes the perception of Traditional Medicine (TM) among the study population. The table reflects that nearly half of the study participants' belief that TM is safe and should also be covered by the National Health Insurance Scheme. Half of them (51.5%) disagree with the perception that TM is only relevant for chronic diseases. Summarily, the table shows that the study population have a good perception of TM and nearly half of them (45.1%) would like to gain more knowledge on the use of TM.

TABLE (2): SIDE EFFECTS EXPERIENCED WITH THE USE OF TRADITIONAL MEDICINE

S/N	VARIABLE	FREQUENCY	Percentage (%)
1.	Vomiting	6	7.2
2.	Rashes	7	8.4
3.	Abdominal pain	18	21.7
4.	Nausea	6	7.2
5.	Dizziness	13	15.7
6.	Watery stool	24	28.9
7.	Others	7	8.4

N=83 Cumulative % < 100 for any subgroup is due to non-response

Table 2 above shows the side-effects experienced by the study population with respect to the use of Traditional Medicine (TM). The table indicates that watery stool is the most commonly experienced side-effect associated with the use of TM as indicated by 28.9% of the study population. Meanwhile, nausea and vomiting have been reported to be the least experienced side-effect as seen in the table. Nevertheless, other side-effects experienced include rashes, abdominal pain and dizziness.

TABLE (3): REASONS FOR THE USE OF TRADITIONAL MEDICINE

S/N	VARIABLE	FREQUENCY	Percentage (%)
1.	Traditional cleansing and treatment of diseases	153	75.0
2.	Food supplement	22	10.8
3.	Protection	5	2.5
4.	Sexual enhancement	6	2.9
5.	Skin care	12	5.9
6.	Blood enrichment	4	2.0
7.	Fertility/reproduction	1	0.5
8.	Laxative	1	0.5

N=204 Cumulative % < 100 for any subgroup is due to non-response

In table 3, the different reasons associated with the use of Traditional Medicine (TM) among the study population were captured. It can be deduced from the table that nearly all the study participants (75.1%) use TM for traditional cleansing and treatment of diseases. Few of them (10.8%) use it as food supplement, whereas others use TM for diverse reasons including protection, sexual enhancement, skin care, blood enrichment, laxative and for fertility reasons.

The findings of this study revealed that most respondents have a good perception of the use of traditional medicine as they believed that it would enhance the availability and affordability of healthcare. This is in line with the results of the study conducted by Gari *et al.* [10], which reported a positive perception of traditional medicine because it has successfully solved problems of some ailments like infertility, diabetes, high blood pressure, malaria, etc. This trend can be attributed to the fact that traditional medicine is more

accessible to the locals and cheaper than orthodox medicine, which is also in tandem with the submission of Yineger *et al.*, [12] who opined that traditional medicine is the most affordable and easily accessible source of treatment in the primary healthcare system of resource poor communities. The wider acceptability of traditional medicine in the town can be ascribed to cultural acceptability, easy accessibility, and affordability of traditional medicine compared to modern medicines and facilities [14]. Nevertheless, this finding is contrary to that of Tora and Heliso who in a study to assess knowledge and use of traditional medicine in Wolaita zone, Southern Ethiopia, reported that medicinal plant usage has reduced in recent years [13]. Also, countries in Africa, Asia, and Latin America use traditional medicine to help meet some of their primary health care needs [14]. However, nearly half of the study population have reported experiencing at least a side-effect related to traditional medicine, which is inconsistent with the findings of Ohemu *et al.* [11] and another study conducted in Ethiopia which revealed wide acceptability for traditional medicine [14]. The opposing study outcomes may be related to the irregularities associated with using these preparations among the study population and the individual practice methods of different practitioners of traditional medicine. Also, the knowledge and understanding of these users are likely to have contributed to these differing findings. The patients' knowledge of traditional medicine influences their use of it, and different traditional medicine practitioners employ various methods in their practice, most of which are not officially standardized; hence, they may not always have a predictable outcome. Therefore, it now behooves the relevant authorities to work towards standardizing traditional medicine practice to ensure its safe use by the public. It can also be deduced from the study results that traditional medicine faces several limitations and issues ranging from lack of standard dosage and verification of claims to inadequate training of the practitioners. This finding is in line with that of Yineger *et al.*, [12] who found that most traditional healers have poor knowledge on dosage while prescribing remedies to their patients. It has also been reported in a similar study conducted in Kenya that, although traditional medicine plays an important role in Ethiopian 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. This is also true in Merawi where such study on traditional medical practice was not conducted in the past [14]. Nevertheless, the Nigerian government has taken giant strides in addressing these challenges by establishing guidelines for the regulation of traditional medical practice to protect the population from quackery, fraud, and incompetence; liaising with State Boards of Traditional Medicine to ensure adherence to the policies and guidelines outlined in the Federal Traditional Medicine Board Act; establishing model traditional medicine clinics, herbal farms, botanical gardens, and traditional medicine manufacturing units in the geopolitical zones of the country; and collaborating with organizations with similar objectives within and outside Nigeria.

4. CONCLUSION

This study revealed a broad acceptance of traditional medicine among Jos South Local Government Area residents of Plateau State, Nigeria, consistent with other parts of the world. Nevertheless, it is evident from the study's findings that using traditional medicine in regions where the practice is not standardized comes with certain disadvantages, such as associated side effects. Finally, most of the study population believed that traditional medicine has made access to healthcare more accessible and cheaper. Hence, they would support any government policy to strengthen the practice of conventional medicine.

COMPETING INTERESTS

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

1. Toyin Adefolaju. Traditional and Orthodox Medical Systems in Nigeria: The Imperative of a Synthesis, *American Journal of Health Research*. Volume 2, Issue 4, July 2014, pp. 118-124. doi: [10.11648/j.ajhr.20140204.13](https://doi.org/10.11648/j.ajhr.20140204.13)
2. Frimpong .E. and Nlotoo .M. Tswana traditional health practitioners' perspectives on the management of diabetes and hypertension: a qualitative study using focus group discussions. *The Pan African Medical Journal*.2019;34:93. doi:10.11604/pamj.2019.34.93.19112
3. WHO. Traditional and Modern Medicine Harmonizing the two approaches, Western Pacific Region, Geneva. World Health Organization, 2000.
4. Martins Ekor. The growing use of herbal medicines: issues relatingto adverse reactions and challenges in monitoring safety. *Frontiers in Pharmacology*.2013; 4:177. doi:10.3389/fphar.2013.00177. PMID: 24454289; PMCID: PMC3887317.
5. Sato A. Revealing the popularity of traditional medicine in light of multiple recourses and outcome measurements from a user's perspective in Ghana. *Health Policy Plan*. 2012 Dec;27(8):625-37. doi: 10.1093/heapol/czs010. Epub 2012 Feb 17. PMID: 22345671. Roan, S. (1999) Alternative Medicine. Encarta year book, November.
6. Toyin Adefolaju. Traditional and Orthodox Medical Systems in Nigeria: The Imperative of a Synthesis.*American Journal of Health Research*. Vol. 2, No. 4, 2014, pp. 118-124. doi:10.11648/j.ajhr.20140204.13
7. Toyin Adefolaju. *International Journal of Health Research*, June 2011; 4(2): 99-106. Available at <http://www.ijhr.org>
8. World Health Organization (2011) Legal Status of Traditional medicine and complementary/alternative medicine: a world review
9. WHO African Region (AFRO). Expanded special project for elimination of neglected tropical diseases. <https://espen.afro.who.int/regions/who-african-region-afro>
10. Gari A, Yarlagadda R, Wolde-Mariam M. Knowledge, attitude, practice, and management of traditional medicine among people of Burka Jato Kebele, West Ethiopia. *J Pharm Bioallied Sci*. 2015 Apr-Jun;7(2):136-44. doi: 10.4103/0975-7406.148782. PMID: 25883518; PMCID: PMC4399012.
11. Ohemu T L, Sariem C N, Dafam D G, Ohemu B O, Okwori V A, Olotu P N, Jerome CO. Knowledge, Attitude and Practice of Traditional Medicine among People of Jos North Local Government Area of Plateau State. *International Journal of Pharmacognosy and Phytochemical Research* 2017; 9(10); 1353-1358
12. Yineger, H., Yewhalaw, D. Traditional medicinal plant knowledge and use by local healers in Sekoru District, Jimma Zone, Southwestern Ethiopia. *J Ethnobiology Ethnomedicine* 3, 24 (2007). <https://doi.org/10.1186/1746-4269-3-24>
13. Asfaw Tora and Tarekegn Helisob. Assessment of the Indigenous Knowledge and Use of Traditional Medicinal Plants in Wolaita Zone, Southern Ethiopia. *International Journal of Medicinal Plants and Natural Products (IJMPNP)* Volume 3, Issue 1, 2017, PP 16-22 ISSN 2454-7999 DOI:<http://dx.doi.org/10.20431/2454-7999.0301003>
www.arcjournals.org

14. Samuel Masresha Wassie, Leul Lisanework Aragie, Belaynew Wasie Taye, Laychiluh Bantie Mekonnen. Knowledge, Attitude, and Utilization of Traditional Medicine among the Communities of Merawi Town, Northwest Ethiopia: A Cross-Sectional Study. Evidence-Based Complementary and Alternative Medicine. vol. 2015, Article ID 138073, 7 pages, 2015. <https://doi.org/10.1155/2015/138073>
15. WHO, Traditional Medicine Strategy 2002–2005, World Health Organization, Geneva, Switzerland, 2002.
16. Tezera Jemere Aragaw, Dessie Tegegne Afework, Kefyalew Ayalew Getahun, "Assessment of Knowledge, Attitude, and Utilization of Traditional Medicine among the Communities of Debre Tabor Town, Amhara Regional State, North Central Ethiopia: A Cross-Sectional Study", Evidence-Based Complementary and Alternative Medicine, vol. 2020, Article ID 6565131, 10 pages, 2020. <https://doi.org/10.1155/2020/6565131>

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