

ORIGINAL ARTICLE

Traditional medication use among out-patients attending the eye clinic of a secondary health facility in Owerri, South-East Nigeria

Eberechukwu O ACHIGBU¹
Kingsley I ACHIGBU²

¹Department of Ophthalmology
Federal Medical Centre
Owerri, Imo State, NIGERIA

²Department of Paediatrics
Federal Medical Centre
Owerri, Imo State, NIGERIA

Author for Correspondence

Dr Eberechukwu O ACHIGBU
Department of Ophthalmology
Federal Medical Centre
Owerri, Imo State, NIGERIA

E-mail: bebediora@yahoo.com
Phone: + 234-806-787-3509

Received: March 11th, 2014

Accepted: September 21st, 2014

DISCLOSURES: NIL

INTRODUCTION

Traditional medicine (TM) is a comprehensive term used to describe various forms of indigenous medicines. It has been referred to

as the sum total of practices, measures, ingredients and procedures of all kinds, which have enabled the African, alleviate his sufferings and achieve healing.¹ With

ABSTRACT

Background: Traditional medicine practice is thriving in Nigeria. Proximity, easy accessibility, cost and increasing interest in natural products of plant origin are factors that have been implicated. Inappropriate and unregulated use of traditional medications can result in hazardous effects. Lately, the World Health Organization (WHO) has been helping nations to develop policies for the regulation of traditional medicine use.

Objective: This study aims at determining the pattern and prevalence of the use of traditional medication among out-patients attending the Eye Clinic of Imo State Specialist Hospital Owerri, Imo State, Nigeria. The study will provide useful data for patient management and the development of national health policies on traditional medicine practice.

Methodology: A prospective study using a pre-tested structured questionnaire was carried out in the Eye Clinic of Imo State Specialist Hospital Owerri during the period of study.

Results: Out of 202 subjects enumerated, 168 (83.2%) comprising of 72 (82.8%) males and 96 (83.5%) females have used traditional medication. The use of traditional medication was significantly associated with age and occupation, but, not with sex and education. Malaria (44.5%) was the most common reason for the use of traditional medication followed by ocular problems (20.6%). The most common type of this medication used was vegetable matter / herb (52%). There was an 89.5% positive response to counselling among the subjects.

Conclusion: The use of traditional medication was significantly associated with occupation and increasing age. Education had a positive influence on the attitude of the subjects; hence, education and regulation of traditional medication practice are recommended to curb the negative effects of inappropriate use. Medical practitioners should be aware of the prevalent use of traditional medications among patients, and the challenges they may pose in patient care.

Keywords: African, education, herbs, malaria, ocular problems

modernisation, traditional medical practice became modified or in some cases, entirely abandoned in preference to western-oriented scientific medicine.

Nevertheless, traditional medical practice still thrives in Africa and other developing countries where the practitioners are highly patronized.^{2,3,4} In fact, its use is rapidly spreading in industrialized countries. Seventy percent of the population in Canada and over 50% of people living in Europe and North America have used complementary or alternative medicine.⁵ Similarly in China, 30-50% of the total medicine consumption are traditional herbal preparations.⁵

While these traditional medications constitute first line treatment for malaria with high fever in 60% of children in Ghana, Mali, Nigeria and Zambia, 75% of people living with HIV/AIDS use traditional medicine in San Francisco, London and South Africa.⁵

The reason for the dependence on traditional medications in Africa is not far-fetched. Factors such as proximity and easy accessibility of the traditional practitioners to the community, cost, availability of the medicines and traditional beliefs have been implicated as some of the reasons for the patronage of these services.^{2,6,7} In addition, there is an increasing interest in the use of herbal medicines due to the everyday consumer's preference of products of natural origin resulting in a growing number of national traditional medicine research institutes in developing countries such as Nigeria, China, Ghana, India, Madagascar and Vietnam.⁸ On the other hand, the modern hospitals are often located far away in the cities and their processes are considered time consuming and more expensive, which discourage patients from utilizing them.

Indeed, there is scientific evidence supporting the use of some herbal medicines. It is estimated that 25% of modern medicines are made from plants first used traditionally.⁵ However, the inappropriate use of traditional medicines can result in hazardous effects,

which is why the World Health Organisation (WHO) advised that researches be carried out to ascertain the safety and efficacy of these products before making them available to consumers. The WHO by its comprehensive traditional medicine strategy in 2002, is helping nations develop policies for the evaluation and regulation of traditional medications and increasing its availability and affordability.⁵

This study is aimed at determining the pattern and prevalence of the use of traditional medications among patients attending the Out-patient Eye Clinic of Imo State Specialist Hospital Owerri, Imo State, Nigeria. Knowledge gained from this study may be useful in the management of patients and the development of national health policies on traditional medicine practice.

METHODOLOGY

Study Area

This study was carried out in the Ophthalmology Outpatient Clinic of Imo State Specialist Hospital Owerri, a secondary level hospital located in Owerri municipality, Imo State, Nigeria.

Study Design

This was a prospective study in which a structured questionnaire was used to collect the necessary data. Information obtained were the biodata, use of traditional medications by the subjects, type of ailment treated, route of administration, type of traditional medication used, outcome of the treatment and attitude towards further use of the medication.

Subjects

This included consecutive patients attending the Eye Clinic of the hospital during the four-month period of the study, January to April 2010.

Data Management

Data collected were analysed with SPSS version 20 (2012) and presented in tables and charts. Chi square was used to compare

variables. A *p-value* of <0.05 was considered significant.

Ethical Considerations

This study was approved by the Ethics Committee of Imo State Specialist Hospital Owerri, Imo State, Nigeria. Informed consent was sought and obtained from the subjects before administering the questionnaire.

RESULTS

A total of 202 subjects made up of 87(43.1%) males and 115 (56.9%) females participated in the 4-month study.

Table 1. Age group distribution of the subjects

Age Group	Frequency	%
1-10 years	12	5.9
11-20 years	9	4.5
21-30 years	18	8.9
31-40 years	20	9.9
41-50 years	25	12.4
51-60 years	42	20.8
61-70 years	44	21.8
71-80 years	25	12.4
> 81 years	7	3.5
Total	202	100

Table 1 shows that the 51-60year age group had the highest prevalence for the use of TM at 23.2%, followed closely by the 61-70year group (22.02%) and 41-50year group (13.1%). Lower values were noted for age groups below 40years with 10.7% for 31-40year group and 8.33% for 21-30year group.

Table 2. Level of education of the subjects

Educational Level	Frequency	%
No education	53	26.2
Primary	66	32.7
Secondary	45	22.3
Tertiary	38	18.8
Total	202	100

Table 3. Occupation of the subjects

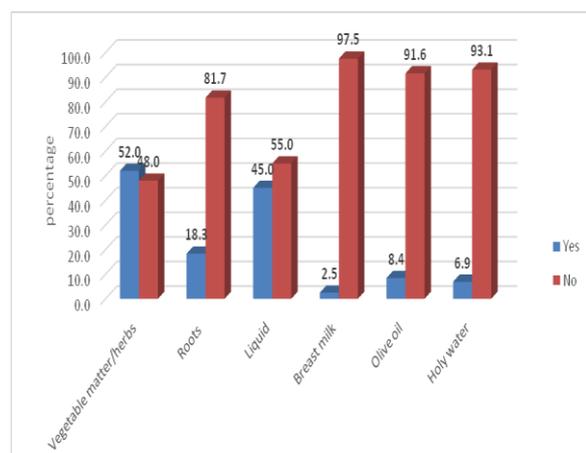
Occupation	Frequency	%
Artisans/Traders	81	40.1
Farmers	42	20.8
Students	22	10.9
Civil servants	30	14.9
Unemployed/Applicants	27	13.4
Total	202	100

One hundred and sixty-eight of the subjects admitted to have used traditional medication giving a prevalence of 83.2%, while 34 (16.8%) have not. Of those who have used TM, 72 (82.8%) were males while 96 (83.5%) were females. The use of TM is significantly associated with age (*p* = 0.002) with 0.006 likelihood ratio, and occupation (*p* = 0.000) while it showed no significant relationship with sex (*p* = 0.892), and education (*p* = 0.058).

Table 4. Reasons for using traditional medicine

	Frequency	%	Valid %
Valid Eye related problems	32	15.8	20.6
Abdominal pain	24	11.9	15.5
Body pains	10	5.0	6.5
Constipation	5	2.5	3.2
Malaria	69	34.2	44.5
pregnancy problems	4	2.0	2.6
Toothache	2	1.0	1.3
Worms	2	1.0	1.3
Venereal diseases	2	1.0	1.3
Diabetes mellitus	4	2.0	2.6
Weight loss	1	.5	.6
Total	155	76.7	100
No response	47	23.3	
Total	202	100	

Figure 1. Types of traditional medicine used



Of the 166 subjects that responded to the question on the route of administration of the medicines, 129 (77.7%) took their medications orally while 22.3% instilled it into the eyes.

One hundred and sixty-seven (82.7%) subjects responded to the question on the resolution of their ill health after using the TM. Of these, 108 (64.7%) of the subjects said they got better after using the medicines while 59 (35.3%) did not get better. Only 14% said their illness got worse in the course of their treatment, 86% responded negatively to this question.

On whether they will still use TM, 19.3% responded positively while 80.7% said they will no longer use them. Following a brief counselling on the possible dangers of TM use vis-à-vis the absence of information on the constituents, concentration, and dose, 89.5% indicated their willingness to stop using them, 4.7% will still use them, while 5.8% were indifferent.

DISCUSSION

The prevalence of use of traditional medication in our study was 83.2% and this was higher among the females (57.1%) than the males. This was comparable to the results for females and males (62.7% and 34.7%) respectively, reported in a similar study with a total prevalence of 69.4% for TM use, but which, however, focused on subjects who had

used TM concurrently with synthetic drugs within one month of the study.⁹ The risk of TM use was equally higher above 40 years of age compared to younger subjects in both studies.⁹

There were fewer health care facilities in the past than exist, presently. It was possible that the older subjects, having depended more on TM in the past, might have carried on the practice in spite of the increasing availability of healthcare facilities. Comparable to our study, the use of TM in other studies was also significantly associated with age and occupation of the subjects, but not to gender.^{9,10}

There was a consistent downward trend in TM use with higher level of education, from primary to tertiary, with the lowest use in those who had tertiary education. This was similar to the findings in a study on the use of medicinal plants in Trinidad and Tobago.¹¹ However, this finding was at variance with another study which reported a higher level of education as a significant predictor of TM use.¹⁰ This difference was not too surprising because *aloe vera barbadensis*, which was the substance of their research, had been evaluated and found medically useful and safe over the years unlike the substances which our subjects utilized. This might have influenced their results, whereas, the reverse might be the case for other medications which appropriate therapeutic dosing, efficacy, safety, as well as methods of processing, had not been well established.

The high prevalence of TM use noted in all these studies was not surprising as there has been a general rise in the use of TM worldwide, including the citizens and immigrants of the developed countries, where allopathic medicine is still dominant.^{1,12,13} The risk of use of TM (Table 4) was high for malaria (44.5%), eye related problems (20.6%), and abdominal pains (15.5%) but low for pregnancy (2.6%). Other studies had also reported malaria as the most common predictor for the use of TM in the developing countries.^{5,9,14}

Malaria is common in Sub-Saharan Africa with thirty countries in this region accounting for 90% of global malaria deaths. Of these, Nigeria, Democratic Republic of Congo (DRC), Ethiopia and Uganda account for nearly 50%.¹⁵ In Nigeria, malaria is a major public health problem, constituting a risk for 97% of Nigeria's population. It is also the 2nd leading cause of deaths from infectious diseases in Africa, after HIV/AIDS, accounting for more deaths than in any other part of the world.¹⁵ It was not, therefore, surprising that there was a high predominance of use of TM for malaria.

Reports vary in literature for the use of TM for ocular disorders ranging from 0.87% in Uyo, Akwa Ibom State, Nigeria to 17.9% in DCR.^{16,17,18,19,20} These values were lower than the 20.6% documented in this study. It should be noted, nonetheless, that while the other studies focused mainly on traditional eye medication (TEM) instilled into the eyes, this present study (20.6%) did not distinguish between oral and ocular-instilled TM for these disorders.

Realizing how susceptible the eyes could be to damage from both toxic orally ingested substances (toxic retinopathies and maculopathies) and ocular instilled preparations (corneal damage), every susceptible individual would represent a significant statistic because of the possibility of becoming blind from avoidable acts.

Traditional medication use for pregnancy was 2.6%, a low but significant value in our opinion, as it had implications for both the mothers and unborn babies. On account of this, the training and integration of traditional birth attendants (TBA) in maternal safety become imperative, and cannot be over-emphasized.

The prevalence of use of TM of plant origin at 52% was consistent with findings from other studies carried out in Nigeria, previously.^{16,17,18,19} Olive oil and holy water at 8.4% and 6.9%, respectively, were the other

types of unorthodox medication used and could have been a fall out of the increasing interest and inclination towards religious and faith based care prevalent in our society.

Majority of the respondents (64.7%) acceded to the cure of their ailment after the use of TM, which correlated with the 14% who reported a worsening of their ailment in the course of treatment with TM. This finding was in keeping with the already existing knowledge that TM is useful in the treatment of some diseases such as resistant malaria treatable with the Chinese herb *Artemisia annua*.⁵

The unregulated and/or inappropriate use of these substances, may have adverse consequences including death.⁵ One hundred and thirty-four (80.7%) subjects, prior to a brief counselling session on the dangers of using TM, reported they would no longer use TM. This number increased to 89.5% after the counselling session. This implied that with a proper education, people would more likely make positive and informed decisions on what medications to use, how, and when to use them. This response was particularly important as the subjects of this study were patients attending the Out-patient Clinic of the Ophthalmology Department who, like many others, would do almost anything to retain their sights.

On the other hand, it was also possible that these subjects responded positively to counselling because they needed help for their present ailments which might not have responded to unorthodox treatment (if they had used it). They may, therefore, not want to jeopardize their chances of getting treated.

Yet, irrespective of the defining factor, education is still a potent tool in the hands of health care givers and administrators in changing the attitude of the public towards a safe and effective use of TM.

LIMITATION

The result of this study depended a lot on the subjects' ability to recall their use of TM in the

past, and this might have constituted some limitation to this study.

RECOMMENDATIONS

Since the unregulated use of traditional medications could result in hazardous effects which could lead to blindness, renal failure and even death, it would be recommended that patients and, indeed, the public at large be educated on these dangers.

Additionally, the WHO efforts to integrate, regulate and promote the safety, efficacy and quality of traditional medicine therapy should be encouraged and supported so as to protect ignorant consumers especially at the primary health care level.

CONCLUSION

There was a high prevalence of the use of traditional medication among patients with eye problems at the Imo State Specialist Hospital Owerri. While older age and occupation were significant predictors of its use, malaria was the most common reason for the use, followed by ocular problems. In spite of the belief that these medications cured ailments, majority of subjects were willing to stop their use after being counselled on the dangers associated with the unregulated use.

These findings would be very important for medical practitioners in the management of patients since some of these medications may mask or worsen the symptoms of diseases and, also, interact adversely with orthodox drugs when used concurrently. The patients could even abandon their prescriptions, altogether, in the erroneous belief that the traditional medications would cure them.

REFERENCES

1. Barimah KB, Van Teijlingen ER. The use of traditional medicine by Ghanaians in Canada. *BMC Complementary and Alternative Medicine* 2008; 8:30 doi: 10.1186/1472-6882-8-30.
2. Klauss V, Adala HS. Traditional herbal eye medicine in Kenya. *World Health Forum* 1994; 15:138-142.
3. Courtright P, Chirambo M. Symposium report: Traditional healers. *J Comm Eye Health* 1997; 10:6-7.
4. Courtright P, Lewellan S, Kanjaloti S. Traditional eye medicine use among patients with corneal disease in rural Malawi. *Br J Ophthalmol* 1994; 78:810-812.
5. The World Health Organization. http://www.allcountries.org/health/traditional_medicine.html.
6. Nwosu SNN. Beliefs and attitude to eye diseases and blindness in rural Anambra State. *Niger J Ophthalmol* 2002; 10:16-20.
7. Courtright P. Eye care knowledge and practices among Malawian traditional healers and the development of collaborative blindness prevention programmes. *Soc Sci Med* 1995; 41:1569-1575.
8. World health organization. World Health Report 2000. Health system: improving performance. Geneva 2000.
9. Adibe MO; *et al*. Prevalence of concurrent use of herbal and synthetic medicines among outpatients in a mission hospital in Nigeria. *Int J Drug Dev & Res* 2009; 1:60-66.
10. Adibe MO, Ukwue CV, Ekwunife OI. Evaluation of therapeutic uses of aloe barbadensis miller (aloe vera) plant among staff and students in a Nigerian university. *Int J Ph Sci* 2009; 1:59-70.
11. Mahabir D, Gulliford MC. Use of medicinal plants for diabetes in Trinidad and Tobago. *Rev Panam Salud Publica* 1997; 1:174-179.
12. Woodward M. Epidemiology: Study design and data analysis -2nd edn. Chapman and HALL/CRC USA, 2004.
13. Wu APW, Burke A, LeBaron S. Use of Traditional Medicine by Immigrant Chinese Patients *Fam Med* 2007; 39:195-200.
14. Ahorlu CK, Dunyo SK, Afari EA, Karam KA, Nkuruma FK. Malaria related beliefs and behaviours in southern Ghana: implications for treatment, prevention, and control *Trop Med Int Health* 1997; 2:488-499.
15. Malaria Facts. United States Embassy in Nigeria December 2011; Economic Section <http://nigeria.usembassy.gov>.
16. Abraham E, Ekanem U. Pattern of traditional eye medications use as seen in a tertiary hospital - University of Uyo Teaching Hospital Experience. *Ibom Medical Journal* 4:29-32.
17. Ukponwan CU, Momoh N. Incidence and complications of traditional eye medications in Nigeria in a teaching hospital. *Middle East Afr J Ophthalmol* 2010; 17: 315-319.
18. Eze BI, Chuka-Okosa CM, Uche JN. Traditional eye medicine use by newly presenting ophthalmic patients to a teaching

- hospital in south-eastern Nigeria: socio-demographic and clinical correlates. *BMC Complementary and Alternative Medicine* 2009; 9:40doi:10.1186/1472-6882-9-40.
19. Nwosu S, Obidiozor J U. Incidence and risk factors for traditional eye medicine use among patients at a tertiary eye hospital in Nigeria. *Niger J Clin Pract* 2011; 14:405-407.
20. Mutombo TK: Assessing the use of TEM in Bukavu ophthalmic district, DCR. *J Com Eye Health* 2008; 21: 66.