

Traditional eye medicine use among ophthalmic patients attending a secondary health care center in Southeast Nigeria

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Abstract

Introduction: The perceived high cost of eye care services has been implicated as one of the reasons for the use of traditional eye medications (TEMs) in the country. Other factors including distance, tradition, ignorance, and failure of medical treatment among others have also been documented as determinants of TEM use. TEMs constitute a wide range of unorthodox therapies utilized for treatment of ocular disorders. They have been reported to have no beneficial effect rather causing more harm than good.

Aim: This study sought to determine the prevalence, types, and ocular indications for TEM use in the study population.

Methods: This was a cross-sectional study in which a structured questionnaire was used to collect relevant data from consecutive patients attending the eye clinic during the study.

Results: At a prevalence of 15.8%, the highest use of TEM was noted among artisans, those in the seventh decade of life, with low level of education, ocular complaints of poor vision, and illness of < 1 year duration. Its use though high, was not significantly associated with age, sex, education, occupation and illness duration. Roots and herbs were the most common types of TEM used.

Conclusion: There was a high prevalence of use of TEM in this study. The deleterious effect of its use is known and has been reported in literature. Education and enlightenment of the public are needed and highly recommended.

Keywords: Determinants, eye, prevalence, types, unorthodox medication

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INTRODUCTION

In 2014, the World Health Organisation reported an estimate of 285 million people as visually impaired worldwide.¹ Of these, 39 million were blind and 246 million had low vision.¹ About 90% of these live in low-income settings.¹ In Nigeria, the national blindness and visual impairment

survey which was carried out between 2005 and 2007 reported that 4.25 million adults aged ≥ 40 years had moderate or severe visual impairment or blindness.² This implies that there is a huge need for eye care in Nigeria. A wide supply gap exists between the orthodox eye care practitioners and the patients.³ A fact corroborated by the reported prevalence of traditional eye medication (TEM)

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use and attributed to many factors including the lack of eye care professionals and medical resources.⁴ The low supply and high demand of these resources cause an upward increase in cost, thus discouraging uptake of care by those of lower socioeconomic class. Decreased access to eye care due to barriers of physical distance;⁴ exclusive trust in traditional medicine, ignorance, failure of medical treatment, and communication gap between patient and orthodox eye care providers are other reasons.⁵

TEM which are mostly of biological origin can be plant or animal based and also include other unorthodox therapies applied to the eyes or ingested orally to achieve cure for ocular ailments. The efficacy of TEM in treating ocular problems have not been proven⁶ rather they have been reported as causing more harm than good.⁷ The aim of this study was to determine the prevalence, types of TEM, and ocular indications for the use of TEMs among outpatients attending the eye clinic of the Specialist Hospital Owerri, Imo state.

METHODS

Study design

This was a cross-sectional study using a structured questionnaire comprising closed- and open-ended questions designed to elicit information on the biodata, use of TEMs, type of TEM used, and ocular indication of these medications in patients attending the outpatient eye clinic of the Specialist Hospital Owerri, Imo state, Nigeria (Appendix).

Subjects

These were consecutive patients attending the eye clinic of the hospital during the 12 weeks of study from April to June 2010.

Data management

Data collected was analyzed with SPSS version 16 (SPSS Version 16.0. Chicago, SPSS Inc.) and presented in tables and charts. Chi-square was used to compare variables.

Ethical considerations

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

RESULTS

A total of 202 patients consisting of 87 (43.1%) males and 115 (56.9%) females participated in the 3 months study. Thirty-two of these (15.8%) had used TEM for ocular problems.

The patients within the seventh (8 = 25%) and fourth (6 = 18.75%) decades accounted for the highest use of TEM. Age was not significantly associated with the use of TEM ($P = 0.843$) as shown in Table 1.

The use of TEM was higher among those with primary education (10 = 31.25%) followed by those with no form of education (9 = 28.12%), but this finding was not statistically significant ($P = 0.591$) [Table 2].

Artisans and farmers (11) constituted 34.37% of the occupation of respondents using TEM. Occupation was also not statistically related to use of TEM ($P = 0.494$) [Table 3].

Sixteen (50%) of the respondents who had used TEM were females with no significant relationship between sex and use of TEM ($P = 0.641$).

Twenty-three respondents (71.9%) used roots and herbs, 16 (50%) used liquid concoctions, 2 (6.2%) instilled olive oil, and another 2 (6.2%) holy water [Figure 1].

Table 1: Age group distribution of the respondents and traditional eye medications use

Age (years)	Frequency (%)	TEM use (%)
1-10	12 (5.9)	3 (9.4)
11-20	9 (4.5)	2 (6.3)
21-30	18 (8.9)	3 (9.4)
31-40	20 (9.9)	6 (18.7)
41-50	25 (12.4)	3 (9.4)
51-60	42 (20.8)	4 (12.5)
61-70	44 (21.8)	8 (25.0)
71-80	25 (12.4)	2 (6.2)
>81	7 (3.5)	1 (3.1)
Total	202 (100.0)	32 (100.0)

TEM: Traditional eye medication

Table 2: Level of education of the respondents and traditional eye medications use

	Frequency (%)	TEM use (%)
No education	53 (26.2)	9 (28.1)
Primary	66 (32.7)	10 (31.3)
Secondary	45 (22.3)	7 (21.9)
Tertiary	38 (18.8)	6 (18.7)
Total	202 (100.0)	32 (100)

TEM: Traditional eye medication

Table 3: Occupation of the patients and traditional eye medications use

	Frequency (%)	TEM use (%)
Artisans/traders	81 (40.1)	11 (34.4)
Farmers	42 (20.8)	6 (18.8)
Students	22 (10.9)	5 (15.6)
Civil servants	30 (14.9)	5 (15.6)
Unemployed/applicants	27 (13.4)	5 (15.6)
Total	202 (100.0)	32 (100.0)

TEM: Traditional eye medication

Eighty-two (40.6%) of patients had been ill for <1 year before their presentation, 106 (52.5%) for 1–5 years, 5 (2.5%) for 6–10 years, and 9 (4.5%) for more than 10 years.

Majority (53.1%) of the patients reported using TEM within 1 year of their illness; however, the use of TEM for the ocular complaints was not significantly associated with the duration of illness ($P = 0.271$).

DISCUSSION

The prevalence (15.8%) of use of TEM in this study was higher than reports in some previous studies⁷⁻⁹ in Nigeria but lower than findings in other countries^{4,10-12} It was however similar to the prevalence of 17.9% recorded in the Democratic Republic of the Congo.¹³

The difference in the prevalence of these studies may be attributed to the methodology, study population and timing of the study. In addition, some of the studies were limited to patients who used TEM for ocular trauma or corneal ulcer (resulting in a higher prevalence) while our study included all the ophthalmic patients presenting in the clinic for various complaints.

The demographic characteristics of the study participants revealed that an equal number of females and males used TEM even though more females participated in this study. This is at variance with the findings in other studies which showed slight female preponderance.^{3,6-8} The use of TEM was not significantly related to gender in our study similar to other studies.^{3,6}

TEM use was highest among the elderly in the seventh decade followed closely by the working age group in the fourth decade. Other studies also documented increased use of TEM among the age group 40 years and above, 50 years and above, third decade and the 21–50 years group, respectively.^{3,6-8} These suggest an increased use of TEM around the third to fourth decades irrespective

of the reason for its use. Notwithstanding, age was not a significant predictor of TEM use in our study unlike in other studies.^{3,6}

Patients with no formal education and low-level education used TEM more than those with higher levels of education. However, this finding was not statistically significant. Similar findings have been noted by other authors.³ Contrary to our findings, another study which also recorded a high TEM use among patients with lower educational level, reported that lack of formal education was significantly related to the use of TEM.⁶

In addition, use of TEM was more among farmers and artisans/traders similar to findings in other studies.^{8,14} Other researchers reported the highest use of TEM among civil servants and students though farmers and traders also constituted a large number.^{3,7}

Roots and herbs followed by liquid concoctions were the most frequently used TEM. This finding corroborates the results of other studies.^{6,7,15} Chemical substances have been reported as the most frequently used TEM while a study in India reported the use of breast milk to be highest.^{3,8,10} Majority of our respondents are farmers and traders and their occupation may have influenced their choice of TEM. These herbs, roots, and concoctions can be plucked in the bush and they are also readily advertised and sold in the marketplaces.

While the respondents presented in the clinic for various ocular complaints, [Table 4] diminution of vision, pain, and itching were the key complaints influencing the use of TEM among these people. This finding was also noted among the respondents in another study where lower entry visual acuity and anterior segment ocular pathologies were noted to be more among the TEM users when compared with non-TEM users.³ This is also corroborated by other studies.^{6,7}

Majority of our respondents used TEM for illnesses <1 year duration. They may have used it as the first-line treatment before reporting to the eye clinic when the desired result was

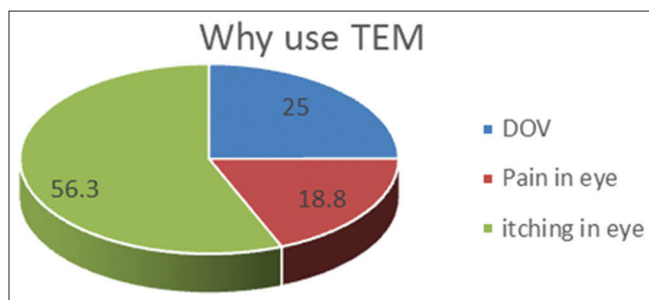


Figure 1: Indications for use of traditional eye medication by the patients. DOV: Diminution of vision

Table 4: Presenting ocular complaints of the 202 respondents

Complaints	Total (%)
Poor vision or (DOV)	132 (65.3)
Itching	14 (6.9)
Tearing	5 (2.5)
Eye trauma	7 (3.5)
Pain	25 (12.4)
Discharge	9 (4.5)
Sensation in eye	10 (4.9)
Total	202 (100)

DOV: Diminution of vision

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not achieved. Other studies also reported the use of TEM for ocular complaints of more than one month duration contrary to the non-users who reported to the hospital within 1 month of developing symptoms.³ In agreement with our reasoning, the latter study reported that their respondents had just discontinued use of TEM before their presentation at the clinic. They mentioned unsatisfactory response, worsening of symptoms, and advice from others as the major reasons for abandoning TEM use. This therefore implies that with proper education targeting the high-risk groups, the use of TEM can be significantly reduced. The duration of the illness in our study was however not significantly related to the use of TEM similar to other studies.⁶

Limitations

The study population was limited to the patients who presented to the Eye Clinic and so may not show the true prevalence of TEM use in Imo State.

The reasons for the preference of TEM rather than orthodox medication were not determined in the study.

CONCLUSION

There was a high prevalence of use of TEM, especially among the elderly in the seventh decade, farmers, and artisans and those with no or primary level education. However, its use was not significantly associated with age, sex, education, occupation, or duration of illness.

Roots and herbs were the most commonly used TEM while diminution of vision was the most common ocular complaint influencing its use.

Awareness programs and education of the public on sight-threatening dangers of the use of TEM cannot be overemphasized and are strongly recommended.

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Conflicts of interest

There are no conflicts of interest.

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