PATTERN OF TRADITIONAL EYE MEDICATIONS USE AS SEEN IN A TERTIARY HOSPITAL-UNIVERSITY OF UYO TEACHING HOSPITAL EXPERIENCE

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ABSTRACT

BACKGROUND: *Traditional eye medications (TEM) are biologically based concoctions instilled into the eye to achieve a desired ocular therapeutic effect but its use, though widely practiced, has no sound scientific evidence in the treatment of eye diseases.*

AIM: The aim of the study was to determine the prevalence and types of traditional eye medications in use in our environment.

MATERIALS AND METHOD*: This was a retrospective study of new patients who presented in the eye clinic between January 2008 and December 2009.*

RESULT

A total of 47 of the 5,416 patients (0.87%) that were seen within the study period recorded to have used TEM before presentation at the Eye clinic were used for the study. Four (4) records were discarded because of incomplete documentation. Data obtained was analysed with SPSS version 17 for windows package. Mean age was 37.7years. Prevalence of use TEM was0.87%. The most common form of TEM was herbal concoction/roots (32.2%).

CONCLUSION*: The prevalence of TEM use is low but significant enough for definite steps to be taken by relevant authorities and eye care givers in educating the public. Primary eye care in the state should be upgraded and greater emphasis than it is now should be placed on the eye care during the training of nurses and community health extension workers.*

KEYWORDS: Traditional eye medication, eye medication, eye care, Uyo

INTRODUCTION

There has been documented increase in the use of Traditional Eye Medications (TEM), though there is no sound scientific evidence to justify the use of TEM in the treatment of eye diseases [1,2,3] Until a few years ago there was no functioning eye hospital in the city of Uyo, Nigeria, thus the tendency of people attempting some form of relief when faced with an eye condition before making it to the nearest hospital is very high. The aim of this study was to determine the prevalence and types of traditional eye medication (**TEM)** among patients attending the out patients eye clinic of the University of Uyo Teaching Hospital in Uyo, Nigeria.

MATERIALS AND METHODS

This was a retrospective study of all new patients who presented in the eye clinic of the University of Uyo Teaching Hospital between 2008 and 2009. The University of Uyo Teaching Hospital is located in the heart of the state capital and is easily accessible to patients within and outside the city. Primary, secondary and tertiary eye care services are provided here, as its eye clinic is the only government owned eye hospital in the state that provides eye care services.

Records of all patients seen within the study period were assessed and those patients who were documented to have used TEM before presenting in the hospital were chosen as the study population.

Data such as demographic records-age, sex, type of TEM used, diagnosis at presentation and presenting visual acuity was extracted from the patients' records. Such data was entered, validated and analyzed using SPSS version 17 for windows package. Indices of location and dispersion were used to summarize quantitative variables, and were presented as tables. Chi-square test was used to test association between two variables and statistical significance was set at $p < 0.05$.

Ethical Consideration

Informed consent could not be obtained from study subjects since it is a retrospective study. All data from the patients' records were collected and analyzed without identifiers to ensure confidentiality. However, ethical clearance was obtained from the Research and Ethical Committee of the University of Uyo Teaching Hospital, Uyo.

RESULTS

A total of 5416 patients were seen during the study period and of these 47 (0.87%) admitted to having used one form of TEM or the other before presenting in the hospital. Of the study cohort, 22(46.8%) were males while 25 (52.2%) were females. Mean age of the study group was 37.7 ± 21.8years (range =7 months to 75 years).

Most of the subjects were in their 3rd decade of life (Table 1), and more women than men used TEM (Table 2). The most frequently used TEM is herbal concoction/roots (Table 3) and children/ students were the greatest users of TEM (Table 4)

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Table 1: Age distribution of study population

Age range in years	No.(n)	Percentage (%)
<1	2	4.3
1-10	3	6.4
11-20	6	12.8
21-30	12	25.5
31-40	5	10.6
41-50	4	8.5
51-60	5	10.6
>60	8	17.0
Not recorded	2	5.3
Total	47	100

Table 2: Age and sex distribution of TEM users.

AGE (Years)	SEX				TOTAL
	Male		Female		
	No.(n)	**Percentage (%)**	**No.(n)**	**Percentage(%)**	**Percentage (%)**
<1	1	2.1	1	2.1	4.3
1-10	1	2.1	2	4.3	6.4
11-20	1	2.1	5	10.6	12.8
21-30	6	12.8	6	12.8	25.5
31-40	3	6.4	2	4.3	10.5
41-50	2	4.3	2	4.3	8.5
51-60	2	4.3	3	6.4	10.8
>60	4	8.5	4	8.5	17.0
Age not indicated	2	4.3	0	0	4.3
Total	22	46.8	25	53.2	100

Table 3: Types and frequency of commonly used TEM.

Type of TEM used	**N0(n)**	**Percentage (%)**
Palm/kernel/olive oil	9	20.9
Herbal concoction/roots	13	32.2
Sugar/salt solution	5	11.6
Coconut/holy water	2	4.7
Snail water	1	2.3
Breast milk/urine	12	27.9
Native chalk/honey	1	2.1
Not indicated	4	8.5
Total	47	100

Table 4: Distribution of study group according to occupation

Occupation.	TEM used															
	Palm/kernel /olive oil		Herbal Concoction		sugar/salt		Coconut /holy water		Snail water		Breast milk/honey		Native Chalk		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Children/ Pupils/ students	5	11.6	2	4.7	1	2.3	1	2.3	0	0	6	14.0	1	2.3	16	37.2
Traders/ Artisans	2	4.7	5	11.6	2	4.7	0	0	1	2.3	3	7.0	0	0	13	30.2
Dependants/ Applicants/ Pensioners	0	0	1	2.3	0	0	0	0	0	0	0	0	0	0	1	2.3
Professionals	0	0	1	2.3	0	0	1	2.3	0	0	1	2.3	0	0	3	7.0
Clergy/ Traditional Rulers	1	2.3	3	7.0	0	0	0	0	0	0	0	0	0	0	4	9.3
Civil servants/ Corpers	0	0	0	0	0	0	0	0	0	0	2	4.7	0	0	2	4.7
Farmers	0	0	1	2.3	1	2.3	0	0	0	0	0	0	0	0	2	4.7
Herbalist	0	0	0	0	1	2.3	0	0	0	0	0	0	0	0	1	2.3
Not recorded	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	1	2.3
Total	9	20.9	13	30.2	5	11.6	2	4.7	1	2.3	12	27.9	1	2.3	43	100

DISCUSSION

In this study the prevalence of TEM was 0.87%, which is lower than what was observed in Benin (1.57%)[4], Enugu (5.9%)[2] and Democratic Republic of Congo (DRC)[17.9%][5] The observed differences may be due to difference in the methodology; while the other studies were prospective ones, this study is a retrospective study. Apart from the fact that this was a retrospective study which is invariably associated with irretrievable loss of data, self-reporting and dependence on records, may also account for the low prevalence of TEM use observed in this study since patients may actually hold back important information for fear of being stigmatized. This study was also limited by the use of hospital patients as opposed to community based subjects; therefore our estimates may only represent a tip of the iceberg

The most commonly used TEM was herbal concoction/roots (32.2%) followed by breast milk/human urine (27.9%). This is consistent with the findings in Enugu[2], Benin[4] and India[1] and as it has been generally noted that in Africa TEMs are more of plant than animal origin. It was noted that patients with conjunctivitis (infective, allergic, vernal keratoconjunctivitis, acute heamorrhagic conjunctivitis) used TEM most (23.3%) followed by those with lens problem (cataract, subluxation of lens, traumatic aphakia) (16.3%) and corneal problem (corneal ulcer, corneal opacity, corneo-scleral rupture) (16.3%), other complications of trauma (16.3%).These findings are similar to that of Enugu in which anterior segment problem constituted the greatest number of cases for which TEM was used as a form of treatment. In the eye hospital in Malawi[6], South India[1] and Naples[7], 33.8% , 47.7% and 57% of corneal ulcer patients respectively, were reported to have used TEM before presentation. The socio-demographic characteristics of the cohort showed that most were in the productive age group with only 17% being more than 60 years old, only 4.3% were infants. There is therefore a high economic cost of the resulting visual loss/impairment.

Twenty five were females while 22 were men. The age and gender difference is similar to findings in previous studies[2] as seen in the south east town of Enugu, Nigeria. Having more women resorting to use of TEM could be as a result of gender barriers; as a good number of the Nigerian women are economically dependent on their husbands who may not always be willing to spend the scarce resources on hospital bills, but rather resort to TEM.

About 45% of TEM users were married, 40.4% were single, while 14.9% were widowed. The high number of married participants and minors involved in the use of TEM in this study shows the extent of family influence in the use of TEM as noted in other studies[2,8,9]. In this study, pupils/students made up the highest number of those who used TEM (34.4%), followed by traders/artisans (30.2%),but farmers were 4.7%, and herbalist 2.3% . This is different from findings from other studies where farmers formed the bulk of the users of TEM. This may be because of the location of the study since this is a hospital based study. Chirambo *et al.*[10] found out that 26% of blindness among school children was due to TEM use.

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CONCLUSION/RECOMMENDATION

The prevalence of TEM use is low in this study, but significant enough for definite steps to be taken by health policy makers, clinicians and other eye care providers in educating the public. Primary eye care providers are almost nonexistent in practical terms in our community health centers. There is need to upgrade primary eye care programs in the state and the entire nation by placing greater emphasis on eye care during the training of nurses and community health extension workers(CHEW). In this era where alternative medicine is gaining recognition by government, the public must be well educated on the dangers of instilling unorthodox medicines into the eye. This study calls for further, prospective, population based studies to establish the short and long term effects of TEM use in Nigeria.

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