

Original Research Article

Patients with traditional eye medicines reporting to the ophthalmology department of SMBT medical college, Ghoti, Nasik

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Abstract: Though the world is progressing day by day, there are some populations in the country who still use traditional eye medicines. This study was done to inspect the nature and frequency of use of Traditional Eye Medicine (TEM) for eye diseases in patients from predominantly rural background nearby Nasik. The patients coming to the OPD of the ophthalmology department over a period of 6 months were taken for the study. A detailed case history was taken of the patients with the use of TEM. A total of 259 patients reported to the ophthalmology department over a period of 6 months. Out of 259 patients, 23 patients reported with the use of TEM. Usually the patients with trauma history were reported with the use of TEM and the common forms of TEM were human breast milk and leafy matter. The patients with the use of TEM were still reporting to the eye specialists. There is need to increase the awareness regarding the side effects of these TEM.

Keywords: medical College, Ophthalmology, Traditional eye medicines.

INTRODUCTION:

Different countries use traditional eye medicines and the products used vary from healer to healer and from country to country [1]. India is considered with the world's 12th richest biodiversity, traditional and cultural system in respect to medicinal plants [2].

TEMs are a form of biologically based therapies or practices that are instilled or applied to the eye or administered orally to achieve a desired ocular therapeutic effect. TEMs are crude or partially processed organic (plant and animal products) or inorganic (chemical substances) agents or remedies that are procured from either a traditional medicine practitioner (TMP; synonyms: traditional healer, traditional alternative medicine practitioner, spiritual healer) or nontraditional medicine practitioners that could be the patient, relative, or friend [3]. This study was done to inspect the nature and frequency of use of Traditional Eye Medicine (TEM) for eye diseases in

patients from predominantly rural background nearby Nasik.

MATERIALS AND METHODS:

The patients coming of the OPD of ophthalmology department of SMBT Medical College, Ghoti, and Nasik were taken for the study. The study was done over a period of 6 months. A detailed case history was taken of the patients who used TEM. Approval of the local ethical committee was taken before start of the study and informed consent was also taken from each of the patient participating in the study. All the data were recorded and analyzed by percentage analysis.

RESULTS:

A total of 259 patients reported to the ophthalmology department over a period of 6 months. The patients were reported to have variety of eye diseases. Not all of the patients able to note down the medicine used by them for the eye diseases. Out of 259 patients, 23 (8.8%) patients reported with the use of

TEM. Usually the patients with trauma history were reported with the use of TEM and the common forms of TEM were human breast milk and leafy matter. Out of 23 patients 14 (80.86%) were females and 9 were males. In consideration of the rural and urban, 18 (78.26%) were from the rural areas and 5 were from the urban area.

DISCUSSION:

India with its great topographic and climatic diversity has a very rich and diverse flora and fauna. Biodiversity is the most important wealth of our planet and form the foundation upon which the human civilization is built. All socio-cultural, economic and other activities of mankind are directly or indirectly associated with various environmental resources [4].

The ethnobotanists explore how these plants are used as food, clothing, shelter, fodder, fuel, furniture and how medicinal use of such plants is associated to other characteristics of the plant species. They understand and collect the knowledge of valuable plants by the use of anthropological methods [4].

Eye problems are many and may be categorized as;

- I. Eye infections when pathogenic microorganisms invade any part of the eyeball or surrounding area. The infection may cause redness, pain, discharge, watering and light sensitivity
- II. Eye conditions e.g., cataract, dry eyes and eye allergies and,
- III. Vision impairment e.g., glaucoma, double vision (Diplopia) [1, 5].

TEM use was found to be significantly high among females in our study, which is similar to study by Choudhary P *et al.*; [3] but Prajna VN *et al.*; [6] and Ukponmwan *et al.*; [7] observed no difference in age and sex among TEM users and non-TEM users. As shown by our study, rural residence continues to be an important risk factor for usage of TEM, which was in accordance to the study by Choudhary P *et al.*; [3]. Rural residence imposes both geographic and economic barriers to access eye care services. Due to unawareness on the negative health risks associated with TEM, traditional healers prefer using substances that cause pain and irritation. The effects are considered as temporary and painful medications in particular as therapeutically effective. TEMs causing pain are likely to bring great damage to both extraocular tissues and/or intraocular tissues of perforated eyes [1].

TEM use, either as sole first-line treatment or as an adjunct used concurrently with conventional therapy, has been associated with poor visual outcome of otherwise treatable eye diseases in clinical ophthalmic practice. TEM-related poor ophthalmic outcomes have been attributed to delay in uptake of eye care services, damage to ocular and or adnexal structures from TEM toxicity, and microbial contamination of TEM agent or procedure [3, 6].

Contact lens use is a major risk factor for corneal ulceration in the developed world, also a high prevalence of fungal infections, agriculture-related trauma, and use of traditional eye medicines (TEMs) is unique to the developing world [3]. Many studies indicated that HR/TEM is likely to have adverse effects on the eye. Most of these traditional medications are often prepared with alkaline or acidic solutions, resulting in high degree of corneal damage and scarring. Ocular complications such as keratitis, endophthalmitis, and panophthalmitis were more frequent in patients with a positive history of TEM than those with a negative history. TEM may also cause corneal damage by introducing microorganisms into the eye, which lead to primary or secondary infection. The secondary infections are likely to be due to the unsanitary condition used to make and instill TEM [7].

CONCLUSION:

Educational programs should be organized in these regions to increase the awareness about the uses and complications of TEM. Further studies including large number of patients should be done to support the present study and to arrive at a specific conclusion.

REFERENCES:

1. Sheila Maregesi M, Kauke B, Kagashe G, et al. Traditional Eye Medicines in Tanzania: Products, Health Risk Awareness and Safety Evaluation. *Herb Med.* 2016;2(1):1-11.
2. Ramakrishna N, Sunitha EM, Saidulu C, Rajani A. Studies on Some Medicinal Plants of Leguminaceae Family in Adilabad District, Telangana State, India. *Int. J. Pharm. Sci. Rev. Res* 2015; 30(1):315-8.
3. Choudhary P, Chalisgaonkar C, Marathe N, Lakhtakia S. Use of traditional eye medicines by patients with corneal ulcer in India. *International Journal of Medical Science and Public Health.* 2015 Jul 1; 4(7):1001-5.
4. Samar R, Shrivastava PN, Jain M. Ethnobotanical Study of Traditional Medicinal Plants Used By Tribe of Guna District, Madhya Pradesh, India. *Int J Curr Microbiol App Sci* 2015; 4(7):466-71.

5. 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 Oct 24; 9(1):40.
6. Prajna VN, Pillai MR, Manimegalai TK, Srinivasan M. Use of traditional eye medicines by corneal ulcer patients presenting to a hospital in South India. *Indian journal of ophthalmology*. 1999 Jan 1; 47(1):15.
7. Ukponmwan CU, Momoh N. Incidence and complications of traditional eye medications in Nigeria in a teaching hospital. *Middle East African journal of ophthalmology*. 2010 Oct; 17(4):315.