HOME REMEDIES AND TRADITIONAL EYE MEDICINES USED FOR THE TREATMENT OF COMMON EYE AILMENTS IN DISTRICT SWABI

Asif Iqbal[1], Omer Khan Orakzai[2], Maqsood Ayaz[3]

ABSTRACT

Objectives: *To identify the different home remedies and traditional eye medicines used for the treatment of different common eye ailments in District Swabi.*

Methodology: *This was Cross Sectional study of fifteen months duration, from February 2010 to May 2011 conducted in out-patient department of District Headquarter Hospital Swabi. Initially different eye ailments and their home remedies and traditional eye medicines were identified by interviewing of the hospital staff belonging to different villages of district Swabi. 1500 patients, aged 20 years and above and also those patients who could answer were included in the study.*

Results: *The study comprised of 1500 patients belonging to different villages of district swabi. The mean age of patients was 42.33 years, ranging from 20 yrs to 80 yrs.818(54.5%) patients were male and 682(45.5) patients were female. The male to female ratio was 1.2: 1 .At least 7 common eye ailments and 11 home remedies or traditional eye medicines commonly used were recognized. The different home remedies and traditional eye medicines used in different eye ailments included surma (galena- lead sulfide) (39.24%), alum(6.70%), honey(14.30%), coldwater (5.69%), ice cube(0.93%), rose water(2.33%), black pepper(1.28%), turmeric paste(5.85%), hot fomentation(5.37%), olive oil(4.94%), goat milk(0.87%) and different combinations of these home remedies and traditional eye medicines(12.50%).*

Conclusion: *There is evidence of use of Home Remedies and Traditional Eye Medicines in Pakistan especially in rural population. Chemical substances and plant products are used frequently as Home Remedies and Traditional Eye Medicines.*

Key Words: *home remedies, traditional eye medicines, common eye ailments.*

This article may be cited as: Iqbal A, Orakzai OK, Ayaz M. Home Remedies and Traditional Eye Medicines used for the treatment of common eye ailments in District Swabi. J Postgrad Med Inst 2012; 26(4): 432-8.

INTRODUCTION

Globalization and cross movement of people across countries have lead to adoption of traditional medicines, once indigenous to a sector of population or country. It has been noted that approximately 80% of population from the developing as well as the developed countries use such traditional services either for diagnosis, treatment, prevention of disease and/or maintenance of good health. There is a growing demand of eye care in developing countries[1]. Many individuals turn to traditional eye medicines (TEM) for care and treatment for several reasons. Primarily there is a dearth of eye care professionals and medical resources to treat the overwhelming number of affected people. Furthermore, low supply and high demand of these resources has pushed costs upward thus, barring access to those of lower class[2]. Another reason for the use of TEM is decreased access to biomedicine due to barriers of physical distance, travelling to reach the closest hospital can be expensive and time consuming. In addition to socioeconomic hindrances, in many societies there is an exclusive trust in traditional medicines enhanced by lack of education about available biomedical treatments, poverty and lack of eye care facilities[3]. Regardless of the reason for the use of TEM, it is important to

[1,3] Department of Ophthalmology, District Head Quarter Hospital, Swabi - Pakistan

[2]Department of Ophthalmology, Khyber Institute of Ophthalmic Medical Sciences, Peshawar - Pakistan

Address for Correspondence:
Dr. Asif Iqbal,
Medical Officer,
Department of Ophthalmology,
District Head Quarter Hospital, Swabi - Pakistan
E-mail: dcasif@yahoo.com

Date Received: December 27, 2011
Date Revised: August 12, 2012
Date Accepted: August 18, 2012

evaluate its reliability and efficacy in treating ocular diseases[4].

Home remedy (HR) is defined as a simply prepared medication often of unproven effectiveness, administered without prescription or professional supervision. Traditional medicines(TM) according to WHO definition is the sum total of knowledge, skills, approaches and practices based on theories, beliefs and experiences incorporating plant, animal, mineral based medicines, spiritual therapies and manual techniques apply singularly or in combination, indigenous to different cultures to diagnose, treat and/or prevent illnesses and maintain well being[5,6,7]. According to WHO, 80% of population depend on traditional medicines for primary health care in some Asian and African countries[1]. TEM is used in sub Saharan African nations in 33.8%, 33.8% in Malawi, 47.7% in India, 49% in Tanzania, 62.3% in Oman and 17.9% in Democratic Republic of Congo[1,6,8-10]. Pakistan has the population of 180 million, seventh most populous country in the world with 70% of the population live in rural areas and 57% engaged in agriculture[11]. Pakistan presented an excellent case study for examining the role of home remedies and TEM, where a sizeable population lacks access to allopathic medications. However, there are no studies specifically focusing on the use of HR/TEM in the country[12].

This study reports the use of different HR/TEM for different common eye ailments in district Swabi.

METHODOLOGY

This Cross Sectional Study was conducted at Ophthalmology Out Patient Department, District Headquarter Hospital Swabi from February 2010 to May 2011. First different eye ailments for which different HR/TEM were used were identified by interviewing hospital staff at DHQ swabi and Bacha Khan Complex Hospital Swabi, belonging to different villages of district Swabi. Then different HR/TEM commonly used for different eye ailments were identified. A proforma was designed for entry of data for each patient. Patients were then randomly selected and interviewed. Patients age 20 years and above and also those patients who could answer were included in the study. Patients who could not understand and those who could not complete the proforma were excluded from the study. The questionnaire was developed in pushto and questions asked and answers given were noted in pushto. During data entry into SPSS, the recorded data in Pushto was translated, compiled and analyzed in English. Data was then entered into SPSS version 18, analyzed and frequency and percentages calculated.

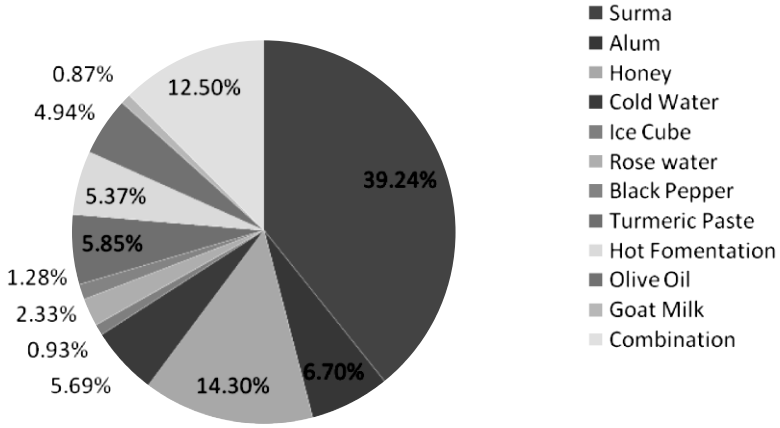
RESULTS

The study comprised of 1500 patients belonging to different villages of district swabi. The mean age of patients was 42.33 years, ranging from 20 to 80 years. 818(54.5%) patients were male and 682(45.5) patients were female. The male to female ratio was1.2:1. At least 7 common eye ailments and 11 home remedies or traditional eye medicines commonly used were recognized (Figure 1).

For burning, itching, watering and foreign body sensation, splashes of cold water (33.3%) was commonly used followed by surma (26.4%), combination(splashes of cold water, surma, rose water, ice cubes) (24.5%), rose water (9.3%) and ice cube(6.5%) (Figure 2).

For redness, pain, swelling and crusting, alum(19.7%), turmeric paste(19.3%), surma (18.9%), hot fomentation (18.4%), honey (11.7%),

Figure 1: Overall Percentage of Traditional Eye Medicines



combination (surma, alum, honey, black pepper, turmeric paste, hot fomentation) (9.9%) and black pepper paste (2.1%) were used (Figure 3).

For minor trauma like finger nail trauma, surma (31.9%), alum (20.4%), hot fomentation (19.2%), honey (18.9%) and combination (surma, alum, honey, hot fomentation)(9.6%) were used (Table 1).

For sharpening of vision surma (70.9%), combination (surma, honey, black pepper and turmeric paste) (8.00%), honey (7.1%), turmeric paste (7.1%) and black pepper (6.9%) were used (Figure 4).

Figure 2: Use of Traditional Eye Medicine for Burning, Itching, Foreign Body Sensation, Watering

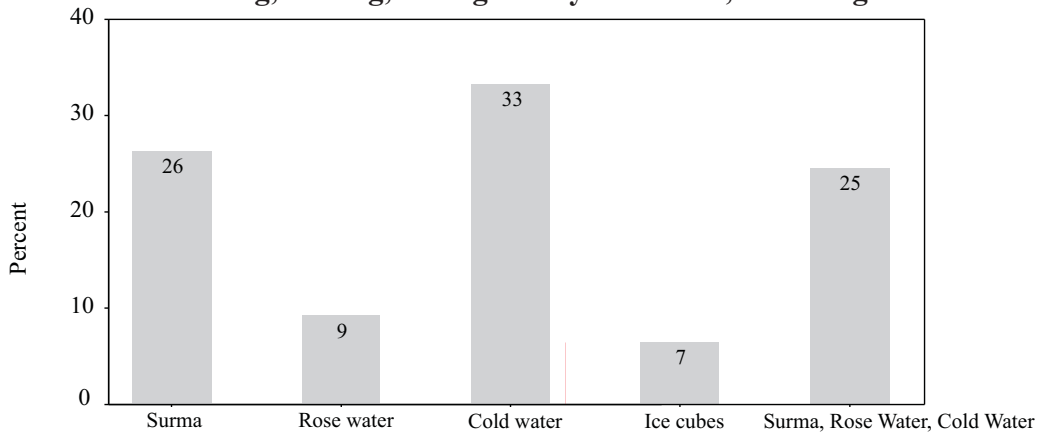


Figure 3: Use of Traditional Eye Medicine for Pain, Redness, Swelling and Crusting

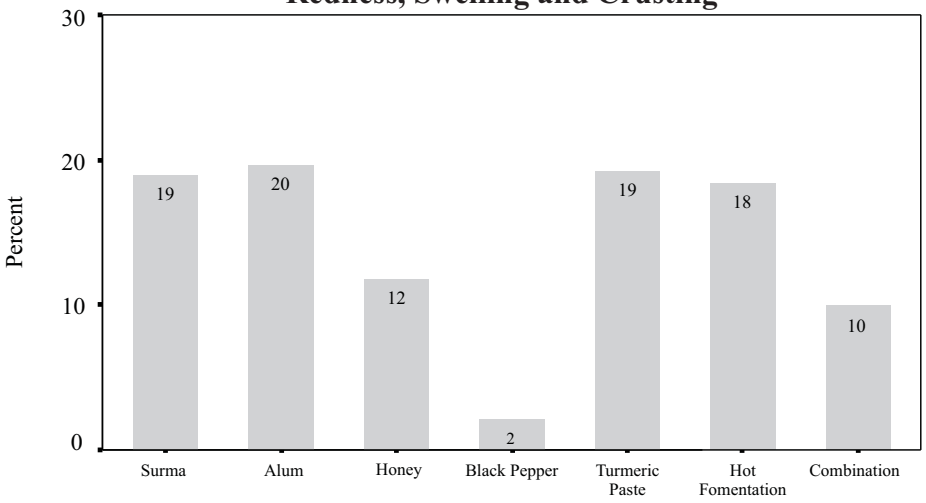


Table 1: Use of Traditional Eye Medicine for Minor Trauma

TEM	No.of cases (n)	Percentage(%)
Surma	479	31.9
Alum	306	20.4
Honey	283	18.9
Hot fomentation	288	19.2
Combination	144	9.6
Total	1500	100.0

Figure 4: Use of Traditional Eye Medicine for sharpening the vision

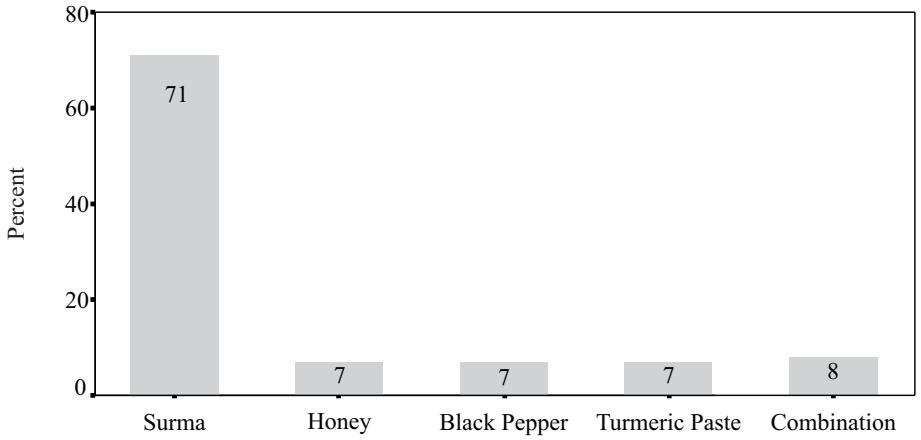
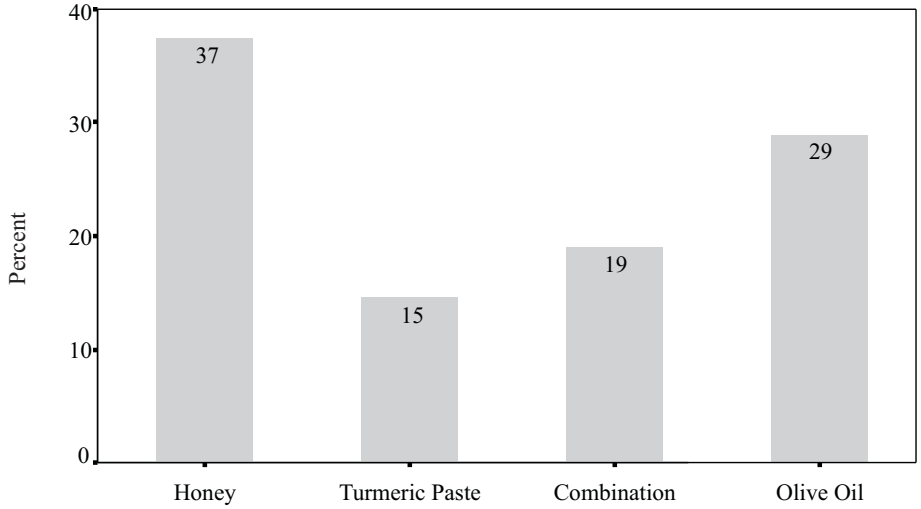


Table 2: Use of Traditional Eye Medicine for Cosmetic reasons

TEM	No.of cases	Percentage of Cases (%)
Surma	1142	76.1
Rose water	105	7.0
Honey	77	5.1
Combination	92	6.1
Olive oil	84	5.6
Total	1500	100.0

Figure 5: Use of Traditional Eye Medicine for Enlargement of eye-lashes



For cosmetics surma (76.1%), rose water (7%), combination (surma, honey, rose water, olive oil)(6.1%), olive oil (5.6%) and honey (5.1%) were used (Table 2).

For enlargement of lashes, honey (37.5%), olive oil (28.9%), combination (honey, olive oil, turmeric paste) (19.1%) and turmeric paste (14.5%) were used (Figure 5).

For watering and crusting in children less than 10 years and neonates, surma (50.5%), honey 19.9%, combination(surma, honey, cold water splash, alum and goat milk) (10.2%), alum(6.9%), cold water splash (6.5%) and goat milk(6.1%) were used.

DISCUSSION

There is a myriad of TEM treatments practiced across the globe. The methods of treatment vary drastically from country to country, so it becomes difficult to find a common thread that links them all. This study highlighted 11 HR/TEM commonly used in district Swabi for different common eye ailments. These remedies were applied locally to eye lids as paste or liquid solution or administered as eye drops instilled into the conjunctival sac or administered orally.

Burning, itching, watering and foreign body sensation was the common condition for which HR/ TEM were used. These are common symptoms of allergic conjunctivitis. Cold water splash was common home remedy. Surma and rose water were also used. Mostly a combination of these HR was used to relieve the symptoms. The condition can also result from a variety of causes. It is important to identify the cause and then avoid it, if possible[13].

Redness, pain, swelling and crusting may be due to different causes. To relieve it, alum, turmeric paste, surma, hot fomentation, honey, black pepper or combination of these HR/TEM were used. Alum was applied by diluting it in water and putting the drops into cojunctival sac or wetting it with water and applied directly to painful area. Surma was applied topically with the help of wooden or fine metallic applicator. Paste was formed from raw turmeric or black papper crushed and then mixed with water and then applied locally. Hot fomentation was done by either heating the sand in metallic utensil and putting it into a piece of cloth and applied to painful area. It could also be done by pressing a piece of cloth and putting that hot cloth to painful area. Honey was used as drops or pasted to local area. It is important to know the cause of symptoms, because this may be due to some serious potentially sight threatening diseas like glaucoma or intraocular inflammation and any delay in treatment may lead to visual loss. The lay people cannot differentiate between different eye diseases and therefore examination by trained eye worker or Ophthalmologist is necessary[12].

In cases of minor trauma like finger nail trauma, surma, alum, hot fomentation and honey were commonly used. These remedies not only helped in reducing pain but also helped in reducing redness and watering. It is necessary to assess the extent and severity of trauma by trained eye worker or Ophthalmologist and treat accordingly.

To sharpen the vision and improve cosmetic appearance of eye, surma was commonly used. The exact relation is not known but it is the social and religious belief of the people. Surma is used for cosmetics for a long time but to date, the exact role of surma in sharpening the vision has to be defined[14]. Some people say that drinking milk with turmeric is also helpful for vision. Other say chewing black pepper daily is necessary for sharp vision.

For enlargement of lashes, honey and olive oil were commonly used. It is applied to a cotton bud or a piece of cloth and applied topically to lid margins and bases of eye lashes. Some people also put honey into the conjunctival sac. The use of honey and olive oil has to be established.

For newborn babies and for children, in order to relieve dirty eyes, sharpen vision and increase cosmetic appearance, surma and honey were commonly used. The use of diluted goat milk for crusting eyes in children was also commonly practiced. It is thought that diluted goat milk nourishes the eyes and clears it[13,15,16]. Goat milk was diluted with well water and instilled directly as drops into conjunctival sac.

From the above discussion it is evident that HR/TEM are widely used in district swabi. Pakistan is the 7th most populous country in the world with a population of 180 million. 70% of population lives in rural areas and approximately 57% of it are employed in agriculture[11]. Rural residence imposes both geographic and economic barriers to access eye care services[3]. Illiteracy, poor socioeconomic status, unawareness, physical distance to hospitals and health care and other barriers to access eye care are few facts for increasing use of HR/TEM[3,4,9]. Increased use of HR/TEM in rural population reflects the healthcare needs of the population not met by the existing eye care system[12]. The profile of HR/TEM use in this study shows that more of chemical substances and plant products than animal products are used. This is consistant with reports in India and Nigeria[17,18]. The majority of peoples obtain their

prescriptions from non-traditional practitioners who are patients themselves, friends or relatives. This is similar in observation in Malawi and Nigeria[6,17,19]. The people's belief in the potency of HR/TEM and reported therapeutic effects from other TEM users contribute more to use TEM. Similarly, low cast, easy availability and absence of known side effects are the important reasons for using HR/TEM. Almost all types of HR/TEM have no sterility and the constituent chemicals are not graded to the desired concentration[20,21]. Many studies indicate that HR/TEM is likely to have adverse effects on the eye. It may introduce infection or may cause physical, chemical and thermal injury. Damage depends on the type of substance used, its concentration, contents, pH, temperature, sterility and mode of application.

CONCLUSION

Chemical substances and plant products are used frequently as HR/TEM. Research is needed to assess the safety and efficacy of these therapies and to explore if these therapies are used together with or in place of conventional medicines.

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CONTRIBUTORS

AI conceived the idea and planned the study. OKO & MA did the data collection and analyzed the study. All the authors contributed significantly to the research that resulted in the submitted manuscript.