Traditional eye medicines – good or bad news?

The paper by Courtright and colleagues in this issue of the journal reports the use of traditional eye medicines by one in three patients with corneal disease in a study from Malawi. The patients who used traditional eye medicines took four times as long to report to a health clinic and had three times the rate of blindness in the affected eye. So are traditional eye medicines bad, and should the people who prescribe them be outlawed?

Traditional eye medicines include a multitude of herbal and other remedies prescribed by a variety of traditional healers and lay people. It is likely that many of these remedies are harmless and a few may be beneficial.

The term 'harmful eye practices' is used in describing ocular morbidity from the use of traditional treatments. This is defined as the application of substances, or mechanical or thermal devices to the ocular surface or adnexae, by traditional healers or lay people, resulting in damage to the globe or ocular adnexae. This includes 'couching' of the lens, and cautery to the eyelid, and also external eye disease as a result of the application of harmful traditional eye medicines. Harmful eye practices need to be distinguished from adverse effects, which are the negative consequences which may occur from the use of scientifically proved beneficial treatments.

Corneal diseases and harmful traditional eye medicines

Chirambo and Ben-Ezra in Malawi reported one in four cases of childhood blindness as being due to harmful traditional eye medicines.[1] Foster and Sommer found harmful traditional eye medicines to be responsible for one in seven cases of corneal ulcer in children in Tanzania.[2] Approximately half the cases were bilateral and half followed measles infection.

Yorston and Foster, also in Tanzania, found that one in four patients with corneal ulcer used traditional eye medicines.[3] Traditional eye medicines were likely to be associated with hypopyon formation and dense central corneal scarring. Wiafe, in a study of ocular trauma in Zambia, reported that more than half the patients with eye injuries will use traditional or home made eye remedies.[4]

Reports from Zimbabwe,[5] Nigeria,[6] Sierra Leone, (Barbe R, unpublished data, Lunsar Eye Hospital, Sierra Leone) and Haiti[7] have all linked the use of harmful traditional eye medicines with epidemics of acute haemorrhagic conjunctivitis (enterovirus 70), resulting in corneal ulceration and blindness.

These reports, mainly from Africa, suggest that people with red eyes from a variety of causes (measles, conjunctivitis, and trauma) often seek treatment from traditional healers or use home made remedies such as Vick vapour rub in Haiti, or sugar water in Nigeria.

Some of these treatments produce corneal ulceration and loss of vision through a variety of mechanisms including:

(a) Chemical injury to the epithelium and stroma from caustic substances.

(b) Introduction of pathogenic organisms – fungi from plants or *Neisseria gonococcus* from urine – resulting in secondary suppurative keratitis.

(c) Thermal or mechanical injury to the ocular surface from boiling or particulate applications to the eye.

The use of traditional eye medicines would appear to be a common practice in Africa, and although serious ocular damage is relatively uncommon it is still a significant cause of avoidable blindness from corneal ulceration and consequent scarring. There are relatively few reports from other parts of the world of the effects of traditional eye medicines, although it is known that herbalists have an important role in Chinese medicine. It is likely that active compounds with beneficial effects are to be found in some herbal eye preparations, but little work has been done to isolate and identify these agents.

The role of traditional healers in primary eye care

Lasker in a study in Ivory Coast investigated why people choose different modes of therapy. She suggests that the major determinant to the utilisation of either Western or traditional medicine is not cultural beliefs or level of education, but 'accessibility' to the service. Accessibility includes the distance to the health facility, the cost of service, and the degree of communication between health provider and consumer.[8]

In Africa there is, on average, one ophthalmologist per one million population. There are relatively few eye trained nurses or assistants. General doctors and nurses have little time for patients with eye problems and have inadequate training in eye diseases. Eye medicines are often not available in health facilities and are expensive in private pharmacies.

The result is that eye care is not easily accessible to the majority of Africans. This is further demonstrated by the fact that fewer than one in 10 people blind from cataract in Africa actually ever receive cataract surgery.[9] It is therefore not surprising that people choose to go to the traditional healer when they have eye problems. Traditional healers are accessible, the treatment is usually affordable, and they communicate well at a psychosocial level with the patient. All of which provide consumer satisfaction in relation to non-clinical care, and outweigh the benefits of better clinical care but poorer non-clinical care in the Western hospitals.

It is with this understanding that Chana and his colleagues in Zimbabwe have been working with traditional healers.[10] Chana took the initiative of inviting traditional healers to the hospital and showing them the eye clinic and eye surgery. After some initial resistance Chana found that the traditional healers were willing to talk about eye problems. The next step is to give the traditional healers training in the recognition of common eye diseases. They can learn about cataract and be encouraged to refer patients who are blind. They may also be taught the diagnosis and management of common eye infections and injuries.

Chana recommends that eye specialists should enter into dialogue with traditional healers, with a view to utilising their accessibility to, and acceptance by, the community to deliver primary eye care as part of a referral system. Further experience is required to see if this concept will work in other countries and in urban as well as rural situations.

ALLEN FOSTER
GORDON G JOHNSON

International Centre for Eye Health,
Institute of Ophthalmology,
London

1 Chirambo M, Ben-Ezra D. Causes of blindness among students in blind school institutions in developing a country. *Br J Ophthalmol* 1976; **60**: 665–8.
2 Foster A, Sommer A. Corneal ulceration, measles and childhood blindness in Tanzania. *Br J Ophthalmol* 1987; **71**: 331–43.
3 Yorston D, Foster A. Traditional eye medicines and corneal ulceration in Tanzania. *J Trop Med Hyg* 1994; **97**: 211–4.
4 Wiafe B. Ocular trauma in Eastern Zambia. MSc dissertation. London: Institute of Ophthalmology, 1994.
5 Schwab L, Tizazu T. Destructive epidemic of Neisseria gonorrheae keratoconjunctivitis in African adults. *Br J Ophthalmol* 1985; **69**: 525–8.
6 McMoli TE, Bordoh AN, Munube GMR, Bell EJ. Epidemic acute haemorrhagic conjunctivitis in Lagos, Nigeria. *Br J Ophthalmol* 1984; **68**: 401–4.
7 Taylor HR, Cadet JC, Sommer A. Folk medicines and acute haemorrhagic conjunctivitis. *Am J Ophthalmol* 1982; **94**: 559–60.
8 Lasker JN. Choosing among therapies: illness behaviour in the Ivory Coast. *Soc Sci Med* 1981; **15**: 157–68.
9 Foster A. Who will operate on Africa's 3 million curably blind people? *Lancet* 1991; **337**: 1267–9.
10 Chana HS, Schwab L, Foster A. With an eye to good practice: traditional healers in rural communities. *World Health Forum* 1994; **15**: 144–6.