

Role of traditional healers in the management of microbial keratitis in eastern Nepal

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Purpose

Traditional healers (TH) within the community are often the first point of care for MK management. Little is known of their practice, perceptions, and knowledge around MK management. We aimed to understand the role of traditional healers in the management of MK in south-eastern Nepal.

Methodology

- A cross-sectional, mixed method, descriptive study was conducted in the Siraha district of Nepal.
- Quantitative:** In total, 109 traditional healers consented to participate in a survey.
- Qualitative:** Some participants were also invited to participate in in-depth interviews (IDI) and focus group discussions (FGD).
- Thematic analysis was used, codes sharing common attributes influenced the emerging themes.
- Ethical approval:** Approved by the London School of Hygiene and Tropical Medicine Ethics Committee, UK and the Nepal Health Research Council, Nepal.

Results

- The study participants (THs) claimed to have previously provided treatment to patients with MK.
- Of 109 THs, 100 were male and 9 were female with mean age 65.7 Years (SD 13.7). They lived a median of 24 km away from the tertiary eye hospital (SCEH), majority (42/109) of them were illiterate while some (32/109) were able to read and sign without having any formal education.
- Thematic analysis of the coded transcripts and predetermined topics of the KAP survey were categorized into five themes: knowledge, treatment practices, referral practices, role of TH and improving referral systems.

Theme 1: Knowledge

- THs with limited knowledge about corneal ulcers and infection explained that infections can be caused by a curse or witchcraft, vegetative matter trauma, insects or conjunctivitis symptoms. A picture (Figure 1) of corneal ulcer of corneal ulcer was identified as *fulo*, *fula*, or *madi*- local terms for corneal ulcer by 17/29 THs during IDI. One of them even stated as, it initially resembles a ‘*lentil-sized white spot in the black of an eye*’ (IDI/23).
- A KAP survey participant (T0168) remarked, ‘*God may get angry if we use modern medicines and as a result eye condition may worsen*’.

Theme 2: Treatment practices

- The majority of THs followed spiritual or mythical practices of chanting mantras and offering prayers to God for healing the patients with MK.
- Commonly practiced was, a herb that makes direct contact with the infected eye and the herb then placed into muddy soil or under water to rot. The belief is ‘*when herb rots, the ulcer heals*’.

Results



Figure 1. Photograph of a corneal ulcer/microbial keratitis (white mark in the eye). This image was shown to traditional healers during in the depth interviews to ask if they could identify the condition affecting the eye.

- Some offered *Jadi* (can be leaf, stem, root, flower, or mixture) to put into milk cream or banana and eaten for a few weeks.
- One participant said, ‘*I take whole black pepper in my mouth and blow their eye by chanting mantra along with God Shiva’s prayer.*’ - IDI/26
- Survey: 65/109 (60%) THs offer prayers for the patients to relieve pain and others (40, 37%) offer prayers combined with TEM. The majority (76, 70%) of THs said they use the root of herbs to treat eye diseases/conditions while others use other substances such as tree milk, cactus thorn, flower juice, and *Tulshi* seed extract.
- THs find allopathic medicine effective for red eye, especially from trauma, but prefer traditional treatment for small corneal ulcers. They acknowledge delays in allopathic care due to reliance on THs, transport issues, and high costs.

Theme 3: Referral practices

- Many THs do not refer patients at all and supported it by providing past treatment examples. Some of them directly refer to eye hospitals.
- Majority said they don’t refer to community health posts because they lack trust in the ability to manage eye conditions.

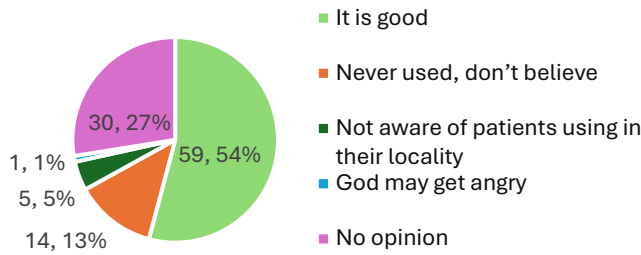
Theme 4: Role of traditional healers

- They said that it is trust which brings patients to them for further treatment and expressed confidence in what they do as well as perceived confidence of patients in THs and natural healing. ‘*If it is destined to heal, it will heal*’ (FGD/04).
- THs expressed their dissatisfaction that some educated people do not recognise the traditional healing profession.
- They admitted that with the establishment of community health facilities there is a decrease in patients visiting THs.
- Some opposed to other THs who might delay medical treatment of patients by emphasising trust in traditional treatments, resulting in worsening of the disease.
- THs do not want to be blamed by patients, and traditional treatment must be accountable and responsible, ‘*Holding patients for long at village is sort of killing them*’ (FGD/04).

Theme 5: Improving referral systems

- THs were keen to be trained to identify eye diseases and refer patients when there is a need.

Figure 2. Perception of traditional healers in the KAP survey on the use of eye drops (number, %), in response to the question: “What are your thoughts on using eye drops or medicine available from pharmacy shops or medical centres to treat eye diseases?”



Duration of treatment offered by 109 traditional healers to patients with eye diseases in Siraha district.

Treatment period	Frequency (n/109)	Percentage (%)
1 day	25	22.9
Up to 3 days	22	20.2
Up to 1 week	26	23.9
Up to 2 weeks	20	18.4
Up to 1 month	6	5.5
More than a month	2	1.8
Unsure	8	7.3

Questions and responses	Frequency (n/109)	Percentage (%)
Q1. Do you think public health posts can treat the patients with minor eye injuries?		
Yes	43	39.5
No	53	48.6
Don't know/Not sure	7	6.4
No answer	6	5.5
Q2. Do you think a public health post or general hospital can treat emergency eye conditions?		
No they can't	82	75.2
Only some places can	14	12.8
They can but they don't treat	2	1.8
Same as us	2	1.8
They can	5	4.6
Don't know	4	3.7
Q3. What do you do if the patient has not healed after all your efforts?		
Everyone healed	64	58.7
Refer to traditional healers	1	0.9
Refer to health post	3	2.8
Refer to pharmacy	1	0.9
Hospital - general or eye	29	26.6
Linked to their choice	6	6(5.5)
No answer	5	4.6

In a FGD, THs suggested using training videos and photographs of the disease, one remarked that a book could improve their relations with the hospital (TH/02). On the contrary, one TH (TH/05) pointed out that a book ‘...won’t be useful for me as I am illiterate.’ Majority, 47/109 (44%), of THs suggested referring cases to HP/hospital as an initiative to reduce corneal blindness resulting from MK. Highlighted the need for scheduled specialist visit to health posts to address eye conditions. A meeting was proposed to discuss solutions for delays in MK treatment by inviting THs and other stakeholders. They recognised the reality that most will not attend hospital due to associated costs and fear. Therefore, they continue to offer traditional treatment because they consider that this is better than doing nothing.

Challenges and opportunities for research and data:

- The information regarding active traditional healers is not readily accessible. Moreover, locating traditional healers within the community is challenging, and not all identified will be willing to engage in any form of study.
- Through this valuable data and in-depth interaction with traditional healers, we believe there is an opportunity for policymakers to train them and recognise their role within the referral pathway. Traditional healers could assist in sharing the workload of community health volunteers.
- Traditional healers conveyed their willingness to contribute to the reduction of preventable blindness through dedicated meeting-based solutions.

Conclusion

- This is the first study focused on traditional healers who are involved in treating patients with MK in Nepal.
- The uncoordinated referral system in the community both by THs and HCs and poor knowledge and awareness of eye health in general is a matter of concern for the Ministry of Health and policy makers, especially with respect to emergency eye conditions like MK.
- Better integration of THs into the health system will not only share the burden of community health volunteers but also act as a bridge for eye care into the formal health system.

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