

Letter to Editor

Pervasive Blindness and ocular morbidity in the Chepang people of Nepal

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Dear Editor,

Blindness, which is a major burden on the individual and the society, was observed to be pervasively present in a region inhabited by an undermined, disadvantaged ethnic people, the Chepang (Köberlein et al., 2013). Such a plight heralds escalating, already-fragile eye health care in the remote region of Nepal (Ghimire, 2015).

The Chepang are a group of people of the Tibeto-Burman origin, which share Mongolian features, living a semi-nomadic existence (Beine et al., 2012). Numbering 68,399, they live in only a few districts of Nepal (CBS, 2012). They are living below subsistence level, witnessing self-food insufficiency and food insecurities inflicting hardship on their lives (Luni and Lal, 2011). To make matters worse, their lives have been hit hard by the massive 25 April 2015 earthquake and the 2015 Nepal blockade (Rathour, 2015)

During a health camp in two remote villages, namely Jirethum and Silinge, of the Makwanpur District of Nepal, we examined and observed members of this ethnic community. In this report we attempt to outline their eye health status, and thereupon recommend solutions to ensure that they no longer have to live with blindness and succumb to blinding disorders. This community was observed to be deprived of even basic health education and care facilities, including basic eye care, so much so that a patient reported to the camp with a wooden stick piercing half way through the wrist and another patient with medically untreated corneal ulcer for more than a month. The latter case sought traditional healing which, in this case, employed using the patient's own urine in the eye.

Cataract and glaucoma, among many others, are important causes of blindness; cataract and glaucoma respectively account for 33.4% and 6.6% of blindness worldwide (Bourne et al., 2013), and for 62.2% and 5.9% in Nepal (Sapkota and Limburg, 2012). Most of the patients seeking eye care presented with chief complaints of blurring of vision and frequent watering of their eyes. Of 307 total patients (age range: 5 years to 89 years), including 97 students (aged 6 years to 17 years), cataract was observed in 110 subjects and glaucoma suspect in 23. Much to our dismay, owing to the density of cataract in 48 subjects, retinoscopy and an undilated view of the retina were stymied; therefore, in these subjects, we could not diagnose, if any, some other potentially blinding diseases such as glaucoma, age-related macular degeneration and diabetes- and hypertensive-retinopathy. These 48 densely cataractous subjects had blindness, whereas the rest with less dense cataract had moderate to severe visual impairment. The definition of

visual impairment is in line with the latest recommendations by the World Health Organization (World Health Organization, 2015)

Another remarkable ocular morbidity observed was five cases of glaucomatous optic atrophy. 22 subjects were observed to have chronic dacryocystitis, all of whom visited with symptoms of watering. Only 18 subjects were found to be with no ocular disorders.

Now concerning all the students (n=97) aged 6 years to 17 years, the commonest complaint observed was watering followed by ocular pain and complaints of diminution of vision for near. On dynamic retinoscopy, accommodative lag was observed in 62% of those who complained of difficulty with near vision. Others, however, did not complain of any problem whatsoever and said that they just came for a check-up. The cover test revealed that only a small proportion of these students had exophoria for near. Refractive error in the students averaged at +0.83 Diopters.

With respect to refractive error in patients other than students, myopic refractive error was observed only in seven. Secondary myopia ie, myopia due to cataract was not considered for our analysis.

Because retinitis pigmentosa (RP) prevails in 0.025% of the general population (Venturini et al., 2014) our finding of RP in three children, aged 6, 9 and 16 years was remarkable.

Another notable finding of a great many glaucoma suspects should lead us to investigate this group for its particular susceptibility to glaucoma. With cataract and glaucoma (both suspect and atrophy) observed in 110 and 28 respectively of all, the status of eye health was miserable and, therefore, needs immediate attention from the authorities concerned.

As suggested in a paper, we would like to suggest the following ways: a) eye care should be made integral part of primary health care and primary health care workers be trained in eye care so that appropriate management at local level can be instituted (Pokharel et al., 2016), b) because a greater proportion of patients were glaucoma suspects, population genetic studies of this community might reveal any loci, which could mark a milestone in the understanding and management of glaucoma in this group in particular c) regularly conduct eye health camps to screen for disorders and manage them appropriately; d) provide proper eye health counseling to people in the remote places by improving the current counseling occurring in certain places of the country; the current counseling maintains that people need to seek care for cataract only after they get unable to count their own fingers with the arms stretched. Such inappropriate counseling can lead to blindness with glaucoma.

Despite the fact that blindness prevalence rate reduced from 0.84% in 1981 to 0.35% in 2011 (Sapkota and Limburg, 2012), a major proportion of eye care services remain accessible on the district headquarters and urban areas, with other places left relatively remote. We hope our report will make aware the authorities concerned of the current scenario of oculo-visual status of a disadvantaged, undermined ethnic community and help ensure that they receive required attention.

We urge the government and stakeholders to help communities such as this, to ensure equity in eye care all over the country.



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Source of support: nil. Conflict of interest: none