


Causes of Moderate to Severe Visual Impairment and Blindness Among Children in Integrated Schools for the Blind and Visiting a Tertiary Eye Hospital in Nepal: The Nepal Pediatric Visual Impairment (NPVI) Study [Response to Letter]

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Dear editor

We would like to respond to the letter by Singh et al, in which they comment on our publication “Causes of moderate to severe visual impairment and blindness among children in integrated schools for the blind and visiting a tertiary eye hospital in Nepal: The Nepal Pediatric Visual Impairment (NPVI) Study”.¹

We appreciate the attention to our work, and more general, to childhood visual impairment and blindness. We very much agree on the statement that more research into this important subject is needed and also agree on many of the areas for improvements raised by the authors.²

First, we agree that population-based data would help with our understanding of the overall prevalence and causes of childhood visual impairment and blindness in the Nepalese population. However, as the prevalence of childhood blindness is low, resources needed to set up a population-based study are high, because of the very large sample size that would be needed. In low-income countries like Nepal, setting up such studies are not considered a priority, even though their importance can be considered indisputable. Moreover, there is no national registry of children with VI that would provide information on the prevalence or incidence of childhood blindness in the community.

Investigating access to eye care was not the main goal of our study. However, we agree that access to care for children and adults living in remote (mountain) areas is a well-known problem in Nepal and in other low-income countries.^{3,4} Our study aimed to assess the etiology of childhood visual impairment and blindness. Surveying blind school children is an important mode of collecting data on etiology of childhood blindness in any country and is practiced worldwide. However, it comes with limitations, including potential selection bias as raised by Singh et al. This means that our findings might not be generalizable to the broader population of visually impaired children in Nepal.

Although our trend analysis was based on a comparison with a limited number of other historical samples from blind schools (which also include the abovementioned shortcomings), the data obtained from these studies were comparable to ours. Therefore, we believe that we were able to identify changing trends in the etiology of childhood visual impairment and blindness in Nepal. We are aware that our analysis should be considered an exploration of the changes that seem to have taken place in the etiology of blindness and visual impairment in children over the last ten years, which may be explained by good immunization coverage and effective Vitamin A program implemented by the Nepalese Government,

as was also mentioned in our manuscript. However, despite the changing trend in the etiology, with an increase in retinal and globe disorders and a decrease in corneal diseases, many of the causes of visual impairment and blindness today, are still avoidable. To eliminate these causes, we recommend age-specific vision screening programs such as routine eye screening combined with immunization, incorporating pediatric screening into adult screening camps in rural areas, and school vision screening programs, which might help prevent childhood blindness due to potentially preventable causes.⁵

We are grateful that the authors have taken the effort to provide constructive comments on our paper. The improvements raised by Singh et al echo the need for more research into the prevalence of childhood visual impairment and possible interventions to eliminate avoidable causes, especially in countries like Nepal. We believe our study is an initial step in evaluating the etiology and changing trends in childhood visual impairment and blindness in Nepal, and we welcome others to join us in the effort in studying and putting an end to childhood visual impairment and blindness in Nepal.

Disclosure

The authors report no conflicts of interest in this communication.

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