Sir,

Amblyopia is one of the common risk factors for visual impairment in children and adults,[1‑5] the prevalence of which is usually underestimated in India, often because of lack of awareness in public and among health-care professionals and inadequate attention to diagnosis and management.[2] There are very few clinical studies[5] in India, elucidating the clinical profile of patients with amblyopia as primary focus of attention.

In this tertiary care teaching hospital-based prospective observational study, all the patients who were diagnosed to have amblyopia in the Outpatient Ophthalmology Department were enrolled over a period of 24 months from August 2013 to August 2015. Patients who could not comprehend the tests for the assessment of binocularity were excluded from the study. The ocular examination included assessment of the unaided and the best-corrected spectacle visual acuity with the help of Snellen’s visual acuity chart in patients >4 years of age and Cardiff’s vanishing optotype charts in children <4 years of age. Refraction under appropriate cycloplegics depending on the age of the patient, assessment of the ocular alignment, ocular motility and associated deviation if any, and slit lamp examination for the assessment of any anterior segment pathology was performed. A detailed fundus examination was done to rule out any posterior segment pathology and to determine the fixation pattern. Assessment of the binocular status of the eye was performed whenever possible with the help of Worth four-dot test, Bagolini striated glasses, TNO test, and random-dot test.

The clinical profile of 160 patients with amblyopia enrolled in the study is summarized in Tables 1 and 2. In our study, amblyopia was most commonly seen in younger males in the first two decades of life. The predominant prevalence of amblyopia in the left eye may be attributable to ocular dominance, microtropia, laterality in the development of refractive error, developmental or neurological factors, or a combination of the above-mentioned factors. Strabismic amblyopia is the most common type of amblyopia seen in 68 patients (42.50%) with associated constant or alternate tropias, especially esotropia with small angle of deviations. Fixation was eccentric in 85 patients (53.12%) and central in 67 patients (41.87%) while 8 patients (5.00%) had nystagmus without any fixation. Binocularity was present in 32 patients (20.00%) and absent in 116 patients (72.50%). In 12 patients (7.50%), binocularity could not be assessed as they were unable to comprehend the tests.

As amblyopia is often a diagnosis of exclusion, ophthalmologist evaluation of the fixation pattern with the standard direct ophthalmoscope should be an essential part of an ophthalmic examination in a child, especially in preverbal children, uncooperative children, and mentally challenged children in the absence of the more expensive modalities of assessing pediatric visual acuity.

As our study was a prospective observational study evaluating the clinical profile of different types of amblyopia, treatment protocols, response to treatment, and follow-up measures were not included in this study. We believe that this study would enable us to plan future surveys and strategies to screen and implement appropriate therapeutic measures for treating amblyopia on a mass scale subsequently.

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Conflicts of interest
There are no conflicts of interest.
Table 2: Clinical profile of amblyopia – visual acuity

| Clinical profile                                           | Number (percentage) |
|-------------------------------------------------------------|---------------------|
| Total number of patients                                    | 160                 |
| Uncorrected visual acuity right eye                         |                     |
| Better than 6/18                                            | 61 (38.12)          |
| 6/18-6/60                                                  | 70 (43.75)          |
| Worse than 6/60                                            | 29 (18.12)          |
| Uncorrected visual acuity left eye                          |                     |
| Better than 6/18                                            | 40 (25.00)          |
| 6/18-6/60                                                  | 81 (50.62)          |
| Worse than 6/60                                            | 39 (24.37)          |
| Best-corrected visual acuity right eye                      |                     |
| Better than 6/18                                            | 99 (61.87)          |
| 6/18-6/60                                                  | 50 (31.25)          |
| Worse than 6/60                                            | 11 (6.87)           |
| Best-corrected visual acuity left eye                       |                     |
| Better than 6/18                                            | 69 (43.12)          |
| 6/18-6/60                                                  | 74 (46.25)          |
| Worse than 6/60                                            | 17 (10.62)          |

Himabindu Marthala, Gurudutt Kamath, Manjunath Kamath, Sumana J Kamath
Department of Ophthalmology, Kasturba Medical College, Mangalore, Karnataka, India

Correspondence to: Dr. Himabindu Marthala, Department of Ophthalmology, Kasturba Medical College, Light House Hill Road, Hampankatta, Mangalore - 575 001, Karnataka, India. E-mail: drhima14@gmail.com

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