Novel method of utilization of trained medical students for house to house screening for obtaining population based data on ophthalmic diseases

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Statement of the problem: Novel method of utilization of medical students for house to house screening to obtain population based data on ophthalmic diseases in India. There is paucity of population based data, due to shortage of trained manpower for screening. The purpose of this study is to describe utilization of medical students to conduct house to house screening in rural India around a medical college who can be the source of trained manpower for data collection for ocular and systemic diseases.

Methodology and theoretical orientation: Trained III year MBBS students were provided a questionnaire and deployed for house to house screening in villages spanning a 20 km radius around a tertiary care center on every Sunday for a year assisted by staff in rural maternity and child welfare centers. In Children <3 years, vision and amblyopia were assessed by fixation pattern and LEA symbol charts. In those >3 years, E chart were used. Population was screened for anterior and posterior segment diseases. Non mydriatic fundus camera was used.

Findings: Of the 25,375 screened, 51% were females. Children (0-6 years) comprised 9 %and 2% were >80 years. Commonest among the young were infections of lids & conjunctiva and refractive errors, among 40-60 years presbyopia, glaucoma, cataract and in >60 years cataract. 17% with severe visual impairment had not accessed eye care services. 10 % had refractive errors / anterior segment diseases. 3.5% had posterior segment diseases. 30% of diabetics had not consulted an ophthalmologist. 20 % with visual impairment were not interested in availing ophthalmic care.

Conclusion and significance: House to house screening can provide data on prevalence of diseases in the population. Utilization of medical students a novel method can make up for lack of trained manpower. Recommendations: If all medical colleges in the country were to conduct screening programs with uniform protocol, authentic data at national level can be obtained which can provide an insight into the problems associated with implementation of national program for control of blindness in rural India and implementable measures can be planned.

Recent publications:
1. Ravi Thomas, MD, Padma Paul MS, Gullapalli N Rao, MD, Muliyil JP, MD, and Annie Mathai, MS1; Present status of eye care in India; Surv Ophthalmology 50:85-101, 2005

Biography
Lavanya G Rao is a comprehensive ophthalmologist with special interest in anterior segment diseases, medical retina, community and pediatric ophthalmology. She has served in academic institutions for more than 20 years and has contributed immensely to undergraduate and postgraduate ophthalmic teaching in medical college. Presently after retirement from Manipal University is a consultant at Dr AV Baliga memorial Hospital Udupi, India

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