COMMUNITY OPHTHALMOLOGY

An Overview of Services Rendered By State Medical Colleges

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Introduction

Visual impairment has immediate and long-term consequences in people of all age groups resulting in lost blind-person years, low educational and employment opportunities, poor economic gain for individual, families and societies and decreased quality of life.

Community Ophthalmology is a system which utilises the full scope of Ophthalmic knowledge and skill, methodology of public health and services of other medical and non-medical agencies to promote ocular health and prevent blindness at the community level with an active, recognised and crucial role of community participation.

***Categories Of Visual Impairment ; WHO(1977)*(1)**

Categories Of Visual Impairment	Level Of Visual Acuity	
Normal vision	(0) 6/6 To 6/18	
Low vision	(1) Less Than 6/18 To 6/60	
	(2) Less Than 6/60 To 3/60	Economic Blindness
Blindness	(3) Less Than 3/60 To 1/60	Social Blindness
	(4) Less Than 1/60 To Light Perception)	Legal Blindness
	(5) No Light Perception	Total Blindness

According to WHO criteria, global estimate predict that there are 314 million people with visual impairment [45 million Blind (visual acuity <3/60) and 269 million due to Low Vision (visual acuity <6/18) due to eye diseases and refractive errors. There has been a transition in usage of definition from 'best corrected' vision to 'presenting' vision in determining the extent of visual impairment. Best-corrected vision refers to visual acuity obtained with the best possible refractive correction whereas presenting vision indicates visual acuity obtained using currently available refractive correction, if any. (2)

Over the last 20 years, causes of blindness has changed both in proportion and actual numbers, however cataract has still remained the major cause of blindness globally and more so in Asia.

Available Indian estimates suggest that there are more than 12 million bilaterally blind persons in the country with visual acuity [VA] <6/60 in the better eye, of which nearly 7 million are with VA <3/60 in the better eye. National survey during 2001-04 indicated that prevalence of blindness stood at 1.1% and Rapid Assessment of Avoidable Blindness [RAAB] in 2006-07 showed that prevalence has come down to 1.0%.

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Main causes of blindness in the surveyed population indicated cataract [62.6%], refractive errors [19.7%], corneal blindness [0.9%], glaucoma [5.8%], surgical complication [1.2%], posterior capsular opacification [0.9%], posterior segment disorder [4.7%] and other causes [4.19%].(3)

The fundamental issue under any program is social mobilization for advancement of health objectives and increasing demand and utilization of services. It is expected that health personnel including community link worker like ASHA, Aanganwadi workers and 'motivated' members of civil society can play a critical role in this aspect. Village-wise blind register is a tool that facilitates in identification, recording, communication, referral and appropriate management of such cases.

National Programme For Prevention Of Blindness (NPCB) :- NPCB was launched in the year 1976 as a 100% Centrally Sponsored scheme with the goal to reduce the prevalence of blindness from 1.4% to 0.3%. Various activities/initiatives undertaken during the Five Year Plans under NPCB are targeted towards achieving the goal of reducing the prevalence of blindness to 0.3% by the year 2020.

NPCB has been able to deliver effective eye care services through successful and vibrant Public Private Partnership [PPP], through decentralized mode under integrated State/District Health Societies of National Rural Health Mission [NRHM], a win-win situation for all stakeholders and parties. The year 2008 recorded ever-highest 5.8 million cataract surgeries with 94% intraocular lens [IOL] implantation at national level inspite of continuation of ban on 'surgical camps' in makeshift operation theaters to prevent post-operative infections. The program has been able to achieve huge quantitative gains without compromising quality and the momentum thus generated has paved way towards a sustainable blindness free society in near future.

Curative ophthalmology can make a perceptible impact in the society only in conjunction with community ophthalmology. Such activities include need assessment, planning, mobilizing level appropriate resources, fact finding surveys, outbreak investigation in ophthalmic practices, targeted interventions through screening,operational research, clinical care, Vitamin-A supplement/rich food, complete vaccination [especially measles], training, ophthalmic surveillance; sensitization, counselling, motivation, ensuring compliance, referral, follow-up, rehabilitation of incurable blind, empowering community/individuals to utilize available government concessions/benefit for the welfare of blind; reducing myths and misconceptions, understanding and removing barriers for access to services, facilitating favourable environment for growth and development; local leadership and coordination amongst stakeholders under various governmental departments of health, social welfare, education and ICDS, establishment of intra and inter-linkages, information, education and communication activities [IEC], promotion of eye donation improving efficient client movement and logical disposal within health facilities, feedback/reminders for action, monitoring, supervision and evaluation.

Our Services

Various projects and activities are being carried out at our institution GSVM Medical College , Kanpur among which A Cross Sectional Study On Prevalence Of Ocular Morbidity among school going children was done from January 2015 to December 2015. in this study 1149 urban and 956 rural school going children of 6 - 16 years of age of Kanpur city were screened with Snellens-E-chart , Ishihara chart , pin hole , cover uncover test along with comprehensive ocular examination with torch light , slit lamp with 90 D and direct ophthalmoscope. After the study in the result it was found that the prevalence of refractive error was

maximum (26.19%) followed by squint (2.78%), Vitamin A deficiency (1.91%), blepharitis(1.83%), colour-blindness(1.2%), stye(0.78%) and ptosis(0.35%) in urban area.

In rural area prevalence of refractive error was 15.9% but prevalence of Vitamin A deficiency (12.86%) blepharitis (5.43%) and stye (2.40%) was highly significant (P<.0001). for the rest of the ocular morbidities prevalence did not vary significantly.

Prevalence of ocular morbidity in males (Rural-63.52% and Urban -57.81%) was more than females (Rural-36.48% and Urban - 42.17%).

We are providing community ophthalmic services through various means like organising school health programmes on regular basis where we provide promotive and preventive measures. Children are screened for various ocular morbidities and are provided medications and those requiring major interventions are referred to our institution.

Awareness is being spread on maternal and child nutrition like including vitamin A rich sources in their diet, face washing, safe water and environmental sanitation. Preventive and curative measures are also being taken like nutrition supplementation, vision screening, measles vaccination , treatment for vitamin A deficiency and referral for surgery

As cataract being one of the leading cause of avoidable blindness *'screening camps'* are held in rural , remote and underprivileged areas of Kanpur. Patients are provided comprehensive eye care services including refraction and cataract patients are being transported to our institution and undergo surgery.

Glaucoma week is celebrated every year from 6th - 12th March where we organise free eye camps where patients are screened thoroughly and given treatment accordingly. Public awareness for eye care , eye donation , glaucoma and prevention of blindness is achieved by organising different rallies ; frequent press releases and articles in leading newspaper and scientific journals.

Rehabilitation of the blind is as important as the prevention and control of blindness. In Rehabilitation services we have provision of low vision services and certification of blind and to sensitise them about concessions.

Conclusion

To conclude, it should never be forgotten that, one of the basic human rights is the right to see. The strategy makers MUST ensure that:

- No citizen goes blind needlessly due to preventable causes.
- All avenues are exhausted to restore the best possible vision to curable blinds.
- Blinds not amenable to curable measures receive comprehensive rehabilitation.

And various activities and services should be enhanced at a community level for the prevention of blindness.

References

1. WHO (1977). International Classification of Diseases. Vol. 1, p. 242.
2. Resnikoff S, Pascolini D, Mariotti SP, Pokharel GP. Global magnitude of visual impairment caused by uncorrected refractive errors in 2004. Bull World Health Organ 2008;86:63-70.
3. www.npcb.nic.in