

Original Article

THE STATUS OF NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS IN MADHYA PRADESH

Kaushal Rituja¹, Sanjay Kumar Gupta², Neeraj Gaur³, A V Athawale⁴, Manmohan Gupta², Najnin Khanam³

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Author's Affiliation:

¹Resident; ²Associate Professor; ³Assistant Professor; ⁴Professor and Head, Department of Community Medicine, Peoples College of Medical Sciences and Research, Bhanpur, Bhopal

Correspondence:

Dr. Sanjay Kumar Gupta,
Email: sanjaygupta2020@gmail.com

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ABSTRACT

Background: National Programme for Control of Blindness was launched by Government of India in 1976, but in Madhya Pradesh (MP) it was launched in 1978. It is a 100% centrally sponsored programme to overcome the major public health problem (blindness) in India. Keeping this viewpoint in mind, the study was conducted with the objectives of to assess the status of national programme for control of blindness in MP, to find out the district wise status and comparisons and to know the status of school children in Programme.

Materials and Methods- Study Design: Record based retrospective observational. Period of study: From 2007-08 to Aug 2012-13.

Results: Data showing that during the year 2011-12, hundred percent target were achieved for cataract operation followed by 95% in 2010-11. From 2007-08 to 2012-13. In the all cataract operation in M.P. around 98% intra ocular lens were also inserted. Among school children detected refractive errors were higher during the period of 2012-13 (3.91%) followed by 2011-12 (2.26%), lowest detection rate were reported in 2009-10 (1.37%). Maximum number of students given spectacles after detection of refractive error in 2011-12 (62.57%) followed by in 2010-11 (49.88%). According to performance grading of districts of MP, 20% are best performer district (A grade) and 18% in B grade, 22% of MP districts are worst performer and graded E.

Conclusion: National programme for control of blindness in 20% of districts of MP are best performer districts but still 22% of total districts of Madhya Pradesh are poor performer, there we have to put more effort to make blindness control programme successful.

Keywords: Blindness, Madhya Pradesh, school children, surgery, IOL

INTRODUCTION

National Programme for control of Blindness was launched by Government of India in 1976 but in Madhya Pradesh (MP) it was launched in 1978. It is a 100% centrally sponsored programme to overcome the major public health

problem of blindness in India.¹ It is decentralized in 1994-95 with the formation of District blindness control society in each district. The goal is - To reduce the prevalence of blindness from 1.4% to 0.3% up to year 2020. At present prevalence of Blindness is 1%. Strategy is 1. Developing eye care infrastructure & human

resources. 2. Promoting outreach activities & public awareness. 3. Improving quality of eye care services & visual outcome following medical & surgical management. Many surveys/studies were undertaken to assess the root causes of blindness & to cure it in a cost-effective way.

Various studies based on gender & blindness aspect revealed – women account for between 53 % & 72% of all cataract cases². Women don't receive surgery at the same rate as men. Blindness due to cataract would reduce by about 12.5% if women received surgery at the same rate as men. 3 Cataract is curable with inexpensive surgery costing about US \$ 20 per person.³ A survey was undertaken by ICMR in 1971-1974 to identify main causes of blindness, which revealed that prevalence of blindness was 1.38% & cataract was the leading cause of blindness. Based on this survey Government of India appointed a committee to formulate strategies to control blindness.⁴ National survey was undertaken by GOI/WHO in 1986-89, the survey revealed increase in prevalence from 1.38 % to 1.49%. Cataract accounted for 80% of Blindness⁵. Of the total estimated 45 million blind persons in the world, approx. 7 million are in India. An estimated 2 million new cases of cataract are added per year. Also refractive errors are the second commonest cause of blindness after cataract, it accounts for over 7% of the blindness.

Madhya Pradesh is having 7 Division, 50 Districts, 313 Blocks and 52117 Villages.⁵

The health infrastructure in MP is CHC : 333 (every 1,20,000 popu./or Tribal population 80,000), PHC : 1156 (every 30,000 popu./or Tribal population 20,000), Sub Centre : 8860 (every 5,000 popu./or Tribal population 3,000) , District hospital : 48, and Urban civil hospital : 56, two new districts are also formed in M.P. that are Alirajpur & Singroli.

World Bank assisted cataract blindness control project 1994-2002. To overcome the backlog of target -17.2 lacs cataract operations. Achievement up to 2002 -18.31 lacs cataract operations were done. Under the Project following facilities were provided. 1) Cataract operations were done with IOL implant. 2) Operating microscope provided in each district 3. Other ophthalmic equipments were also provided, a scan, Slit lamp, Keratometer, Tonometer, Direct ophthalmoscope, and streak Retinoscope. 4) IOL training given to 120 eye surgeons. 5) 20 bedded 15 eye wards & OTs were constructed. 6) 10 bedded 38 eye wards

& OTs were constructed. 7) 383 dark rooms were constructed.

OBJECTIVES

To assess the status of national programme for control of blindness in MP; to find out the district wise status and comparisons between districts on performance bases; and to study the status of school children in National Programme for Control of Blindness.

METHODOLOGY

Data of all districts of Madhya Pradesh was collected in standard format from 2008 to 2012-13 retrospectively, from Madhya Pradesh (MP) blindness control programme office regarding yearly target set for cataract operation and Intraocular lens implantation, number of school surveyed, number of student examined, number of spectacle distributed for refractive error students, under the National Programme for control of Blindness (NPCB), all collected data was analysed and recorded.

OBJECTIVES

1) To Assess the status of national programme for control of blindness in MP 2) To find out the district wise status and comparisons between districts on performance basis. 3) To study the status of school children in National Programme for Control of Blindness.

METHODOLOGY

Data from all districts of Madhya Pradesh was collected in standard format from 2008 to 2012-13 retrospectively, all collected data was analysed in reference to target achieved for cataract operation and IOL implantation, school survey and detection programme.

OBSERVATION

Table 1 is showing that during the year 2011-12, hundred percent target was achieved for cataract operation followed by 95% in 2010-11. From 2007-08 to 2012-13 in all cataract operations in MP around 98% intra ocular lens were also inserted.

Table 1: A yearly distribution of cataract operations and Intra ocular lens insertion cases in Madhya Pradesh

Year	Cataract Operation		IOL
	Target	Achievement (%)	Rate (%)
2007-08	350000	322822 (92.0)	97
2008-09	450000	376143 (84.0)	98
2009-10	450000	409601 (91.0)	98.47
2010-11	450000	429695 (95.5)	98.72
2011-12	450000	454150 (100.9)	98.76
2012-13*	109440	96144 (87.8)	98

*up to August13

Table 2 shows that refractive errors detected among school children were higher during the period of 2012-13 (3.91%) followed by 2011-12 (2.26%) & lowest detection rate were reported in 2009-10 (1.37%). Maximum number of students given spectacles after detection of refractive error in 2011-12 (62.57%) followed by in 2010-11 (49.88%), lowest spectacles' distribution occurred up to month of august in 2012-13 (3.94%).

Table 2: Distribution of School children according to target for blindness control screening in MP

Year	Target	Schools examined	Students examined	Students with refractive errors (%)	Distribution of free spectacles (%)
2007-08	1000000	30597	3848206	73668 (1.91)	19226 (26.00)
2008-09	952000	37698	4210030	75593 (1.79)	16615 (21.97)
2009-10	4100000	24670	3796960	52197 (1.37)	11179 (21.41)
2010-11	4100000	37791	3490087	72142 (2.00)	35990 (49.88)
2011-12	4100000	36285	3211264	72768 (2.26)	45531 (62.57)
2012-13*	4100000	2925	264226	10344 (3.91)	408 (3.94)
Total			18820773	356694 (1.89)	

*up to August13

Table no. 3. Various Districts of Madhya Pradesh & their performance grading

Achievement target	Grading	Districts (%)
>100%	A	10(20%)
75-100%	B	9(18%)
50-75%	C	9(18%)
<50%	D	10(20%)
<40%	E	12(24%)
Total		50(100%)

Table 3 is showing that according to performance grading of districts of MP, 20% are best performer district (A grade) and 18% in B grade, 24% Of MP districts are worst performer and graded E.

DISCUSSION

District Blindness control society in each district of the country was launched in the year 1994-95 with the objective of decentralizing the implementation of the programme. Each district covers population of approx.15-20 lacs & acts as basic unit for delivery of eye care services.⁵ It requires co-ordination of activities of governmental, non-governmental & private sector. Madhya Pradesh has got momentum from World bank assisted Cataract Blindness Control Project 1994-2002 which over shot

the target of 17.2 lacs cataract Operation (to overcome the backlog) & achievement was -18.31 lacs cataract operations.^{6,7} Even in 2012 programme is going in full swing in many well facilitated districts of M.P. But in few districts due to poor eye care services quantitatively & qualitatively, poor follow up services, improper filling up of standard cataract surgery records & discharge cards, accumulation of unspent balances over the plan period due to poor utilization of funds, Suboptimal coverage of eye care services, poor maintenance of village wise blind registers, absence of micro plan for mopping up of the backlog of cataract blindness, cataract surgery rates are low or even absent. Poor infrastructure & lack of trained manpower with non availability of ophthalmic equipments are further hindrances in the achievement of goals to bring down CSRs.^{8,9}

Refractive errors in children - In India, refractive errors are the second commonest cause of blindness after cataract. It accounts for over 7% of the blindness. In children refractive error occurs due to the defects in the size of the eyeball. Children usually don't complain of defective vision. Any problem in the vision during the formative years can hamper the intellectual development, maturity & performance of a person in his future life. So timely detection of these problems & their

correction by spectacles can tremendously improve the child's potential during his formative years. So for prevention & control strategy it is better to catch maximum number of children in school hours.^{10,11}

School eye screening programme includes. 1. Training of school teachers in primary screening, 2. Annual primary screening of school children, 3. Confirmation of refractive error, and 4. Provision of free glasses for the poor. School children represent a needy & big target group requiring identification & treatment of refractive error due to following reasons.-They are a captive group & can be reached through the education system, reading & writing are their felt needs for which good eye sight is required, Many children, their teachers & parents realize this. There has been significant increase in school eye screening programme^{10,11}.

1. No. of teachers trained in school eye screening programme has risen.

2. No. of students screened for refractive error has risen.

3. No. of children detected with refractive errors & no. of children provided free glasses has also increased manifold. If we compare these figures with other states like Orissa, NPCB programme figures from 2007-08 to 2012 were poorer in performance in comparison to Madhya Pradesh, Again Madhya Pradesh is a better performer in achieving target of cataract operation and intraocular lens insertions (98%) in comparison to UP (65%).¹² Maharashtra was better performer than MP from 2007-08 to 2010-11, but in 2011-12 MP was better performer than Maharashtra.¹² In the present study percentage of refractive error among school children was (1.89%). Comparatively Bihar had little higher percentage

(2.77%) and Orissa significantly higher percentage (12.52%) than MP.¹²

CONCLUSION

As per National programme for control of blindness - 20% of districts of MP are best performer districts but still 24% of total districts of Madhya Pradesh are poor performers, there we have to put more effort to make blindness control programme successful.

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