

Assessment of Visual Impairment Related Knowledge and Health Care Seeking Behaviour of the Community in the District of Dibrugarh, in India

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ABSTRACT

Introduction: Blindness is a major health problem but has received relatively little attention in worldwide efforts to promote health. Health inequities are related to the level of knowledge about the health conditions and the health seeking behaviour of the community members. So this study was designed to assess the Health care seeking behaviour of the community in conditions related to visual impairment and to identify if any gender differences exists in the care seeking behaviour.

Material and methods: A community based cross sectional study was carried out amongst 100 randomly selected community members and 100 patients receiving treatment under the National Programme for Control of Blindness in the district of Dibrugarh, Assam, during the period from July 2010 to June 2011. Sex specific behaviour pattern of the adults was studied by selecting 50 males and 50 females randomly for better comparability. The data was collected using a standardized pre-designed and pre-tested interview schedule.

Results: The study revealed that only 42 % of the patients had the knowledge about the causes of blindness, especially cataract and glaucoma. Knowledge amongst the patients regarding the modalities of treatment was adequate (90%) while 69% of them preferred to avail eye care services from Government sector facilities only. Knowledge amongst the females regarding services available for prevention and control of blindness was poorer (18%) as compared to males (32%).

Conclusion: For reducing the problem of blindness, knowledge and health seeking behaviour of the community needs to be improved with special attempts to address gender issues.

Keywords: Blindness, health seeking behaviour, gender.

INTRODUCTION

Vision is one of the most cherished senses and most of us can hardly imagine what it would be like to lose it. Blindness is a chronic non-communicable disease, which is a major health problem but has received relatively little attention in worldwide efforts to promote health. Prior to the launch of Vision 2020 there were around 38 million blind people globally, a figure that was expected to increase to approximately 76 million by the year 2020.¹ Later estimates however put the figure at 45 million blind people globally, in 2004, plus another 269 million low vision thus a total of 314 million visually impaired people which represented some 5% of the global population at that time.² As per the latest estimate the total number of visually impaired persons in the world upto 2010 was 285 million, representing some 4.2% of the global population.³

This rising tide of blindness can be attributed primarily to the demographic transition that has strongly influenced the

health patterns in the developing countries exhibiting a transition from predominance of mortality from infectious and parasitic diseases that are more prevalent among younger age groups, to mortality from chronic non-communicable diseases, more prevalent among adult and elderly population.⁴

In the developing countries infection, malnutrition and lack of eye care give rise to a high proportion of blindness, particularly in the rural population. Thus these countries have blindness rates that are ten to forty times greater than those of industrialized countries, where blindness is mainly due to degeneration and metabolic disorders.⁵ Childhood blindness is the second largest cause of blind person years following cataract accounting for about 70 million blind person years globally.⁶

It has been observed that health inequities are related to the level of knowledge about the specific health conditions and social determinants based on gender, socioeconomic status and ethnicity, race, living in a specific geographic region, or having a specific health problem.⁷ In fact Needless blindness and poor vision can be eliminated only if people have access to sight saving health care. This ensures social as well as economic progress of a nation.

As no studies have been conducted in this part of the country to assess the visual impairment related health care seeking behaviour, this study was designed to be carried out with the following objectives to assess the Health care seeking behaviour of the community in conditions related to visual impairment and to identify if any gender differences exists in the health care seeking behaviour.

MATERIAL AND METHODS

The present study was carried out to gain information regarding the health seeking behaviour of the patients with visual impairment and the difference in the health seeking behaviour of the males and females of the adult population of the study district in India.

Before undertaking the study due Ethical clearance was taken from the Institutional Ethics Committee at Dibrugarh; where the study was conducted. Written Informed consent was taken from all the study participants after duly explain-

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ing to them the importance and purpose of the study

Interview of patients receiving treatment under National Programme for Control of Blindness (NPCB)

The total number of beneficiaries registered under the NPCB in the district was 5000. As patients are a relatively homogeneous group 100 patients receiving treatment under the programme were selected by simple random sampling method from the hospital records maintained with the Medical College and Hospital and were interviewed.

Interview with the general adult population after sampling

In the study district there are six primary health centres. Out of the six PHCs two PHCs closest to the Medical College were purposively selected considering feasibility issues. For interview with the general adult population the sample size was calculated on the assumption that 50% of the population knows about the programme.

$$\begin{aligned} \text{Sample Size} &= \frac{4pq}{L^2} \\ &= \frac{4 \times 50 \times 50}{10 \times 10} \\ &= 100 \end{aligned}$$

Where:

p = Proportion of population aware of the Programme.

q = 1 - p

L = Allowable error (10% of 'p')

For better comparability 50 adult community members each were randomly selected from each of the two PHC areas beginning from the house nearest to the PHC. To study the sex specific behaviour pattern of the adults, 50 males and 50 females were randomly selected for better comparability. They were interviewed using pre-designed and pre-tested schedule of mixed type which included both open and close ended questions.

In the event of any refusal or reluctance on the part of the community members, to participate, the next house was visited. This sequence of visits continued until the desired sample of 100 was achieved.

RESULTS

Knowledge and health seeking behaviour amongst patients

For this study a total of 100 patients registered under the National Blindness Control Programme, undergoing treatment for visual impairment in the Medical College were interviewed. The study revealed that 100 % of the patients were aware of the public health importance of blindness/visual impairment (Table 1). It was observed during the assessment that knowledge about the causes of blindness and visual impairment amongst the patients was not satisfactory. Only 42 % of the patients had the knowledge about the causes of blindness and visual impairment, especially cataract and glaucoma (Table 1). However it was observed during the study that knowledge amongst the patients regarding the modalities of treatment or correction of visual impairment/blindness was adequate (90%) and all patients (100%) were aware about the availability of free surgical treatment in the Government sector. Because of this awareness about the

availability of free service, it was seen that majority of the patients (69%) preferred to avail eye care services from the Government sector only.

Knowledge and health seeking behaviour of the community

The study revealed that 100 % of the community members, who were assessed during the course of the study, were aware of the social and economic implications of blindness/visual impairment. Knowledge regarding the different causes of blindness was more amongst males (56%) as compared to 32% of the females. 96 % of the females were aware of the correct modalities of treating visual impairment as compared to 88 % of the males. All the community members (100 %) were aware that full treatment was available free of cost. It was observed that awareness about an ongoing Nation Programme for Blindness Prevention and Control was low amongst both the sexes, being lower for females (18%) than males (32%) (Table 2). 66% of the people preferred Government health sector for the treatment of visual impairment. Majority (77%) of the studied individuals considered timely consultation of doctors and proper information as important steps for reducing the burden of blindness in the community. This suggests that there has been a general improvement in awareness level about one's health amongst the community members. However the difference in the knowledge and health seeking behaviour of the males and females were not found to be statistically significant (P=0.96).

DISCUSSION

Almost similar findings regarding awareness and knowledge of causes of visual impairment was reported by a study conducted by Dandona R, Dandona L, John RK, McCarty CA and Rao GN in Hyderabad,⁸ which revealed that awareness of cataract was 69.8% and night blindness 60% but that of diabetic retinopathy was 27.0% while that of glaucoma was only 2.3% amongst the patients.

Another study, conducted in Bhaktapur, Nepal by Thapa SS, Berg RV, Khanal S, Paudyal I, Pandey P, Maharjan *Net al*,⁹ also reported very low awareness level about cataract (6.7%) and glaucoma (2.4%) among the study subjects.

In this study it was observed that availability of free surgical services was the main reason for utilization of Government facilities. Similarly Gupta SK and Murthy GV,¹⁰ in their study also observed that easy accessibility, reputation of a facility, competence of its staff and free services were the major reasons that were cited by patients for utilization of

Knowledge/health seeking behaviour	Total number of patients interviewed N (%)
Awareness about Blindness/ Visual impairment	100 (100 %)
Knowledge about Causes of Blindness	42 (42 %)
Knowledge about Modality of treatment	90 (90 %)
Knowledge about Availability of treatment	100 (100 %)
Preference for Govt. sector health facility	69 (69 %)

Table-1: Knowledge and health seeking behaviour amongst patients registered under npcbl in the district of dibrugarh

Health Seeking Behaviour	Male (n = 50)		Female (n = 50)		Total Number of Adults (n = 100)	
	Number	%	Number	%	Number	%
Awareness about blindness/visual impairment	50	100%	50	100%	100	100 %
Causes of blindness	28	56%	16	32%	44	44 %
Modality of treatment	44	88%	48	96%	92	92 %
Availability of treatment	50	100%	50	100%	100	100 %
Awareness of NPCB	16	32%	9	18%	25	25 %
Preference for Govt. sector health facility	35	70%	31	62%	66	66 %
Steps for controlling blindness in the community	39	78%	38	76%	77	77 %

Table-2: Knowledge and health seeking behaviour of the adult population

service facilities.

A study conducted by Abou Gareeb I, Lewallen S, Bassett K and Courtright P (2000) observed that females in poorer countries have lower knowledge and awareness level about blindness/visual impairment as compared to males resulting in the under-utilization of eye care services by females with subsequent higher prevalence of blindness in them.¹¹ In this study also females were found to have lower (32%) level of knowledge and awareness about different aspects of blindness/visual impairment as compared to males (56%).

Similar findings were also revealed in a study conducted by Courtright Paul (2002), which concluded that females living in poorer countries utilize eye care services much less than males because of low awareness levels.¹²

These differences in the knowledge level of the two sexes calls for more attention to be given towards narrowing the gender bias and thereby improve the utilization of eye care services by both the sexes. However to date no gender issues have been incorporated into the evaluation, planning and treatment efforts under the programme.

CONCLUSION

The study reveals the fact that there exists a wide gap in the awareness level of both males and females regarding the problem of blindness and it's control despite community eye health education being an important plank in the National Programme for Control of Blindness in India. This suggests that for reducing the burden of visual impairment upon families, in particular and society, in general, there is an urgent need to improve the health care seeking behaviour of the community, especially addressing issues related to gender discrimination.

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