



BARRIERS TO THE UPTAKE OF CATARACT SURGERY SERVICES IN RURAL AREAS VARANASI DISTRICT OF UTTAR PRADESH: A PROSPECTIVE OBSERVATIONAL STUDY

Ophthalmology

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ABSTRACT

AIM: To study the barriers for cataract surgery among walk in bilateral cataract blind patients in free cataract camp at a tertiary center in eastern U.P.

Material and Methods: One hundred and fifty walk-in patients attending the free cataract surgery camp diagnosed to be bilateral blind (better eye vision 10/200 or less) were included in the study. Total duration of study was 6 months. All the patients were subjected to field validate questionnaire and their response was documented by a single trained ophthalmologist. The questions on barrier were devised from existing literature and required yes/no response only. Eleven barriers relating to patients attitudes towards cataract surgery were investigated. Patients were allowed to go through the system like any other regular OPD. Patients being advised surgery.

Results: Most important reason for non-accepting surgery were could manage daily work in 70% cases, cataract not mature in 60% patients, could see clearly with the other eye in 58% cases, other engagements in 50% cases, being female gender in 30% of cases, fear of surgery in 34% of cases, fear of surgery causing blindness in 30% cases, God's will in 20% of patients. Barriers relating to service delivery included insufficient family income in 66% of cases, no one to accompany in 40% of cases, distance from hospital >20 km in 30% of patients, lack of transport in 10% of cases.. The study concluded that the major barriers (present in >50% Patient) were more related to patient attitude than to issues of service delivery.

Conclusion: It was observed that in this population with majority of patients with severe vision loss and blindness even when offered free transport and free surgery, the utilization of cataract surgery is below 60%. Medical practice need to develop a more holistic understanding of the needs of communities cultivating a better capability to analyze the role of cultural social and economic factors when planning medical services for the population. Barriers to cataract surgical services should be addressed by community based health education programs to improve the uptake of existing services.

KEYWORDS

Cataract Surgery, Barriers, Blindness.

INTRODUCTION

Worldwide cataract remains the major cause of all blindness. It is estimated that 41.8% of all global blindness is caused by cataract(1). WHO NPCB(1988-89)(NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS) revealed that in India, cataract alone is responsible for 81% of severe vision loss and blindness(2). It is estimated that 9.7 million have severe vision impairment (less than 6/60) and 4.3 million are (less than 3/60) are due to bilateral cataract. By the year 2020 the elderly population is expected to double from today number, increasing the number of blind to even more(3,4). A recent study published in medical journal The Lancet Global Health by vision loss expert group estimates that the global prevalence of visual impairment (VI) has dropped from 4.6 in year 1990 to 3.4 in year 2015(5). The data are encouraging as it shows that the effort to reduce avoidable blindness in affected countries are effective. There are several lacunae both from service providers perspective as well as from the receivers perspective that need attention. Cataract is most important cause of avoidable blindness which has cost effective solution. Although in many remote and poor areas of developing countries, people bear blindness from cataract due to lack of access to eye care facilities .(6,7). Making cost effective cataract surgery available to remotest area is a part of large solution to global problem of VI. But even at places where services are available and accessible, the utilization of services is determined by several factors or barriers that must be addressed if we want to improve the demand for utilization for these services and thus decrease the prevalence of Visual Impairment (10). Various studies done in past in our country shows that factors affecting uptake of services tend to change from time to time. Studies done around twenty years back suggest poverty, lack of awareness, lack of transportation and fear of surgery to the common barriers to the uptake of services in India (9,10,11,12). Research done in later decade showed unwillingness of the patients, fatalism, ageism, lack of escort work and domestic obligations as a most common reasons(13,14,15). Studies in present decade revealed that apart from cost other barriers including wait for maturation of cataract , other coexisting health conditions and those that appear to be more related to service provider(16, 17, 18, 19). So the present study was conducted in the rural areas of Varanasi district of eastern U.P. with the objective of determining the barriers to the uptake of cataract surgical services and

high prevalence of blindness due to cataract despite the availability of free of cost surgical care under NPCB programme.

Material And Methods: This study was conducted from October 2016 to March 2017 at Heritage Institute Of Medical Sciences, Varanasi a tertiary eye care center in eastern U.P. One hundred and fifty walk in patient attending the free cataract surgery camp OPD diagnosed to be bilateral mature cataract (better eye vision $\leq$ 10/200) were included in the study. Patients with bilateral cataract and other pathologies were excluded from the study. The study was done in accordance to the principles of the Declaration of Helsinki. Patients were briefed in appropriate local language about the purpose and procedure of the study and an informed written consent was obtained. Socio demographic data were noted on a Performa and included age, gender, rural and urban residence, literacy and employment. All the patients were subjected to a field validated questionnaire in patients own language. The questions on barrier were devised from existing literature and required yes/no response only. Eleven barriers relating to patients attitudes towards cataract surgery were investigated (20). To maintain uniformity and reliability of data collection, all questionnaire were interviewer assisted by the same interviewer who had undergone training in questionnaire administration in the department of Ophthalmology of this Institution. The diagnosis of cataract was based on torchlight and distant direct ophthalmoscopy. Vision was assessed by Snellen's chart and WHO definition of blindness was used (3). Data was entered in an excel worksheet and each barrier that was reported by patient was given a score of one point. Mean and median age of patient and mean of total barrier per patient was calculated using the statistical package SPSS-13.

Result: There were 150 patients in all of which 81 are male and 69 females with the age ranging from 50yrs to 86yrs (Median 64yrs). Attitudinal barriers seen were could manage daily work in 70% of cases, cataract not mature in 60% of cases, could see clearly with the other eye in 58% of cases, other engagements in 50% of cases, female gender in 30% of cases, fear of surgery in 34% of cases, fear of surgery causing blindness 30% in cases, God's will in 20% of cases. Barriers relating to service delivery included insufficient family income in 66% of cases, no one to accompany in 40% of cases, distance from hospital

> 20 km in 30% of cases, lack of transport in 10% of cases.

Barriers Relating To Attitude Of Patients Towards Cataract Surgery

S.No.	Barriers	No. of Patients
1.	Could manage daily work	105
2.	Cataract not mature	90
3.	Could see clearly with the other Eye	87
4.	Female Gender	45
5.	Fear Of Surgery	51
6.	Old age	45
7.	God's Will	30

Barriers Relating To Service Delivery

S.No.	Barriers	No. Of Patients
1.	Insufficient Family Income	99
2.	No one to accompany	60
3.	Lack Of Transport	15
4.	Distance From Hospital >20 km	45

DISCUSSION:

The sociodemographic data shows that the study included comparable number of men and women. Studies have shown that financial limitations rank high as reasons for not having cataract surgery (21). However in our study the major barriers (present in >50% Patient) were more related to patient attitude than to issues of service delivery which is similar to the findings of Dahiwal U et al(13). It was observed that in this population with majority of patients with severe vision loss and blindness even when offered free transport and free surgery, the utilization of cataract surgery is below 60%. Medical practice need to develop a more holistic understanding of the needs of communities cultivating a better capability to analyze the role of cultural social and economic factors when planning medical services for the population. Barriers to cataract surgical services should be addressed by community based health education programs to improve the uptake of existing services.

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