

ORIGINAL RESEARCH

## Prevalence, Barriers and Gender Inequalities in Cataract Surgical Coverage in a Rural Village in South India

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### ABSTRACT

**Background:** To estimate the prevalence of cataract surgical coverage (CSC), its barriers, and unmet need of cataract surgical services among people above 60 years in rural population in Kerala.

**Materials and Methods:** The study design was community based cross-sectional survey of 340 subjects of 60 years and above using a multi stage cluster sampling technique. Participants were interviewed with pre- tested questionnaire to collect information on demographics, CSC and barriers of cataract surgery. Pen torch was used for eye examination. Data was entered in Excel and analysed by SPSS. Using appropriate bivariate and multivariate methods and gender analysis of the determinants of CSC was done.

**Results:** Prevalence of cataract surgery in persons operated in one or other eye was 59.6 % (women 58.7 %, men 62.9 %). CSC was lower in women compared to men. Barriers of surgery were experienced by 40.4 % of the people with cataract, the common reason for it being 'no one to accompany'.

**Conclusion:** Gender disparities and poorer access to services in rural areas are still a challenge. Results indicate that we should continue to prioritize cataract surgical services and their augmentation, particularly among the aged and women.

**Keywords:** Cataract surgical coverage, barriers, gender inequalities in surgical coverage.

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### INTRODUCTION

Cataract is a preventable cause for blindness rectified by the use of appropriate surgical services. The absence of effective utilization of such services leaves many of those affected by it with severely impaired vision. Significantly, a majority of those living with blindness due to cataract and poor access to services are in the poor countries.<sup>[1,2,3]</sup>

Although several studies on cataract are available in various parts of India, few studies were reported cataract surgical coverage services. The only cost-effective intervention available in preventing cataract is cataract surgery and it reduces the major burden of avoidable blindness. Many barriers exist for undergoing cataract surgery despite the availability of surgical services. Proper understanding of barriers will help in planning strategies to achieve maximum cataract surgical coverage. Non availability of statistics regarding the prevalence, cataract surgical rate and barriers that exists hinders the effective measures to address the

unmet need for surgical services. Barriers in accessing cataract surgical services are mainly lack of awareness, poor quality of services, and high cost of treatment. There are personal (42%), economic (37%) and social barriers (27%) by two studies (Rabiu MM, Sasikumar S et al ). The state of Kerala has the highest life expectancy at birth among the Indian States and this level of longevity among its population is comparable to many advanced countries. The proportion of elderly population in this state is 10.4 %, <sup>[4]</sup> which is the highest among the states in India, and consequently one expects that the number of cataract cases would be high. Coverage of cataract surgery is expected to be good in Kerala because of the increase in health care access, increase in literacy especially for women and high status of women. But much of the access to and utilization of health services in the state is from the private sector, <sup>[5]</sup> and this might create a barrier for the elderly who will not be currently employed or have a monthly income. There is a need to assess and address this increased demand for cataract surgical services that this demographic phenomenon of increased proportion of elderly would have caused in the recent period. The prevalence of many of the chronic conditions such as hypertension, <sup>[6]</sup> and diabetes mellitus, <sup>[7]</sup> among the elderly in this state is also high. These are specific risk factors for cataract. <sup>[8-10]</sup> There is, therefore, a definite need to assess the level of cataract surgical coverage in the state. The information from such a study can help in the strategies and policies regarding the intervention (surgery) and to highlight the issues of quality and quantity of surgical coverage.

#### Objectives:

- To estimate the prevalence of cataract surgical coverage among people above 60 years in a rural setting of Kerala.
- To study the barriers of cataract surgery and
- To determine unmet need of cataract surgical services

#### MATERIALS & METHODS

This was a cross-sectional field-based survey. Cluster sampling method was used: two randomly selected clusters of 10 persons each with 60 plus age were selected, from each of the 17 wards of a rural panchayat of Ernakulam district of Kerala. A pen torch was used for eye examination to detect the status of lens. The number of persons detected with cataract was 161 out of the 340 examined.

**Inclusion Criteria:** People above age 60 as reported by the respondent.

**Exclusion Criteria:** Those who were unable to respond to queries for various reasons including physical conditions that make it difficult for them to respond were excluded. Such a case is referred to the nearest health facility.

**Sample Size:** The prevalence of cataract among 60+ populations is used to calculate sample size. For this purpose, we assumed a prevalence of 18% and confidence interval of 95%. The precision was assumed to be 0.05. So we got the sample size of 226. For design effect, 0.5 was taken and the total sample size required was calculated as 340.

**Data analysis:** Data was entered in Excel/ Epi data and SPSS version 17 was used for analysis.

#### RESULTS

The study results were mentioned in the below tables.

**Table 1: Percentage distribution of prevalence of cataract surgical coverage by sex**

Sex	Cataract surgery done (%) (n=96)	Cataract surgery not done (%) (n=65)	Total (%)
Women	74 (58.7)	52 (41.3)	126 (100)
Men	22 (62.9)	13 (37.1)	35 (100)
Total	96 (59.6)	65 (40.4)	161 (100)

**Table 2 a: Gender analysis percentage distribution of Cataract Surgery by various socio- demographic factors**

Characteristics	Cataract Surgery (%) (women)		Total (n= 126) (100.0%)	Cataract Surgery (%) (men)		Total (n= 35) (100.0%)
	Yes (%) (n=74)	No (%) (n=52)		Yes (%) (n=22)	No (%) (n=13)	
<b>SLI</b>						
Low	9(47.4))	10(52.6)	19	1(50.0)	1 (50.0)	2
Middle	58(60.4)	38(39.6)	96	15(60.0)	10(40.0)	25
High	7(70.0)	3(30.0)	10	6 (75.0)	2(25.0)	8
Chi-square-1.643,df-2,Pvalue-0.440 OR-1.652,(CI-0.615-4.437) <sup>[1]</sup>			Chi-square-0.734,df-2,Pvalue- 0.893,OR-1.5456(CI-0.087-27.358) <sup>1</sup>			
<b>No. of children</b>						
No children	62(57.4)	46(42.6)	106	20(64.5)	11(32.6)	31
>=1child	6(66.7)	3(33.3)	9	2(50.0)	2(50.0)	4
Chi-square-0.293, df-1, P value 0.583, OR-0.674 (CI- 0.160-2.837)			Chi-square-0.320,df-1,Pvalue- 0.572,OR-1.818(CI-0.224-14.751)			

**Table 2b: Gender analysis percentage distribution of Cataract surgery by various demographic factors**

Characteristics	Cataract Surgery (%) (women)		Total (n= 126) (100.0%)	Cataract Surgery (%) (men)		Total (n=35) (100.0%)
<b>Previous occupation</b>						
White-collar	11(73.3)	4(26.7)	15	8(72.7)	3 (27.3)	11
Agriculture	8(57.1)	6 (42.9)	14	3(37.5)	5 (62.5)	8
Blue collar	28(54.9)	23 (45.1)	51	10(66.7)	5 (33.3)	15
No work	27(58.7)	19(41.3)	46	1(100.0)	0(0)	1
Chi-square-1.643,df-1,Pvalue0.650 OR-2.095,(CI-0.628-6.987) <sup>[2]</sup>			Chi-square-3.346,df-3,Pvalue0.341, OR-.9051(CI-0.402-9.023) <sup>[2]</sup>			
<b>Education</b>						
Illiterate	9(40.9)	13(59.1)	22	3(100.0)	0 (0)	3
Primary	50(59.5)	34 (40.5)	84	13(59.1)	9 (40.9)	22
>high school	15(75.0)	5 (25.0)	20	6(60.0)	4 (40.0)	10
Chi-square-5.089,df-2,Pvalue-0.079,OR-0.418(CI- 0.144-1.235) <sup>[3]</sup>			Chi-square-1.941,df-1,Pvalue-0.379, OR-1.185 (CI-0.263-5.343) <sup>3</sup>			
<b>Age group</b>						
60-64	8(53.3)	7	15	4 (66.7)	2 (33.3)	6
65-69	15(53.6)	13(46.4)	28	1 (25.0)	3 (75.0)	4
70-74	17(58.6)	12(41.3)	29	4 (57.1)	3 (42.9)	7
>=75	34(63.0)	20(37.0)	54	13(73.2)	5 (72.2)	18
Chisquare-0.887,df-3,pvalue-0.829, OR-0.735,(CI-0.357-1513) <sup>[4]</sup>			Chi-square3.267,df-3,Pvalue-0.433, OR-0.227(CI-0.106-1.761) <sup>[4]</sup>			
<b>Children in the house</b>						
No children	24(53.3)	21 (46.7)	45	11(68.8)	5 (31.2)	16

>=1child	50(61.7)	30 (37.0)	81	11(57.9)	8(42.1)	19
Chi-square-0.841,df-1,Pvalue-0.359,OR-0.709 (CI-0.339-1.481)				Chi-square0.438,df-1,P value-0.508,OR-1.600(CI-0.396-6.458)		
<b>Source of income</b>	22					
Self	(68.8)	10 (31.2)	32	11(64.7)	6(35)	17
Others	52 (55.3)	42(44.7)	94	11(64.7)	7(38.9)	18
Chi-square1.777, df-1, P value-0.183, OR-1.777(CI-0.749-4.161)				Chisquare-0.048,df-1, P value -0.826, OR-1.167(CI-0.295-4.609)		
Medical reimbursement	5	1(16.7)	6	1 (50.0)	1(50.0)	2
Yes	(83.3)					
no	69 (57.5)	51(42.5)	120	21(63.6)	12(36.4)	26
Chi-square-1.573,df-1,Pvalue-0.210, OR-3.696(CI-0.419-32.606)				Chi-square-0.150,df-1,Pvalue-0.698, OR-0.571 (CI- 0.033-9.989)		

OR computed with 1. low + middle and high, 2.white collar and others, 3.no schooling +primary together and high school and above and 4. less than 74 and more than 74 source-primary survey.

**Table 3: Analysis of prevalence of cataract surgery and factors associated with it**

Characteristics		Cataract Surgery done (%) (n=96)	Cataract Surgery not done (%) (n=65)	Total persons with cataract (%) (n=161)
Sex	Female	74(58.7)	52 (41.3)	126(100)
	Male	22(62.9)	13 (37.1)	35 (100.0)
Chi-square-10.194,df-1,pvalue-0.660,OR-1.189(CI-0.550-2.573)				
SLI	low	10( 47.6)	10(52.4)	21(100.0)
	Middle	73(60.3)	48(39.7)	121 (100.0)
	High	13(72.2)	5 (27.8)	18(100.0)
Chisquare-2.467,df-2,pvalue-0.291, <sup>@</sup> OR-0.753(CI0.384-1.475)				
Age group	60-64	12(57.1)	9(42.9)	21(100.00)
	65-69	16(50.0)	16(50.0)	32(100.0)
	70-74	21(58.3)	15(41.7)	36(100.00)
	>75	47(65.3)	25(34.7)	72(100.00)
Chi-square2.226,df-3,pvalue-0.519 <sup>@</sup> OR-0.652(CI-0.344-1.236)				
Children in the house	No children	35(57.4)	26(42.6)	61(100.0)
	>1child	61(61.0)	39(39.0)	100(100.0)
Chi-square-0.207,df-1,pvalue-0.649 OR-0.861(CI0.451-1.644)				
Marital status	Currently married	38(57.6)	28(42.4)	66(100.00)
	Single/widowed	58(61.1)	37(38.9)	95(100.0)
Chi-square-0.196,df-1,pvalue-0.658,OR-0.866 (CI 0.457-1.640)				

Parity (Number of children)	>1 child	82(59.0)	57(41.0)	139(100.0)
	No children	8(59.2)	5(40.8)	13(100.0)*
Chi-square-0.032,df-1,pvalue-0.858,OR-0.899(CI0.280-2.889)				
Education	No+primary	75(57.3)	56(42.7)	131(100.0)
	High school and above	96(59.6)	65(40.4)	30(100.00)
Chi-square-1.648,df-1,pvalue-0.199,OR-0.574, (CI0.244-1.348)				
Previous occupation	White collar	19(73.1)	7(26.9)	26(100.0)
	Others	77(57.0)	58(43.0)	135(100.00)
Chi-square-2.330,df-1,pvalue-0.127,OR-2.045,(CI0.806-5.189)				
Source of income for treatment	Self	33(67.3)	16(32.7)	49(100.0)
	Others	63(56.3)	49(43.8)	112(100.0)
Chi-square-1.744,df-1,pvalue-0.187,OR-1.604(CI-0.793-3.244)				
Medical reimbursement	Yes	6(75.0)	2(35.0)	8(100.0)
	No	90(58.8)	63(100.0)	153 (100.0)
Chisquare-0.826,df-1,pvalue-0.363,OR-2.100(CI-0.410-10.744)				

**Table 4: Percentage distribution of people with barriers to Cataract Surgery by socio-demographic factors**

Variable		Barrier present (%) (n=65)	Barrier absent (%) (n=96)	Total (%) ((n=161)
Sex	women	52(41.3)	74(58.7)	126(100.0)
	men	13(37.1)	22(62.9)	35(100.0)
	Total	65(40.4)	96(59.6)	161(100.0)
Chi-square-0.194, df-1, p value-0.660, OR-1.189, (CI-0.550-2.573)				
SLI	Low	10(47.6)	11(52.4)	21(100.0)
	Middle	13(41.9)	18(58.1)	31(100.0)
	High	40(37.4)	67(62.6)	107(100.0)
	Total	63(39.6)	96(60.4)	159(100.0)*
Chi-square-0.855, df-2, pvalue-0.652, <sup>@</sup> OR-1.328(CI-0.678-2.604)				
Medical reimbursement	Yes	2(25.0)	6(75.0)	8(100.0)
	no	63 (41.2)	90(58.80)	153(100.0)
total		65(40.4)	96(60.4)	161(100.0)
Chi-square-0.826, df-1Pvalue-0.363,OR-0.476,(CI-0.093-2.436)				
Marital status	Not married	3(33.3)	6(66.7)	9(100.0)
	Currently married	28(42.4)	38(57.6)	66(100.0)
	Single/widow/er	34(39.5)	52(60.5)	86(100.0)
	Total	65(40.4)	96(60.4)	161(100.0)
Chi-square0.326,df-2 Pvalue-0.850,@OR-1.155(CI-0,610-2.188)				
Source of income For treatment	Self	16(32.7)	33(67.3)	49(100.0)
	Others	49(43.8)	63(56.2)	112(100.0)
	Total	65(40.4)	96(60.4)	161(100.0)
Chi-square1.744,df-1,Pvalue-0.187,OR-0.623CI-0.308-1.261)				
Children in the house	No children	26(42.6)	35(57.4)	61(100.0)
	1childor above	39(39.0)	61(61.0)	100(100.0)

	Total	65(40.4)	96(60.4)	161(100.0)
Chi-square-0.207, Pvalue-0.649,OR-1.162(CI-0.068-2.220)				
Age group	60-64	9(42.9)	12(57.1)	21(100.0)
	65-69	16(50.0)	16(50.0)	32(100.0)
	70-74	15(41.7)	21(58.3)	36(100.0)
	>75	25(34.7)	47(65.3)	72(100.0)
	Total	65	96(60.4)	161(100.0)
Chi-square-2.266, P value-0.519, @OR-1.535,(CI-0.193-1.241)				
Previous occupation	White collar	7(26.9)	19(73.1)	26(100.0)
	Agriculture related	11(50.0)	11(50.0)	22(100.0)
	Blue collar	28(42.4)	38(57.6)	66(100.0)
	No work	19(40.4)	28(39.6)	47(100.0)
	Total	65	96(60.4)	161(100.0)
Chi-square-2.916,Pvalue-0.405,@OR-0.489(CI-0.193-1.241)				
Education	No schooling	13(52.0)	12(48.0)	25(100.0)
	Primary	43(40.6)	63(59.4)	106(100.0)
	High school and above	9(30.0)	21(70.0)	30(100.0)
	Total	65(40.4)	96(60.4)	161(100.0)
Chi-square-2.746,Pvalue-0.253,@OR-1.742,(CI-0.742-4.093)				

\*Details of SLI was not available for 2 subjects @computed 2 groups for assessing odds ratio

**Table 5: Percentage Distribution of men and women with barriers to undergo Cataract Surgery by reasons for not undergoing surgery**

Sl no.	Barriers	Women (%)# n=52	Men(%)#n=13	Total(%)# n=65
1	No one to accompany	21 (40.3)	3(23.0)	24(36.9)
2	Not tested	20 (38.4)	2 (15.4)	22(33.8)
3	Cannot afford	10 (19.2)	2 (15.4)	12(18.5)
4	Need not felt	7 (13.4)	2 (15.4)	9(13.8)
5	No time	6 (11.5)	2 (15.4)	8(12.3)
6	Fear of loosing eye sight	6(11.5)	1 (7.6)	7(10.8)
7	Diseases contraindicating surgery	5(9.6)	2(15.4)	7(10.8)
8	Other reason (other disease of eye/ other eye normal)	3(5.8)	3 (23.0)	6(9.2)
9	Other priority	1(1.9)	0(0.0)	1(1.5)
Total		52(100.0)	13 (100.0)	65(100.0)

#-Multiple barriers were reported by each person and therefore the percentages do not add to100 across each group

**Table 6: Percentage distribution of persons who did not undergo second eye surgery by reasons for not undergoing surgery**

Sl no.	Barrier for second eye surgery	Women n=41	Men# N=15	Total#
1	No one to accompany	14(34.9)	3(20.0)	17(30.4)
2	diseases contraindicating surgery	8(19.5)	3(20.0)	11(19.6)

3	One eye sufficient to see	7(17.1)	4(26.7)	11(19.6)
4	Other diseases of eye	7(17.1)	3(20.0)	10(17.9)
5	Old age need not felt	6(14.6)	3(20.0)	9(16.1)
6	Cannot afford	5(12.2)	3(20.0)	8(14.3)
7	Waiting to mature	2(4.9)	2(13.3)	4(7.1)
8	Fear of operation	3(7.3)	0(0.0)	3(5.3)
9	Fear of loosing eyesight	3(7.3)	0(0.0)	3(5.3)
10	No time	2(4.9)	1(6.7)	3(5.3)
11	Surgical services faraway	1(2.4)	1(6.7)	2(3.6)
	Total	41(100.0)	15(100.0)	56(100.0)

#-Multiple barriers were reported and therefore the percentages do not add to 100 across each group.

## DISCUSSION

### Prevalence of cataract surgical coverage:

As per the RAAB survey 2006-07, the prevalence of CSC for persons was 66.0 % in India and it varied from 79.6 in Kerala, 80.6 in Tamil Nadu and 45.3 % in UP.

CSC for eyes was 47.7 % in India and it was 62.8 % in Kerala, 63.1 % in TN and 26.1 % in Bihar. In the present study, CSC for persons was 59.6 %. CSC for women was 58.7 % and CSC for men was 62.9 %. Men do utilise surgical facilities more often than women.

The causes may be that most of men get operated at the age of 60-64 years. But it was only 53.3 % for women in that age group. Of all women who are currently married, 51.1 % had done surgery but 63.6 % of currently married men did surgery so that they have their wives to accompany them for surgery. In almost all strata of age group, prevalence of cataract was higher in women and 97.9 % of women with cataract were either single or widowed. Even then, the men get the privilege of getting operated at an early age compared to women of same age group. This may indicate the inadequate facility in government hospital, (many private hospitals were present near this place where they do surgery for cataract). CSC for eyes was 44.0% which implies that the facilities were not used adequately.

The IOL rate in India was 63.6 % and in Kerala it was 83.4 % (RAABI study).<sup>[11]</sup> IOL surgeries were much higher - 91.9 % in the study population; this may be because most of the surgeries were done in private hospitals (58.1 %) where they provide only IOL surgeries.

The same study found that most of the cataract surgeries in Kerala were done in NGO hospitals, with government hospitals doing 4.9 % of surgeries, the private hospitals contributed 32.7 % and 60.9 % of all surgeries being done at NGO hospitals (Arvind Eye Hospital is close to Palghat district where the RAABI study done). The site of surgery in the study population was 29.2 % of surgeries at Government hospitals, and 14.7 % at charitable hospitals with the bulk going to private facilities. This could be because a majority of the surgeries were in private facilities, where IOL is the dominant mode of surgery. The payment mechanism in India was free for 66.3 % and was paid for 33.6 % and in Kerala it was 54.1 % and 45.8 % respectively RAAB I study.<sup>[11]</sup> In the present study, the proportion of those with cataract who underwent surgery for free was 51.4% and those who had to pay were 48%, reflecting the patterns in the Kerala sample of RAAB I study.<sup>[11]</sup> This again could be a reflection of the fact that most of the surgeries were in the private sector.

### Socio-demographic factors associated with cataract surgical coverage

**SLI:** In the Beaver Dame Eye study,<sup>[18]</sup> it was found that those with lower and higher income were more likely to have undergone cataract surgery compared with the middle-income group although the reasons were not clear, the authors suggest that this could be related to better

access to health insurance, as many of these people were still working. It is also noticed that the level of CSC increases from low to high SLI.<sup>[18,21,22]</sup>

In the present study, CSC increases from 47.6 % in low SLI to 72 % in high SLI group. This is expected and noted in studies elsewhere in the World. Given the fact that most of the surgeries in the present study were in private institutions, a SES gradient to CSC is to be expected. When further examined, it was found that 57 % of people who underwent surgery were in 60-64 age groups even though the prevalence of cataract was lower (23.1%) in that age group compared to people above 75 where the prevalence of cataract was 67.9 and surgical coverage was 65.3 %.

Of the total number of people who were illiterate, the prevalence of cataract was 67.6% and only 48% have done surgery. But in people who were educated, the prevalence of cataract was 35.7 % and 70 % of them did cataract surgery and the gap in cataract surgery was very marked in these two groups. So also the prevalence of cataract was higher in low SLI group (51.2 %) than high SLI group (38.3 %) but the CSC was in lower (47.6%) in people of low SLI than in high SLI (72.2%). There is an inequity gap between the prevalence of cataract and cataract surgical coverage across SLI, age, education and sex.

**Gender analysis:** In the present study also, CSC was higher for males (62.9 %) compared to females (58.7 %). This result is not different from what has been reported elsewhere in India (RAAB study),<sup>[11]</sup> and also from other countries where a strong gender bias against women in access to and utilisation of resources for health care has been reported, where in the odds for CSC among men was 20-70 % higher when compared to women.<sup>[23]</sup> The proportion of women having cataract was 57.4 % and proportion of women who underwent surgery was 58.7 %. In men, it was 36.8 % and 62.9 % respectively. The difference in CSC among men were attributed to factors like age, education, occupation, number of children in the house, marital status, source of income for treatment and medical reimbursement. When analysed further, even though the proportion of women with cataract was higher in low SLI strata (52.8%) CSC was only 47.4% in that group. On the other hand, the proportion of men having cataract in high SLI group was only 34.6 % and CSC for them was 75 %.

More the number of children in the house, and the number of children they have (parity), higher the proportion of women, who get operated for cataract when compared to women who had no children living with them. This may be because the children may help their mothers to get operated for cataract. This could also be due to the fact that more women were currently not married, when compared to the men, and therefore would not have partners to see them through cataract surgery. The prevalence of cataract among illiterate women was 66.7 % and the proportion of CSC was 40.9 for them while 75% of illiterate men have cataract and all of them had undergone surgery (100%). The proportion of cataract in women less than 75 years was 42.4 % and in men it was 26 % while it was 72 % in older women and 58 % in older men. The CSC for them was 63 % for women and 72.2 % in men. There exists a gap in the CSC between women and men despite the fact that the women had higher prevalence of cataract than men.<sup>[22,24,25]</sup>

**Barriers to Cataract Surgery:** In the present study total number of people with any barriers for eye surgery was 65. We found that 40.4 % of the people with cataract reported one or the other barrier for undergoing surgery. There was a slight difference in the proportion of women and men who experienced a barrier with a slightly higher proportion of women experiencing a barrier.<sup>[22,24]</sup>

Even though not statistically significant, we did notice a gradient in the proportion of people with barriers with higher proportions of people reporting barriers amongst the lower SLI, less education, those with agriculture related occupations and those dependent on others for



surgical treatment. The most frequent reason for not being able to undergo surgery was that there was no one to accompany them for both men and women. Most of the women in the study cited this reason when compared to men. Among women who had cataract, more than a third had reported that they had not tested their eyes previously. The proportion of men reporting this as a reason for not undergoing surgery was relatively lower. This is different from the picture in an all India study (RAAB I Study), the most frequently cited reason was lack of awareness. Lack of escorts was one of the least frequently cited barriers in that study. The reasons for not undergoing surgery in Kerala are different and lack of awareness of the condition is not necessarily the primary reason for not undergoing surgical correction.

## CONCLUSION

Gender disparities in CSC coverage are evident in a state like Kerala, where we expect gender-based discrimination against women to be low. There is inequity in CSC by age and SLI and this is a challenge that has to be addressed. The reasons for not undergoing surgery are related to lack of assistance during the surgery possibly in the recovery period as many of those in need are older, are dependent on others and do not have alternative resources for care, even if surgery is free. Efforts need to be made to overcome the barriers of cataract surgery. Cataract can be easily cured by a simple cost-effective surgery which is very easy to perform by a trained ophthalmologist which will improve the quality of life of poor elderly people. Therefore, we should continue to prioritize cataract surgical services and their augmentation. But to overcome the barriers to undergoing surgery, approaches that include community level support services for the elderly, particularly women are needed.

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