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Burden of Cataract and Surgical Interventions in South Asia : A Narrative Review

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Abstract

This study explores the prevalence of blindness primarily caused by cataracts in South Asia and evaluates the availability of eye care services. Drawing from books and research articles, it compares eight countries, noting cataracts as the leading cause of blindness 58 percent followed by refractive errors and glaucoma. Cataract surgery coverage stands at 71 percent, yet access remains limited due to lack of awareness, low health-seeking behavior, inadequate infrastructure, and high costs. The study emphasizes the need for regional cooperation, targeted awareness campaigns, and improved healthcare access to reduce the burden of preventable blindness across the region.

Keywords: cataract, South Asia, prevalence, coverage, blindness

Introduction

"This word dates from the middle age and has been derived from the Greek word ‘katarraktes' which means ‘waterfall" (Khurana, 2022). As today, the term cataract refers to development of any opacity in the lens or its capsule. A cataract is an opacification of the eye's natural lens that impairs vision. The lens is in charge of focusing light onto the retina, which is situated in the back of the eye behind the iris, which is its colored component..(Gervasio, 2017).

Cataract including nuclear 8.22 percent, cortical 8.05 percent and posterior sub-capsular cataract 2.24 percent are the first leading cause of blindness in the world mostly in above 60 years of age. It is an avoidable cause of blindness(Hashemi et al., 2020).

Numerous factors contribute to cataract development, which is characterized by a loss of transparency in the lens of the eye due to tissue deterioration, protein clumping, and harmful environmental and hereditary factors.(Lepcha et al., 2019a)

Millions of people worldwide are impacted by blindness, a global public health issue that significantly lowers their quality of life and makes it more difficult for them to go about their everyday lives, work, and interact with their communities.(Canatan, 2024) . If quality of life is affected it has negative impact in the community people in context of daily activities.

With surgical intervention, cataracts which are effectively treated and are defined by the clouding of the eye's natural lens can be properly treated, enabling patients to regain their vision and reclaim their independence.(Flessa, 2022).The above conditions are complication stage if not aware in proper time. Every age group people need to be aware of his or her ocular health condition. Cataract affects people of all ages, gender ethnicity, and socioeconomic status.

Cataract-related blindness is estimated to affect over 10 million people worldwide, with over 35 million experiencing moderate to severe visual impairment, despite a general drop in prevalence.

(Canatan, 2024). It is also the impact of contribution concerned organization to alleviate blindness but still there is problem which is extra burden in medical intervention.

The World Health Organization states that uncorrected refractive errors and cataracts are the main causes of vision impairment and blindness. Cataracts, on the other hand, account for around 46.53 percent of blindness worldwide, making them the primary cause of curable blindness.(Canatan, 2024). WHO defined about supporting factors for vision problem and its complications about half of the population worldwide.

Currently, explorers have focused on the Disability-Adjusted Life years (DALYs), which are defined as the sum of years lived with disability and years of life lost due to premature death and reflect the difference between the real state of health and the. standard condition(Jiang et al., 2023).It is one of the vital indicator for evaluating the impact of health and disease in human population. It determines about the differences between productive and unproductive conditions.

Global burden of cataract

According to a 2019 study, the prevalence rate and DALY rate of cataract-related visual impairment increased significantly during the previous 30 years, with the former rising by 58.45 percent and the latter by 32.18 percent. (Jiang et al., 2023). It can be concluded that a considerable increase in both the occurrence and the overall impact of cataracts on global health during this period.

The 74th World Health Assembly recognized a global target for effective cataract surgical coverage of 30 percent increase by 2030. To achieve this target, they analyzed Rapid Assessment of Avoidable Blindness (RAAB) survey data to establish baseline estimates of ECSC and CSC(McCormick et al., 2022). The assembly has prioritized improving cataract treatment by aiming for a 30 percent increase in effective cataract surgical coverage by 2030, with baseline estimates for this target established through the 2022 RAAB survey data. This illustrates a committed global effort to improve in cataract surgery accessibility and effectiveness.

Despite the fact that cataracts are estimated to be the source of 50 percent of all blindness and 33 percent of visual impairment, most cases can be effectively recovered with cataract surgery, a very straightforward lens replacement technique. Thus, in low- and middle-income countries, cataracts are essentially a medical problem that largely affects the most vulnerable populations, such as those who reside in rural areas, are elderly, are women, or lack literacy.(Flessa, 2022).It is mainly the problem of low and middle level income countries due to illiteracy and low socioeconomic status.

The prevalence of cataract-related blindness in adults 50 years of age and older is lowest in high-income nations like the United States, Norway, and Ireland 17.50 percent, while it is highest in South Asian nations like India, Bangladesh, and Pakistan 63.10 percent. The increased frequency of cataract-related blindness in these low- and middle-income areas is caused by a number of factors, including aging populations, restricted access to eye care services, and socioeconomic inequities(Canatan, 2024). Nepal is also included in among the south Asian countries so the problem of cataract is about of India, Bangladesh and Pakistan due to access of health services and low socioeconomic status of the country.

Purpose of study

The purpose of this study is to

- explore the situation of cataract including other ocular health problems within south Asian countries
- determine the surgical coverage and other health care aspects applied by south Asian countries to alleviate the ocular health problems

Methodology

In this study secondary data from different source like google scholar, pub-med, books and journals were taken for the study. The study that was conducted among south Asian countries are source of information. It is narrative review about situation of cataract among south Asian countries.

Different studies about cataract done among these countries were taken for the studies The burden of cataract from different countries of south Asia are taken for the study. Related books, journal articles, bulletin and review reports were taken as secondary data source. Secondary data including abstract and full text articles were used as from the period of 1998 to 2024.

Results

Afghanistan

According to a cross-sectional study, 8.7 percent of people were blind, 13.9 percent had limited vision, and 22.6 percent had visual impairment. The most common cause 52.8 percent was cataract, which was followed by glaucoma 8.6 percent and uncorrected refractive error 26.9 percent. Visual impairments have been associated with poverty, overweight, hypertension, and illiteracy. Among all majority of the causes are preventable(Amansakhatov et al., 2002) .The most common cause of blindness in research involving 6011 individuals 50 years of age and above was cataract 54 percent, followed by glaucoma 25 percent. Seventy five percent of people had cataract surgery, yet many people, especially those without intraocular lenses, still had vision problems after the procedure. Indifference and waiting for maturity were barriers, underscoring the need for improved surgical criteria and results (Abdianwall & Doğan, 2018). Blindness was reported in 2.4 percent of 3751 persons over 50 in the study, with cataracts accounting for 36.8 percent of cases. There were 2.2 percent, 6.9 percent, and 8.7 percent of people with severe, moderate, and mild visual impairments, respectively. Perceived lack of need 23.7 percent and expense 22.0 percent were barriers to cataract surgery, underscoring the need for improved eye care services (Sapkota et al., 2021).

After examining the three Afghan studies mentioned above, cataracts and other eye health issues were found to be the most frequent causes of blindness. The efforts to prevent and control cataracts including cataract surgery have not yielded much improvement. The prevalence of cataract is approximately 54 percent, which is somewhat lower than the total prevalence among south Asian countries. The overall percentage of cataract in south Asian countries is approximately 67 percent.

Bangladesh

According to a survey, 21.6 percent of adults have impaired vision and 1.5 percent were blind. Refractive error 63.2 percent, conjunctivitis 17.1 percent, and cataract 7.2 percent were the most prevalent eye problems. While cataracts were less likely with higher education, refractive error was associated with older age, female gender, and employment, underscoring the need for improved

access to eye care(Dineen et al., 2003). An analysis of 11,624 individuals over 30 examined the results of cataract surgery. Of the 199 eyes that were operated on, 10 percent had Intracapsular Cataract Extraction and Intraocular Lens (ICCE+IOL) and 88 percent had Intracapsular Cataract Extraction (ICCF) With correction, 30.1 percent of patients had good vision (VA 6/12 or better) after surgery, up to 50.4 percent. ECCE+IOL produced better results than ICCE. Patients who read well performed better. Results from ECCE+IOL operations performed in hospitals were better(R. R. A. Bourne et al., 2003). The overall prevalence of cataract among patients attending the ophthalmology OPD was19.87 percent. The majority of cataract cases, 50.98 percent, were over 69 years. Most cases, 52.94 percent, were among illiterate and 58.13 percent were female. A significant portion of cases, 72.55 percent, came from rural areas. Among cataract cases, 9.8 percent had diabetes. The study indicates a significant improvement in visual acuity following cataract surgery, although common post-operative complications included astigmatism and posterior capsular opacification(Dineen et al., 2003). Interviews, visual acuity testing, autorefraction, and optic disc examination were employed in research of 12,782 persons among 30 years of age or older. Out of the 11,624 people who were screened 13.8 percent had low vision (<6/12 VA) and 1.53 percent were bilaterally blind. Refractive error 18.7 percent, cataracts 74.2 percent, and macular degeneration 1.9 percent, were the primary causes of low vision. Additionally, the primary cause of bilateral blindness 79.6 percent was cataracts. Based mostly on curable cataracts, the study approximates 650,000 blind persons in Bangladesh, underscoring the necessity of a national plan for eye care(Hossain et al., 2021) .

According to research on eye health in Bangladesh, 26 percent of adults have vision impairments, primarily from cataracts, and 1 percent of adults are blind. Although cataract surgery is a vision-improving procedure, its increased incidence in rural, illiterate, and elderly populations emphasizes the need for specialist eye care services. In order to treat treatable cataracts and enhance general eye health, the study recommends creating a national plan for eye care.

Bhutan

In this country, 1 percent of people are affected with bilateral blindness; rates are higher in women and rural areas. The majority of blindness (53.8 percent) is caused by untreated cataracts, and 46.7 percent of early visual impairment is caused by untreated refractive issues. Although the success rate of cataract surgery is 67.3 percent, accessibility is still a significant problem. Since 2009, the percentage of blind people has decreased to 1.0 percent, indicating a need for ongoing measures to maintain eye health (Lepcha et al., 2019a) . A statewide RAAB survey (2018) found that the country's blindness rate decreased by 33 percent between 2009 and 2018, fulfilling the goals of the WHO's global action plan for eye health. The percentage of patients who had cataract surgery increased from 72.7 percent to 86.1 percent, with 67.3 percent of patients experiencing good visual results (VA >6/18). Cataract blindness declined from 0.7 percent to 0.4 percent. Untreated cataracts and corneal opacities have decreased dramatically, and conjunctivitis is no longer a serious health concern. The introduction of intraocular lenses (IOLs) and manual small-incision cataract surgery has transformed the management of cataracts. This advancement has been bolstered by the hiring of international specialists in the field of eye care and the development of local eye care facilities(Lepcha et al., 2019b).

The WHO's eye health targets have been significantly attained In Bhutan as evidenced by the RAAB survey (2018). Bilateral blindness dropped to 1.0 percent of the population, and both the coverage of cataract surgery and the quality of the visual outcomes improved significantly. Cataract management has been greatly improved by the decrease in untreated cataracts and corneal opacities, as well as by the use of sophisticated cataract surgery procedures and the hiring of foreign eye specialists. Even

with these developments, accessibility problems still need to be solved in order to further reduce blindness, especially in rural and female populations.

India

The average corneal astigmatism of 3,597 patients undergoing cataract surgery in North India between 2010 and 2017 was 1.17 D. Of these, 15.59 percent had oblique astigmatism, 51.72 percent against the rule, and 29.83 percent with the rule. With age, astigmatism changed from being in favor of the rule to being against it. Of the patients, 40.49 percent required toric intraocular lenses, and the majority 56.69 percent had astigmatism less than 1.0 D (Sharma et al., 2021). According to research conducted in 2021–2022 on 1,472 patients, the primary reasons why severe cataract surgeries were postponed were: inability to obtain eye care 44.2 percent; ignorance of elective procedures 42.6 percent; lack of public transportation 37 percent; fear of COVID-19 23.4 percent and waiting for outreach camps 20.4 percent. More than half struggled with daily chores, which led to a backlog of complex cases and emphasized the importance of taking preventative measures(Vedachalam et.al., 2022). Among all, 98.5 percent of the 192 cataract patients were aware of their ailment, and 57.6 percent were aware that surgery was a possible course of treatment. Only half knew that surgery meant a prosthetic lens would need to be inserted. For 89.2 percent, the high cost was an issue, and for 31.5 percent, it was unaffordable. Despite a high level of awareness of the disease, the main hurdles were fear of discomfort 65.5 percent and insufficient accessibility 98 percent(Gupta, 2022). In India, preventable blindness is a serious health concern. According to a 2015–19 survey of adults over 50, there were 26.68 percent vision impairment cases and 1.99 percent blindness cases. Blindness was associated with old age and ignorance. The most common cause 66.2 percent was cataracts, which were followed by glaucoma and other conditions. The majority of cases of blindness 92.9 percent and visual impairment 97.4 percent were avoidable, highlighting the need for better eye care(Vashist et al., 2022). The results of cataract surgery at secondary and tertiary centers were examined in a 2021 study. Out of 32,302 surgeries, the tertiary center handled 27,945 cases, including more complicated cases with higher rates of complications, while the secondary center completed 4,357 surgeries. The tertiary center exhibited reduced success rates (BCVA ≥6/12) for Manual Small Incision Cataract Surgery MSICS and phacoemulsification, although fulfilling WHO criteria. For MSICS outcomes at the post-secondary level to improve, further study is required(Gunasekaran et al., 2023) (Ind. 5). In this study of 52,380 Indians over 50, cataracts were discovered in 14.85 percent of the participants. Of those who had surgery 76.95 percent another 23 percent still required it. Age-specific surgery rates were 24.62 percent for people 50–60 years old and 78.30 percent for those 66–80 years old. Unmet needs were highest among the poorest. Even though blindness prevention has advanced, more work needs to be done to assist the underprivileged(Das et al., 2024).

In India, cataracts continue to be a leading cause of blindness, particularly in the elderly and underprivileged. Access to cataract surgery has been successfully increased, but COVID-19 has made hurdles like cost, accessibility, and awareness worse. It is imperative to focus on high-need populations, handle expenses, and improve access to eye care in order to lower the rate of blindness caused by cataracts.

Maldives

The most prevalent eye conditions in the nation were glaucoma, pterygium, cataract, and refractive errors. According to local specialists, ocular toxoplasmosis is a major cause of permanent eyesight loss in people aged 10-45. About 3.03 percent of individuals had toxoplasmosis effects, according to a 2009 screening. Glaucoma, ocular trauma, infections, and diabetic retinopathy are further

problems. Although there is little information on eye conditions, hospital records indicate that 46 percent of blindness is caused by cataracts. The most prevalent procedures performed at IGMH between 2003 and 2006 were cataracts, which were followed by pterygium and lid surgeries. Twenty to twenty-five percent of outpatient patients are affected by refractive problems(Ministry of Health and Planning: Center for community health and disease control, 2010).

The standardized prevalence of blindness by age and sex was 2 percent. The most common cause of blindness 51.4 percent and visual impairment 50.9 percent was cataracts and uncorrected refractive error, respectively. Blindness was more common in women 16.3 percent and older age groups. 86 percent of cataract-blind eyes and 93.5 percent of cataract-blind individuals had cataract surgery. In eyes with cataract surgery, the best corrected visual acuity was 76.6 percent, and the median visual result was 67.9 percent. 48.1 percent of participants in this study had undergone cataract surgery in nearby nations. Two significant reasons for not utilizing the services were "treatment deferred" 33.3 percent and "did not feel the need" 29.7 percent (Thoufeeq et al., 2018).

The primary causes of vision problems include pterygium, cataracts, glaucoma, and refractive errors; cataracts account for the majority of blindness. The age range affected by ocular toxoplasmosis is 10-45. Improved records of eye health are required. Pterygium and lid operations are frequently combined with cataract surgery. Refractive issues are also important; they need for targeted treatments and enhanced data collection.

Nepal

In Bhaktapur, cataracts and glaucoma are the two main causes of blindness, with cataracts being the most prevalent. Many people have undergone cataract surgery, however not everyone is aware of these issues with the eyes. Just 2.4 percent knew about glaucoma, and 6.7 percent knew about cataracts. More efforts are needed to address refractive defects and raise public awareness of these illnesses.(S. S. Thapa et al., 2011) . Even though cataract surgery is available in rural Nepal, many people have financial difficulties; only 45.5 percent of patients, more males than women, agree to have the procedure. Individuals who are blind are more inclined to agree to medical procedures.

After counseling, just 13 percent of non-acceptors accepted, citing anxiety, lack of time, and financial issues. In medical practice, a comprehensive strategy taking into account social, cultural, and economic variables is required(Snellingen et al., 1998). This study concentrated on low vision and blindness among adults 60 years of age and older. Following rectification, the percentages of blind people and those with limited eyesight among 2100 people rose to 1.61 percent and 22.92 percent, respectively. The chance of developing visual impairment increased dramatically with age. The majority of blindness 46.66 percent and decreased vision 68.07 percent were caused by retinal disorders. Visual impairment has been connected to illiteracy. In this population, screening and prompt intervention can lessen visual impairment(Thapa et al., 2018) .

A study conducted in Nepal examined the quality of cataract surgery at three Primary Eye Care Centers (PECCs) and the base hospital, PLLEH. Post-surgery, 80 percent of 1038 patients had satisfactory vision; however, outcomes differed according to location, with Rampur showing the best results and Arghakhanchi the worst. The cost of surgery varied from PLLEH ($25) to Rampur ($62). Notwithstanding differences, PECCs can provide better patient selection together with high-quality, reasonably priced cataract surgery(Manandhar et al., 2018). According to a study, cataracts are the primary cause of blindness in the districts of Morang and Sunsari. Treatment was delayed due to budgetary restrictions and lack of awareness. Compared to women, men were more likely to seek

treatment for bilateral blindness. Reducing blindness rates in these locations could involve lowering medical expenses, increasing public awareness, and enhancing women's access to surgery(Sheng et al., 2021) . A study conducted in tertiary eye hospital in six-month research, in which 6,916 patients, of whom 54.66 percent were female who received free eye care. Of the Among 1,776 cases, 1,706 patients selected for cataract surgery. With an average age of 60.84 years, women made up 52 percent of cataract cases, despite the fact that there were fewer healthcare facilities. To reduce blindness, free eye camps for the underprivileged, women, and the elderly are crucial. Women's access to cataract surgery has to be increased through gender-sensitive strategies (Gupta et al., 2023).

Though glaucoma is also a major factor in some area, cataracts are the primary cause of blindness The percentage of people who are aware of glaucoma or cataracts is very low. Financial constraints prevent more women from seeking cataract surgery in rural Nepal. It is imperative to tackle financial and awareness impediments. Studies also stress the significance of early intervention and screening to lessen vision impairment. The quality of cataract surgery differs depending on where you live, however PECCs provide affordable solutions. Lastly, free eye camps are crucial to lowering the rate of blindness, particularly among the elderly and female population.

Pakistan

Bilateral cataract blindness was seen in 4.8 percent of cases. Bilateral cataract blindness was 2.1 times more common in women than in men 7.1 percent vs. 3.4 percent. However, women were less likely than men to have cataract surgery covered. 43.1 percent of eyes with cataract surgery had a VA <6/60, indicating poor overall quality of prior cataract surgery. Of those with bilateral cataract blindness, 73.3 percent said they were unable to have cataract surgery because they could not afford the expense(K M Anjum, 2006c).

In order to determine if cataract procedures conducted between January 2009 and June 2011 complied with WHO recommendations, this study assessed that compliance. Out of 495 procedures, 58 percent of the patients were female. After six to eight weeks from surgery, 93.3 percent of patients had good vision, 4.4 percent had results that were unclear, and 2.2 percent had poor results. Ninety-three percent of below-normal results were caused by pre-existing conditions. The study demonstrated how successful phacoemulsification combined with intraocular lens implantation is in producing favorable visual results(Hashmi et al., 2013). This study looked at the results of cataract surgery among 16,507 people over 30 in Pakistan. Of the 1,788 eyes that were operated upon, 61 Percent had Intracapsular Contract Extraction (ICCE) and 34 percent had Extracapsular Contract Extraction with Intra Ocular Len (ECCE+IOL). After surgery, only 15.4 percent of patients had good vision. Poor results were a result of surgical complications, concurrent diseases, and refractive defects. Poorer eyesight was linked to factors including eye camp surgery, ICCE, living in a rural area, being a woman, and illiteracy. The significance of refractive correction and enhancing surgical quality is emphasized in the study(Bourne et al., 2007). This study looked at the causes of cataracts in children under the age of fifteen, both acquired and congenital. Out of the 192 patients, 166 had congenital cataracts and 26 had acquired ones. The majority of congenital instances were bilateral, with 36.74 percent being inherited and 40.96 percent having unknown etiology. Most cases of acquired cataracts were unilateral. Among the risk variables mentioned were consanguineous marriages and delayed hospital presentations(Irshad, 2021). The cataract surgical rate (CSR), as reported by a recent survey commissioned by Pakistan's Ministry of National Health Services, was 5307, about twice as high as the 2002 rate. Compared to men, women received more surgeries: 63.9 percent used phacoemulsification, and 98.9 percent used intraocular lenses. NGOs and the

commercial sector performed the majority of the procedures. An annual total of 1,840,000 procedures are required to achieve a CSR of 7500+ by 2030. By 2030, if present trends continue, the CSR will drop to 4628(Khan et.al, 2022). The purpose of this study was to investigate the role that genetics in common eye problems. Blood samples from 100 of the 256 patients were analyzed to look for genetic abnormalities linked to cataracts. A silent mutation in the CRYAA gene with little effect on the structure of the gene or protein was found through analysis. It was decided that environmental influences had greater sway than hereditary ones. In order to gain a deeper understanding of eye illnesses in Pakistan, the study recommends broadening the research population(Khan, 2022).

Research conducted in Pakistan evaluated the causes, effects, and genetic makeup of cataract surgery in children. Both phacoemulsification and intraocular lens implantation yielded positive outcomes. The number of cataract procedures rose, and more women had them. The significance of environmental influences is suggested by the limited role that genetics play in eye disorders. It is advised to expand the research population in order to gain deeper insights.

Sri-Lanka

The purpose of this study was to ascertain the prevalence of cataracts among the elderly and evaluate their effect on life quality. Age, gender, and socioeconomic level were found to be risk factors. The NEI-VFQ's validation revealed a lower quality of life brought on by cataracts, which influenced public health initiatives for treatment and prevention(Nanayakkara, 2009). The purpose of the study in Kandy, was to ascertain the prevalence of cataracts and risk factors in persons 40 years of age and older. More than 33 percent of subjects had various types of cataracts. There was inconclusive evidence linking smoking, gender, and outdoor work to cataracts; nevertheless, poorer education levels and shorter stature were connected to an increased risk. It is necessary to conduct more research to determine how height and education affect the risk of cataracts(Athanasiov et al., 2010) . The Visual Functions (VF) and Quality of Life (QOL) subscales showed acceptable internal consistency and reliability, according to the study. People who are blind had lower VF/QOL scores and more difficulty completing tasks. Completing VF tasks and QOL categories was difficult for people with visual impairments associated to cataracts. The results of VF/QOL following cataract surgery were improved, demonstrating the value of blindness management programs in monitoring functional gain as reported by patients(Murthy et al., 2018). Even though there are free treatments accessible for cataract patients, a lot of older people with cataracts don't use these services because of misconceptions, financial limitations, and lack of awareness. These obstacles were identified in a study including 379 adults over 60, emphasizing the necessity of removing them in order to raise the prevalence of cataract surgery and enhance public health initiatives(Nishad et al., 2019). Disparities in cataract blindness were seen among married women living in rural regions, especially widows, according to a national blindness survey conducted in Sri Lanka. Even though they made up only 18 percent of the population, they were responsible for 54 percent of cataract-related blindness. For this particular demographic, there were notable deficiencies in the quality of care and accessibility to services (Jacqueline, Ramke Fatima, 2017). Of the 5,779 individuals who were screened, 345 had had cataract surgery in one or both of their eyes (486 eyes). Overall, the prevalence of cataract surgery was high 85.4 percent for vision <3/60; 79.1 percent for vision <6/60, but it was significantly higher among younger age groups, urban dwellers and those with higher socioeconomic status. In Uva Province, coverage was 60 percent, whereas in Southern Province, it was 100 percent(Murthy et al., 2018).

Research conducted in Sri Lanka revealed that cataracts are common among the elderly and have

an effect on life quality. Age, gender, and socioeconomic position are examples of risk variables. The validation of the NEI-VFQ indicated that cataracts reduced life quality, which calls for more effective public health initiatives. Despite the availability of free treatments, seniors specially widow still face obstacles to receiving cataract surgery. Married rural women showed differences in cataract blindness, highlighting the need for better access to care.

Table 1

Overall situation of Cataract and Surgical Intervention

Country	Survey year	Inv. Population	Cataract %	Cataract surgical coverage %
Afghanistan	2021	50+ yrs	36.8	Not specified
Bangladesh	2021	30+ yrs	18.7	Not specified
Bhutan	2019	General	0.4	67.3
India	2015-19	50+ yrs	14.85	76.95
Maldives	2018	50+yrs	51.4	48
Nepal	2023	60+ yrs	24.66	100
Pakistan	2022	50+	4.8	73.3
Srilanka	2019	+40 yrs	>33	79-83

The information presented above regarding South Asian nations describes the prevalence of cataracts and the coverage of surgical interventions based on data from several study sources carried out at various points in time. The Maldives has the highest prevalence of cataracts among all countries, whereas Bhutan has the lowest. The majority of the countries chose people over 50, but few chose people 30 or 40 years old. Unlike surgical intervention, which has no particular data in two nations, Nepal's study has full coverage, with the highest range of coverage encompassing all countries except the Maldives. It can be concluded that the majority of countries need to improve the coverage of surgical interventions and run awareness campaigns.

Conclusion

In the majority of south Asian nations, cataracts are the most common cause of morbidity among all eye health issues. In isolated places, cataract surgery is not accessible, especially for the female population. Financial difficulties and a lack of broad public understanding of treatment options for cataracts, particularly for women and widows, are barriers to cataract surgery. Environmental factors significantly contribute to cataract development, even though hereditary factors are the primary cause of cataracts. Therefore, the government health sector needs to focus on improving access to eye care services including cataract surgery in order to prevent and control cataracts and other ocular diseases. All regions of the nation should have access to cataract surgery and treatment, with a focus on strengthening the PHCC's ability to address these issues.

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