

## ***Letter to the editor***

### **Mass Cataract Surgery program as an effective approach to eradicate the Cataract backlog in resource constraint settings-A real life experience**

***<sup>1</sup>Malaravan M, <sup>1</sup>Thurga Jeyaratnam, <sup>2</sup>Kumanan T***

*<sup>1</sup>Teaching Hospital, Jaffna, <sup>2</sup>University of Jaffna*

#### **Introduction**

Cataract has been identified as the major cause of blindness. Low and middle-income countries (LMIC) account for over 90% of all cataract blindness. The prevalence of blindness and low vision in any country is determined by the population's socioeconomic status, access to medical and healthcare services, and literacy level [1]. Even though cataracts cannot be prevented, vision can be restored with a cost-effective surgery in individuals with cataract. Despite technological advancements in cataract management, the volume of cataract surgeries remains low in many low middle-income countries.

It is estimated that in Sri Lanka, one of the LMICs, Cataract is accountable for 66.7% of cases of vision impairment and blindness [2] as the country faces several obstacles to implementing the World Health Organization's recommended rate of cataract surgery, including financial constraints and a shortage of eye care personnel.

#### **Cataract as a cause in Northern Province**

Northern Province is one of Sri Lanka's nine provinces, with a total population of 1,165,000 catered by two ophthalmologists and identified to have one of the highest prevalence of blindness in Sri Lanka [2]. The cataract surgical rate in Northern Province is influenced by several barriers. Mainly, 80% of its population residing in rural areas with relatively low median incomes, therefore they have limited access to cataract surgical services due to a scarcity of human resources and cataract surgery centres. Further, factors such as age, gender, education level also identified as barriers to obtaining cataract treatment, resulting in an instability

in cataract surgery rate over the last decades irrespective of the high visual outcome.


The COVID-19 pandemic, followed by the economic crisis, slowed the progress in improving cataract surgery rates further, resulting in a significant case volume backlog. In order to tackle the major cause of blindness, cataracts must be treated, and treating cataracts necessitates cataract surgery. After a cataract is successfully treated, a person and their family may benefit for many productive years.

Therefore, given the large unmet need for cataract surgery, Eye Unit of Teaching Hospital Jaffna conducted a special 1000 free cataract surgery program to mark the world sight day- 2023 and as a part of the friendship week celebration between Teaching Hospital Jaffna and Teaching Hospital Ratnapura from 30<sup>th</sup> October to 03<sup>rd</sup> November 2023. This program was funded by non-government organizations.

#### **Mass cataract surgery program-an effective approach**

The mass cataract surgery programme proposes pragmatic solutions for innovative and equitable reforms in providing high-quality eye care services that will mitigate the burden of cataract-related blindness in a resource constrained setting. This program was designed with specific objectives to enhance and support the existing service delivery model by making good use of existing personnel and appropriate technology, which can be a very effective approach of cataract surgery to a huge number of patients.

First, the program determined to increase the quality and quantity of cataract surgery and minimize the prevalence of blindness by lessening the backlog of

**Corresponding Author:** M Malaravan M, Email: [mmalaravan@gmail.com](mailto:mmalaravan@gmail.com),  <https://orcid.org/0000-0002-3319-2809>, Submitted January 2024 Accepted June 2024



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cataract surgery cases. Despite limited resources, financial constraints, insufficient staff, and an economic downturn, this programme was able to provide high-quality service delivery by performing 1052 cataract surgeries without complications by a diverse team of skilled surgeons, nurses, and health care assistants working collaboratively and cohesively. As a result, Northern Province alone achieved a CSR of 10/1000, which is similar to the CSR of high-income countries (8 to 14/1000). Additionally, the backlog for cataract surgery has been eliminated in the districts of Mullaitivu, Mannar, and Vavuniya.

Second, this program aided in providing equitable and affordable service delivery through public-private partnerships. The engagement and successful collaboration with the private and NGO sectors enhanced the availability of high-quality eye care services for individuals residing in underprivileged areas. Their input also facilitated the seamless execution of mass cataract surgeries in a resource-constrained setting over the course of the programme.

Third, the programme implemented particular steps to enhance access to eye care among impoverished population, especially women, as well as in distant and inaccessible areas. It is worth noting that of the 1052 people who underwent the surgery, 603 were women.

Fourth, because it is a mass cataract surgery programme, it enabled the achievement of sustainable development goals 2, 8, 12, 13, 16, and 17, which are zero hunger, decent work and economic growth, responsible consumption and production, climate action, peace,

justice, and strong institutions and partnerships, respectively; reduction of carbon footprint; developed a skilled and efficient team by applying the 5S concept.

### **Conclusion**

To have a significant influence on public health, initiatives must reach a substantial proportion of the population in need while also being effective and affordable. Following this program's success, second round of mass cataract surgery program was effectively implemented in the district of Vavuniya by employing the same strategies. Further, through its extensive scope, pragmatic, affordable, and contextually applicable strategies, it paved the way to address inequalities and promote safe, prompt, and affordable cataract surgery for all patients, regardless of their socioeconomic status or geographic location in a low resource setting. These efforts will ultimately lead towards the achievement of 2030 insights.

### **References**

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