

Universal health care: Can Indian ophthalmologist community set an example?

Towards the end of 2018, the state government of Telangana launched the biggest ever vision screening programme anywhere, with an ambitious goal of covering the entire population of 35 million in a period of 5-6 months.^[1] The goal was to screen and create awareness among all citizens of the state and provide necessary services.^[1] The funding provided was the highest ever one-time support to vision care in India and the developing world. Over 15 million people were screened. Over 4 million people were provided spectacles, and close to a million were referred to higher centres for treatment of various conditions including cataract surgery. Around the same time, the state government of Odisha inaugurated a “Universal Eye Health Programme” and allocated a budget of over INR 600 crores (US\$ 100 million) over 5 years.^[2] Following this, the state government of Andhra Pradesh also decided to replicate the Telangana programme. The aspiration here is comprehensive coverage for the entire population in about 5 years; the programme commenced about 3 months ago.^[3]

These are all examples of the outcomes of successful advocacy that resulted in governments giving priority to eye care. This is a cause for celebration by the ophthalmologist community, as this group played a dominant role in the advocacy effort. Advocacy was one of the goals of the ‘Global VISION 2020: The Right to Sight Programme’ that was launched over 20 years ago.^[4]

Eye care in India has a very strong tradition of government support since the days of Prime Minister Indira Gandhi.^[5,6] The support came in diverse ways – significant allocation of funds, favourable policies for importing equipment, promotion of indigenous eye care industry and encouragement for human resource development in all cadres.^[7] This enabling environment catalysed the delivery of eye care in India and made it an example worthy of emulation by other nations. India has become the poster case for the most cost-effective eye care in the world.

Another factor has been the role of the vibrant non-profit and private sectors in Eye Care who contributed a lions’ share for the promotion and provision of eye care in India. The ever increasing culture of private and corporate philanthropy and private investment into the eye care sector has made several innovative practices possible, in addition to enhancement of services.

Juxtaposed with the above accomplishments are the challenges for eye care in India. The magnitude of blindness remains very high; quality and equity remain elusive in most parts; large residual geographic pockets of inadequate services still exist across the country; and the availability of adequately trained human resources is suboptimal.^[8] The question before us is, “can we reach out to everyone who needs eye care with reasonable quality of service?” – i.e., achieve “Universal Eye Care”. Universal Health Care (UHC) has been an aspiration of the Government of India for nearly a decade.^[9] Such an initiative

is perhaps the only way to provide health care to everyone in a country with the largest concentration of economically disadvantaged populations.

In this regard, a high-level expert group (HLEG), constituted by the Planning Commission of India, provided recommendations on critical areas for UHC.^[10] With the recent launch of Ayushman Bharat Program (ABP), the Government of India demonstrated its commitment to provide UHC to all citizens in the country.^[11] In this context, two recent publications are of interest.^[12,13]

“Poverty line” has been the traditional index of economic deprivation. When this was applied to India’s population, 22% of Indians were below the poverty line in the year 2012 (close to 270 million). McKinsey Global Institute came up with a different index called “Empowerment line”, arguing that the poverty line did not reflect the true depth of widespread deprivation in terms of quality of life and access to basic services. Empowerment line therefore is a holistic measure of income-based deprivation, including all the critical elements for an individual well-being such as food, energy, housing, drinking water, sanitation, healthcare, education and social security.^[12] When this index was applied, 56% of Indians (some 680 million) were below the empowerment line^[12] during the year 2012. Another publication was a cover page article in an issue of *Economist*, in which the bottom half of India was described as equivalent to destitute parts of Africa.^[13] These indeed provide a strong argument to support the need for Universal Health Care with significant governmental support.

Innovative and successful models for effective and cost-effective eye care abound in India.^[8,14] The challenge is to scale them up. While a handful of the not-for-profit organizations have scaled to some degree, they are constrained due to resource limitations. The “for profit” sector is limited to urban locations mostly.

Optimal utilization of infrastructure and other resources, well-trained human resources, effective deployment of operating systems, focus on efficiency, leveraging technology and leadership are some of the contributing factors for the effectiveness of these models. These together with delineation of care to different segments of delivery – primary, secondary, tertiary and advanced tertiary – will enhance the reach and consequent coverage with considerable cost efficiency.^[14] It is vital to have integration of all these tiers for free flow of referrals. With the enhanced funding for universal health through the “Ayushman Bharat” scheme of the Government of India, replicating these models will be possible.

This situation is even more critical now with the eye care needs increasing way beyond just cataract surgery. India succeeded in rapidly escalating the volume of cataract surgery, while simultaneously enhancing quality and adopting new techniques and technologies, over the past two decades. This is a great success story that we can all be proud of.

However, the challenge before us now is to address the residual burden of cataract using newer approaches to tackle this problem more effectively. Participation of a large proportion of ophthalmologists in this task should become

the norm, rather than just a few individuals or programmes performing high volumes. Those who have decided to practice in rural areas should be given all forms of encouragement. Their success will act as a catalyst for more to follow. In the long run, high quality care delivered closer to the doorstep of the rural population is the most desirable approach for the longer term.

The next big challenge for us is tackling uncorrected refractive error.^[15,16] Can we repeat the success achieved in cataract in the control of this seemingly simple problem? Here again, all possible answers are available waiting for a massive scaling up programme. The Telangana government programme could be replicated with some modifications and improvements.^[1] This problem is better addressed through a team approach with multiple cadres of eye care personnel providing different levels of care. A major portion can be easily dealt with at the primary level of care using modern systems. Better accessibility and affordability, resulting in greater coverage of the population are the benefits of such an approach.

While the beginning of the just concluded decade offered promise of effectively tackling the more complex problems of glaucoma, diabetic retinopathy (DR) and various forms of childhood blindness; the progress made has been suboptimal. Various models of addressing DR have been developed and investigated with some success.^[17]

However, as of now, there is no unanimity in arriving at a single and simple system that can be applied universally.^[17] Massive infusion of resources from governmental and non-governmental sources was a positive development. While glaucoma is a massive problem, it remains a subject of ongoing debate and there is no consensus on a public health approach.^[17] Both these problems remain largely in the realm of tertiary care, and this makes it inaccessible and unaffordable to a large proportion of people.^[17]

The area of childhood blindness has received significant attention from all concerned. The problem that received the greatest attention was Retinopathy of Prematurity (ROP),^[18] and several advances were made in this area. This includes significant advocacy with policy makers, professionals (ophthalmologists, pediatricians and obstetricians), and not for profit foundations. This resulted in increased availability of resources; training of scores of professionals in screening and caring of neonates; better and new infrastructural facilities across the country.^[18] The Government of India allocated substantial funds and this was complemented by the grants from the Queen Elizabeth Diamond Jubilee Trust of United Kingdom.^[19] All these are beginning to have an impact on this problem, in terms of the development of a National ROP Task Force, development of National guidelines for ROP, increasing awareness and the development of model programs in 8 states across India.^[19]

Several children's eye care programmes were initiated, leading to better surgical care and improved outcomes.^[20,21] Childhood cataract, glaucoma and corneal disease require surgical intervention and demand high quality and expensive infrastructure. While school screening and community programmes have become more active, these should be multiplied rapidly, particularly to tackle uncorrected refractive errors at the right time.^[22,23] We still have residual pockets of Vitamin A deficiency in rural and tribal areas that need collaboration with child welfare programmes.^[24]

Supplementation with Vitamin A prevents sight-threatening problems.

India also has the largest magnitude of corneal blindness.^[25] We have made some progress with treatable forms of corneal blindness. Improved education systems, access to potent medications at an affordable cost to treat problems such as infections, inflammatory diseases and others have led to improved results of medical care. The predominant surgical technique is corneal transplantation. India has progressed reasonably well in this area with the creation of a network of good quality eye banks, well trained corneal specialists and better infrastructure. While the volume of transplants has shown some increase with around 25000 corneal transplants annually, it falls significantly short of the projected 100,000.^[26] Implementation of a robust eye banking plan, coupled with the development of transplant programme in every medical college and teaching hospital with trained corneal specialists, and better exposure to residents in the care of corneal infections and transplants will be the way forward to achieve the goal of controlling corneal blindness.^[26]

The ever vexing issue is the quality of our ophthalmic education.^[27,28] More adequately trained ophthalmologists are required to manage these problems. Education programmes need multiplication. This applies to every programme including residency training, subspecialty fellowships, and continuing education. Major effort is required to improve the quality of residency training across the country, with the exception of a small number of programmes. A few islands of excellence in fellowship training breed optimism. The lessons from these should be followed by residency training programmes. Only then can we have enough professionals who can offer comprehensive ophthalmic care; and extend some aspects of advanced care to secondary levels. Until then, DR, corneal problems, glaucoma, and childhood blindness will remain as our ongoing challenges into the future.

The areas that received the least attention are low vision and rehabilitation. While we have made progress in other areas of eye care, low vision and rehabilitation appear to be the most neglected components, even in the major institutions in the country. These could become our focus areas in this decade, for development in terms of clinical care, education and research. Low vision and rehabilitation should become an integral part of the eye care system at all levels of care, from primary to advance tertiary.

Research is another area where there is a visible change. More and more institutions and individuals are getting recognized internationally. They need to be applauded for this accomplishment, in spite of relatively scarce resources for research. The ever improving quality of our journal is an index of this progress.^[29] Greater resource allocation by the government and introduction of a 'real' research culture in our medical colleges can make the future more promising. Advances made in stem cell research, genomics, infections, and public health are some of the worthy contributions from India.

India has a vibrant technology environment. Some institutions and individuals have begun to promote a culture of technology innovation. The partnership with technology sectors has produced some impressive results. Leveraging all forms of technology from innovating low-cost high-quality

diagnostic tools to the application of artificial intelligence (AI) will enhance the quality, reach and coverage. If we begin to harness the power of our large data sets with appropriate analytics, we could find solutions to many problems. A prerequisite for this would be to make good documentation a part of our DNA.

Advocacy is another area where Indian ophthalmologists have a proven track record. We should continue to propagate the usage of this powerful tool. Indian ophthalmology benefitted immensely from inspiring leaders over the past three generations, a trait that should be fostered among future generations.

With all this, the question before the 20000 plus ophthalmologists of India is, "are we ready and willing to meet the challenge of providing necessary eye care of good quality to EVERY ONE in our country?" The solutions are readily available, but what we need is the determination to apply them to everyone equitably.

Ophthalmologists of India can be the first specialty group to show that Universal Health Care is possible through their example. For over 60 years, we have practiced a tradition of providing care for everyone who needed our attention. No other medical specialty can claim to be more philanthropic. This can extend to every aspect of eye care. With this spirit of generosity of individual ophthalmologists combined with continuing and increased support from the government, Universal Eye Care is eminently possible. We were successful in our advocacy efforts with the governments at the central level and some states as was alluded to earlier. If what happened in Telangana, Andhra Pradesh and Odisha can be replicated in other states using the united power as well as individual clout, by the end of next decade, Universal Eye Care will no longer remain elusive in India. We can indeed be the first country to demonstrate the implementation of the World Health Organization (WHO) Action Plan of 2014-19 in full. When the global programme "VISION 2020: The Right to Sight" was launched in February 1999, the three strategic pillars identified were:

- Disease control
- Human Resource Development
- Infrastructure and Technology development.

On the foundation of:

- Advocacy
- Resource Mobilization
- Programme Facilitation.

India can justifiably be proud of its record on its progress on all these fronts. It is against this solid record, we should set an audacious goal of "eliminating all avoidable blindness by 2030".

Let me end with this quote from the Harvard graduation address of 2008 by J.K. Rowling (Author of the *Harry Potter* series).^[30] "Your intelligence, your capacity for hard work, the education you have earned and received, give you unique status, and unique responsibilities. That is your privilege, and your burden. If you choose to identify not only with the powerful, but with the powerless, if you retain the ability to imagine yourself into the lives of those who do not have your advantages, then it will not only be your proud families who celebrate your existence, but thousands and millions of people whose reality you have helped change".

The ophthalmologist community has that privilege to wipe out all needless blindness and vision impairment in India by the end of next decade.

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Gullapalli N Rao, fondly called Nag, founded the LV Prasad Eye Institute (LVPEI) in 1987 after a successful career in the US as an academic ophthalmologist. LVPEI is a unique blend of excellence in clinical care, training, and research. Dr. Rao has published over 300 papers in addition to serving on the editorial boards of several journals. As editor of *Indian Journal of Ophthalmology (IJO)* from 1993 to 1999, he was instrumental in nurturing the exponential growth of the journal. He has been honored with several international and national awards, the most recent one being induction into the prestigious "Ophthalmology Hall of Fame" instituted by the American Society of Cataract and Refractive Surgery. He was formerly the Secretary and Chair of the Board of International Agency for the Prevention of Blindness and the Chair of the Academia Ophthalmologica Internationalis. Dr. Rao is a Visionary Leader and an Academic Ophthalmologist who leads from the front and preaches and practices the amalgamation of the best of hand, head, and heart in delivering compassionate, affordable, and quality eye care. Dr Rao has shown to the world that excellence can indeed co-exist with equity in an efficient and self-sustainable model of eye care.