Perspective

Social entrepreneurship eye care model in Africa: A case of Kisii Eye Hospital, Kenya

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Many definitions have emerged to describe what social entrepreneurship stands for. A generic one goes 'Social entrepreneurship is the process by which individuals, startups and entrepreneurs develop and fund solutions that directly address social issues'[1]. Mohammed Yunus in his book - *Building a Social Business*, described it as a new kind of capitalism that serves humanity's most pressing needs. Therefore, the motivation for starting a social enterprise is not, so that you can be your own boss or to build an empire as it is traditionally, but rather to address a social problem that is bothering your conscience. Social entrepreneurs are individuals who identify a social problem and apply entrepreneurial spirit, business insight, and leadership to solve the problem. These are people with new ideas to address major problems, who are relentless in the pursuit of their visions, people who simply will not take "no" for an answer, who will not give up until they have spread their ideas as far as they possibly can[2-4]. Bill Drayton, the founder of Ashoka described social entrepreneurs as people who cannot just give fish or teach how to fish but rather the ones who cannot rest until they have revolutionized the fishing industry.

Getting closer home, as eye care providers we have in our hands the big burden of blindness in Sub-Saharan Africa (SSA) that has eluded the eye care providers over the years. It is a big social problem and as Prof. Allen Foster puts it – we need to be emotional. Emotions that will lead to action. The government eye care services have been in existence for several years and with support from development NGOs have made great attempts to address this problem. The universities and colleges have produced eye care workers, done research and outreach programs. Through these a lot of advances have been made in various fields of eye care in SSA. However, using parameters like Cataract Surgical Rates (CSR), and Cataract Surgery Outcome Monitoring (CSOM) it is evident that Africa is performing way below what is expected in terms quantity and quality of eye care service delivery[5-7]. It is in this backdrop that a new thinking is imperative. Social entrepreneurship has revolutionized eye care in other regions like India[2,3]. Can it do it for Africa?

The author founded Kisii Eye Hospital in 2013 as a comprehensive eye hospital that runs as a social enterprise with a mission to offer high quality, affordable and high-volume eye care services in the rural population of Southwestern Kenya. Prior to this he was an assistant professor and head of ophthalmology in Aga Khan University Hospital, Nairobi. The main motivation to start this model of hospital is the perpetual backlog of blindness especially attributed to easily and completely treatable conditions like cataracts and refractive errors despite all the efforts that were seemingly being made. The notion is that an African ophthalmologist who lives and works in Africa with firsthand experience of the blindness problem is best placed to come up with a solution and offer leadership to a program that will tackle the problem.

Cost is one of the leading barriers to access of eye care services in Africa[8]. The social enterprise model is designed to offer quality eye to all where the rich can pay the normal cost and the poor will have their fees subsidized or even no fees for a similar level of care. The strategy was to start a facility where the founder who understands the problem and the solution well, has full control of the Manpower, Money, and Materials [3M] in the facility.

Starting a high-quality eye hospital in the rural area in Africa is full of challenges. These will range from financial resources, source of equipment, supply chain of consumables, skilled manpower for this specialized service in a rural area etc. The hospital was started on a very low budget by leasing an apartment building and renovating section by section as funds became available.

The main sources of funding were initially from selling of family property, local bank loans and friends' donations. Later some international grants and zero interest loans started trickling in. The hospital was not designed to rely on grants and donations but by being self-sustaining. Up to the present period, grants whenever available have only contributed to about 7% or less of the revenue. Regarding skilled manpower, it was realized from the beginning that the mid-level ophthalmic personnel are the backbone of such a practice. These include ophthalmic nurses and technicians, counsellors, outreach staff, refractionists among others. The only way to obtain such staff in this region was to train them. The hospital therefore embarked on an intensive training program that leveraged on best practice training programs elsewhere which had shown success.

As the hospital celebrates its 10th Anniversary, great strides have been made to demonstrate that it has achieved great successes and looking forward for much more. Most important to note is that the hospital is financially self-reliant, a key factor to prove that the social enterprise model can be a success in Africa. In terms of numbers the hospital started by attending to 6,469 patients in 2013 and that increased steadily to 31,914 in 2019 before the effects of Covid-19 pandemic affected the operation of the hospital and now it is catching up. A total of 188,875 patients have been treated in the facility since inception (Figure 1). In 2013 the hospital performed 404 cataract surgeries. This number also increased greatly to 2,356 cataract surgeries in 2019 before the decline in 2020. By 2022 the numbers have bounced back to 2,016 cataract surgeries (Figure 2). Cataract surgeries serve a dual purpose of having the most significant impact in reduction of blindness in the community as well as being key to sustainability. It is recognized that the poverty index in the rural areas in Kenya is higher than 50% in several counties[9]. To break the greatest barrier to access eye care in the poor communities, a total of 48% of cataract surgeries have been offered free of charge. This cost is met by either supporters or the cross-subsidization model. To manage the cost recovery the hospital performs a minimum of 40% phacoemulsification of the walk-in patients. There is great attention to the quality of cataract surgery outcome monitoring. The hospital made a concerted effort to

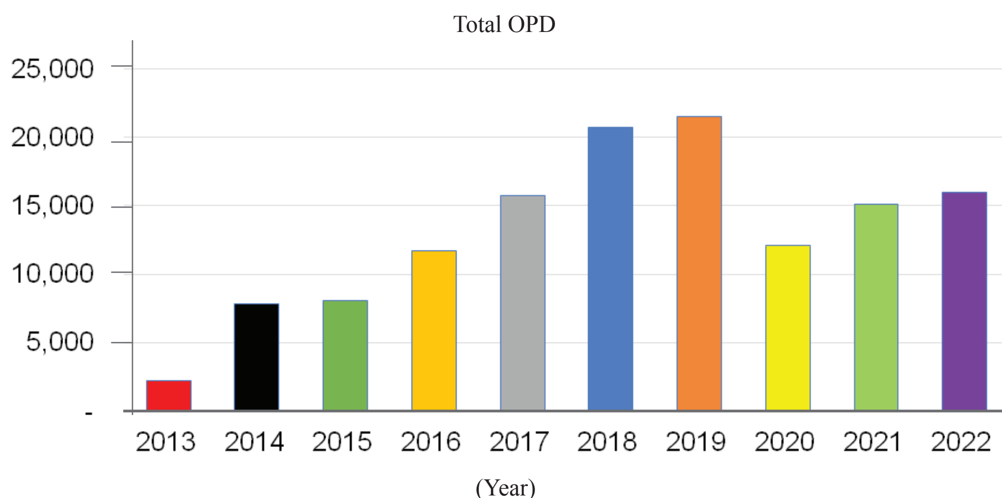

Figure 1: Patients attended per year

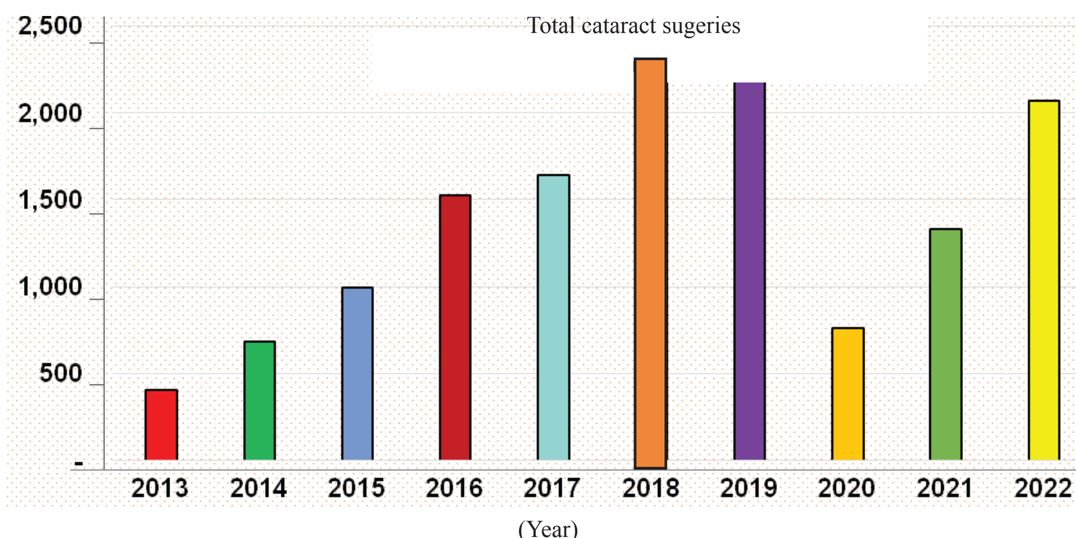

Figure 2: Cataract surgeries done per year

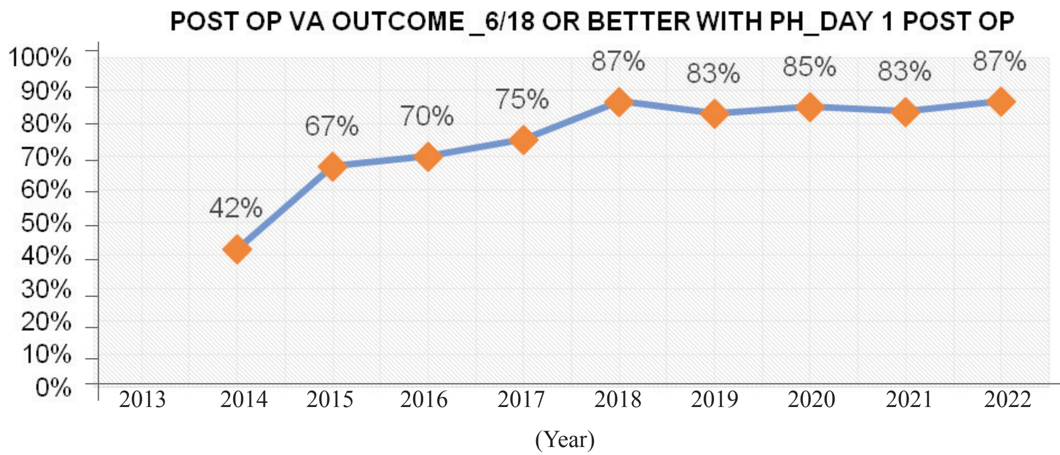

Figure 3: Cataract surgery outcome

meet the WHO recommended target of > 80% success in cataract surgery outcome from the beginning. The target was achieved in 2018 and consistently maintained and surpassed to date (Figure 3). And these figures include the outcome of surgeries for residents from the neighbouring universities who regularly come for training in the facility.

The optical department also similarly serves the dual function of reduction of reversible poor vision as well as sustainability. Significant emphasis is made in dispensing spectacles in a cost effective and timely manner. The hospital has so far dispensed 25,836 spectacles with the yearly breakdown as shown in Figure 4. As a

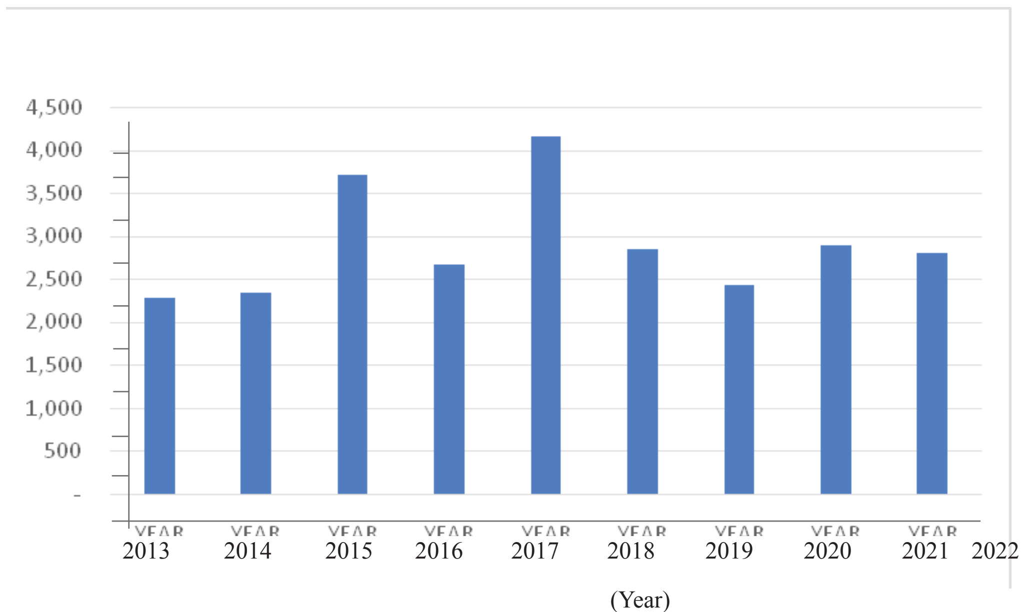

Figure 4: Spectacles dispensed

comprehensive eye hospital, skills are developed to serve other specialties like glaucoma, cornea, medical retina, and paediatric ophthalmology.

Traditionally the hospital has been running base hospital and outreach services. It has however recognized that outreach program, as much as they help reach to the non-customers [those who need the services but would ordinarily not be able to access them], they are not effective in giving a sustainable eye care in the community. The outreach is planned in the community at the convenience of the hospital and the clients may not be having the need then, and when the need occurs, there is a tendency that they will wait until the outreach happens again, often too late for timely intervention. The hospital embarked in a program of vision centres – these are small permanent facilities set up to provide primary eye care services to semi-rural and rural communities. Ophthalmic nurses or assistants operate the centres and will counsel, treat, dispense spectacles, and refer complicated and patients needing surgeries to a main hospital. It is envisaged that a vision centre will greatly improve the eye health seeking behavior of the community as one can travel a short distance and get quality care whenever there is need to. The hospital has established vision centres with the standard best practice of setting up and running one. It is in the process of establishing many more in the coverage area to replace outreach camps.

Looking forward, a stage is now set for further growth by strengthening the existing programs of training and standard processes as well as establishing other hospitals

in the region for wider coverage. It has been observed through the establishment and other similar ones in SSA that this model is a viable option of providing eye care in this region with a potential to offer the solution to the elimination of avoidable blindness. Setting up of more such models by others in the region is encouraged and the Kisii Eye Hospital is ready to share their experience.

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