

## Title

It was on an atypically sultry summer's afternoon in the summer of 1971, on the 4th floor of what is now Glasgow Caledonian University, when I was asked by a certain Bert Cox, the Deputy Head of the Ophthalmic Optics Department, why I wanted to become an optician (Optometrists did not pertain to the UK in those days). My spontaneous response was that I wanted to help people see. Now, naïve as this seems, it was nonetheless true and the antithesis of any notion given to me by friends and family that optics was a very well paid and highly prestigious profession.

Great men inspire both by word and deed and it was in the early 90's that I met such a man in Varanasi, India, who had helped, through his hospital, to virtually eradicate leprosy in India. Sadly, he passed away a year later, but his inspiration was the main reason for my starting a charity in that city in 2007.



Varanasi, formerly known as Benares, is one of the oldest and most sacred cities to the Hindus in India and as such had always had a certain attraction to me since childhood. The charity is called Vision Varanasi "clarity and charity" and its function is to refract and supply spectacles to the poor and needy of this highly under privileged city in the state of Uttar Pradesh, which is the poorest state in India.

In terms of eye care of this nature, India has been significantly overlooked in relation to say Africa, as India is now regarded as a more prosperous developing country. Whilst this is true in the Metropolitan cities of Mumbai, Delhi, Bangalore etc, it certainly does not apply to the poorer states and certainly not to the many hundreds of thousands of rural villages of which India is largely composed.

So it was in October 2007 that I found myself in an ashram in the outskirts of Varanasi, having made contact in the U.K. prior to the trip. The first night was neither comforting nor encouraging; the room was small and sparse; the bed was a board with a 2 inch thick mattress; I shared the room with 2 lizards, a cockroach and more than a dozen mosquitos; it was very hot with no air-con and the constant howling of the neighbourhood dogs kept me awake all night.

The following morning, although warm, bright and sunny brought with it a strong sense of despondency and mental gloom. That afternoon, I was introduced to a young, erudite, intelligent, fluent English- speaking Optometrist by the name of Jay Krishna. Being quite interested in the venture he allowed me the use of his practice as a platform to launch. He and his brother simply went around the streets telling the locals that a free eye check with free specs was available the following day. So I found myself inside a room 3 metre by 4, again with mosquitos and cockroaches for company with the added pleasure of having to endure the delightful stench of an open sewer just outside the practice. Armed with a retinoscope, an ophthalmoscope and a box of trial lenses, I somehow managed to successfully diagnose and supply optical aids to 17 extremely poor and needy people with the help of Jay's translation.

Diagnosing patients who do not read is certainly not a cake walk and is completely different to anything I have previously encountered. Imagine patients who had never before had an eye exam. The problems encountered were as follows: the language barrier; the lack of emotional response to dramatic improvements in sight; the not insignificant pathology and the economy of the truth, particularly of women, when disclosing their age.

Notwithstanding these problems we ended up with 17 satisfied individuals, most of whom were presbyopes, meaning they have an acute inability to focus. The specs were made up to my specifications, with glass lenses and a reasonable acetate frame for the cost to me of 90 rupees (just over a pound). Those who were not prescribed were given "Magic Drops," a small bottle of methyl cellulose lubricant. Those with cataracts were referred, but would probably go untreated due to the prohibitive cost of surgery (50 pounds minimum at the government hospital).

As we all know in life, there are good days and bad days: that day can be classified as one of the best, most significant and most memorable of all. Rather than pondering over turnover, profit and targets, the ethos had subtly altered to entities such as compassion, satisfaction, care for humanity and utilising knowledge in the best possible way. Rather than aimlessly revolving round the rim of the wheel, I found myself transported into the hub, as it were, via the spokes. At the centre of the wheel one can experience the true value of human existence; one can see the whole picture and one is empowered with the certain knowledge that by caring for



humanity one takes a step closer to the true purpose of what being human is all about. On that day, a bridge was crossed. Until that bridge is crossed, you can never really know what it is like to be charitable. On that day I gave those poor folk some hope and, indeed, some charity. The faith, however, they will have to find for themselves.

Meanwhile, back at the ranch, after about a week or so, we found that we seemed to be gaining in popularity! We were getting booked solid, so we decided to work from the ashram, which gave us more space and afforded better crowd control. We made contacts from some of the surrounding villages at that time, so we took our basic refraction equipment in a taxi (£10 a day), and headed off into the great unknown.

Village life in India is something else! Upon arrival, we would set up in a small room, sometimes a shed or an out building. We really had no experience of this kind of work and tended to be a bit disorganised. Patients were tested, their results noted and the specs were delivered a week later through our contact. This system was slow and unsatisfactory, so after some thought, I came up with a cunning plan vis-a-vis pre-made specs in acetate, ladies and gents versions with varying powers. We started with a range from plus one to plus three, the same range in minus. Specs for those requiring specials i.e higher plus and minus, patients with blurred vision and aphakes (without lenses) were made and delivered in a week or so. In this manner, we went round about a dozen or so villages, sometimes with a large crowd awaiting us (if pre-arranged), sometimes, if arranged only at the last minute we would be met with say four or five people but, as word spread, we ended up seeing our maximum of fifty patients a day. All of those helped were extremely poor and were very grateful for our services. At the ashram in the city, however, word soon got round of the bargain of the century and those whose needs were deemed more self-indulgent than others were despatched post haste. We only cater for the poor and needy. Dress, body language and general demeanour eliminated the carpet baggers, the differentiation of which grew with experience.

From a clinical point of view, as those who have done charity work will know, it's not quite the same as a cosy appointment in a nice warm Mall in Basingstoke. Oh No! For starters, there's no previous test results, no auto refraction, no pre-screening and worst of all, no Marks and Spencer sandwiches at lunch time. As previously mentioned, most patients were presbyopes (which starts about 5 years or so earlier than in the West). Although many are illiterate, they can use specs for their vocations which require good near vision and for sewing as well as rice and grain sorting, which is done in abundance by Indian women of all ages. Virtually all were first time spec wearers and a significant impact was made there. Virtually all 50 year olds and above had some form of cataract, ranging in reduction of sight of a line or so to hand movements only. Some were aphakes, whose specs were either lost or in a totally dilapidated state. I was informed that it was common practice for budding ophthalmologists to hone their skills on desperate villagers, the results of which bordered on butchery. I unfortunately came across many such cases. What would you do if confronted by an aphake gone wrong due to post operative infection, the other eye with total cataract and near blindness? This was not an isolated case.

There is an inordinate level of high astigmatism (acutely blurred vision) in India, which, as you can imagine, is quite difficult to evaluate, especially if ret. is impossible, which often it is, due to acute clouding of the lenses. No 0.25D and 5 degree changes here! In the first year I could not dilate, as I was only donated an i-care tonometer (easy to use diagnostic tool) this year, facilitating dilation and therefore making retinoscopy and ophthalmoscopy that much easier. A great boon, indeed!

Many cataract patients had their acuities changed from merely being able to count fingers to 6/36 (being able to read a chart at 6 metres) or so with corrective lenses (Myopic shift). Those were particularly rewarding as there was no way they could ever afford surgery. I often saw very high astigmats (patients with acutely blurred vision) and I saw a family of two parents and three teenage children with



an average of 15D of myopia (extreme near sightedness). All were satisfactorily prescribed for the first time. What would you give?

There were many cases of children, having had either trauma or infection some years back, their parents not understanding the consequences of being left untreated, so that when I saw them I had to inform them that there was nothing that I could possibly do to improve their sight better than P.L. only. My duty was to refer to the nearest eye unit, which they could never afford or understand the mechanism by which they could attain treatment, if any. Many a heartbreaking case was encountered.

As the end of 2007 came to a close, my 12 weeks in Varanasi saw the distribution of just over a thousand specs and 300 bottles of lubricant. I left my assistant sufficient funding to continue the project in my absence, seeing about 10 patients a week for the next 9 months, until my return in October 2008.



One of the best indicators of the value of the project is in relation to the amount of interest it has created, I am pleased to say that the total number of patients seen will be around the 2000 mark. This has largely been achieved with the addition to my armoury of a Retinomax 2 portable auto-refractor, supplied on very favourable terms by Messrs. Keeler U.K. Ltd. and an i-Care hand-held tonometer donated by a very generous Trinidadian lady. This allowed us to improve our efficiency considerably. The technique was as follows: two patients entered the room simultaneously; each sat directly opposite each other at a distance of 3 metres and each facing a 3 metre illiterate E test chart. Whilst I performed retinoscopy on my patient, Jai auto-refracted the other and then we swapped tools. Acuties were measured, presbyopes were checked with a Hindi or illiterate E near test chart.

Patients were then given a set of pre made spherical glasses, of which we kept about 500 or so in stock (powers of plus one to four). Myopes were also supplied from our range of minus one to four. Astigmats were told to return for a second appointment and pathology was referred where necessary. In this way Jai and I together with two of his newly qualified friends manage to see 300 patients on Christmas Day, turning away a further 150, who were seen at a later date. One New Year's Day, after I left, around 400 people turned up all who will be seen by Jai throughout the coming months. All of this attracted the attention of The Times of India newspaper, which duly published our story. Next year we hope to see around 4000, with the aid of further equipment and resources. So, if you're reading this between patients, on the train home, or polishing off a KitKat for lunch, I hope it has given you some entertainment and inspiration to get on board the project in any way that you can. Remember, a pound lets someone pronounce "LOKATA" (I can see). Everybody knows sight is a basic necessity for humans and, as optometrists, sight for all is what we strive towards accomplishing.