

Improving eye care in
rural india
communications
essay



**ASSIGN
BUSTER**

CATARACT refers to the clouding of the lens in the human eye, affecting vision. In the developing world, cataract is the cause for blindness in nearly half the blind population i. e. 50% of the recorded number of blindness cases. While problems of inaccessibility continue to plague many parts of the developing world - nearly two-thirds of the population in many developing countries are unable to access quality medical resources & infrastructure primarily because quality medical care or eye care in this case is still urban-centric - all hope is not lost yet.

In India too, where 90% of the cases are treatable, most Indians lack access to quality eye care. In the early 1990s, the country was home to a third of the world's blind people and here too cataract blindness was the major cause in most cases. The World Bank decided to step in and help the Indian government deal with the problem, spending \$144. 8 million between 1994 and 2002 on the Cataract Blindness Control Project under which 15. 3 million eye surgeries were performed. The World Bank-funded project was largely implemented in northern India and it helped reduce the incidence of cataract, in the states that were covered under this project, by half. But India is a very big country and it definitely needs a more sustainable approach to dealing with cataract blindness given that it has a sizeable ageing population. One such approach is the Aravind Eye Care System, a three-decade old campaign that has been fighting cataract blindness predominantly in the southern Indian state of Tamil Nadu. Working in the same direction is the L V Prasad Eye Institute, operating from the neighbouring state of Andhra Pradesh. Both Aravind and LVPEI, setup in the mid 1970s and the mid 1980s respectively, have been focused on taking

quality eye care to the rural masses from the very beginning, most of it free of cost.

In the larger context, this paper discusses how private entrepreneurship is taking quality Eye Care to the rural masses in India. This paper will discuss the Eye Care delivery model aimed at fighting Cataract Blindness in the context of the Culture-Centered Approach (CCA). The Culture-Centered Approach advocates greater engagement with the local culture, “ through dialogues with community members”, to ensure “ equitable” and “ accessible” healthcare across communities (Dutta-Bergman, 2004a, 2004b; Dutta and Basu 2007 as quoted in Dutta, 2008). Furthermore, this paper will use the Extended Technology-Community-Management (TCM) model (Chib & Komathi, 2008) to explain the intersections between technology, community and the management of information communication technologies (ICT) in the context of the CCA and the Eye Care delivery model adopted by the private healthcare players i. e. the non-governmental organisations (NGOs). According to the TCM model (Lee & Chib, 2008), the intersection of ICT characteristics of technology, along with the dimensions of software and hardware, project management dimensions of financial requirements, the regulatory environment, and stakeholder involvement, along with local community participation “ will ultimately lead to sustainable ICTD interventions.”

Culture-Centered Approach

Globalisation has led to an increasing realisation that the

Biomedical[6]model of healthcare is limited in scope when engaging in

issues of global health (Dutta, 2008). Furthermore, Dutta (2008) says that

<https://assignbuster.com/improving-eye-care-in-rural-india-communications-essay/>

many societies now feel the need to “ open up the spaces of health communication to the voices of cultural communities” i. e. there is now greater awareness of the need for better engagement with marginalised communities.

Culture is dynamic. That culture has an important role to play in health communication is better understood today. But this concept began attracting widespread attention only in the early 1980s, especially in the U. S. when healthcare practitioners felt a need to adopt multiple strategies to address the health-related issues of a multicultural population (Dutta, 2008). “ This helped question the universalist assumptions of various health communication programs” aimed at the developing nations and the so called third-world nations (Dutta, 2008).

The Culture-Centered Approach was born out of the need to oppose the dominant approach of health communication, located within the Biomedical model, where health is treated as a “ universal concept based on Eurocentric[7] understandings of health-related issues, disease and the treatment of diseases” (Dutta, 2008).

According to Dutta (2008), the CCA is a better alternative to understanding health communication because it is a “ value-centered” approach. The CCA is built on the notion that the “ meanings of health” cannot be universal because they are ingrained within cultural contexts, he argues.

The CCA has its roots in three key concepts i. e. ‘ structure’, ‘ agency’ and ‘ culture’. The term ‘ culture’ refers to the local context within which so called health meanings are created and dealt with. ‘ Structure’ encompasses food, <https://assignbuster.com/improving-eye-care-in-rural-india-communications-essay/>

shelter, medical services and transportational services that are all vital to the overall healthcare of various members of a community. ' Agency' points to the " capacity of cultural members" to negotiate the structures within which they live. It must be noted that ' structure', ' agency' and ' culture' are intertwined and they do not operate in isolation.

Dutta (2008), in his book *Communicating Health*, further elaborates that the CCA throws light on how the dominant healthcare ideology serves the needs of those in power. Powerful members of society create conditions of marginalisation. Therefore the focus of the CCA lies in the study of the intersections between ' structure, ' agency' and ' culture in the context of marginalised communities. To understand better the problems faced by the marginalised, the CCA advocates the healthcare practitioners engage in dialogues with members of the concerned community. Each community has its own set of stories to share and this is vital to understanding the local culture. The CCA also aims to document resistance, of any kind, to dominant ideologies as this helps strengthen the case of the CCA against the dominant healthcare model. The CCA, according to Dutta (2008), provides sufficient scope to study physician-patient relationships, in a bid to ultimately improve the healthcare delivery model. Adopting the CCA is just half your problem solved; the integration of the CCA with the Extended TCM model completes the picture.

The Extended TCM Model

The TCM model (Lee & Chib, 2008) argues that the larger question of social sustainability depends on both local relevance and institutional support. The

TCM Model

<https://assignbuster.com/improving-eye-care-in-rural-india-communications-essay/>

proposes that the intersection of ICT characteristics of technology, along with the dimensions of software and hardware, project management dimensions of financial requirements, the regulatory environment, and stakeholder involvement, along with local community participation, will ultimately lead to sustainable ICTD interventions (See Figure 1. 1).

The TCM model was further revised. Community was subdivided to include: modes of ownership of ICT investments and profits; training of community users both in the use and in technology management; and the basic needs of the community. Furthermore, Sustainability was also subdivided into financial and social (see Figure 1. 2).

Chib & Komathi (2009) found that the TCM Model was inadequate as it could not examine the critical issue of vulnerability. Therefore, their study improved on this inadequacy by adding crucial factors and variables relating to vulnerability. They extended the TCM model, and called it the Extended Technology-Community-Management (Extended TCM) model (see Figure 1. 3).

This new framework on ICT planning accounts for community involvement, the management components, the overall design of technologies such as telemedicine or tele-consultation, and evaluation of existing vulnerabilities in the community where these technologies are implemented. It identifies four dimensions of vulnerabilities influencing technology implementation among the rural poor: economic vulnerability, informational vulnerability, physiological/psychological vulnerability, and socio-cultural vulnerability.

Chib & Komathi (2009) further explain each dimension of vulnerability:

Physiological and psychological vulnerabilities refer to the physical and mental well-being of an affected person, or a specific community.

Informational vulnerability deals with the access to and availability of information within affected communities. Informational resources include personal documents, books and critical data, opinion leaders and professional experts,. The lack of such resources affects the capabilities of people who are dependent on them. In a rural setting, informational vulnerability is further augmented by the low literacy levels and lack of pertinent “ technological skills necessary to enable the learning and processing of information.” The economic vulnerability is sparked off by the loss of livelihood i. e. a loss of activities that otherwise financially support households and sustain economic growth in a rural setting. The socio-cultural vulnerability of communities is determined by “ the structure and values of a given society that define human relationships in communities.” Hierarchies in any society (gender, race, religion, caste, age and class egalitarianism within communities) or a community often dictate access to resources and assets, and the decision-making power of people.

Cataract Blindness in India

At the outset, one has to understand the sufferings of the blind in India, in a rural setting – blindness, irrespective of the cause, results in a loss of livelihood for an individual. In rural India, like elsewhere, this would translate into one less earning member in the family, making the blind person a burden to his/her family. This leads to a loss of dignity and status in the family. In effect, blind people in rural India, like in many other societies, are

marginalized. Enter Aravind and LVPEI, who continue to strive to help blind people in rural India and empower them by giving them back their sight.

There are many causes of blindness, like Diabetes for instance. But Cataract is one of the leading causes of blindness in the developing world. Records in India show that Cataract is the most significant cause of blindness in the country (Nirmalan et al. 2002 & Murthy et al. 2001). Cataract, reports say, is responsible for 50 to 80 per cent of the bilaterally blind (Thulsiraj et al. 2003 & Thulsiraj et al. 2002). The elderly are more at risk of developing Cataract.

India aims to eliminate needless blindness by 2020 in line with ' Vision 2020: the right to sight initiative', launched jointly by the World Health Organisation (WHO) and the International Agency for Prevention of Blindness (IAPB). Many organisations worldwide are also working in the direction of eliminating needless blindness (Foster, 2001). The government in India and the World Bank launched the Cataract Blindness Control Project in seven states across India in 1994. From close to 1. 2 million cataract surgeries a year in the 1980s (Minassian & Mehra 1990), Cataract surgical output tripled to 3. 9 million per year by 2003 (Jose, 2003).

In 2004, World Health Organization (WHO) data showed that there was a 25 per cent decrease in blindness prevalence in India (Resnikoff et al. 2004) — the reason(s) could be the increase in Cataract surgeries countrywide. But there is a larger problem here, that of population growth. The aged population in India (those aged over 60 years) population which stood at 56 million people in the year 1991 is expected to double by the year 2016

(Kumar, 1997). This 'greying' of India's population only suggests that the number of people 'at-risk' of developing Cataract is constantly on the rises.

In the larger sense, this paper aims to show how private entrepreneurship in India is taking quality eye care to the rural masses in that country. This paper aimed to discuss the same through two case studies, that of the Aravind Eye Care system as well as the L V Prasad Eye Institute (LVPEI). Unfortunately, email correspondence with LVPEI failed to elicit responses from this organization. Given the limitations of this study, including time constraints, this paper will explain the Aravind Eye Care system in the context of rural Eye Care in India and the fight against Cataract Blindness - all this within the framework of the CCA.

Furthermore, this paper will critique the business model of NGOs like Aravind in the context of the Extended TCM model, including whether for-profit organisations are using the rural masses to support their business model. In particular, what is the role of the healthcare provider in this case - disseminate knowledge to the grass-roots or live-off their healthcare delivery model?

Aravind Eye Care

Dr. G. Venkataswamy had a very simple vision when he first setup Aravind Eye Care in 1976: "Eradicate needless blindness at least in Tamil Nadu, his home state, if not in the entire nation of India."

Aravind began as an 11-bed private clinic in the founder's brother's house in the southern Indian city of Madurai. Today, the Aravind Eye Hospital (AEH) at Madurai is a 1, 500 bed hospital. In addition to Madurai, there are four more
<https://assignbuster.com/improving-eye-care-in-rural-india-communications-essay/>

AEHs in Tamil Nadu (Aravind. org) with a combined total of over 3, 500 beds. By 2003 the Aravind Eye Care System as we know it today was up and running. The System continues to operate under the aegis of a nonprofit trust named the Govel Trust - it comprises of a manufacturing facility (for manufacturing synthetic lenses, sutures, and pharmaceuticals related to eye care); eye hospitals; education and training (graduate institute of ophthalmology); research facilities (complete with an eye bank);) and a center for community outreach programs (Prahlad, 2004).

A typical day at Aravind now has doctors performing about 1, 000 surgeries including free surgeries; 5-6 outreach camps in rural areas where about 1, 500 people are examined and close to 300 people are brought to an AEH for eye surgery (TED, 2009).

How does Aravind do it?

The organisation has setup ' vision centers' or clinics in remote villages, fitted with basic eye care equipment. Each clinic is manned by an ophthalmic assistant and " these clinics perform basic examinations; prescribe corrective lenses and treat minor ailments." If an eye ailment can be cured by the application of eye drops, these clinics are equipped to do so. For more complicated cases, such as Cataract Blindness, the patient consults an ophthalmologist based at an AEH in a nearby city via the videoconferencing route. If the patient needs corrective surgery, he/she is asked to hop onto a bus waiting outside the ' vision centre' that takes them to the nearest Aravind base hospital. The patients are operated upon the following day; they spend a day in post-operative care and then take a bus back to their villages — all free of cost (Laks, 2009).[8]

<https://assignbuster.com/improving-eye-care-in-rural-india-communications-essay/>

But it wasn't all gung-ho in the beginning; more hard work than anything else. There was no specific Outreach team. Everyone in the pool was asked to participate in Outreach programme. " In the beginning (in 1976-77) Dr. V and a small team would visit villages and conduct eye screening camps. Those who required Cataract surgery would then be advised to visit the base hospital for surgery. But Dr . V found that a majority of those advised to undergo surgery would dropout, owing to socio-economic factors like fear of surgery; lack of trust on restoration of sight; no money to spend for transport, food and post operative medical care and (their) resistance to western medicine," according to the head of Outreach activities at Aravind, R. Meenakshi Sundaram in his email response to my queries.

These barriers were gradually addressed through various strategies. " We decided to involve village chiefs and local organizations to take ownership of the Outreach programmes, in terms of identifying the right location for the Eye Camp and providing the required support facilities. Their help was key to community mobilization. We organized a team to standardize the quality in Eye Care service delivery. Furthermore, Dr. V focussed his attention on building hospitals like one's home where we normally expect basic culture and values," said Mr. Sundaram.

" Fear of surgery was a common barrier in addition to other factors. Perhaps the acceptance for surgery was low in the beginning. But it was constantly explained at the community level whenever camps were organized as the programme aims to serve people at large. Particularly, in the year 1992 the Intra Ocular Lens (IOL) was introduced and the rural community did not

believe in having a 'foreign particle' in their eyes. We came across a lot of myths. Those issues were addressed thru counselling," added Mr. Sundaram.

Realizing the impact of counselling, a cadre was developed within the System in 1992 and seven counsellors were trained in the first batch of counsellors' training. They were given a basic orientation about common eye problems with a special focus on IEC. 'Patient counsellors' i. e. patients who had undergone eye surgery were asked to help the Outreach team. " They played their role in explaining eye problems in the local language and tried to help others realize the consequences of failing to accept surgery.

Considering the myths, a real IOL was used as education material to help the rural folk understand the concept of the IOL," Mr Sundaram said. The number of counsellors has steadily risen ever since and stands at 179 at present.

How is the Aravind Eye Care System possible?

Financial self-sustainability was the primary focus from day one at Aravind. Initially, the organization was given a grant by the government to help subsidize the treatment costs for eye camp patients (Prahlad, 2004) and the Govel Trust also pledged properties to raise money from banks in the early days. Prahlad (2004) states that the Madurai AEH, the first, was always self-supporting as far as recurring expenditures were concerned. Within the first five years of operation, the Madurai AEH had accumulated surplus revenues for further development and for the construction of four other hospitals in the Tamil Nadu state. He adds that over the years, the patient revenues generated from its five hospitals located in five cities finance the Aravind Eye Care System to a great extent. Furthermore, Aravind has also taken to the

management-contract route and it manages two hospitals outside of its home-state.

While city folk are charged market rates for each consultancy and for surgery, patients in remote villages pay just Rs. 20 for three consultancies or SGD 0. 60. (TED, 2009). Those who can afford to pay, the urban folk who visit Aravind's hospitals in urban locations on their own, do not get discounted rates. Such a system of cross-subsidies ensures that only 45 percent pay while the rest are not charged at all i. e. about five out of every 10 patients examined at Aravind can be provided free eye care, including eye surgery (TED, 2009). A cross-subsidising financial model is not the only mantra[9]to Aravind's success. Having been in the business of delivering quality Eye Care for over three decades now, the System is well-positioned to leverage on the Aravind brand-name to attract donations. Over the years, the organization has received international recognition for its work and this includes the 2008 Gates Award for Global Health, and this year's Conrad N. Hilton Humanitarian Prize that carries a US\$1. 5 million cash award.

Last but not the least is the money that flows into Aravind in the form of specific project-funding. One such sponsor is the London-based ' Seeing Is Believing' (SiB) Trust, a collaboration between Standard Chartered Bank and the International Agency for Prevention of Blindness (IAPB). Since 2003, ' Seeing is Believing' has grown from a staff initiative to raise enough money to fund a cataract operation for each member of the Bank to a US\$40 million global community initiative.

I wrote to Standard Chartered Bank (SCB) asking them why they decided to partner with Aravind and LVPEI. “ LV Prasad Eye Institute, Hyderabad, as well as Aravind Eye Hospital are premier eye care institutes in the country. India has a vast geographic spread and both these institutions work in different geographic zones of the country. LVPEI is prominent in the south-eastern states of the country while Aravind is prominent in the southern states of India,” said Pratima Harite, Manager (Sustainability), Corporate Affairs- India in her email response to my queries. The rationale behind the India Consortium Project is the ‘ vision centre’ concept – that a significant proportion of eye problems corrected or detected at the primary care level has substantial savings to the individual and to the communities. “ Based on the success of LVPEI’s Vision Centre model, the India Consortium Project proposed scaling up the development of Vision Centres in a co-ordinated matter in six states across the country. For this, LVPEI sought support from four key implementing partners – premier eye care institutions themselves across the country,” added Ms. Harite. Singapore’s Temasek Foundation (TF) part-funds SiB activities in India, particularly in capacity building i. e. in enhancing the training component of the SiB programme.

Is this a viable business model?

1. Aravind has perfected the model over the last three decades. They have the technology, behind the video consultation, in place – “ a low-cost wireless long-distance network (WiLDNet)” put together by the Technology and Infrastructure for Emerging Regions (TIER) research group at the University of California, Berkeley, California, USA.[10]This was done to overcome the issue of zero internet connectivity or slow

connections that do not support video consultations in remote villages (Laks, 2009).

In 2004, a mobile van with satellite connectivity was introduced to facilitate Tele-Consultations. The Indian Space Research Organisation's (ISRO)[11] help was sought to this extent. The 'vision centres' can easily communicate with the base hospital (some 30 to 40 kms.) via satellite. These 'vision centres' effectively address the issue of accessibility, affordability and availability of quality Eye Care. "A series of centres were started across the Tamil Nadu state. Each base hospital is connected with a group of vision centres. At present, we have 10 'vision centres' that operate on WiFi. The rest run on BSNL[12] broadband connections," Mr Sundaram said.

2. Aravind has the delivery system in place. A sound understanding of the local culture that in many cases is averse to western medicine and where modern-day medicine is not the first and only option to treat any disease or ailment. Why would a villager trust a doctor who drives down one fine morning and says he would like to operate upon them? Aravind begins by appointing a volunteer group for each community; some of these volunteers are further trained to serve as ophthalmic assistants and even as nurses in Aravind's hospitals. In a rural setting, rural folk trust their friends, neighbors, and their own people first. It is about creating ownership to the problem, like Mr. Sundaram said, and then partnering with the community to solve the problem.
3. Aravind's financial results for the year 2008-09 were healthy. It raked in (income) US\$22 million and spent (expenditure and depreciation) US\$ 13 million.[13]

Discussion

That Aravind and other NGOs working in a similar direction, like LVPEI for instance, use the Culture-Centered Approach, as elaborated by Dutta (2008), in delivering quality eye care to rural India is quite clear. Aravind, in particular, has successfully integrated the CCA with the Technology-Communication-Management (TCM) model, as elaborated by Lee & Chib (2008) to create a sustainable model for Eye Care delivery. 'Accessibility' and 'affordability' are the key factors in such healthcare models. In taking this route, one has to ensure that the technologies chosen for the job are cost-effective and easy to implement because capital expenditure and operational expenditure do play a vital role in determining the cost of healthcare services. Aravind has been able to keep the cost of Eye Care delivery considerable low consistently for many years now.

Critics argue that organizations like Aravind are feeding-off their model. At this point, it is important to understand the ground-realities. In India, the divide between the urban 'haves', and the rural 'have-nots' is only getting wider with each passing year. According to UN projections released 2008, "India would urbanize at a much slower rate than China and have, by 2050, 45% of its population still living in rural areas" (Lederer, 2008). The Government in India is not doing enough to address the plethora of health issues that plague [the various regions and communities in] the country. The flagship scheme to improve healthcare services in rural India, the National Rural Health Mission — launched in 2005 as a seven-year programme — has many of its goals yet to be achieved, and the government is now considering extending it to 2015, according to recent media reports. Despite many a

government claims and many a government schemes several villages in states across India continue to depend on the private sector for quality healthcare or in this case Eye Care. Given this situation, Aravind and LVPEI's work in the direction of providing affordable Eye Care and free eye surgeries to five out of every ten patients they examine is a commendable feat. A second question raised in this study is, what is the role of the healthcare provider in this case - disseminate knowledge to the grass-roots or live-off their healthcare delivery model? Aravind is doing its part in disseminating knowledge to the grass-roots. Most ophthalmic assistants who man the 'vision centers' are community members trained by Aravind. But one has to understand that the act of knowledge dissemination in a remote rural setting has its challenges i. e. tackling illiteracy, basic awareness among others and these challenges cannot be addressed in just a few years.

The India Consortium Project, sponsored by SCB and Temasek Foundation, set a target to set up 40 'vision centres' by 2010. So far, 32 'vision centres' are operational and the remaining will be operational this year, according to Ms. Harite.

On the flip side, a study by Murthy et al. (2008) argues that the goals of the 'Vision 2020: the right to sight' initiative to eliminate Cataract blindness in India by the year 2020 may not be achieved. But this should not deter those working in this direction. Both the public and the private sector must continue to fight Cataract Blindness because that is the only way to tackle the problem at hand. Last but not the least, this study recommends that NGOs operating in the healthcare space look at both the CCA and the TCM model to ensure better service delivery.

<https://assignbuster.com/improving-eye-care-in-rural-india-communications-essay/>

References

Chib, A. & Komathi, A. L. E. (2009). Extending the Technology-Community-Management Model to Disaster Recovery: Assessing Vulnerability in Rural Asia. Submitted to ICTD 2009.

Dutta, M. J. (2008). Communicating Health. Polity Press, Cambridge, U. K.

Foster A. (2001). Cataract and " Vision 2020 - the right to sight" initiative. British Journal Ophthalmology, 85, 635-639.

Jose R, Bachani D. (2003). Performance of cataract surgery between April 2002 and March 2003. NPCB-India; 2: 2.

Kumar S. (1997). Alarm sounded over ' Greying' of India's population. Lancet, 350, 271

Lee, S., & Chib, A. (2008). Wireless initiatives for connecting rural areas: Developing a framework. In N. Carpentier & B. De Cleen (Eds.), Participation and media production. Critical reflections on content creation. ICA 2007 Conference Theme Book (pp. 113-128). Newcastle, UK: Cambridge Scholars

Publishing.

Lederer, E. M. (2008). Mint. Retrieved April 16, 2010, from <http://www.livemint.com/2008/02/27231012/Half-the-world8217s-populat.html>

Laks, R. (2009). Videoconferencing and Low-cost Wireless Networks Improve Vision in Rural India. Comminit. com. Retrieved April 16, 2010, from <http://www.comminit.com/en/node/301452/307>

<https://assignbuster.com/improving-eye-care-in-rural-india-communications-essay/>

Minassian DC, Mehra V. (1990). 3. 8 Million blinded by cataract each year: Projections from the first epidemiological study of incidence of cataract blindness in India. *Br J Ophthalmol*, 4, 341-3.

Murthy GV, Gupta S, Ellwein LB, Munoz SR, Bachani D, Dada VK. (2001). A Population-based Eye Survey of Older Adults in a Rural District of Rajasthan: I, Central Vision Impairment, Blindness and Cataract Surgery. *Ophthalmology*, 108, 679-85.

Nirmalan PK, Thulasiraj RD, Maneksha V, Rahmathullah R, Ramakrishnan R, Padmavathi A, et al. (2002). A population based eye survey of older adults in Tirunelveli district of south India: Blindness, cataract surgery and visual outcomes. *Br J Ophthalmol*, 86, 505-12.

Prahlad, C. K. (2004). *The Fortune at the Bottom of the Pyramid*. Wharton School Publishing, Pennsylvania, U. S.

Resnikoff S, Pascolini D, Etyaale D, Kocur I, Pararajasegaram R, Pokharel GP, et al. (2004). Global data on visual impairment in the year 2002. *Bull WHO*, 82, 844-51.

TED. (2009). Thulasiraj Ravilla: How low cost eye care can be world class. Retrieved April 16, 2010, from http://www.ted.com/talks/lang/eng/thulasiraj_ravilla_how_low_cost_eye_care_can_be_worl