Community Eye Health
JOURNAL

International Centre for Eye Health
VISION 2020 THE RIGHT TO SIGHT INDIA

VOLUME 22 | ISSUE 70 | JUNE 2009
INDIAN SUPPLEMENT - Official Publication of the
"VISION 2020: The Right to Sight - India Forum"

Published for "VISION 2020: The Right to Sight – INDIA" from H. V. Desai Eye Hospital, Pune, India E-mail: cehjindia@vision2020india.org
Resource Centre Technical Advisory team :
Dr. Asim K. Sil (Team Leader), Dr Taraprasad Das, Dr. Krishna Prasad, Dr. A.K. Grover, Dr. Supriyo Ghose, Mr. P. Kirubanithi
Editorial Assistance : HVDEH Staff(s) involved in this work, VISION 2020 INDIA Secretariat

Gender and Eye Care Services in Central India

K. Anand Sudhan, Dr. B.K. Jain, Kamta Prasad Pandey and Vijay Singh.

Sadguru Netra Chikitsalaya, Chitrakoot, MP

Eye care programs, in India and worldwide, are focused on reducing inequities in service delivery. Most programs have an active focus on reaching services to the hitherto unreached populations that have a higher burden of eye diseases- the rural, the poor and the elderly. Several epidemiological studies worldwide have established a higher incidence and prevalence of blinding eye diseases among females and have provided evidence for poorer utilization of eye care services by women.[1-5] Barriers to eye care services are more acutely felt by women who often do not have decision making choices in a male dominated society. Studies from south India and different parts of the world have reported that at least two women need to be operated (for cataract) upon for each male to achieve equality in the cataract surgical coverage.[2,6] A study from south India reported that increasing education in women actually improved the chances for accessing eye care services.[6] Although information on women as a vulnerable group in the eye care context is available, there are few specific women oriented approaches. We decided to retrospectively study the patterns of eye care utilization in a district of north central India that has an active eye care program since the last 40 years .

Methods :

The Shri Sadguru Seva Sangh Trust (SSSST), established in 1968, supports the largest eye care institute in the region – the Sadguru Netra Chikitsalaya (SNC), Chitrakoot. SNC performs around 60,000 operations annually and has evolved into a tertiary eye care institute. It has a dedicated Centre for Community Ophthalmology to manage community eye care programs and specialty departments in pediatric, glaucoma, vitreo-retina, occuloplasty, cornea and low vision and vision rehabilitation. The major strategy of outreach programs is to reach out to poor rural populations, particularly women and children, through outreach camps and vision centers. SNC introduced a more comprehensive outreach program in 2001-02 that included an active counseling and IEC component to reach the unreached population.

A retrospective analysis of data focusing on sex disaggregated data for several of the components of eye care programs was undertaken. These included disaggregated data from vision centers, from school screening programs and hospital based data.

Results :

Eye Care services for children

The pediatric eye care center at SNC has examined 38, 948 children between 2004 and 2007; 15,243 (39%) of these were females (Table-1). Surgeries were performed on 4376 children of which 1513 (34.6%) were on females. Spectacles were dispensed to 6704 children of which 2521 (38%) were females. The lower number of female children operated upon and provided spectacles is probably related to the lower number of female children who accessed the hospital services. These data indicate that more male children were presenting and availing services at the dedicated pediatric eye care center.

School eye screening programs

The community ophthalmology unit had screened 258,463 children during the same period (between 2004 and 2007) and only 40% of the screened children were females (Table -2). The lower number of female children screened at schools is probably related to the pattern of school enrollment and dropouts in this region rather than any discrimination of the screening program.

Table 1: Utilization of services at Children's eye care centre

Services	Grand Total				
	M	%	F	%	Total
Outpatients	23705	60.9	15243	39.1	38948
Spectacle dispensed	4183	54.4	2521	37.6	6704
Surgeries	2863	53.4	1513	34.6	4376

Table 2 : School eye screening program results at SNC

Services	Grand Total				
	M	%	F	%	Total
Outpatients	154361	60%	104102	40%	258463
Spectacle dispensed	1065	54%	901	46%	1966
Refer To SNC	449	53%	397	47%	846

Vision Centers :

SNC has made a major shift in its programmatic approach to outreach with an increased emphasis on vision centers rather than outreach programs. The vision centers offer a base for permanent eye care solutions on, 6 days of the week basis and offers greater potential to reach the unreached than a conventional eye camp. The vision center approach has been in practice at SNC since 2003 and we have data for the years 2007-2008 (Table-3)

Table 3 : Utilization of services at Vision centres

Services	Grand Total				
	M	%	F	%	Total
Outpatients	4890	56%	3785	44%	8675
Spectacle dispensed	2751	56%	2134	44%	4885
Refer To SNC	632	56%	498	44%	1130

Hospital based data

We examined data from the hospital for the years 2005-2007 with specific reference to patterns of utilization by gender (Table-4).

Table 4 : SNC hospital service utilization

Year	M	%	F	%	Total
2007-08	29479	49.7%	29875	50.3%	59274
2006-07	28218	51%	27074	49%	55293
2005-06	24325	52%	22722	48%	47048

Community based data

During the period 2006-2007, 20,209 persons were referred to SNC from outreach programs of which 9803 (49%) were females. Among these 20,209 persons referred to SNC, 7,315 (70%) of the 10,406 referred males and 6,569 (67%) of the 9,803 referred females accessed eye care services at SNC

Table 5: Outreach camp utilization pattern

Services	Grand Total				
	M	%	F	%	Total
Selected for surgery	20835	52%	19222	48%	40057
Accepted surgery	1065	54%	901	46%	1966

A population based Rapid Assessment for Cataract Surgical Services (RACSS) in 2006 found that the prevalence rate among women is 19% when compared to men 7.8% for with vision < 6/60. The prevalence rate was also higher among women (11%) compared to men (4.1%) for bilaterally blind individuals with vision <3/60. The overall age and sex adjusted prevalence of blindness was three times more among women (9.2%) than men (4.11%). The overall cataract surgical coverage (CSC) was 56.1%; the CSC was significantly lower among women (51%) compared to men (66%).

Discussion

The results of this analysis indicate that gender inequities in delivery and utilization of eye care services persist even in long standing eye care programs. Getting more females into the eye care program appears to be an issue that needs to be resolved. We found that patterns of spectacle dispensation or advice for surgery did not differ much by gender, once the patients were brought into the system thus ruling out the possibility of any bias in services provided. However, lower number of females accessed eye care programs in the first instance and strategies to improve access to eye care services for women is essential.

The results of the RACSS are similar to previous epidemiological studies from other parts of the world- blindness and vision impairment is more among females but cataract surgical coverage is much lower among women. Logically, it follows that adequate control of blindness can be achieved only by increasing the cataract surgical coverage among women. In the short term, this will mean a ratio of at least two females to one male being operated for cataract till equality is achieved in surgical coverage. However, this will mean that the number of females currently accessing eye care programs has to at least double from its current numbers.[6]

Improving utilization of services needs a multi-pronged approach that addresses several social concerns in a male dominated society. This will involve empowering women to make decisions (which involves greater financial independence), education for women, more empathetic services for women from eye care programs and several development initiatives, like provision of safe water that will provide women with some free time from routine chores to actually access health care services.

To conclude, we find that eye care programs need to think of gender specific initiatives and consider women as a specific vulnerable subgroup similar to the elderly, rural and poor people.

Acknowledgement : The authors wish to acknowledge support and guidance received from PRASHASA Health Consultants Pvt Ltd, Hyderabad.

References

1. Courtright P, Klungsøyr P, Lewallen S, Hendriksen TH. The epidemiology of blindness and visual loss in Hamar tribesmen of Ethiopia: The role of gender. Tropical & Geographical Medicine 1993;45:169-170
2. Abou-Gareeb I, Lewallen S, Bassett K, Courtright P. Gender and blindness: A meta-analysis of population-based prevalence surveys Ophthalmic Epidemiology 2001;8:39-56.
3. Courtright P. Gender issues in blindness, eye disease and use of eye-care services. IAPB News. April 2001;30:7.
4. Lewallen S & Courtright P. Gender and use of cataract surgical services in developing countries. Bulletin of the World Health Organization 2002;80:300-3.
5. Lewallen S, Courtright P. Gender differences in cataract: Increasing uptake of eye services by women. Journal of Community Eye Health 2006; 19: 59-61
6. Nirmalan PK, Padmavathi A, Thulasiraj RD. Sex inequalities in cataract blindness burden and surgical services in south India. Br J Ophthalmol 2003;87:847–849

Community Eye Health Journal
(with Indian Supplement)

A new vision corrective device, the Universal Spectacles (U-specs) for vision correction among children in India

Vinod Immidisetty[1], Suma Ganesh[2], Sybil Meshramkar[3], Anand Sudhan[4], Rob van der Heijde[5]

1. Philips Electronics India Limited, Gurgaon, Haryana.
2. Shroff's Charitable Eye Hospital, Daryaganj, Delhi.
3. Dr. Salin's Eye Hospital, Bidar, Karnataka.
4. Sadguru Netra Chikitsalaya, Chitrakoot, Madhya Pradesh.
5. VU University Medical Centre, Amsterdam, The Nederlands.

Background
Worldwide over 314 million people have poor eyesight of which uncorrected refractive errors are a major contributor. Although easy to recognize and easy to correct, uncorrected refractive errors have consequences on several aspects of life including productivity and education in children. The solution is a pair of glasses that are comfortable to wear, comfortable to maintain and satisfies the vision requirements of the beneficiaries. Universal spectacles (U-specs) (Figure 1) developed for people living at the base of the economic pyramid are based on the Alvarez lens principle (Figure 2) of sliding two lenses over each other to achieve the desired refractive power that can be adjusted with a simple tool. A user trial was conducted in three centres of India to demonstrate the functionality of U-specs as compared to conventional spectacles.

Methods
The user trial used a single masked randomized controlled trial with two comparison arms – U-specs vs. Conventional spectacles. Eligible subjects were drawn from schools, vision centres and community eye care programs.

Results
The Randomized Controlled Trial (RCT) on U Specs enrolled 195 subjects at the three centers- Shroff Charity Eye Hospital (SCEH, n=65), Dr Salins Eye Hospital (DSEH, n=59) and Sadguru Netra Chikistalya (SNC, n=71).

Visual improvement parameters were similar between U-specs and conventional glasses. 90 of 93 children who received the control spectacles and 92 of 98 children who received the trial spectacles reported that the spectacles had corrected the problem (Fishers exact test p=0.38)
The stability of refraction at the end of the trial period was also comparable to conventional glasses and there was good correlation between them. Color, design and to an extent robustness of the spectacles were the issues that emerged in the feedback and that warranted some more attention. 49.25% of those who received control spectacles reported quality of spectacles >=8 on a scale of 0 to 10 with 10 being the best compared to 29.33% of those who received the trial lenses; 34.67% of those who received the trial lenses reported quality of spectacles < 6 out of 10 compared to 8.95% of those who received the control lenses. This difference was statistically significant (Fishers exact test p=0.004).

Acknowledgement:
PRASHASA Health Consultants Private, Limited, Hyderabad (www.prashasa.co.in) in the design, conduct and analysis of the results of the user trials. Mahesh Krishnan, CL Head & Rakesh Sharma, NSBI Head - Phillips Electronic India Limited.

Figure 1 - U-specs

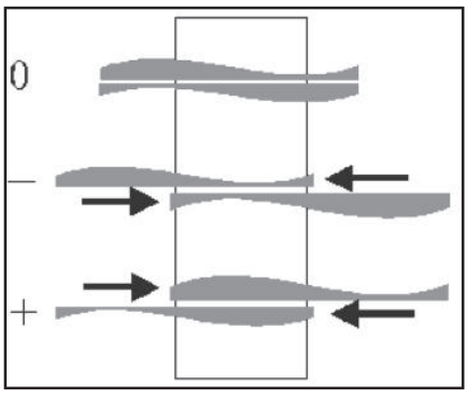

Figure 2 - Alvarez lens principle

VISION 2020 : The Right to Sight - INDIA

VISION 2020 INDIA provides an invaluable, historic opportunity to eye care organizations and allied stakeholders to become part of a movement and team focused on eliminating causes of avoidable blindness from India, as was done for eradication of smallpox.

We are doing this by focusing on key strategic areas of advocacy for eye health, policy and program development and quality in eye care.

Our group has worked with the Government of India in the formulation of the XIth Five Year Plan (2007-12) for Blindness Control which has led to a fourfold increase in resource allocation and a program which is more comprehensive.

To bring about a national wide, system level impact, our group is focusing on key areas of health management information system (HMIS), quality of service delivery and training of human resources.

The other key initiatives include:

(1) Recently, we have reviewed and revised the National Program for Control of Blindness (NPCB)

(2) Our Annual General Assembly focusing on Public Private Partnerships : This was led by ex-President of India, Dr. APJ Abdul Kalam. He has requested the NPCB team and VISION 2020 INDIA stakeholders to make all necessary effort to make Bihar a blindness free state in the presence of the State Health Minister, Shri Nand Kishore Yadav.

Technical capacities were enhanced by sessions on Resource Mobilization & Sustainability, Comprehensive Eye Care and Quality Assurance in eye care delivery

(3) Training of Hospital Based Ophthalmic Assistants
An initiative has been launched to address the growing need of standardization of the curriculum for training of Hospital based Ophthalmic Assistants (HB-OA). Workshops were held first in Madurai and Bangalore and will be followed by a meeting of the Academic Council in November, 2009.

(4) 24th National Eye Donation Fortnight
29 (39%) of the 75 member organizations of VISION 2020 INDIA have an Eye Bank and/or EDC. These member organizations conducted sensitization & awareness building activities amongst the general population as well as Health Care Professionals Of these 29 organizations, 20 (69%) are working towards getting Spiritual Leaders involved in the eye donation movement at their own level.

(5) World Sight Day 2009, New Delhi
Key events included an exhibition of posters developed by members of VISION 2020 INDIA, National Symposium on the theme: "Gender & eye health" on 7th October, 2009 with eminent resource persons from across the country. Keynote address was delivered by Dr. GN Rao.

VISION 2020 INDIA brand ambassador Smt Hema Malini also participated in the celebrations. A celebrity dinner was organized for the members of VISION 2020 INDIA and its guests on 7th October evening. Hema Malini mentioned, "Let's us therefore pledge our physical eyes after our lifetime, while we shall pledge our hearts loaded with love during our lifetime. My appreciation to those in the Secretariat who have pledged their eyes in this noble service!"

This was also an apt occasion to felicitate Dr. (Mrs.) Rachel Jose for her 20 years of commendable service and leadership to the blindness control program in India.

Information on Training Opportunities
VISION 2020 INDIA in collaboration with the premiere ophthalmic training centres in India and supported by a Designated Funding from the Corporate "Desai Brothers Ltd" of Pune has envisaged enhancing the capacities of its active member organizations. Such training would include courses on:

1. Eye Care Program Manager's Training
2. Hospitals Management Training
3. Instrument/Equipment Maintenance Training
4. OT Nurse's Training
5. Vision Technicians Training
6. Eye Bank Manager's Training
7. Eye Donation counselors Training
8. DR & Glaucoma Training for Ophthalmologists
9. Low Vision Training

Organizations interested in making India free of causes of avoidable blindness and joining our movement can become our members by writing to us for further information at rajeshnoah@vision2020india.org.

Sapling Plantation by : (1, 2 & 3) Addl. Secretary, Joint Secretary & Addl. DGHS, Ministry of Health & Family Welfare, Govt. of India
(4) VISION 2020 INDIA Brand Ambassador – Smt. Hema Malini (5) IAPB Past President – Dr. GN Rao