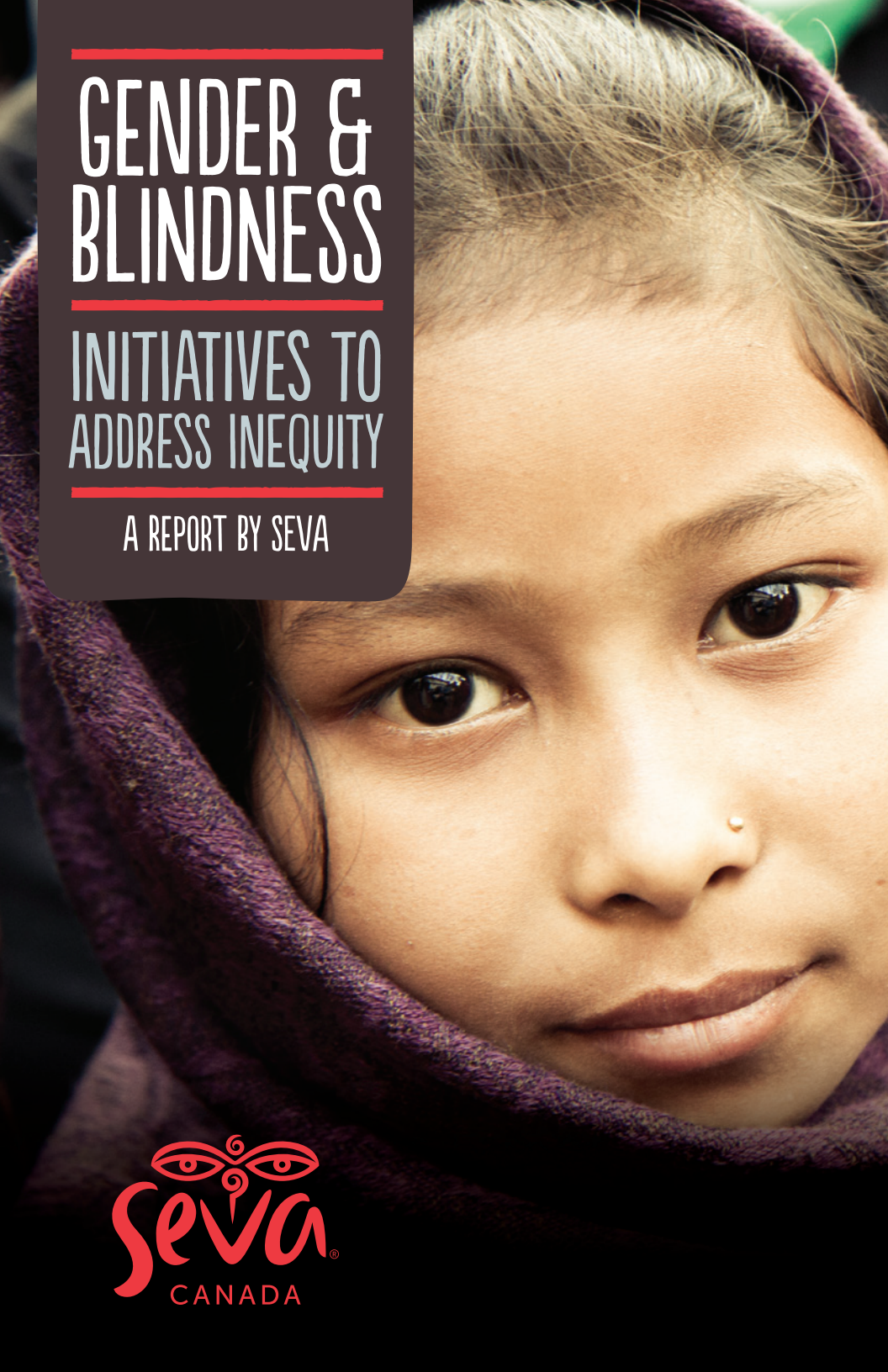

GENDER & BLINDNESS

INITIATIVES TO ADDRESS INEQUITY

A REPORT BY SEVA

Seva CANADA

INTRODUCTION

Seva believes that, to achieve VISION 2020 goals, eye care programs must develop explicit strategies to reach the most vulnerable populations, particularly women and girls. We encourage our program partners to disaggregate data by sex, to determine gender-specific barriers to uptake of services, and to study strategies to increase utilization by women and girls. More generally, Seva looks forward to collaborating with all partners and international eye care providers to eliminate all forms of inequities in eye care.

Seva Canada Society
#100—2000 West 12th Avenue
Vancouver, BC V6J 2G2
Tel: 604-713-6622
Toll-free: 1-877-460-6622
Fax: 604-733-4292
Email: admin@seva.ca
www.seva.ca
Registered charity
#13072 4941 RR0001

Seva Foundation
1786 Fifth Street
Berkeley, CA 94710 USA
Tel: 510-845-7382
Toll-free: 1-800-223-7382
Fax: 510-845-7410
Email: admin@seva.org
www.seva.org
Nonprofit 501(c)(3) organization
Federal ID #38-2231279

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GLOBALLY, TWO-THIRDS OF ALL BLIND PEOPLE ARE WOMEN, primarily because they are less likely to receive services, compared to men. In many settings, this disparity is even more pronounced between girls and boys.

Seva has taken explicit leadership in the gender and blindness global initiative. All Seva-supported projects work towards achieving gender equity by focusing on overcoming cultural and economic barriers to access by women and girls. The barriers that prevent women and girls from receiving surgery vary locally and can include:

- Cost of surgery
- Inability to travel to a surgical facility
- Differences in the perceived value of surgery
- Lack of access to information and resources
- Fear of a poor outcome

Awareness of the problem is not enough. Political will and social action are needed to address gender inequities in use of eye care services. We believe that in order to achieve the goals of VISION 2020, gender inequities in eye care must be a priority for all organizations.

HISTORY

In 2000, the British Columbia Centre for Epidemiologic & International Ophthalmology (BCEIO), located at the University of British Columbia, began studying the gender and blindness issue. Through a meta-analysis of population-based prevalence studies, researchers at the Centre found that approximately two out of every three blind people in the world were women, most were over the age of 50, and 90% lived in poverty.[1] Furthermore, the researchers found that the sex ratio held true for most population-based blindness prevalence surveys from Western industrialized countries and economically poorer countries. This sex ratio also held true, albeit for different reasons, for virtually all of the preventable and treatable conditions causing blindness, including cataracts, glaucoma, and trachoma. The sex ratio only approached one for age-adjusted rates of less treatable conditions such as macular degeneration.

In no instances did biological differences explain much of the increased prevalence of vision loss among women. Instead, women of all ages (including children) were more frequently exposed to causative factors such as infectious diseases and malnutrition, and they used eye care services less frequently than men. Based on these findings, in 2001, the BCEIO prepared a World Health Organization (WHO) Fact Sheet for the WHO Gender and Women's Health Unit.[2]

The first International Gender and Blindness meeting, which was held in Moshi in 2002, was co-hosted by the BCEIO and the Kilimanjaro Centre for Community Ophthalmology

(KCCO), and funded by the Canadian International Development Agency and the Canadian Institutes of Health Research. Many of the policy, program, and research recommendations from the meeting have been implemented. Considerable visibility has been created, research has led to a number of successful models, and many organizations have changed policies.

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Following on the theme of gender and blindness, in 2003, the Canadian Global Health Research Initiative[3],[4] provided pilot funding to initiate an international collaboration among epidemiologists, anthropologists and ophthalmologists in four countries:

- Community Ophthalmology Program, Lumbini Eye Hospital in Bhairahawa, Nepal
- Lions Aravind Institute for Community Ophthalmology in Madurai, India
- Kilimanjaro Centre for Community Ophthalmology in Moshi, Tanzania
- Al Noor Magrabi Foundation in Cairo, Egypt

Gender inequity has been reduced in these eye care programs through local public health initiatives as well as through community-based service development (e.g., improved water supply).

The collaborative approach augmented the ability of the individual countries to design and conduct applied anthropologic and epidemiologic research. This 'south-south' collaboration greatly exceeds the 'north-south' collaboration with Canadian partners.

The primary finding from this Gender and Blindness Initiative is that the utilization of eye care services is strongly associated with the socio-economic status of women and female literacy (as a surrogate for educational attainment).[5] Female literacy remains the strongest independent predictor of health service utilization by women themselves and by an overall population across all socio-economic levels.[6] Indeed, examples from southern India show that an indirect investment in female education improves all aspects of public health, through increased use of already available health services, without any additions to the health services themselves.[7]

The Global Health Research Initiative funds for gender and blindness were followed by sustained local program funding in each of the original[8] members of the network, as well as in new members.[9],[10],[11] The Gender

and Blindness Initiative became more comprehensive by explicitly including issues related to trachoma[12],[13] and children.[14],[15],[16] Interest continues from non-government organizations (NGOs) such as Seva[17] and within allied organizations such as the Boston-based Women's Eye Health Task Force.[18]

The Gender and Blindness Initiative attracted new funding to expand the network in Asia from southern India to northern India, as well as in central Nepal and the Tibetan regions of China. In Africa, the network was expanded from Tanzania to Uganda and Madagascar.

The following sections outline the Gender and Blindness Initiative, ongoing programs, and future expansion, respectively.

A follow-up meeting of the Canadian Institutes of Health Research, which was funded by the Institute of Gender and Health, was held in 2010 at the Kilimanjaro Centre for Community Ophthalmology in Moshi, Tanzania. This brought together researchers, planners, NGO staff, WHO staff, and eye program staff from Nepal, India, Tibet, Egypt, Kenya, Tanzania, Malawi, South Africa, Congo Republic, Guatemala, Madagascar, UK, USA, and Canada. The meeting reviewed overall progress with the initiative since 2002,[19],[20],[21] and individual researchers discussed their work and the implications of their findings. Small group sessions focused on how to use the lessons learned to develop health policy, revise programs, and undertake new research.

PROGRAM PARTNERS: TANZANIA AND EASTERN AFRICA

Kilimanjaro Centre for Community Ophthalmology www.kcco.net

The Kilimanjaro Centre for Community Ophthalmology (KCCO), established in 2001 under the Good Samaritan Foundation, has recently become an independent unit (KCCO Tanzania). A new related entity, KCCO International, is now based in Cape Town, South Africa. KCCO's mission is to "eliminate avoidable blindness through the integration of programmes, training, and research focusing on the delivery of sustainable and replicable community ophthalmology service".

KCCO helped establish the Kilimanjaro Regional VISION 2020 program to strengthen the effectiveness and efficiency of community-based programs. These activities were subsequently adopted in three other regions of Tanzania (Singida, Tanga, Mara) as well as in Uganda (Gulu, Lira), Ethiopia (North Shoa), Burundi (Western Region), Zambia (Luapula), and Madagascar (Sava, Vakinankaratra, Atsinanana), in total covering a

population of over 15 million. To address child eye health from a gender perspective, KCCO has assisted in the development of three child eye health programs (Moshi, Tanzania; Blantyre, Malawi; Kitwe, Zambia).

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With assistance from the Canadian International Development Agency, KCCO worked to overcome the particular challenges faced by women. KCCO provided better female and family counselling at the 'time of recognition', transported patients to hospital, and had local field assistants and Ministry of Health staff help identify people in need of care. As a result, in all settings, utilization of services has increased and gender issues have become central to eye care program development and staff training at all levels. This effort is best reflected in the community outreach programs where the male to female ratio is 1.3 to 1. In contrast, the population that approached the hospital directly for cataract surgery had a male to female ratio of 2.6 to 1. All of this work was based on a strong evidence base of epidemiologic and anthropologic research.

With support from funds from the Canadian International Development Agency and Seva Canada, the KCCO hired a Gender and Blindness Coordinator in early 2008. This person supervised gender and blindness research, and became an advocate for national and 'district' personnel to include gender strategies in their VISION 2020 plans.

In 2008, the Canadian Institutes of Health Research funded a two-year study by the BCEIO and KCCO that examined the impact of female eye care 'sentinels' on service utilization in randomly selected intervention and control villages. The intervention villages selected local female leaders who were trained in eye conditions and simple screening techniques. They were asked to visit households to examine people and to facilitate referral of those in need of care. The control villages continued to have standard KCCO diagnostic and treatment camps throughout the year. The study found that eye care 'sentinels' increased service utilization in all intervention villages, by men and women, but particularly among older women and younger girls.

More recently, with support from the Canadian International Development Agency, Seva Canada, and the Fred Hollows Foundation, KCCO has

been testing a strategy using existing microfinance groups to promote eye care use in rural communities. Microfinance groups have received training in promoting the use of eye care services, as well as services related to disability and diabetes. Experiences to date suggest that these groups can be effective in creating strong links between communities and eye care providers.

KCCO and BCEIO continue to work closely together on continuous quality improvement of gender equity in all eye programs in Tanzania and in KCCO partner countries. The most active areas are testing gender-specific strategies to increase utilization of cataract surgery by women.

KCCO is particularly active in the international initiative to reduce gender inequity in eye care, in keeping with the WHO and the International Agency for the Prevention of Blindness (IAPB) (www.iapb.org).

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KCCO has facilitated VISION 2020 national and district planning in Egypt, Uganda, Rwanda, Ethiopia, Tanzania, Eritrea, Madagascar, Zambia, Burundi, and Malawi—all including gender-specific programs and planning. Similarly, KCCO has been involved with trachoma-focused groups to conduct national Trachoma Action Plans in a number of African countries. Inclusion of gender issues has been facilitated by *Women and Trachoma* (published jointly by the Carter Centre and KCCO), a manual that assists program managers in ensuring that trachoma control efforts address the needs of women.

NEPAL

Lumbini Eye Institute
www.lei.org.np

The Lumbini Eye Institute (Shree Rana Ambika Shah Eye Hospital) in Siddharthanagar, Nepal, is the main Gender and Blindness Initiative partner in that country. This tertiary care hospital and training institute has acted as the focal point for several initiatives to improve community access to services both in the lowland and hill regions.

The Lumbini Hospital provides a comprehensive outreach program to the Nepali population in the Lumbini Zone, including general and school vision screening as well as diagnostic and treatment camps. The Lumbini

Eye Institute, along with its satellite clinics and outreach activities, serves more adult women (54–55%) as outpatients than men (45–46%). The ratio is reversed for male versus female children. Notably, the prevalence of blindness in the Lumbini Zone is lower for women than for men (5.0 versus 4.3), and 71% of women needing cataract surgery receive the treatment, compared to 62% of men. The results from the Lumbini Zone are much lower than, and paradoxical to, the rest of the country, where more men are treated than women.

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The Lumbini Eye Institute is linked with secondary eye care facilities staffed by ophthalmologists who provide full cataract surgical services. These facilities are located in Tansen (Palpa District), in a hill district north of Lumbini, and in Bharatpur (Chitwan District). The eye program located in Bharatpur Hospital has been the most active centre in testing and refining strategies to reduce gender bias against women in poor and remote regions. The program intensified community services and surgical referral throughout the zone.

A study in 2009 at the Bharatpur Eye Hospital, which was funded by Seva Canada and the Canadian International Development Agency, found that after training a wide variety of groups (traditional healers, psuedophakic motivators, school teachers, and others), the Female Community Health Volunteers were the most effective in improving gender equity.[22] Female Community Health Volunteers are involved in eye care in order to increase utilization of available services, increase equity for women and girls, and integrate eye care into health care at the community level. A recent innovation is a 50% discount on cataract surgery for patients who come as a result of referrals from Female Community Health Volunteers.

With funding from Seva Canada and the Canadian International Development Agency, the Bharatpur Eye Hospital is entering a new program phase that links eye care activities to local microfinance organizations. Along with Seva-sponsored programs in Tanzania and Zambia, the project will assess the extent to which partnering with microfinance organizations brings resources to, rather than increases expenditures by, community ophthalmology programs. That is, can a modest initial investment in established microfinance organizations,

in the form of business training and health education, result in broad community-based support for the utilization of available eye services, particularly by women and the poor? Ultimately, the project will lead to innovative public health approaches to reduce blindness from cataracts through infrastructure development, human resources training, and service delivery.

TIBET

A population-based survey found that the prevalence of cataract blindness in the Tibet Autonomous Region of China is one of the highest in the world.[23] Cataract surgical coverage (vision <6/60) for people age 50 and older (85–90% of cataract blind) was 56% overall, 70% for men, and 47% for women.[24] The most common barriers to the use of cataract surgical services were cost and distance to eye care services.

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In the Tibetan areas of China, the Seva Tibet program has assessed gender equity in the use of eye care services provided at various eye clinics. The program staff in Tibet are exploring the best methods for addressing the disparity noted, and outreach programs in the Tibetan Autonomous Region have been established. The objectives of the project are to plan, conduct, and evaluate Primary Eye Care Training Workshops for rural health workers. The participants of these workshops included doctors of traditional Tibetan medicine, county and village-level health workers, and a few nurses with Western medical training.

INDIA

Aravind Eye Care System
www.aravind.org

The Aravind Eye Care System is one of the principal partners and primary promoters of the Gender and Blindness Initiative, particularly in India. Aravind acts as the primary training and consulting resource for the affiliated eye care programs in the Indian subcontinent.

The Gender and Blindness Initiative has been incorporated into a new model of community care that is focused on Vision Centres. The overall objective is to offer primary eye care services to the targeted rural population. Each

Vision Centre is designed to provide the primary eye care needs for a population of about 50,000 people. Vision Centres are comprehensive because services are provided to all age groups at any time.

The Gender and Blindness Initiative supports the gathering and analysis of utilization data from all community ophthalmology programs. The main finding to date is that the uptake of services for cataract surgery, by both men and women, is much less than expected.

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The Lions Aravind Institute for Community Ophthalmology and the BCEIO studied gender-specific features of the cataract surgery population at Aravind Eye Hospital. Their findings were presented at the international meeting in 2010 at the Kilimanjaro Centre for Community Ophthalmology in Moshi, Tanzania, and a paper has been accepted for publication.[25]

The study sampled patients from three cataract surgical service streams: Walk-in Paying, Walk-in Subsidized, and Free Camp. Records were randomly selected from the list of admitted patients over the age of 40 with senile cataract. More women (3,742 or 53%) than men (3,334 or 47%) had cataract surgery. Compared with people age 40–50, significantly more men than women in the age groups 60–70 and 70+ presented with vision less than 6/60. Women were significantly more likely than men to come to the Walk-in Subsidized and Free Camp streams, compared to the Walk-in Paying stream. Women were more likely to fall in the severe blindness (<3/60) visual acuity category in the Walk-in Subsidized and in the Free Camp sections, compared to the Walk-in Paying section. The study concluded that gender inequity persists, and worsens for some subpopulations, despite an overall favourable sex ratio, in a region with improving cataract surgical coverage, and despite increasing willingness to pay for services.

EGYPT

Al Noor Magrabi Foundation
www.alnoor.org.eg

The Al Noor Magrabi Foundation provides the only active community outreach activities in Egypt. Their interventions are aimed at increasing the volume of cataract surgery through outreach 'caravans' and a charity hospital.

National policies have begun to recognize the unnecessary burden of blindness, particularly due to cataracts. This recognition has, to a large extent, been dictated by the population-based epidemiological studies conducted by Al Noor Magrabi Foundation in Menofyia (1999)[26] and Fayoum (2003)[27] Governorates with support from the BCEIO and the KCCO.

The three studies conducted by Al Noor documented the high prevalence of low vision and blindness, under-utilization of eye care services, and barriers to access to eye care. Women with visual problems account for around 67% of the total, adjusted for age, and irrespective of any biological attribute. Women were found to utilize eye care services 40% less than men due to gender-specific and socio-economic barriers. Al Noor found that the prevalence of low vision in adults exceeded 20%, which is the critical threshold set by the WHO, while the prevalence of blindness is 10% in rural areas.

PHOTO CREDIT: SEVA CANADA

Funded by the Canadian Institutes of Health Research, the Al Noor Foundation and the BCEIO conducted an 18-month prospective observational study of educational interventions to detect and treat people with visual impairment or blindness in Menia District, Upper Egypt (population 100,000). The project educated women in leadership roles in the home and in the community.[28]

The health education interventions were in two villages, while two other villages acted as controls. The educational interventions involved door-to-door visits by local female health visitors who provided information about treatment and prevention of avoidable blindness. Household inhabitants were screened and eligible cases were helped to attend eye services. A total of 2,354 households were visited.

The intervention also included building capacity at the local hospital, where the number of outpatients increased by 155% and the number of cataract and trichiasis surgeries increased by 301% (67% women). Major female-specific barriers to use of services were lack of awareness of services, fear of surgery and surgical outcome, and cost. Compared with control villages, these barriers decreased significantly in intervention by 17.6%, 26.5%, 33.3%, and 41.5%, respectively. The study findings show a significant increase in use of all

eye care services by men and women. The project also demonstrated the need for additional eye care personnel and equipment in the area.

FUTURE EXPANSION

Gender and Blindness Initiative partners will continue to advocate through emails, website development, and resource materials, locally and with the IAPB. As programs develop, the Network partners will provide them electronically for eye care professionals and program planners.

There are also plans to link gender and eye care activities to broader initiatives on health, education, equity, social determinants, and poverty reduction. This includes updating the IAPB Blindness, Poverty and Development document, as well as interacting with the Evidence Informed Policy Network (at WHO) to develop policy briefs.

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Seva Canada and the Canadian International Development Agency are funding a new project to examine alternate social and financial sustainability models in Nepal and Africa (Tanzania, Ethiopia, and Zambia). The project will assess the extent to which partnering with microfinance organizations will bring resources to, rather than increase expenditures by, community ophthalmology programs.

Further grant applications are being prepared and submitted for projects to better understand service utilization by boys and girls. There has been a large increase in the number of children receiving surgery, but gender inequity still persists.

SUMMARY

The Gender and Blindness Initiative Network continues to work towards having gender equity as a mainstream eye care goal worldwide, and to provide gender-specific program tools to achieve that goal. While gender equity is not yet close to being achieved, the positive steps in that direction have made eye care programs a model of success for achieving broader health care equity for women.

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