

An Outreach Eye Care Programme, Zambia

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Introduction

Based in Lusaka, Zambia, the clinic mainly visits areas around the capital. But the outreach programme ventures further into rural areas.

The mobile clinic is publicised in advance and people from the surrounding area congregate to be screened. Suitable patients (usually mature cataracts) are then transported to the eye camp. These are local hospitals, where a visiting ophthalmologist and a team will stay for a few days. The operations are then performed and the patients transported home free of charge.

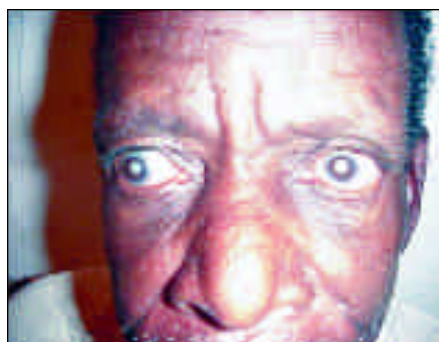
Zambia has unique geographical problems. It has one of the lowest population densities worldwide. Thus it is hard to justify building extensive ophthalmic services across the country.

The mobility of the outreach programme aims to solve these problems. Free transport is provided, thus minimising costs to US \$5 per patient. If they cannot afford this, the cost can be reduced to US \$3.50 and even US \$1.70!

Following the team through 4 villages, 126 patients were interviewed and examined.

The following were investigated:

- Demographics of presenting patients
- Ophthalmic conditions encountered
- Patients' visual acuities
- Barriers that prevented patients from seeking eye services earlier.



Hypermature cataracts

Photo: Boateng Wiafe

Results

Eye Conditions Seen in Four Villages: 126 Patients

	Men (%)	Women	(%) Children (%)
Refractive Error	39	35	10
Cataract	29	21	0
Conjunctivitis	8	7	29
Trachoma	4	19	14
Glaucoma	2	2	5
Xerophthalmia	2	0	14
Corneal Ulcer/Scar	2	5	5
Others	14	12	24

Discussion

A substantial proportion of patients, 12%, were blind. Sixty-one percent of these were due to cataracts, which correlate well with figures in the literature.¹ A small proportion, 8% of blind patients, was due to corneal diseases other than trachoma. This includes injury, xerophthalmia, use of traditional eye preparations, keratitis due to untreated infections, and many others.

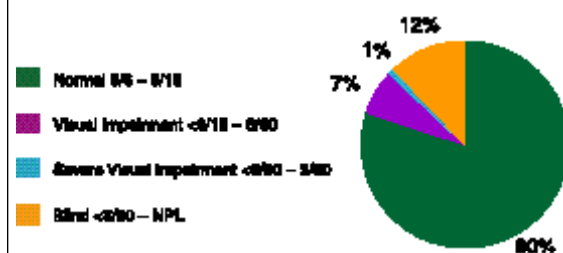
Men and women presented in almost equal numbers, 43% and 38% respectively. One major difference between the sexes was that women were more affected by trachoma than men, 19% compared to 4%. This corresponds with the well-known observation that *Chlamydia trachomatis* is spread mostly between mothers and their children due to poor hygiene.¹

Children mostly suffered from conjunctivitis (29%). This could be reduced with increased awareness about face washing. Xerophthalmia was less of a problem than expected. Only 14% of children were affected compared to a previous 1994 UNICEF estimate of 25-50%.² This suggests that the recent government campaign of vitamin A supplementation for children under-5 is working effectively.

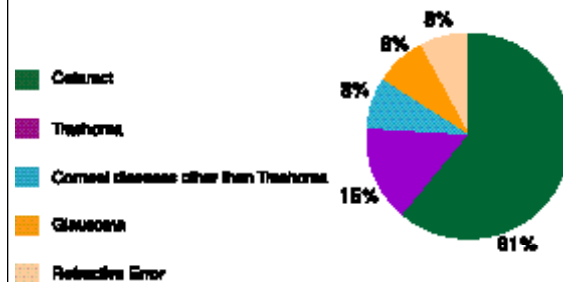
Refractive errors were the commonest presenting complaint for adults (39% of men and 35% of women). As most spectacles in Zambia are second-hand, donations should be encouraged.

Distance and money were the main barriers that prevented the blind from seeking

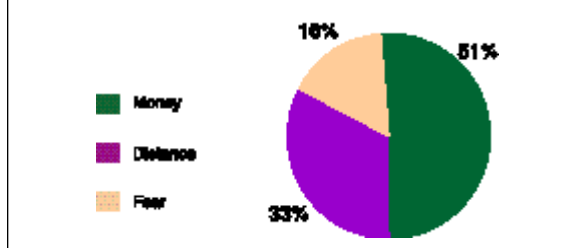
Visual Acuities of Patients Seen



Conditions Seen in Blind Patients (<math><3/60</math>)



Why the Blind (<math><3/60</math>) did not seek Ophthalmic Services earlier



specialist help earlier (33% and 51%). This corresponds well with known statistics for the developing world in the literature: 48% for money and 44.8% due to logistics in Nepalese patients.³ As the outreach programme is mobile, this tackles the distance issue while free transport and discounted costs should overcome the financial barrier.

Fear was the third barrier at 16%. The study in Nepal also found fear to be next after money and distance at 33%.³ This apprehension could be due to lack of awareness, culture, beliefs or uncertainty

over surgical outcome. Improved education and publicity showing cataract patients with restored vision, should hopefully overcome this.

Recommendations

Mobile eye programmes should be integrated into existing primary health care programmes at district hospitals.

Community health workers, traditional healers and schoolteachers should be given basic training in recognising eye conditions.

Community awareness about the prevention of blindness should be raised. For example, it could be included on the teaching syllabus of primary and secondary schools.

References

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- 5 Fletcher AE et al. Low uptake of eye services in rural India: a challenge for programs of blindness prevention. *Arch Ophthalmol* 1999; **117**(10): 1393–1399.
- 6 Johnson JG et al. Barriers to the uptake of cataract surgery. *Tropical Doctor* 1998; **28**(4): 218–220.
- 7 Courtright P et al. Barriers to acceptance of cataract surgery among patients presenting to district hospitals in rural Malawi. *Tropical and Geographical Medicine* 1995; **47**(1): 15–18.

VISION 2020 PLANNING COURSE

A one-week course for eye care project managers about the VISION 2020 programme will be held at the London School of Hygiene and Tropical Medicine, **July 15-19, 2002**. Faculty include Allen Foster and Clare Gilbert. Fees are £500, accommodation and travel not included.

Details from:

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THE GLAUCOMAS

Dear Editor

The several articles on adult glaucoma that appear in the *Journal of Community Eye Health* 2001; **14**:33-52 are especially well done and much appreciated. Recent epidemiological studies combined with advances in instrumentation will undoubtedly combine to make it possible to detect more individuals in developing countries who have glaucoma. Mention is made of referral to tertiary care centres for definitive diagnosis and appropriate treatment. This affords me the opportunity to call attention to a major barrier to appropriate glaucoma care in many developing countries – the relatively low level of glaucoma knowledge in teaching institutions and tertiary care centres.

During the past 8 years I have conducted 2-week glaucoma workshops at 26 training centres in 23 developing countries scattered throughout most areas of the world. Based on this experience I am comfortable in making the generalisation that most ophthalmologists in the so-called tertiary care centres in the majority of developing coun-

tries do not have the clinical skills necessary to accurately differentiate the various causes of glaucoma. The diagnosis of glaucoma continues to be made on the basis of elevated IOP. PACG is diagnosed on the basis of the signs and symptoms of the acute variety. A serious problem is the lack of gonioscopy skills resulting in the rare performance of this most important examination component. The result is frequent misdiagnosis and inappropriate treatment. Visual fields are either not done or are usually unreliable. Secondary glaucoma is not recognised as such and often treated inappropriately.

The ophthalmologists that I have encountered are bright, usually hard working and highly motivated to learn. They suffer from poor basic training even though the duration of the residency training is often longer than in the developed countries. Glaucoma is a very complex and challenging condition. At the beginning of the workshop there is invariably a low level of confidence especially in diagnostic skills. It is satisfying to see what only 2 weeks of concentrated teaching can accomplish. The participants return to their respective teaching institutions with a fresh

outlook and confident enthusiasm in seeing glaucoma patients and an eagerness to teach others.

In summary, it is exciting that new and better screening techniques are becoming available but this begs the question of who will do the final diagnosis and treatment in the tertiary referral centres. A subcommittee of the American Academy of Ophthalmology is compiling a list of training centres in developing countries; the number is now over 200 and still growing. I hope that the preceding comments will stimulate more teaching effort in updating the clinical skills of those who are receiving glaucoma referrals from the primary and secondary allied health personnel in the field. Books, journals and occasional lectures by visiting experts are helpful but not enough. What is especially needed is intensive, basic and practical 'hands-on' clinical training, including gonioscopy, by volunteers from the developed countries or by well-trained ophthalmologists from the developing countries.

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Dear Editor

I have followed with interest the very favourable responses to John Sanford-Smith's earlier appeal for a reappraisal in selected circumstances of ICCE with the newer 'open loop' ACIOL's.

We have used hundreds of ACIOL's in Guatemala over the past ten years - both the classic 4point Kelmann and more recently the 'Omnifit' 12.8mm 3point Kelmann (Aurolab A5528). This is in large part due to the very high incidence of pseudoexfoliation among the Mayan popu-

lation. We have noticed no more post-operative problems than with PCIOL's.

As our patients are poor and often from isolated mountainous areas, I have the feeling we may not be seeing the long range effects of posterior capsule opacification. Our clinic has a YAG laser but few understand its purpose or are able to return to take advantage of it. In the occasional case of operating on one eye with ICCE/ACIOL and the other with ECCE/PCIOL, I have been surprised to see how quickly the patient reports subjectively clearer vision

following the former procedure – even though tested visual acuity may at the time be the same.

We routinely use the above ACIOLS after vitreous loss with often just a scissors vitrectomy. Again, we see few complications. Not to use an intraocular lens in the case of vitreous loss is virtually to ensure a 100% complication rate.

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