

EDITORIAL

VISION 2020 at the district level



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Background to VISION 2020 at the district level

There is an African saying. The question is: "How do you eat an elephant?". The answer is: "One mouthful at a time, slowly, with a lot of help from your friends". There is much that we can learn from this wisdom and apply to VISION 2020. The question is: "How do you overcome the seemingly insurmountable problem of global blindness?" The answer is: "Piece by piece, in digestible portions, step by step, and working together as a team".

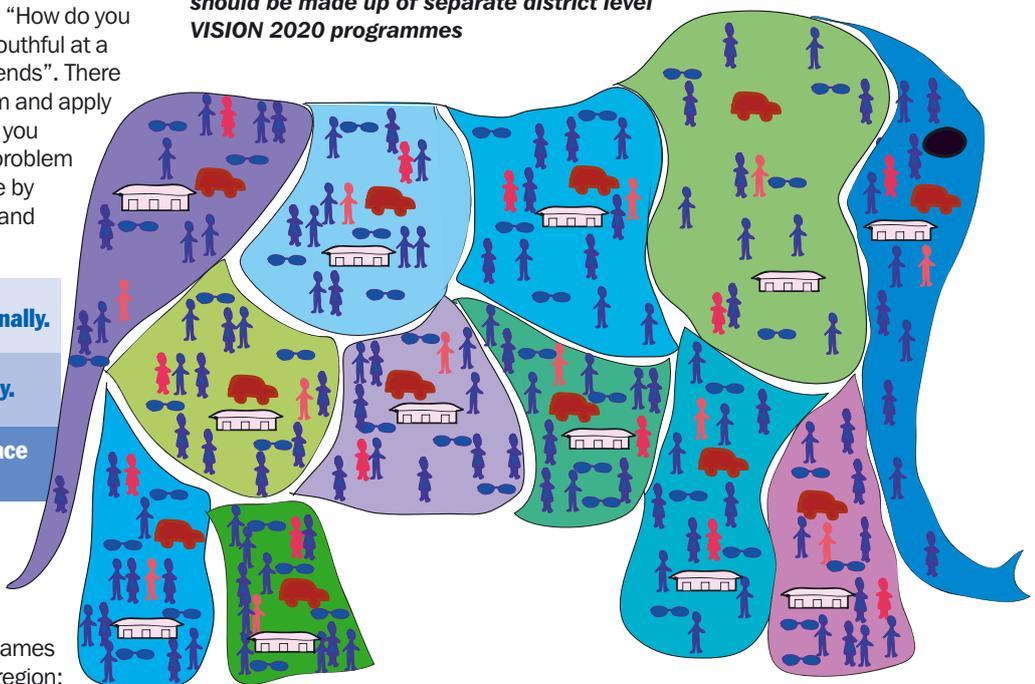
Fig 1. The national VISION 2020 programme should be made up of separate district level VISION 2020 programmes

Advocacy takes place globally and regionally.

Strategic planning takes place nationally.

But the actual implementation takes place at district level.

It is recommended that each of our district level VISION 2020 programmes should be for service units of about 1 million population (0.5-2 million). This administrative unit of about 1 million may be called by different names in different countries: sub-district; district; region; province etc. Whatever it is called, this service unit is what we mean when we speak of a District VISION 2020 programme. These are the 'pieces of the elephant'. If we have a country of 40 million population, we should not plan just a single national VISION 2020 programme, but 40 separate district level VISION 2020 programmes that together make up the national programme (Figure 1).



KEY Secondary level services

- Ophthalmologists/ cataract surgeons
- Optometrists
- Managing services
- Ophthalmic nurses/ assistants
- Eye surgical unit within district hospital

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Moses Chirambo



A team prepares a VISION 2020 plan. MALAWI

What is involved in VISION 2020 at the district level?

District level VISION 2020 programmes are developed as one year operational plans, prepared as integral components of the district general health operational plan, and guided by the five-year national strategic VISION 2020 plans. Each district VISION 2020 programme should, as far as possible, be horizontal, integrated into the existing district health service structure, and conforming to the principles of primary health care. These principles are equity, community involvement, focus on prevention, appropriate technology and a multi-sectoral approach. District programmes provide a continuum of comprehensive eye care, which includes eye health promotion, prevention of eye disease, curative intervention, and rehabilitation. In the past, these four elements have been working separately and without focus. With the launch of VISION 2020, the four elements have been focused and coordinated. Comprehensive eye care should be available, accessible, affordable and accountable.

Each district programme comprises a community eye care component and a surgical centre that is based in a district hospital (Figure 2). Planning and management templates for district VISION 2020 programmes are available (see list of useful resources on page 99/100). The challenge is to use these templates and adapt them for each district. All district VISION 2020 programmes will have the same elements, but no two programmes will be the same because no two districts are the same.

Fig 2. VISION 2020 implementation

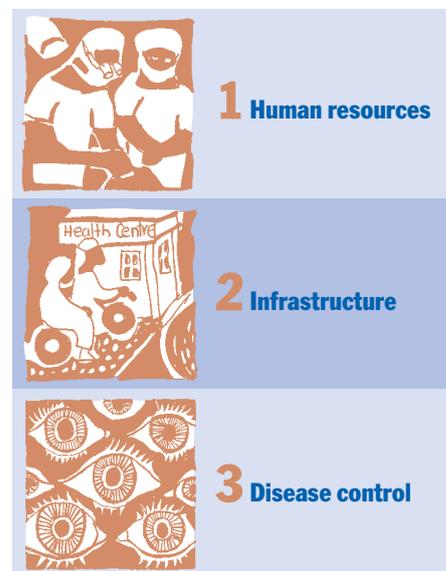


For the first phase of VISION 2020, the diseases that are prioritized are cataract and refractive error (everywhere); trachoma, vitamin A deficiency and onchocerciasis (in districts where they occur and are a public health problem). Once these diseases are being controlled, glaucoma and diabetic retinopathy are usually next in importance.

The recommended human resources for VISION 2020 at the district level specify the human resources required at community/primary clinical level and the secondary clinical level which includes management (figure 4). These can be modified locally, according to norms and resources.

The recommended instruments and consumables needed for VISION 2020 at the district level list requirements for the community/primary and secondary level services (figure 4). Again, these can be modified locally.

Fig 3. The three components of a VISION 2020 programme



The recommended service delivery model for district level VISION 2020 programmes suggests activities for cataract, refractive error, low vision, trachoma, vitamin A deficiency and onchocerciasis (Figure 5).

Partnerships for VISION 2020

We should 'eat the elephant' with our friends, and VISION 2020 is about partnership.

Our ministries of health signed up for VISION 2020 at the fifty-sixth World Health Assembly in 2003. They should be the primary owners of district level VISION 2020 programmes, with support from international and local non-governmental development organisation (NGDO) partners. Ideally, funding support should be provided between the partners. It is often easier for ministries of health to provide this support in the form of staff salaries or by providing the overhead running costs of the surgical centre, whilst the NGDO partners may cover the costs of supplies and consumables.

Editorial continues right and on page 88 ►

Fig 4. Model VISION 2020 Programme (per million population)

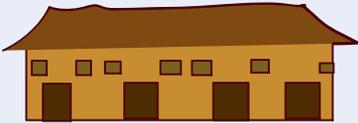
Level of service delivery	Human Resource requirements	Instruments and consumables
District Secondary level services 	1 Manager 4 Ophthalmologists/cataract surgeons 10 Eye nurses/medical assistants 4 Optometrists/refractionists	Computer, information and accounting system Access to a vehicle Visual acuity chart Torch Ophthalmoscope Tonometer Retinoscope & trial lens set Slit lamp Operating microscope Microsurgical instruments Medicines Spectacles
Primary/ Community level 	20 - 100 Clinic nurses Traditional healers Community health workers	Visual acuity chart Torch Medicines Reading spectacles

Fig 5. Model VISION 2020 Programme – summary of service delivery



Joseph Oye

Cataract

Cataract 2,000 – 4,000 operations per year



WHO/APOC/TDR/Crump

Onchocerciasis

Ivermectin distribution where appropriate



USAID/Nepal

Vitamin A deficiency

Supplementation programme where appropriate



Claire Gilbert

Refractive error

50,000 school children screened per year
 5,000 spectacles dispensed per year



Anthony Solomon

Trachoma

SAFE programme where appropriate



Jock Anderson

Low vision

200 low vision treatments per year



John Buchan



ICEH

Other eye services

e.g. diagnosis and treatment of glaucoma, corneal ulcer etc.

Chart: ICEH

Challenges and lessons learnt from experience: **The Asian context**

Babar Qureshi

District Comprehensive Eye Care Programme, Bannu. PAKISTAN

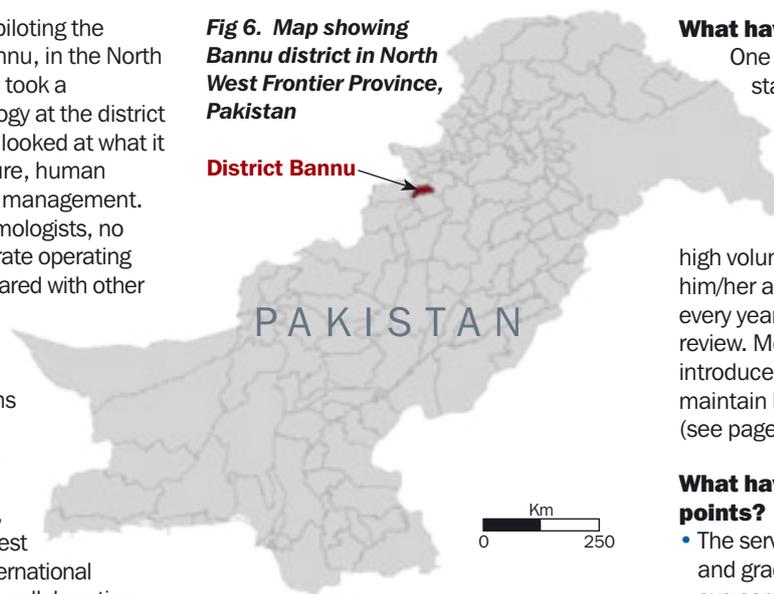


In Pakistan, we started by piloting the concept in one district, Bannu, in the North West Frontier province. We took a department of ophthalmology at the district headquarters hospital and looked at what it had in terms of infrastructure, human resources, equipment and management.

There were two ophthalmologists, no paramedical staff, no separate operating theatre (the theatre was shared with other specialties), no separate eye ward, and minimal equipment. The output was 150 cataract operations per year.

A collaboration between the Pakistan Institute of Community Ophthalmology, the Government of North West Frontier Province and an international NGDO was established. The collaboration strengthened the district by providing equipment for the eye unit, as per the standard list approved by the National Committee for Prevention of Blindness. The government posted two new ophthalmologists trained in ECCE and IOL implantation, and five paramedics were trained, with one of the paramedics trained in management. The infrastructure was upgraded with a separate eye theatre, a separate eye ward and an outpatient complex. Primary eye care workers were trained in detection and treatment of minor disorders and referral of major ones. The eye unit was evaluated

Fig 6. Map showing Bannu district in North West Frontier Province, Pakistan



after two years, and the cataract output had increased sevenfold to 1,050 operations.

Once the cataract services were established, other services were added. The programme now includes successful refractive and low vision services, and a trachoma control programme. Eye care services for children will soon be added.

It was agreed by the National Committee that this model should be replicated in other districts in the country, with the support of INGDOs. Thus far, 53 district programmes have been established out of a total of 119 districts in Pakistan.

What have been the challenges?

One of the challenges was to build a stable and committed team. It was important to engage the government so that frequent transfers of staff would not take place. Motivation of the ophthalmologist to maintain high volume surgery is addressed by giving him/her a forum to display surgical results every year and establishing a system of peer review. Monitoring of outcomes needs to be introduced so that the ophthalmologists can maintain high standards of visual outcome (see page 100 for useful monitoring tools).

What have been the key learning points?

- The service started as a cataract service and gradually grew into a comprehensive eye care service.
- A primary eye care network is vital so that the unit is supported by a good referral system.
- Outputs, outcomes and costs should be monitored.
- Necessary measures should be adopted to ensure sustainability.

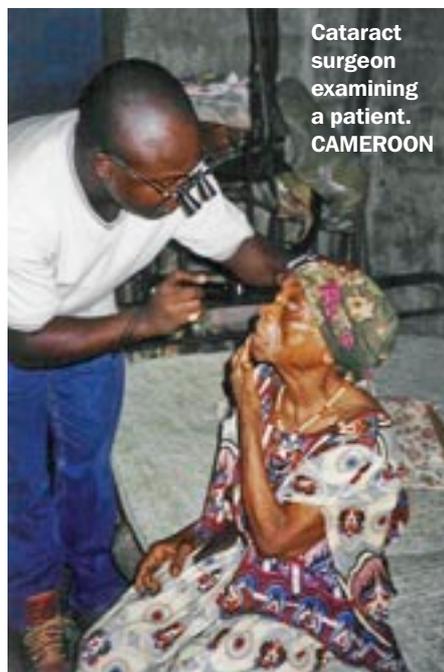
‘One of the challenges was to build a stable and committed team’

Challenges and lessons learnt from experience: **The African context**

The main challenge to the successful implementation of district VISION 2020 programmes in Africa has been the lack of human resources, both clinical and managerial (Figure 6). In Africa, there is one cataract surgeon for every 1 million population. We need to double the number of cataract surgeons. Each of our cataract surgeons is presently doing less than 500 cataract surgeries per year, and this number also needs to double. This can only be achieved with effective management at the district level. There are very few district VISION 2020 programmes in Africa that have effective management. This has been the lesson we have learnt. We need to train more cataract surgeons. As importantly, we need to train effective managers. Human resource development is our priority. There are a number of success stories to illustrate the outcome of efficiently managed district programmes. The case study in the panel opposite provides an example of an effective district VISION 2020 programme in Tanzania.

Fig 6. District VISION 2020 in Africa

Where we are now	Where do we want to be
No manager	One manager managing effectively
One cataract surgeon Doing < 500 cataract surgeries per year	At least two cataract surgeons Each doing > 1000 cataract surgeries per year > 2000 cataract surgeries total per year
SR < 500	SR > 2000

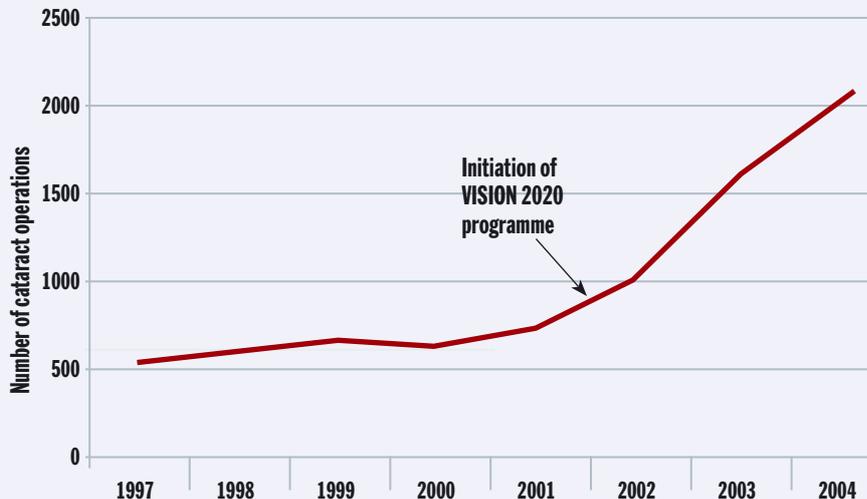


Joseph Oye

An effective district VISION 2020 programme: Kilimanjaro region, Tanzania

Paul Courtright, Susan Lewallen and Anthony Hall

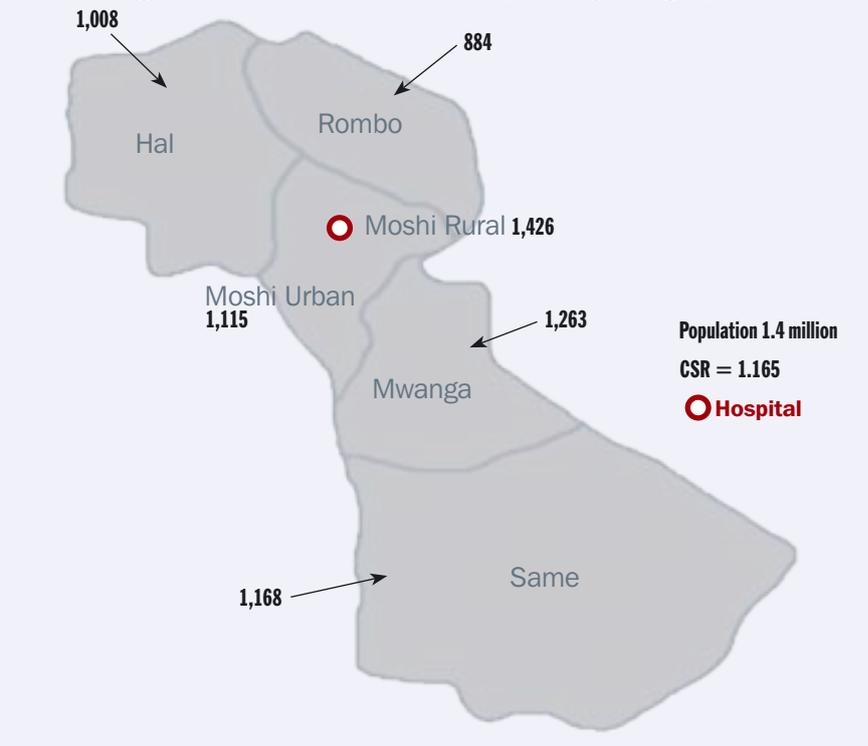
Initiation of VISION 2020 programme, Kilimanjaro region, Tanzania



What changes were made

Hospital	Community
Operating room efficiency was improved	Development of the Direct Referral Site system to get services to patients and cataract patients identified and brought to hospital
Better management of clinical personnel – having the right number and mix	Creation of team approach to service delivery
Hiring of manager	Dedicated programme manager and counsellor
Hiring of clerks for registration and record keeping	Defined roles of all partners

Cataract Surgical Rate (CSR) by district for 2004, Kilimanjaro region, Tanzania





Budgeting for a district VISION 2020 programme



Paul Courtright
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Core concepts of a strong VISION 2020 programme

Many eye care professionals view the prospect of budgeting with about as much pleasure as a visit to the dentist! Nevertheless, if VISION 2020 is going to succeed, programme managers will have to acquire some basic skills in budgeting. First, it is useful to identify some of the core concepts of a strong, practical VISION 2020 programme to be considered when preparing a budget.

The team approach to planning and service delivery

An individual or a group of individuals cannot implement a VISION 2020 programme. It takes a district VISION 2020 team, each member with different skills and roles, to implement it. The team should include management skills and use existing skilled personnel as much as possible, providing training for relevant staff in skills that may be missing from the team.

Population based approach to planning and service delivery

A VISION 2020 programme is not a hospital programme but a population coverage programme. This demands that service provision be planned for the population, rather than for the people who come to the hospital. Targets for service delivery (e.g. number of cataract operations or spectacles needed) must be clearly defined before budgeting.

Service needs vary; for example, while primary school screening for refractive errors is appropriate in much of Asia, current evidence suggests that screening in secondary schools in Africa would be more productive.

Efficiency reduces per unit cost

Achieving VISION 2020 goals will cost money; it will cost considerably more per unit of delivery if a surgical team is doing 300 cataract operations per year, than if a surgical team is doing 1,000 cataract operations per year, because staff costs are a major contributor to overall cost per cataract done. Efficiency in one district means that funds will be available to other districts.

Adopting 'bridging strategies'

In most developing countries the mere presence of human resources, equipment, and buildings does not translate into high surgical numbers and reduced blindness. A VISION 2020 programme will most likely need to adopt a strategy for bridging the gap between communities and the hospital. There are different strategies, and the budget will vary depending on which is selected. There is insufficient evidence now to determine which strategies are most cost-effective, and it is likely that this will vary in different settings.

Budgeting

Prior to preparing a budget, targets for service delivery will have been set, and activities necessary to achieve these targets

will have been agreed upon. These targets and activities should drive budgeting. An example is shown in Table 1. It is helpful to consider three different types of costs in a programme.

Infrastructure-related costs

We have assumed, in our sample budget (table 2), that there is already space dedicated for eye care at the district hospital as well as some equipment. If not, renovation or construction costs must be added. There are one-time only expenses for building and for equipment. Lists of essential equipment are available in the *VISION 2020 Standard List of Medicines, Equipment, Instruments, Optical Supplies and Educational Resources for Primary and Secondary Level Eye Care Services* (see list of useful resources on page 100). Do not forget non-clinical related equipment such as a vehicle and a computer.

Fixed costs

Whether a surgeon does 300 operations or 1,000, his or her salary must be paid; salaries are fixed costs. Similarly, every month, regardless of the number of operations, water, electricity, and building rent or maintenance must be paid. These fixed costs should be included in the budget, no matter who pays them. Many district VISION 2020 plans will engage Ministry of Health personnel whose salaries are paid by the government; this sometimes under-appreciated contribution needs to be listed in a budget.

Variable costs

The cost of 1,000 intra ocular lenses (IOLs) is obviously more than 100 IOLs. Sutures, medicines, and other consumables are referred to as variable costs because the total cost for these varies, depending on the number required. In some settings these are donated; nevertheless, they should be listed in a budget, as they are real costs necessary for programme success.

Creating line items

There is no one 'right way' to create a programme budget. The 'nitty-gritty' or details of preparing a budget come down to creating general categories with specific 'line items' in each category. Some donors want budgets to be written in their own special formats, using specific categories. For example, under the category of 'transportation' there could be line items such as petrol, vehicle maintenance and insurance, bicycle spares, bus fares (e.g., for team meetings or trainings or for bringing patients to the hospital for surgery). The category of 'salaries' will include each of the salaries of all the team members as individual line items.

Paul Courtright



A group working on a VISION 2020 plan and budget for the Menia plan. EGYPT

Table 1. Targets and activities that determine the budget

Targets	Activities
1,600 cataract operations	Bridging strategy to identify and bring patients to hospital (two visits per week by team to referral sites in district). Train community health workers to create a register of blind and visually impaired people and assist them to reach the nearest referral site for assessment and, if appropriate, transport to hospital. Surgical services provided five days per week at hospital.
2,000 presbyopic corrections	Bridging strategy to identify and sell spectacles to those needing them. Hospital to sell spectacles.
300 secondary school children to receive refractive correction	Train teachers in 20 secondary schools to screen 5,000 secondary school students. Visit 20 schools and examine those identified by teachers. Have well-functioning optical service to provide spectacles to children (assuming 6% need correction).
20 children with congenital/developmental cataract to be identified and receive surgery (and follow up) at a tertiary centre	Conduct radio campaign to inform parents about congenital/developmental cataract and where to take their children. Follow up with identified children and assist, if necessary, to reach the tertiary centre. Have district optometrist/low vision technician visit any child who does not return for follow-up for low vision support.

'Medical supplies' can be another category, with IOLs, specific eye drops, and sutures listed as line items.

Once all the real costs of carrying out a programme are listed, you may find that some of these costs are already covered; for example, government or other existing programmes may already cover some salaries. This is good as it demonstrates that you are using currently available resources and you can request less additional support.

Team input

Just as planning and service delivery is a team effort, the VISION 2020 programme will benefit from team input in developing a budget. One person must be responsible for developing the budget, but he or she will need to consult with others on specific issues. The 'manager' must monitor on a regular basis how the actual expenditure compares to the budgeted costs. Feeding this information back to the team at meetings will help the whole team understand how the programme is running. Team members who appreciate all the costs of the programme will be more likely to assist in identifying ways to reduce these costs.

Computer programmes for budgeting

Although it isn't essential, Microsoft Excel is an excellent computer programme for creating a budget and monitoring expenses. There are many ways in which Excel can be used to help with calculations and sub-totals. Learning on the job, from books and experimentation, or from someone else who knows how to use the programme, is often the quickest and most efficient way to get started.

Conclusion

Finally, remember that a well run VISION 2020 programme with a clearly thought out and practical budget will attract organisations interested in supporting these activities. An example of an outline budget for a district VISION 2020 plan (targets shown in table 1) is given in table 2.

Table 2. Sample budget

Line items	No.	Amount/ item	Total cost
Salaries			
Ophthalmologist*	1	1000	1000
Cataract surgeon**	1	400	400
Optometrist**	1	300	300
Refractionist**	2	150	300
Ophthalmic nurses**	8	200	1600
Ophthalmic assistants**	10	150	1500
Registrar*	1	150	150
Accountant*	1	300	300
Programme manager*	1	500	500
Driver**	2	150	300
Community health workers **	500	0	0
<i>Sub-total</i>			6350
Transportation			
Petrol	1500	1.1	1650
Maintenance & spares	6	150	900
Insurance	1	300	300
Bicycle spares	6	25	150
Bus fares (for training)	400	2.5	1000
Bus fares (for patients)	500	2.5	1250
Bus fares (for school screening)	20	2.5	50
Bus fares (for children to tertiary centre)	20	20	400
Bus fares (for follow up)	20	2.5	50
<i>Sub-total</i>			5750
Consumables			
(each listed separately)			
Office supplies			
(each listed separately)			
Allowances			
For field teams to referral sites	800	3	2400
For training of village health workers	400	3	1200
For training of schoolteachers & screening	80	3	240
For follow up of childhood cataract cases	40	3	120
<i>Sub-total</i>			3960
Others			
Radio time	24	6	144
Internet access	12	30	360
Phone	12	100	1200
Electricity	12	150	1800
Linen service	12	50	600
Water	12	50	600
<i>Sub-total</i>			4704
Anticipated receipts			
From surgical fees	-900	15	-13500
From spectacles	-1000	5	-5000
From medicines	-2000	1.5	-3000
<i>Sub-total</i>			-21500

* Salary paid by NGDO partner

** Salary paid by Government

South West Province Eye Care Programme, Cameroon



Joseph Enyegue Oye
Ophthalmologist, Coordinator
of the South West Eye Care
Project, Cameroon.

Situation analysis

The South West Province of Cameroon is one of two English speaking provinces, much of which is situated in the equatorial rainforest. Most of the estimated 1.2 million inhabitants live in rural areas. The main occupation is agriculture for subsistence and employment in agro-industrial estates.

Figure 1. The Provinces of Cameroon



Human resources for eye care

Before the South West Provincial Eye Care Programme (SWPECP) started in July 2001, there was no resident ophthalmologist or specialist eye care worker in government hospitals. The eye unit in the provincial hospital in Limbe, which had obsolete equipment, was visited weekly by a part-time optometrist and subsequently a part-time ophthalmologist. Surgical eye care services were delivered by itinerant eye care teams based in Mission Hospitals (Mbingo Baptist Hospital and Acha Tugi Presbyterian Hospital) in the neighbouring North Province. The teams referred all the surgical cases to their base hospitals over 300 km away (about seven hours drive). No national or provincial survey on blindness had been conducted. There was no national prevention of blindness plan or coordinator.

Planning stage

In November 2000 a meeting was organised to draw up a VISION 2020 compliant provincial eye care plan. Stakeholders from

the Ministry of Public Health (MoPH) national and provincial level, SSI, churches, professionals and the community were represented.

WHO projections, demographic and MoPH primary health care (PHC) data were used for needs assessment and planning. A mapping exercise was conducted to ensure comprehensive geographical coverage of the entire province. During the mapping exercise, it became known that the Baptist Church had advanced plans to establish an eye unit in Mutengene, about 10km (15 minutes drive) away from the Limbe eye unit.

A five-year VISION 2020 plan (2001–2006) was developed and is being implemented by the Government with SSI support, based on a Memorandum of Understanding between the two parties.

What is in the plan?

Disease control

Cataract, refractive errors and childhood blindness are the main priorities for disease control, alongside onchocerciasis, which is addressed through the Community Directed Treatment with Ivermectin Programme (CDTI). Trachoma is not endemic in the area.

The two functioning government eye units and the Baptist Eye Unit all perform cataract surgery. The eye unit in Kumba will perform cataract surgery when fully operational by late 2005. However, the Cataract Surgical Rate (CSR) remains very low. In 2004 only about 261 cataract operations were performed by the Baptist and Limbe Eye Unit, giving a CSR of 218. A study conducted in a rural area of the province¹ found a Cataract Surgical Coverage (CSC) of 15.5% for eyes and 21.7% for persons. The same study found that 33.3% of people did not have their cataract operated because they lacked awareness and 30.8% because of cost. In order to increase the CSR, we plan to train Community Directed Distributors of Ivermectin (CDDs) in case-finding and referral, intensify Information Education and Communication (IEC) and reduce transport costs to patients from remote areas.

Refractive error services are delivered through refraction at base hospital and on outreach. School screening is a routine activity. In 2005, two optical workshops will be set up in Mamfe and Limbe eye units, and a third one later in Kumba. There was little information and expertise on optical services at the time the plan was drawn up so the optical services component was not originally included. A new proposal for optical services (annexed to the original) was developed.

CDDs have been trained to detect blind children and refer them to the nearest

health centre which will, in turn, refer to the nearest eye unit. However, there is no paediatric ophthalmology centre in Cameroon at present. Children needing surgery are referred to tertiary hospitals where services are out of reach for the majority of families.

Research

A survey was conducted in the rural area of the province in 2004¹. A similar survey is planned for the urban area to complete the picture of the prevalence and causes of blindness and visual impairment, and of cataract surgical services in the province.

Human resource development

The programme has trained two ophthalmologists for Mamfe and Kumba respectively. The project coordinator works as an ophthalmologist at the Limbe eye unit and has been joined by another ophthalmologist posted by the government. The Baptist Church Health Centre in Mutengene recruited an ophthalmologist to run their centre. In total, there are five ophthalmologists in the province, one of whom also acts as project coordinator. Five ophthalmologists for this population size, a luxury by African standards, was facilitated by the appointment of an ophthalmologist by the Baptist Church Health Centre in Mutengene, and the government's decision to transfer another ophthalmologist to the provincial hospital in Limbe.

A full time optometrist was contracted by the Provincial Delegation of Health to develop the refractive services. A contract refractionist, trained at a Train-The-Trainers Course run by the International Centre for Eye Care Education (ICEE) in South Africa, assists him. A two-month refractionist training course was started in the programme in April 2005 to meet the need for refraction personnel in all eye units.

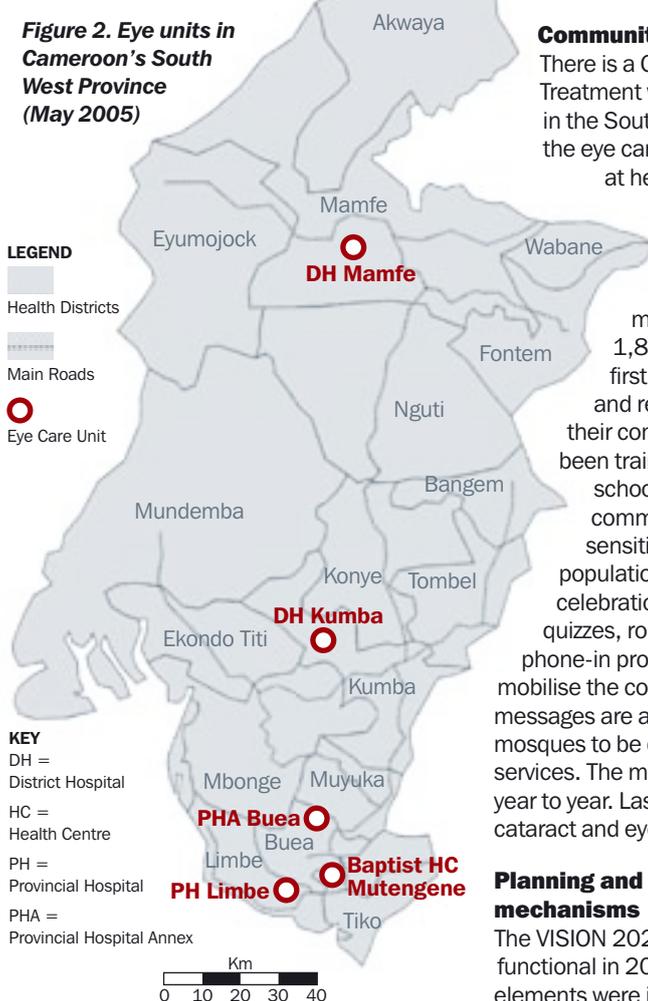
Eleven people have been trained as ophthalmic nurses and are working in the government eye units. They were trained in West Africa as there is no in-country training for specialised eye workers. Four additional ophthalmic nurses, each paired with a refractionist, will be trained and posted in the most remote health districts. The posting of ophthalmic nurses and refractionists in remote government district hospitals was not in the initial plan but it was realised that some remote areas would not feel the impact of the project unless there were eye nurses posted closer to the population there. Funds for this were identified from the existing plan's budget, thanks to budget flexibility. Over 150 integrated eye workers (general doctors,

general nurses, a paediatrician, midwives and health managers) have been trained in eye care by ophthalmologists and ophthalmic nurses.

Infrastructure

The Cameroon health structure divides the country into health provinces (e.g. South West Province) which are sub-divided into health districts (e.g. Kumba, Mamfe). Each health district has a district hospital. The province has a provincial hospital that is the referral hospital for district hospitals. In the South West Province, a second provincial hospital was created recently in Buea. The eye units in the provincial hospital Limbe, the Baptist Church Health Centre in Mutengene, the district hospital in Mamfe and the district hospital in Kumba (to start later in the year) provide secondary level eye care services. Tertiary eye services (retinal detachment surgery, diabetic retinopathy laser photocoagulation, paediatric surgery, etc) are not provided by any of the eye units in the South West Province. The eye unit in the provincial hospital Annex Buea (newly created) will also provide secondary level eye care, but not major ocular surgery (cataract, etc.) because it is staffed with an eye nurse only. All eye units are in existing health facilities providing general health care. Apart from the Mutengene Eye Unit, which is a Baptist Church institution, all other eye units are within government health facilities.

Figure 2. Eye units in Cameroon's South West Province (May 2005)



At the planning stage, the VISION 2020 standard list of equipment had not been developed. There was a list of minimum necessary equipment proposed by the West African College of Surgeons. This list was adapted to the programme's needs.

Each of the eye units (except Buea) has a full range of equipment, instruments, consumables and drugs to deliver secondary eye care services. They have one slit lamp each, one operating microscope, a dedicated theatre, at least three cataract surgical sets each, and diagnosis and refraction instruments. None of the eye units has a working visual field analyser (other than the Bjerrum's Screen), or biometry equipment. Limbe, Mamfe and Kumba will have vehicles for outreach by the end of the year. There are teaching materials (teaching aids, slides and manuals) in Limbe, Mamfe and Kumba.

Sight Savers International provided equipment and initial stocks of drugs and consumables. SSI also supported infrastructure development (refurbishment of existing building in MoH facilities to transform them into eye units), training of all cadres of staff and running of the eye care project office. Additionally, SSI supports monitoring/supervision and coordination meetings. The MoH contributes to infrastructure, personnel salaries, furniture and utility costs. The project is integrated in the MoH structure at all levels.

Community approach

There is a Community Directed Treatment with Ivermectin programme in the South West Province, with which the eye care programme is integrated at health district level. In 2003, 434 Community Directed Distributors of Ivermectin and other community members were trained to measure visual acuity. Over 1,800 CDDs were trained in the first quarter of 2005 to identify and refer cases of blindness in their community. Teachers have been trained to screen over 18,000 school children. These community-based eye workers sensitise and mobilise the population. During World Sight Day celebrations, radio interviews, quizzes, round table discussions, and phone-in programmes inform and mobilise the community. Health education messages are also sent to churches and mosques to be delivered during religious services. The message contents vary from year to year. Last year, the focus was on cataract and eye diseases in the elderly.

Planning and coordinating mechanisms

The VISION 2020 committee became functional in 2004, after most programme elements were in place. The committee,

which meets twice a year, includes representatives of all stakeholders in eye care, rehabilitation and education in the province. It is the forum for planning and coordination of all provincial eye services. There is a VISION 2020 task force that is a smaller sub-set of the committee in charge of technical issues. The task force meets four times a year. The project coordinator is the executive secretary of both the committee and the task force.

Challenges, constraints and lessons learnt

The low CSR in the province is the main challenge. The programme is working to bridge the gap between the cataract services provided by health facilities and cataract patients in the community. Key learning points from our experience are summarised in the box below.

Key learning points from the district level VISION 2020 experience in Cameroon

- Early mapping and early involvement of all the stakeholders avoids duplication of effort. VISION 2020 committees are a good avenue for coordination of all eye care activities.
- Optical services should be part of all VISION 2020 plans from the outset. Needs for optical services constitute a substantial part of the eye care needs of the population. Furthermore, optical services generate funds that can be used to sustain eye care services in general.
- It takes more than human resources, infrastructure and technology to make an impact on the eye health of a population. Potential barriers to service uptake and strategies to overcome them deserve equal consideration at the planning stage.
- It is feasible to train general health practitioners and community members to deliver eye health services. More people could be effectively reached in a limited period of time and with little additional input.

References

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Acknowledgements

Sight Savers International and their country representative in Cameroon, Dr Rosa Befidi-Mengue, have been instrumental to the programme development. The government, through the Ministry of Public Health, took the necessary actions to implement a VISION 2020 plan at provincial level.

The eye health programme in Dera Ghazi Khan district, Pakistan



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Background

In planning for eye care services in Pakistan in 1997, the following factors were taken into account:

- Blindness prevalence rate of around 2%
- More than 70% of the communities live in the rural districts while almost the same proportion of ophthalmic services are based in urban areas
- Presence of a reasonable public health care delivery infrastructure in Pakistan
- Potential in district eye units but significant gaps in equipment, physical space, appropriate clinical skills and management systems
- The need for cost-effective and sustainable ways to reach the remotest communities.

Strengthening cataract services was prioritised as a first step to addressing the problem. All ophthalmologists from the public sector district hospital were trained in extra capsular cataract extraction and intraocular lens (ECCE+IOL) implantation and provided with operating microscopes and instruments.

It soon became apparent that, for real impact, a more comprehensive approach was required. A comprehensive district eye care programme was designed in partnership with the government in 2001. Twenty-two districts were chosen for the delivery of the programme, 19 districts have so far been included.

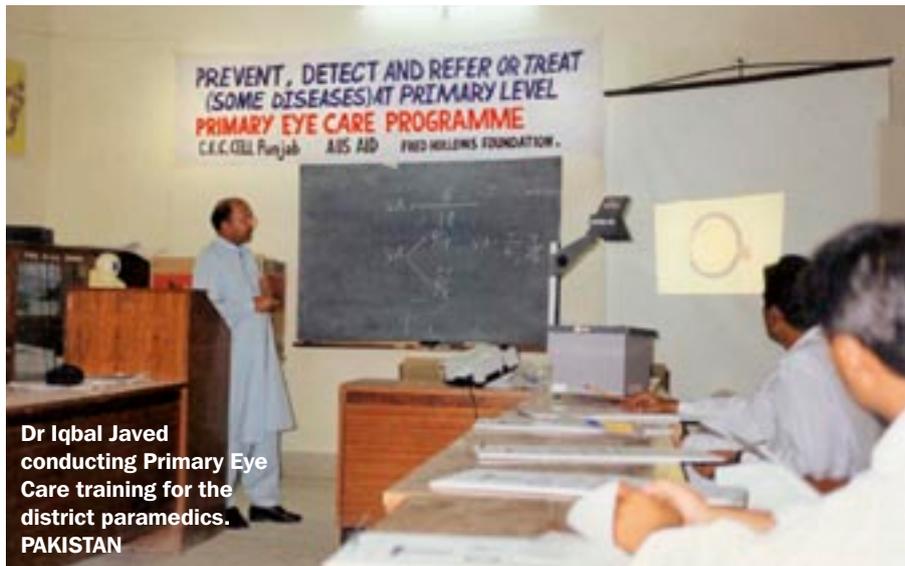
Planning for the comprehensive district eye care programme

In October 2002, a team of staff from the Punjab Comprehensive Eye Care Cell and FHF representatives conducted a needs assessment visit to a programme district, Dera Ghazi Khan. This densely populated and remote district of Punjab is about ten hours drive from the city of Lahore. Occupying an area of 11,294 square kilometres, the district's population of over two million are largely poor and have a traditional tribal culture.

While huge resourcing gaps were identified, there was a valuable asset – a capable and motivated ophthalmologist, Dr. Javed Iqbal; finding the right people to drive the programme locally is a critical ingredient for a successful district programme.



Dr Iqbal Javed examining a patient in his upgraded Out Patients Department. PAKISTAN



Dr Iqbal Javed conducting Primary Eye Care training for the district paramedics. PAKISTAN

Achievements

The upgrade was formally inaugurated on 3 March 2003 by the provincial Health Minister. The widely attended function was part of Eye Week, which comprised a range of promotional, treatment and prevention activities.

Looking back on progress so far, there have been many positive outcomes, including:

- Local partners enabled so that they address their own eye care problems
- Quality eye care more accessible and affordable

- An effective partnership with the public sector
- Sustainability of the programme facilitated by building on existing health structures
- District eye care programme success has positive implications for other health specialties.

Having created the capacity to provide quality health services, it hasn't always been easy to raise the awareness, confidence and demand for those services. Like many programmes, the Pakistan-Australia District Eye Care Project is a work in progress. Table 1 illustrates the before and after profile of Dera Ghazi Khan district.

Table 1: A pre and post upgrade comparison of the eye unit in Dera Ghazi Khan district

Components	Pre-programme	Post-programme upgrade
Physical infrastructure		
Out Patients Department	One room with insufficient equipment	Three well-equipped rooms
Operating Theatre (OT)	One shared OT with one microscope and some surgical instruments	A well spaced and well-equipped dedicated OT
Human resources		
Ophthalmologist	One ophthalmologist, never exposed to refresher training after his basic training	One ophthalmologist with on-going continuing medical education exposed to microsurgical training (two weeks), clinical refresher (two weeks) and management, communication and 'Training of Trainers' course (two weeks), one international conference
Mid-level workers	Two general cadre paramedics shared with Ear Nose and Throat dept.	One paramedic trained for one year as an ophthalmic technician and two general cadre workers
Primary Health Workers	No eye care training for any primary health worker	All medical officers, paramedics and 30% of district lady health workers trained in minor eye problems, diagnosis, management and referral
Clinical results		
OPD patient number	22,954	32,360 (41% increase)
Cataract operations	983	1,657 (69% increase)
Ratio of IOL and non-IOL surgeries	IOL: 507 (52%) Non-IOL: 476 (48%)	IOL: 1,116 (67%) Non-IOL: 541 (33%)

Vanuatu National Eye Care Programme



John Szetu

Ophthalmologist, Vila Central Hospital, Port Vila, Vanuatu.

Background

Vanuatu, with a population of 200,000, situated north-east of Australia, is one of the many small tropical Pacific Island nations scattered across the huge Pacific Ocean. Vanuatu consists of a young chain of rugged mountainous volcanic islands, rising high out of the sea. There are five provincial hospitals in six provinces. With an annual growth rate of 3%, more than 80% of the population live in the rural areas scattered among the 83 volcanic islands. The life expectancy is 59 years for males, and 62 years for females. The major causes of blindness are cataract and corneal blindness mainly due to trauma.

The origins of Vanuatu's National Eye Care Programme

For decades, Vanuatu's eye care depended entirely on short annual external eye team visits. In 2001 the first national five-year plan was implemented in partnership with The Fred Hollows Foundation (FHF). Since 2001, FHF has been working with the Vanuatu government Ministry of Health (MoH) to establish the country's first national eye programme. The Vanuatu National Eye Care Programme (VNECP) is based on VISION 2020's three main pillars: Human Resources Development, Infrastructure and Technology Development, and Disease Control. In October 2003, Vanuatu joined the VISION 2020 global initiative when the Declaration of VISION 2020 Support was signed by the Minister of Health together with high government officials and health and other non-governmental eye care providers.

Achievements

In addition to three other small provincial hospital eye clinics, the programme now boasts two well-equipped eye care facilities in the country, strategically situated in the north and the southern regions. An ophthalmologist registrar commenced training in 2003, and eleven eye nurse practitioners have been trained and stationed in the provincial hospitals to coordinate and provide primary eye care services. The eye nurse practitioners form an effective network of mid-level personnel. Last year a total of 14,972 patients were seen, of which 9,756 (65%) were seen by these eye nurse practitioners.

Prior to 2001, the Cataract Surgical Rate (CSR) in Vanuatu was on average 250 cataract operations per million population a

year. After the first year of the programme, the CSR rose rapidly to 1,260. The CSR increased further to 1,650 in the second year, but slightly decreased to 1,592 in 2003. The CSR further dropped to 1,400 in 2004. This trend most probably indicates the rapidly diminishing cataract backlog; hence our outreach programme is now concentrating on the rural areas, targeting the smaller health centres and the rural communities. Teams are brought closer to the rural communities, delivering secondary eye care such as cataract operations, which were in the past only available in big provincial hospitals.

A surgical audit on a portion of the 2001 data, using Hans Limburg's cataract outcome software (see Useful Resources on page 100), revealed the following post-operative visual outcome at one month: a good outcome of 91%, borderline outcome of 8%, and poor outcome of 1%. Because of the diminishing cataract backlog, the cut-off visual indication for cataract surgery is now 6/36. Apart from the visiting eye surgeons and the training ophthalmology registrars, all cataract operations, since 2003, have been small incision cataract operations. This has reduced the cost of surgery significantly.

The other common cause of blindness is trauma. Diabetic retinopathy is emerging with the increasing prevalence of diabetes because of changing lifestyles. A diabetic retinopathy screening programme is in progress and an argon laser is available to treat diabetic retinopathy patients. The World Diabetes Federation is starting a diabetic project focused on reducing the complications of diabetes in Vanuatu.

Partnerships

In addition to FHF, there are five NGOs working with the VNECP and the MoH. The Pacific Islands Project (AusAID-funded) and Surgical Eye Expeditions (SEE) send ophthalmology teams on an annual basis. These partners complement the services provided by the national programme. Their visits have gradually been scaled down during the last three years from three annual visits to only one visit this year. International Centre for Eyecare Education (ICEE) assists with training, and the Presbyterian Church of Vanuatu organises optometrist team visits and has established an optical laboratory. Both MARC Project (Hope Alliance) and Youth Challenge Australia assist the local team with screening and transportation of patients to surgery locations.

Challenges

One of the many barriers is the scattered population coupled with rugged mountainous terrains and vast sea expanses. Transportation costs for both land and sea are high. The land area is 12,000 sq km compared to a sea area of almost 900,000 sq km.

Another challenge is the sustainability of the programme, which depends on the commitment of the MoH. Sustaining government support was initially a concern but this is now gradually showing a healthy trend. The staff salaries and the drugs and consumables supply are now taken over completely by the MoH. This is an achievement considering that the MoH allocates to eye care only 0.06% of its health budget, which constitutes 12% of the national budget. The present five-year plan ends in December 2005, so the next VISION 2020 Action Plan needs to be developed.



Transportation during eye surgical outreaches (land). VANUATU

Setting out on an outreach by boat. VANUATU



John Szetu (2)

Yaruqui-Ecuador: An ongoing district VISION 2020 programme



Felipe Chiriboga
Ophthalmologist, Juan Leon Mera,
453 y Roca, Quito, Ecuador.

Background

In the Tumbaco valley, 40 km northwest of the capital city of Ecuador, Quito, there is a group of eight small towns with a population of 150,000 inhabitants, most of whom are mixed race (Mestizo) and 15% are indigenous people. The main source of income is agriculture, with an average monthly income of less than US\$100.

The programme

Prior to 1995, access to eye care was poor. In April 1995 the Community Ocular Health and Valley Programme was started in the town of Yaruqui, with support from the Christian Blind Mission International (CBMI). The unit consisted of three rooms, with basic ophthalmic equipment. It was staffed by an ophthalmologist, an ophthalmic nurse and an administrator. From the outset, the emphasis was on cataract, although the unit catered for all eye diseases.

The number of patients attending the unit gradually increased, as did the number of operations. However, a lot of work was required to inform the community about the need for eye care and to let them know about the services that were available.

In 2001, with support from the German Agency for Project Development (BMZ), German Lions Club, and CBMI, a larger clinic and dedicated operating room were built, and diagnostic equipment was increased. This led to an increase in demand for the service by the community. Approximately 100 patients now visit the unit every day. Patients present with cataract and diabetic retinopathy, and a pilot programme is in place for refractive errors and glaucoma. The unit has four ophthalmologists, two nurses and six ophthalmic assistants.

One ophthalmologist works full-time in the unit, one part-time and the other two doctors work one day per week. It is difficult for ophthalmologists from the city to travel 40 km to work in the project and this has been a limiting factor to the growth of the programme. Currently, a good number of operations, technology, social motivation and an economic incentive encourage the ophthalmologist to work in this poor area.

Outreach campaigns

Once a month outreach campaigns for cataract surgery are conducted in very poor rural areas in the surrounding provinces. This has led to a substantial increase in the consultation volume and operations (Figure 1).

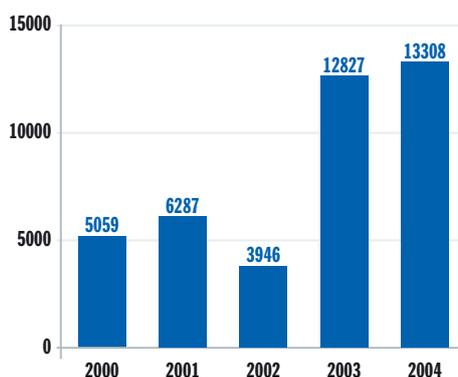
For the outreach activities, the adminis-

trative staff contact local community authorities, identify needs, dates and a location to conduct the screening and operations. On the established date, two ophthalmic assistants and one nurse screen and select patients with VA <20/200 (6/60) for cataract surgery. The patients arrive for the screening through communication work with local radios, churches, schools, etc. The screening includes visual acuity with and without pinhole, biomicroscopy with slit lamp, intraocular pressure and direct ophthalmoscopy. The staff contact patients' families to discuss the surgery date, fix the price each patient can pay, and explain the surgery.

One week after the screening, a complete working group of two ophthalmologists, four ophthalmic assistants, two nurses, driver and administrative staff arrives for a two or three day surgery campaign, usually over the weekend. All the supplies, microscopes and equipment are taken from Yaruqui Clinic. In suitable cases, the community helps with providing food and lodging for the clinic personnel.

Sutureless manual phacofracture small incision cataract surgery is performed. As sutures do not need to be removed, there is less infection, minimal astigmatism and a quick patient recovery. Patients who received surgery are followed-up the next day and again eight days after the surgery.

Figure 1. Number of patients attending the clinic since 2000



Currently in the Yaruqui unit, there are no specialised low vision personnel so we maintain an agreement with a local institution in Quito to manage these patients. We hope that Yaruqui clinic will have a low vision service in the future.

Financing

In the outreach activities, the screening and ophthalmic examination are free. Cataract surgery cost is between US \$5.00 and US \$80.00 all included (supplies, medicines, etc). In order to be able to manage these costs, we use donations from people who want to help with this work.

For outpatient consultations in the clinic



Patient with escort. ECUADOR

Felipe Chiriboga

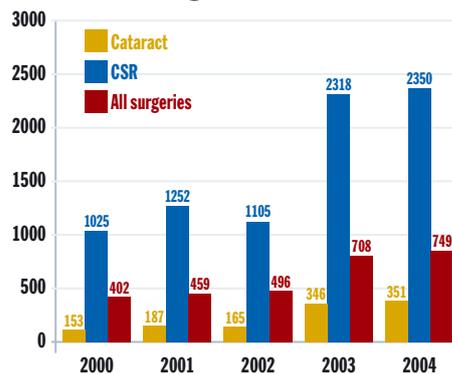
of Yaruqui, there are stratified rates that range from \$0.50 up to \$3.0. The average cost for cataract surgery is \$83 (range from \$30 to \$200), which includes all the consumables; the price means that surgery is affordable for even the poor people. Despite being so close to the capital city, 80% of those attending the unit are poor, or very poor.

The unit has become a referral centre for different provinces where eye care services are deficient or expensive. Patients recommend our clinic because of the affordability, the quality of attention they receive, friendly people, and good results.

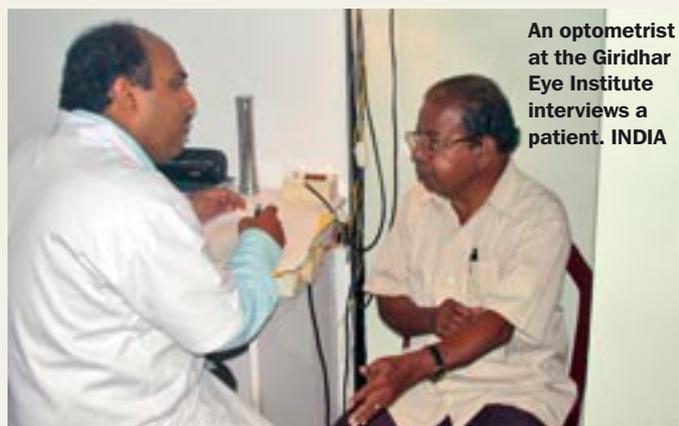
Challenges

Our challenge is to cover the five high-priority strategic areas of VISION 2020 and to have a CSR of 3,000 by the year 2010, this will require approximately 450 cataract operations per year (Figure 2).

Figure 2. Number of operations in the unit and cataract surgical rate since 2000



Our intention is to reach 100% self-management and economic sustainability over the next two years, which is currently 93%. At present, income is generated as follows: 88% from consultations, diagnostic examinations, surgery, optical shop and pharmacy; 3% from individuals, friends or institutional donations; and 9% from CBMI support. Our expected self-management costs will cover only operative costs, salaries, mobilisation, maintenance, small equipment requisition and supplies. It will not cover bigger items of equipment for which we will need at least another five years of external support.



An optometrist at the Giridhar Eye Institute interviews a patient. INDIA

Awareness about eye diseases among diabetics – a survey in South India

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Introduction: There is a recent recognition that diabetes mellitus (DM) has the potential to reach epidemic proportions, with related implications for visual impairment, in India. A quarter of the world's blind population is estimated to be in India, about 9 to 12 million. Awareness about the eye complications of diabetic retinopathy can play an important role in encouraging people to seek timely eye care and help to reduce the burden of visual impairment.

Material and methods: We conducted a survey using a 20-point questionnaire among 1,000 diabetics who attended our outpatients department between October 2001 and March 2002. The questionnaire was devised to assess awareness about the eye complications of diabetes and to seek the opinion of patients about how awareness can be increased.

Results: 86% of patients were aware that DM could affect many organs in the body and 84% knew that DM could affect the eye. Among those who were aware that DM could affect the eye, 36% came to know through the media, 32% from other eye specialists and 30% from their general practitioners or physicians. Among those who were aware that DM could affect the eye, 51% did not know exactly which part of the eye is affected, 28.3% thought that cataract was the main eye disease due to DM, and 19% thought that DM affects mainly the 'nerves in the eye' (presumably retinopathy). 50.8% of the patients knew that routine eye check ups are necessary in spite of good control of DM, while the rest thought that if DM is well controlled, routine eye examination is not necessary. To increase knowledge, 36.8% suggested more media coverage, 32.7% suggested more information from treating physicians, 19.8% suggested more information from eye specialists and 10.7% suggested more information from health and paramedical workers.

Discussion: It is very important to differentiate between 'awareness' and 'knowledge'. Having just heard about a problem is 'awareness' and having an understanding about the problem or disease is 'knowledge'. 84% of the patients were aware that DM could affect the eye. This shows that awareness about the complications of DM is quite high. But knowledge is comparatively less, since only 46.9% of the persons interviewed knew that retinopathy was related to control of DM while only 40.3% knew that it was related to duration of DM. This is also evidenced by the fact that among those who were aware that DM could affect the eye, 51% did not know what exactly the eye complications of DM are. It has been shown that population-based screening is not the ideal method for diseases with low prevalence like diabetic retinopathy. Diabetic retinopathy may occur in 23% of diabetics but only in 1.78% of the general population. Currently, in India, the approach to the problem of diabetic retinopathy should be case detection and not population-based screening. For case detection, awareness and knowledge among diabetics are very important so that they come forward for routine eye examination. This survey is an attempt in this direction.



Cataract surgeons Ernest Challey and Edward Sandy. SIERRA LEONE

Maintaining eye care services during times of conflict

Catherine Cross

Manager, International Programmes, Sight Savers International, Haywards Heath, UK.

During a recent trip to Sierra Leone, cataract surgeons Ernest Challey and Edward Sandy explained what it meant to keep eye care work going during the nine years of civil war, which paralysed most public services in Sierra Leone.

"We often had to sneak to work," recalls Ernest Challey. Edward Sandy tells of evading the rebel troops to get to the eye unit at Connaught Hospital in central Freetown. During those years, with their colleagues, they tried to maintain eye care services, dealing with many trauma cases as a result of the fighting.

Both men were inspired to study ophthalmic nursing when they saw the magic of sight restoration. In the 1980s they went to Tanzania for training, and then were posted to Mvumi Hospital, working with Dr Allen Foster. On return to Sierra Leone as qualified ophthalmic nurses, Edward Sandy was posted to the new eye unit, funded by Sight Savers International (SSI), at Bo Government Hospital, headed by Dr Dennis Williams. Ernest Challey joined them in Bo when Kenema, in the east, became too dangerous when war broke out in the beginning of the 1990s. As war intensified throughout the country, the team was forced to move to the capital, Freetown. There they found the disused eye unit at Connaught Hospital with broken equipment and in urgent need of renovation. For nine years the national eye care team functioned in these cramped and unsuitable premises, until SSI funded a new building, which now houses not only the Department of Ophthalmology, but also the National Eye Care Secretariat, and the SSI Country Office.

During the war years, they both trained as cataract surgeons with Dr Moses Chirambo in Malawi, followed by an internship in The Gambia. Their families remained behind in Bo and regular contact became impossible – at one point Ernest Challey's family had to flee to the bush when rebels attacked, and contact was temporarily lost.

The two men, now senior ophthalmic medical assistants and cataract surgeons, are the backbone of cataract surgery in the country. Today, Edward Sandy is responsible for the Southern Regional Eye Care Programme and Ernest Challey is in the Department of Ophthalmology in Connaught Hospital, Freetown. With stability restored in Sierra Leone, they are able to look ahead to expanding eye care services in the country. Ernest Challey would like to contribute further by training others, especially as Sierra Leone is planning an ophthalmic nurse training course. Edward Sandy hopes to see the Eye Care Programme in the southern region expand to ensure that every district hospital has one ophthalmic nurse, providing immediate care as well as identifying cases for surgery.

It will be many years before Africa has its full quota of ophthalmologists. Well-trained and experienced cataract surgeons like Ernest Challey and Edward Sandy are proving their value, by restoring sight to those who might otherwise remain blind, and by sharing their experience acquired during difficult times.

The utilization of eye care services by persons with glaucoma in rural south India

Robin AL, Nirmalan PK, Krishnadas R, Ramakrishnan R, Katz J, Tielsch J, Thulasiraj RD, Friedman DS.

PURPOSE: To determine utilisation of eye care services, in particular those relating to glaucoma, in a rural population of southern India aged 40 years or older.

METHODS: A total of 5,150 subjects aged 40 years or older selected through a random cluster sampling technique from three districts in southern India underwent detailed ocular examinations for vision impairment, blindness, and ocular morbidity. Information regarding previous use of eye care services was collected from this population through a questionnaire administered by trained social workers prior to ocular examinations. **RESULTS:** One thousand eight hundred and twenty-seven persons (35.5%) gave a history of prior eye examinations, primarily from a general hospital ($n = 1,073$, 58.7%). Increasing age and education were associated with increased utilization of eye care services. Among the 3,323 persons who had never sought eye care, 912 (27.4%) had felt the need to have an eye examination but did not do so. Only one third of persons with vision impairment, cataracts, refractive errors, and glaucoma had previously utilized services. Of the 64 subjects diagnosed as having primary open-angle glaucoma, 32 (50%) had previously seen an ophthalmologist, but none had had an eye examination within 1 year before the study. Only six (19%) of the 32 had been diagnosed as having glaucoma (9% of all subjects found to have glaucoma in the survey). Thirteen (20.3%) of the 64 subjects were blind in either eye due to glaucoma, including one person who was bilaterally blind. **CONCLUSIONS:** A large proportion of persons in a rural population of southern India who require eye care are currently not utilizing existing eye care services. Strategies to improve the uptake of services are required to reduce the burden of blindness due to glaucoma in southern India.

Printed courtesy of: *Trans Am Ophthalmol Soc.* 2004;102:47-54.

Analysis of costs and benefits of the Gambian Eye Care Program

Frick KD, Foster A, Bah M, Faal H.

OBJECTIVE: To estimate the net benefit of the Gambian Eye Care Program (GECF) using a limited definition of benefits from a societal perspective. **METHODS:** The number of cases of blindness avoided was modelled using population projections, population-based blindness survey estimates from 1986 and 1996, and reported blindness-related mortality differences. Benefits were measured as lifetime productivity gains that resulted from the cases of blindness avoided between the surveys. Costs included all contributions to GECF between the surveys.

RESULTS: In 1996, 1658 fewer individuals were blind than would have been without GECF. The present value of costs was 1.28 US million dollars (1995 dollars). Although the net benefit between the blindness surveys was negative, the net lifetime benefit was 1.01 US million dollars (1995 dollars), yielding an internal rate of return of 10%. In the primary sensitivity analysis, assuming similar benefits to Senegalese citizens, who accounted for 30% of patients, the internal rate of return was 19%. Upper bound sensitivity analyses result in internal rates of return higher than 20%.

CONCLUSION: In one sub-Saharan African country with avoidable blindness due to cataract and eye infections, the internal rate of return of a national eye care program was substantial when using a limited definition of benefit.

Printed courtesy of: *Arch Ophthalmol.* 2005 Feb;123(2):262.

The impact of vitamin A supplementation on mortality inequalities among children in Nepal

Bishai D, Kumar K C S, Waters H, Koenig M, Katz J, Khattry SK, West KP Jr.

OBJECTIVE: This paper examines gender, caste and economic differentials in child mortality in the context of a cluster-randomized trial of vitamin A distribution, in order to determine whether or not the intervention narrowed these differentials.

DESIGN: The study involved secondary analysis of data from a placebo-controlled randomized field trial of vitamin A supplements. The study took place between 1989-1991 in rural Sarlahi District of Nepal, with 30,059 children age 6 to 60 months. The main outcome measures were differences in mortality between boys and girls, between highest Hindu castes and others, and between the poorest quintile and the four other quintiles.

RESULTS: Without vitamin A, girls in rural Nepal experience 26.1 deaths per 1000, which is 8.3 deaths more than the comparison population of boys. With vitamin A the mortality disadvantage of girls is nearly completely attenuated, at only 1.41 additional deaths per 1000 relative to boys. Vitamin A supplementation also narrowed mortality differentials among Hindu castes, but did not lower the concentration of mortality across quintiles of asset ownership. The vitamin A-related attenuation in mortality disadvantage from gender and caste is statistically significant.

CONCLUSIONS: We conclude that universal supplementation with vitamin A narrowed differentials in child death across gender and caste in rural Nepal. Assuring high-coverage vitamin A distribution throughout Nepal could help reduce inequalities in child survival in this population.

Printed courtesy of: *Health Policy Plan.* 2005 Jan;20(1):60-6.

Retinopathy of prematurity in South Africans at a tertiary hospital: a prospective study

Mayet I, Cockinos C.

BACKGROUND AND OBJECTIVES: World Health Organization's VISION 2020 programme has recognized retinopathy of prematurity (ROP) as an important cause of childhood blindness in industrialized and middle-income countries. While ROP is virtually nonexistent in many African countries, ROP is seen in urban areas where facilities for neonatal care exist. The aim of this study is to establish the frequency of ROP in a cohort of patients screened for ROP and to establish if current screening criteria apply to our patients.

PATIENTS AND METHODS: Infants with birth weight (BW) of 1500 g or less and/or gestational age of 32 weeks or less were screened for ROP over a 2(1/2)-period by a single examiner.

RESULTS: ROP was observed in 84 of 514 (16.3%) of infants included for analysis.

Threshold disease (tROP) was noted in 1.6% of the total cohort although 41/84 babies with ROP were lost prior to regression or progression to tROP. Of the 43/84 adequately followed up, eight (18.6%) developed tROP. An estimated frequency of tROP was more likely to be 2.9%. There was no tROP noted in babies of BW greater than 1250 g. Gestational age was an unreliable risk parameter in our population.

CONCLUSION: The projected occurrence rate of tROP is similar to that found in black population in the Multicentre Cryotherapy for ROP Trial. Our data suggest that the screening criterion based on BW can safely be lowered to 1250 g in our population.

Printed courtesy of: *Eye.* 2005 Jan 21.



Submissions to Exchange

Community Eye Health Journal invites readers to exchange views and experiences. In the Exchange section we include letters to the editor and short reports about prevention of blindness activities, achievements and lessons from different countries. Examples of reports considered for publication include outstanding achievements of eye care programmes, interesting insights from eye care work, and summaries of research projects. Reports will normally be between 200 – 300 words, but submissions of up to 500 words will be considered. Please send your contributions to The Editor at the address on page 86, or email Victoria.Francis@Lshstm.ac.uk mentioning Exchange in your title.

Courses and conferences

Certificate Course in Community Eye Health for VISION 2020 in South Africa

Date: August 1 – September 23, 2005.

This is the first course in Community Eye Health to be run in South Africa. It is being organised by Colin Cook in collaboration with the International Centre for Eye Health, LSHTM, London. The course will be held in the Division of Ophthalmology, Grootte Schuur Hospital, University of Cape Town, South Africa. The course will focus on how to implement VISION 2020 in sub-Saharan Africa. The course is aimed at eye health professionals working in the field of prevention of blindness, including national and district VISION 2020 coordinators, programme managers and clinical professionals working in VISION 2020 programmes.

Further details: Please contact Dr Colin Cook (myrna@mweb.co.za)

Organizational & Financial Management to Achieve VISION 2020 in Africa

Date: November 7-18, 2005. **Venue:** Moshi, Tanzania.

A course offered by the Kilimanjaro Centre for Community Ophthalmology/Tumaini University (KCCO) in collaboration with The Fred Hollows Foundation, LAICO, and IAPB.

Course objective: To provide practical (African-tested) strategies for developing or strengthening management systems to facilitate increased efficiency, coverage, and satisfaction with eye care services. **Target audience:** the heads and key decision makers of VISION 2020 planning areas. For more information and admission procedures please visit the KCCO website (www.kcco.net) or contact: Dr. Susan Lewallen (slewallen@kcco.net), KCCO, PO Box 2254, Moshi, Tanzania.

Bridging Communities and Eye Care Providers to Achieve VISION 2020 in Africa

Date: December 5-10, 2005. **Venue:** Moshi, Tanzania.

To meet VISION 2020 goals, developing and implementing better strategies for bridging communities and hospitals will be essential. This course will provide eye care programme managers with the skills necessary to develop, implement, and monitor strategies for increasing utilisation of services by the population in need.

Target audience: Eye care programme managers (MoH, NGDO, service groups), trainers, and key decision makers of national prevention of blindness programmes.

Course objective: To provide an understanding of activities necessary to increase utilisation of eye care services (primarily cataract, refractive error and trichiasis but also including childhood cataract and other conditions) by the population. For information and admission procedures please visit the KCCO website (www.kcco.net) or contact: Dr. Paul Courtright (pcourtright@kcco.net) KCCO, PO Box 2254, Moshi, Tanzania.

Diploma Course in Community Eye Health

Date: February 20 – May 26, 2006.

This course is offered by ICEH at the LSHTM. The three month course is designed for those who want to know more about the major blinding eye diseases and the VISION 2020 initiative, but cannot be away from their place of work for one year. It is especially suitable for eye care professionals, ophthalmologists, optometrists, ophthalmic assistants, ophthalmic nurses, and project managers. The course is in three parts: part 1 focuses on the control of blinding eye diseases; part 2 deals with research and writing a project proposal; part 3 focuses on how to plan a VISION 2020 project.

Further details: Adrienne.Burroughs@Lshtm.ac.uk or www.iceh.org.uk; www.lshtm.ac.uk/courses ICEH, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT, UK.

International Ophthalmic Nurses Association Golden Jubilee Conference – 50 years of IONA

Date: April 7-8, 2006. **Venue:** London, UK.

A Celebration of Ophthalmic Nursing.

Call for papers: Please submit an abstract of 500 words.

Application forms for IONA membership and for conference are available from: Carol Bullock, 3 Montgomery Close, Beeston, Nottingham, NG9 6NF. UK. to whom abstracts should also be sent. Email john.bullock@unisonfree.net

World Ophthalmology Congress

(Previously called 'International Congress of Ophthalmology ICO').

Date: February 19-24, 2006. **Venue:** Brazil.

The World Ophthalmology Congress will be held in conjunction with the XXVI Pan-American Congress of Ophthalmology and the XVII Brazilian Congress on Blindness Prevention.

Information on the congress and on the committees, scientific programme and coordinators of different areas are available at the congress web site www.opthalmology2006.com.br

New resources from ICEH



Community Eye Health Update CD

This new CD contains *Community Eye Health Journal* issues 20-53 in easy to use formats (HTML and PDF) as well as many other ICEH teaching materials, including electronic versions of teaching slide/text sets and booklets, and a selection of Aravind Eyesite publications.

It is available free of charge to eye health workers in developing countries. Please write or email to the address below giving name, postal address and occupation.

International Resource Centre, International Centre for Eye Health, LSHTM, Keppel St, London WC1E 7HT, UK.
Email: Anita.Shah@Lshtm.ac.uk



Other new resources

TALC has released Issue 7 of the e-TALC Health Development CD-ROM. e-TALC is a free electronic resource for health care workers in developing countries. Issue 7 contains contributions from 30 organisations and individuals including The BMJ, WHO, Royal College of Physicians, Africa Health, and many more. For more information or to subscribe or contribute to e-TALC, please visit www.talcuk.org or write to TALC, PO Box 49, St Albans, Herts, AL1 5TX, UK.
Email: info@talcuk.org

Useful resources

VISION 2020: The Right to Sight.

Developing an action plan CD-ROM. Version 2.

A detailed guide to the advocacy, design, planning, implementation and monitoring of VISION 2020 action plans with more than 250 supporting documents on all aspects of blindness. A vital resource for national governments, professional organisations, NGOs, eye care managers and other implementers of eye care programmes. Distribution by IAPB, LV Prasad Eye Institute, LV Prasad Marg, Banjara Hills, Hyderabad 500 034, India. Email: IAPB@LVPEI.ORG Also available from: www.v2020.org and also online by the World Health Organization: www.who.int/ncd/vision2020_actionplan/start.htm – go to chapter 4.1 for an example on district planning

VISION 2020. Standard List of Medicines, Equipment, Instruments, Optical Supplies and Educational Resources for Primary and Secondary Level Eye Care Services.

2004/5. Available free of charge from the International Centre for Eye Health (see inside cover for address details) and also electronically on www.iceh.org.uk/files/standardlist04.pdf A new list for 2006/2007 is in preparation.

Useful resources continue over page ➤



Useful resources

continued

Monitoring Cataract Surgical Outcomes CD-ROM

Contains different packages to monitor the

visual outcome of cataract surgery as well as instruction guides and supporting documents. Author: Hans Limburg. Available free of charge from the International Centre for Eye Health (contact details on inside cover).

District Health Care

1996. Intended for those involved in the planning, administration and evaluation of health services at district level. Published by Macmillan. Authors: R Amonoo-Lartson, G Ebrahim, H Lovel & J Ranken. Available from TALC. Price £6.90 www.talcuk.org (address details on previous page).

Strengthening District Health Systems

Editorial by Marcel Tanner. Bulletin of the World Health Organization, Volume 83, Number 6, June 2005.

www.who.int/bulletin/volumes/83/6/en/

V2020 district planning web links

VISION 2020 www.v2020.org

KCMC Tanzania Planning for VISION 2020
www.kcmc.ac.tz/kcco/vision_2020.htm

ICEH

Programme of VISION 2020 Workshops

www.iceh.org.uk/tea_out.asp

Evaluation of VISION 2020 Workshop Programme 2002 2004
PDF report (from ICEH)

www.iceh.org.uk/files/v2020_evaluation02-4.pdf

Aravind

An online collection of comprehensive resources for eye care programmes around the world. It shares valuable tools that help assess, plan, implement and manage high quality, efficient and sustainable eye care programmes.

www.laico.org/v2020resource/homepage.htm

http://laico.org/v2020resource/files/vision2020_jul-sep01.pdf

http://laico.org/v2020resource/files/DR%20Est.Tool_com.xls

South Africa Department of Health Fact Sheets / Guidelines

National guideline on prevention of blindness in South Africa – December 2002 (PDF)

www.doh.gov.za/docs/factsheets/guidelines/blindness.pdf

Available from <http://www.doh.gov.za/search/index.html>

Guidelines for District Health Planning and Reporting

April 2003. Published by the South African Department of Health. Available from:

www.doh.gov.za/docs/factsheets/guidelines/dhp/

Community Eye Health Journal

Issues 20-53, articles relevant to V2020 priority diseases and intervention: www.jceh.co.uk

National Strategic Plan for Prevention of Blindness in Uganda

Five year Plan (pdf) www.health.go.ug/docs/EyePlan.pdf

Available from: www.health.go.ug/pubs.htm

Calling all budding authors!

Article writing competition for the Community Eye Health Journal

Readers are invited to submit original articles (not previously published) on a theme relevant to implementing VISION 2020. Four winning articles will be published in the *Community Eye Health Journal*. Articles should be innovative, based on VISION 2020 priorities, and of interest and relevance to our readers. Our readers are mostly in developing countries and work in community eye care as general nurses,

ophthalmic nurses/assistants, refractionists/optometrists, public health specialists and ophthalmologists. Winning articles will be selected by the Editorial Committee.

Length: 1,500 words maximum

Deadline: January 9th 2006

Photographs and graphics: Photographs, diagrams and tables can be submitted to illustrate the article. If photographs of patients are included, they should be accompanied by evidence of the patient's (or guardian's) written consent to use the

photograph for educational purposes.

Format: Articles can be handwritten, typed or in electronic format.

How to send articles

By post: Article Competition, The Editor, Community Eye Health Journal, ICEH, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT, UK.

By email: Put 'Article Competition' as the subject and send to:

Victoria.Francis@Lshtm.ac.uk

and Anita.Shah@Lshtm.ac.uk

Community Eye Health

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Next issue



The next issue of the *Community Eye Health Journal* will be on the theme **Eye Injuries**