



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**

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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.