

Community Eye Health MSc dissertations

The seven Exchange articles that follow are based on the dissertations of students at the International Centre for Eye Health, London School of Hygiene and Tropical Medicine, who graduated in 2007.

Poor vision and barriers to treatment among commercial vehicle drivers in Plateau State, Nigeria



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In Nigeria, deaths from road traffic accidents have increased from 18 per month in 1988 to 102 per month in 2000. Victims include drivers, passengers and pedestrians. Although there is a minimum legal requirement for visual acuity before a driver's licence can be issued, this is not implemented in practice.

This study investigated the visual acuity of minibus drivers providing public transport in Jos, Plateau State, Nigeria.

Four of the six major stations where people come to board these vehicles were randomly selected and a total of 673 drivers were recruited. Their distance vision was assessed using a Snellen chart and their eyes were examined by an ophthalmologist. Data were collected using modified survey forms used for the rapid assessment of avoidable blindness (RAAB). Information on barriers to treatment was obtained from all drivers with visual acuity $<6/12$.

A total of 53 drivers (7.8%) had presenting binocular vision $<6/12$. This represents the proportion of drivers in this study who would have failed to meet the legal requirement for a driver's licence.

Untreated cataract was the main cause

of presenting binocular vision of $<6/12$, followed by uncorrected refractive error. The main barriers to treatment were lack of knowledge of where to obtain ophthalmic services, lack of time to go for treatment, and not being aware of the problem.

It is therefore recommended that all commercial vehicle drivers have a comprehensive eye examination before obtaining a driving licence in Plateau state. An eye care service should also be put in place to meet the needs of commercial vehicle drivers.

RAAB survey of Pemba and Unguja islands, Zanzibar



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No recent survey data are available about the magnitude and causes of avoidable blindness in Zanzibar. This study aimed to address this by conducting a rapid assessment of avoidable blindness (RAAB) survey. The RAAB survey is a relatively quick and cheap method, as it only includes people aged 50 and over (the prevalence of avoidable blindness is highest in this group). This minimises the sample size required.

The RAAB survey was conducted on Pemba and Unguja islands during July 2007. Visual acuity (VA) was measured and lens status was assessed. All eyes with VA $<6/18$ were examined to diagnose the cause of visual impairment. All participants with VA $<6/18$ who had also previously had a cataract operation were interviewed.

A total of 3,160 persons aged ≥ 50 were

examined (a response rate of 98.8%). The prevalence of blindness was 3.7% (defined as VA $<3/60$, with available correction, in the better eye). Avoidable causes accounted for 75% of blindness.

Cataract was the leading cause of blindness (67%), followed by posterior segment diseases (25%). Cataract (47%) and refractive error (39%) were the leading causes of visual impairment in both eyes.

A total of 30% of the eyes that had been operated on for cataract had a poor outcome (visual acuity $<6/18$). The most common reported barrier to receiving cataract operations was 'unaware of treatment' (36%).

Of the 95 patients affected by poor outcome, 15 did not attend for post-operative care. The greatest barrier to receiving post-operative care was 'not advised' (80%). Most of the patients who mentioned this as a factor were from the private sector. The other barriers were 'distance to travel too far' (6.7%), and 'fear of returning after surgery' (6.7%).

In conclusion, there is a need for:

- routine monitoring of cataract operations to improve outcome
- more optical services to address refractive errors
- better public awareness about the available eye health services
- better coordination between the government and private sector; this will allow patients operated on in the private sector to be followed up in the government sector
- guidelines for the routine management of cataract patients, including counselling techniques to lessen the anxiety of patients before and after operations.

One of the minibus stations (or 'parks') in Jos, NIGERIA

