

## Glaucoma in China: How Big is the Problem?

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**Aims** – To derive preliminary estimates for the number of adults in China suffering from glaucoma, and project the burden of visual morbidity attributable to primary and secondary glaucoma.

**Methods** – Age and sex specific data from two population surveys were applied to US Census Bureau population estimates for urban and rural China. It was assumed that data from Singapore were representative of urban China, and those from Mongolia were representative of rural China.

**Results** – It was estimated that 9.4 million people aged 40 years and older in China have glaucomatous optic neuropathy. Of this number, 5.2 million (55%) are blind in at least one eye and 1.7 million (18.1%) are blind in both eyes. Primary angle closure glaucoma (PACG) is responsible for the vast majority (91%) of bilateral glaucoma blindness in China. The number of people with the anatomical trait predisposing to PACG (an ‘occludable’ drainage angle) is in the region of 28.2 million, and of these 9.1 million have significant angle closure, indicated by peripheral anterior synechiae or raised intraocular pressure.

**Conclusions** – This extrapolation of data from two east Asian countries gives an approximate number of people in China suffering from glaucoma. It is unlikely that this crude statistical model is entirely accurate. However, the authors believe the visual morbidity from glaucoma in China is considerable. PACG is probably the leading cause of glaucoma blindness in both eyes, and warrants detailed investigation of strategies for prevention.

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## The Burden of Trachoma in the Rural Nile Delta of Egypt: a Survey of Menofiya Governorate

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**Background** – Evidence of widespread distribution of trachoma in Egypt had not been clarified as previous surveys were limited to individual communities which may not have been representative of the general population. The Nile Delta of Egypt presents a unique environment for trachoma to persist. Economic improvements in the past decade have affected even the poorest rural environments; availability of electricity is now found in many rural communities. Availability of water in the Nile Delta has always been good but poor hygiene conditions have been the primary factor in trachoma transmission. A survey of trachoma was undertaken in MenofiyagovernoratetodetermineifEgypt should be identified as trachoma endemic and targeted for trachoma control efforts.

**Methods** – A multistage random cluster study design was used with the target population defined as adults aged 50 and over and children aged 2–6 years from throughout the governorate. Among pre-school children only trachoma was graded while among adults presenting visual acuity and cause of vision loss or blindness were also recorded. Adults were interviewed regarding past trichiasis surgery; those currently with trichiasis or history of trichiasis surgery were also interviewed regarding outcome of surgery.

**Results** – A total of 3272 children aged 2–6 and 3322 adults age 50+ were enumerated. Among the children 81.3% were examined and among the adults 73.0% were examined. Active trachoma follicles (TF) and/or intense inflammation (TI) was found among 36.5% (95% confidence interval (CI) 34.7–38.3%) of the children. TI was 1.89 (95% CI 1.22–2.94) times more common in rural children compared to urban children. The prevalence of trichiasis (TT) in adults was 6.5%; women had an age adjusted odds of trichiasis of 1.68 (95% CI

1.18–2.39) compared to men. Trichiasis was 2.11 times (95% CI 1.33–3.37) more common in rural Menofiya compared to urban Menofiya. TT accounts for blindness (presenting vision <3/60) in 8% of patients and accounts for 13.2% of visual impairment. Overall, trichiasis surgical coverage was 34.4%, slightly higher among men than women. The outcome of trichiasis surgery was poor in 44.4% of cases.

**Conclusion** – Trachoma is a serious public health problem in Menofiya governorate and a significant contributor to vision loss. These findings would suggest that continued poor hygienic conditions in rural Egypt have limited the reduction of active trachoma even in the face of significant improvements in socio-economic status. Furthermore, the high proportion of trichiasis surgery cases with a poor outcome would indicate a need to reassess current surgical practices in Egypt and improve training and monitoring.

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## The Epidemiology of Ocular Trauma in Singapore: Perspective from the Emergency Service of a Large Tertiary Hospital

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**Purpose** – To describe the epidemiology of ocular trauma from the perspective of the

emergency service of a large tertiary hospital in Singapore.

**Methods** – A prospective survey was conducted over a 3 month period (August to October 1997) on all patients seen at the ophthalmic unit at the Singapore General Hospital’s emergency service. Data on

clinical presentation, type and cause of injury and use of eye protective devices (EPD) were collected via a standardised interview and examination.

**Results** – A total of 870 persons presented with a diagnosis of ocular trauma, out of the 1631 patients seen during the study

period. Compared with non-trauma cases, trauma cases were more likely to be male (odds ratio (OR): 4.2, 95% confidence interval (95% CI): 3.2, 5.4), non-residents (OR: 6.2, 95% CI: 3.7, 10.5), younger than 40 years of age (OR: 3.2, 95% CI: 2.7, 4.1) and less likely to require follow-up or hospital admission (OR: 0.2, 95% CI: 0.2, 0.3). The three most common types of injuries were superficial foreign body (58.2%), corneal abrasion (24.9%) and blunt trauma (12.6%), while open globe injury occurred in only 17 cases (2%).

Comparison with a 10% random sample of all cases seen in the previous 9 months ( $n = 284$ ) revealed no significant time variation in the types of injuries ( $p = 0.63$ ). Work-related injuries accounted for 590 (71.4%) cases, where grinding, cutting metal and drilling were the specific activities in more than 90% of the cases. In appropriate settings, only 21.7% of patients with work-related injuries used EPD; 43.7% were provided with EPD, but did not use them at the time of injury; and the remaining 34.6% reported that EPD were not provided.

**Conclusions** – Ocular trauma at the emergency service level in Singapore involved mainly young non-resident men, were work-related and associated with well-defined activities, and were generally minor. The low prevalence of EPD use reinforces the need for a review of the design and implementation of occupational eye safety programmes, especially among non-resident workers.

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## Letters to the Editor

### Assessment of Learning Versus Competence

Dear Editor

Dr Prozesky has expertly described why and how learning should be assessed (*J Comm Eye Health* 2001; **14**: 27-28). It should be emphasised that assessing competence in a workplace situation follows the same designs although this assessment is often summative and based on the principles of evidence. In assessing competence, one is concerned with whether the evidence collected (through observation, MCQ, checklists, or oral examination) is current, authentic and sufficient to declare a candidate competent in performing a specific task. That is when the use of OSPE/OSCE is very helpful for the purpose of assessment because it is possible to assess in a given scenario the knowledge, the skills and the attitude of candidates. Historical evidence (reports, testimonials, work history) is also considered in the assessment of competence but its value is limited by its authenticity which can be questionable. As teachers move from didactic to problem-based learning methodology, the assessment of competence becomes a critical issue. Assessment skills will then become not only necessary but also a specialised area with qualified assessors, moderators and verifiers working alongside teachers or trainers as

partners. This is the system that is already implemented to some extent in countries including UK, Australia, Singapore and the United States, to name but a few.

**Mr Ntambwe Malangu**  
*Lecturer*  
*Medunsa School of Pharmacy*  
*South Africa*

### Cataract Surgery

Dear Editor

I did not know that there was room for arguments on whether or not to do ICCE. I thought that all efforts are towards IOL after lens extraction, preferably by the ECCE method. Sadly, in those regions where no surgeon exists to do ECCE with IOL or he/she exists but there is no relevant equipment, ICCE may be performed.

I will restrict myself to the Africa that I know and have worked in – East, West and Central. In all these regions, I have found that there exists a backlog of unoperated cataracts (according to surveys and epidemiological projections) but there are no (or insignificant) surgery waiting lists in eye departments. The pressure is not on surgery time but community awareness and mobilisation campaigns to increase cataract surgery uptake. Backlog or no backlog, Africa or Asia, I would rather take 15 minutes on ECCE with PC IOL than 3 minutes on ICCE with no implant (and no sutures).

With proper distribution of existing resources within countries in our region - human resources and equipment - every patient needing and willing to have cataract surgery should have lens extraction with IOL inserted.

To increase cataract surgery uptake we need to demonstrate improved quality of service. In my catchment area we used to get resistance to surgery because nearly every elder could name somebody who was blinded by cataract surgery - over a decade ago! Today, nearly every other patient who comes for cataract surgery is on recommendation of our former, satisfied cataract patient. There was a change from ICCE to ECCE with PC IOL. Cataract surgical uptake is increasing by about 20% every year.

I agree with my old friend and ICEH classmate, Dr Mmbaga, that some vast regions still do not have microscopes or surgeons trained in ECCE with IOL and that ICCE may therefore be a good solution. But we must sing the song how inappropriate the technique is and how the relevant local NGOs and Ministries of Health must make acquisition of the very affordable equipment a top priority.

Internally, within the countries, we should retrain ICCE surgeons in ECCE with PC IOL technique.

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## COMMUNITY EYE HEALTH COURSES

**Professor Gordon Johnson.** In March, 2002 Professor Johnson will retire after 15 years service at the International Centre for Eye Health, London. We shall all greatly miss his good and wise leadership.

**Community Eye Health Courses.** There are no plans to continue Courses in Community Eye Health (CEH) at the Institute of Ophthalmology beyond August 2002. There are, however, plans for a proposed, new Community Eye Health Course in London, beginning in September 2002.

**Dr Allen Foster.** Dr Foster, who is based at the London School of Hygiene and Tropical Medicine, is currently conducting short, one week Courses in Community Eye Health for the Vision 2020 programme. These short Courses are now taking place in 12 Centres around the world.

Dr Foster should be contacted for information relating to both the new, planned CEH Course in London and the Courses in Centres abroad.

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