

Barriers to Learning in Teaching Programmes

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For the past 10 years, I have had the privilege of teaching 2-week glaucoma workshops in ophthalmology training centres worldwide; the majority have been in the various regions of Asia. The condition that we call glaucoma is one of the more complex that ophthalmologists encounter. The correct diagnosis and treatment of any given patient with glaucoma requires skillful history taking combined with a thorough ocular exam. I often tell those whom I teach that, when presented with a patient with, or suspected of having, glaucoma, we must be expert detectives, paying great attention to even the smallest detail.

There are well-recognised centres of excellent tertiary eye care in Asia such as those in Singapore and Beijing, but these programmes are very much the exception. Unfortunately, the majority of ophthalmologists in developing countries have not received adequate training in the pathophysiology, diagnosis, and treatment of this very complex disease process. Too often this results in misdiagnosis and/or inappropriate treatment.

The ophthalmologists I encounter in my workshops, with only rare exceptions, are intelligent, motivated, and caring individuals, but have received substandard training for a variety of reasons. They have been trained almost exclusively by didactic lectures and may not have been allowed to ask questions. To successfully diagnose and treat patients with glaucoma, thinking in the decision-tree algorithmic manner is essential. Not to do so leads to haphazard

and dangerous conclusions. But what if this pattern of thinking is missing in an ophthalmologist who has completed the training available at the local level? What would be a suitable solution for filling in the gaps in essential knowledge?

Supplemental education in the form of an intensive 2-week workshop can correct much of the knowledge gap and result in a substantial improvement in the quality of care and, hopefully, reduction in the chances of glaucoma blindness. The format of the workshop involves selection of 5 ophthalmologists from 5 different teaching centres within a country or adjoining countries. They become the core group and must have completed a residency, have a sincere interest in glaucoma, and agree to teach others what they have learned from the workshop once they return to their home institutions. In addition, the workshop comprises 20 hours of didactic lectures, with no limit on the numbers who attend.

With worrying frequency, I experience situations that are serious barriers not only to learning, but also to acceptable clinical care. I have come to expect, but am still surprised by, very serious gaps in basic knowledge that are obvious barriers to good clinical practice. The inability to elicit a meaningful history from the patient is almost always present and is accompanied by a failure to perform a thoughtful and systematic ocular examination, making it impossible to present a patient in the usual and universal manner. Other examples include not knowing the significance of, or

how to test for, a relative afferent pupillary defect, not understanding the clinical importance of pinhole vision and not knowing how to write a meaningful clinical record. In fact, it is not unusual to discover that there has been a total absence of any documentation of clinical findings. Very few trainees have ever been taught to perform gonioscopy.

Clinical Practice Guidelines

Elsewhere in this issue, Ivan Goldberg describes the recent publication by the South East Asia Glaucoma Interest Group of the Asia Pacific Glaucoma Guidelines. This 100-page booklet was produced by leading international glaucoma experts from the Asia Pacific region to establish best practice methodologies throughout Asia. It is a remarkably concise, comprehensive, and easy-to-follow set of instructions about how to diagnose and treat the glaucomas. I am constantly looking for teaching aids; the guidelines eloquently describe the best and most practical clinical recipe for glaucoma diagnosis and treatment that I have encountered. The information is appropriate for all ophthalmologists who treat patients with glaucoma, regardless of their educational level.

It is apparent to me that these guidelines can be a major part of the solution to the problem of the many undereducated ophthalmologists in developing countries who, through no fault of their own, were not taught the essentials of basic clinical care — not only for glaucoma, but also for general medicine. The guidelines offer a straightforward approach to the problems noted above, such as history taking, a thorough clinical examination, and performance of appropriate clinical tests. The goals of therapy are clearly defined and treatment options are presented in an algorithmic format. I plan to incorporate the guidelines into my future workshops and leave a copy with all of the core members.

Although the guidelines are not a substitute for personal, over-the-shoulder clinical teaching by knowledgeable ophthalmologists, they are a most valuable resource for appropriate clinical care of patients worldwide, especially in Asia where the most common form of glaucoma is that of chronic angle closure. Accordingly, the guidelines emphasise gonioscopy, which is essential for chronic angle closure evaluation and treatment, although greater emphasis could be given to indentation/pressure gonioscopy with the 4-mirror gonioprism in future editions. This is a handbook of glaucoma diagnosis and treatment that can supplement personal clinical training or be referred to, along with other resources, until personal training is available.

Train the Trainers

I cannot over-emphasise the need for clinical training by well-educated volunteers.

You do not have to be a subspecialty professor to teach residents how to think and do gonioscopy. The AAO International Volunteer Registry will match potential volunteers with those who are looking for help. Use this resource, pick a destination, and become a Trainer of Trainers. You will make a huge contribution to the reduction of global blindness by spending 1 to 2 weeks in a general eye clinic of a teaching institution by teaching basic clinical care. Of course, subspecialty teaching is also in demand, but be prepared to incorporate the basics as well.

The computer and the digital age have enormously expanded the amount of readily available quality ophthalmological teaching material. A partial list of resources follows:

1. The AAO Basic and Clinical Science Course, Section 10, 2004-2005. Glaucoma. www.orbis.org
2. AAO International Registry. www.aao.org
3. ORBIS Cyber Sight. telemedicine.orbis.org/bins/home.asp
4. The International Council of Ophthalmology's Guidelines and Standards for Education of an Ophthalmologist: a Curricular Outline. To be presented at the World Congress of Ophthalmology, San Paulo, Brazil, 19-24 February 2006, and placed on the WHO website: www.who.int/en/
5. Asia Pacific Glaucoma Guidelines. www.seagig.org/apgg

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