Editorial

Ophthalmology subspecialty fellowships: town or gown?

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Conflict of interest: None
Funding sources: None

Subspecialty fellowship training years are regarded as the pinnacle of training, and are cherished for life. Every individual enjoys a unique experience that sets the standards, influences their outlook and forms the foundation for the rest of their professional career. It is during this time that individuals move from a didactic training process to the start of senior careers, where one begins to learn to be an "independent thinker" and professional, who is not only able to critique and apply evidence based medicine to their practice, but to also perhaps consider answering research questions of their own.

The ability to critically review the literature and apply new treatments or management paradigms into one's clinical practice is a vital skill for any clinician, irrespective of whether there is a wish to have an academic career. Indeed, to be a professional and scholar are key roles that RANZCO seeks to uphold in both the selection and training of future ophthalmologists, and also forms the basis of continuing professional development. These skills are ideally acquired when one is personally involved in research – framing research questions, performing critical reviews of the literature, conducting the research and data analysis and then benchmarking one's findings against those of others in the field. Although there is a component of research in registrar training, it is usually during a subspecialty fellowship that the time and opportunity to be involved in dedicated research comes to the fore. Fellowships are therefore a unique opportunity to nurture a reflective process of learning.

Although surgical subspecialty fellowships have traditionally focused on exposure to surgical experience, a "numbers game"[1], fellowships are also increasingly seen as a critical step into subspecialty practice, with various training positions internationally now being compared against standardised criteria, which include academic output.[1-4]

With the increasing globalisation of medicine, it is inevitable that Australian fellowships will be held up against these criteria by prospective applicants.

In this issue, Chen *et al* benchmark academic performance in early career ophthalmologists by publication output.[5] Their comparison is between those completing fellowships in Western Australia with those at The Royal Victorian Eye and Ear Hospital in Victoria. The WA cohort is biased by 50% from UK and 50% vitreo-retinal fellowships. Chen *et al* show that at least one publication per year of fellowship appears to be the average, and that a track record of prior publication is associated with a greater number of publications during the fellowship and in the subsequent years. Chen *et al* argue that the lower rate of publication in those without a prior track record may be due to lack of opportunity to participate in research during their primary ophthalmic training and therefore underdeveloped research skills. Nevertheless, around 60% fellows do eventually publish within four years after their fellowships. There is no known international comparator.

Is this benchmark the minimum acceptable, or should we strive for a greater ideal? Subspecialty fellowships in ophthalmology are the perfect opportunity to fine-tune and develop new skills. Prior foundation knowledge is assumed for a trainee who has passed primary ophthalmic training and now is fully committed to the profession. The interest in subspecialty training itself demonstrates a keenness. These findings should serve as an opportunity to reconsider the structure of fellowships with clearly defined outcomes and an academic focus, beyond the increasing demands of simple service provision.

Fellowship accreditation, by examination, has been suggested in a Europe for a subspecialty license to practice across professional governing borders.[4] The UK has a formal system of advanced subspecialty training opportunities (ASTOs) in an effort

to structure subspecialty posts as part of training. It is possible that this process of standardization becomes more global, with academic output a measurable metric. Subspecialty societies already have strict criteria for membership, not only by proof of subspecialty fellowship training that is endorsed by current members, but mandating evidence of recent publications (http://www.maculasociety.org/Membership; http://www.uveitissociety.org/join). Could this become a process of subspecialist accreditation?

As the increasing number of Australian graduates are looking to forge their careers in medicine, one of the key markers of commitment to a subspecialty is academic output. For Australia, this explorative study provides initial guidance for those planning ophthalmology careers and encouragingly highlights that any initial scholarly output leads to greater academic output later in careers. This suggestion that fellowships with higher academic output in turn leads to ongoing greater academic productivity post fellowship has also been demonstrated in the US.[2]

There is evidence of declining academic numbers globally, and here in Australia we are at risk of the same.[6] Academia is suffering from the global recession and funds for research are diminishing. The future strength of the Ophthalmic Research Institute of Australia (ORIA) may be dependent on a process of regeneration, or the clinician scientist may become as extinct as quickly as it was nurtured. In 2014, Mackey *et al*, suggested that it would be reasonable to expect that the publication output of senior academic ophthalmologists (all those with professor posts) in Australia and New Zealand to be at least two peer reviewed papers per year.[7]

We applaud Chen *et al* for initiating the debate and providing a benchmark to build on. The structuring of fellowships is inevitable. This profession needs to maintain the culture of inquisitive minds, reinforce the need for an evidence-based approach, to

encourage ophthalmologists to continually question their clinical practice, and to seek higher standards of care. Fellowships are the key in providing the pasture in which to nurture this. Not all of us can be or want to be Professors, but we should all strive to be professionals providing the best evidence based care for our patients, as ultimately, without evidence-based medicine, what would set us apart from the town, just the gown?

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