Editor's choice

Tackling the McDreamy complex - a UCT medical student's perspective on neurosurgery

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The modern glamorisation of the medical profession has seen a television series character inspire a new generation of 'wannabe' neurosurgeons. With the boom in interest stemming from the public perception of neurosurgery, it seemed appropriate to investigate the constructs of the modern medical student, focusing on their interaction with the field and what neurosurgery might have to offer in their training and beyond.

Background: the modern medical student

In line with an internationally driven transformation of medical education a decade ago, the pre-clinical years of medical education adopt a far more integrated approach that sees the barriers between the scientific disciplines and basic clinical skills begin to blur with the new problem-based learning (PBL) approach. The neurosciences are taught at the end of the pre-clinical training over a gruelling 6-week period.

As of 2011, students have an opportunity to enrol in an MB ChB/ BSc Med (Hons) programme. This allows for a focus on research skills development while allowing students to qualify with an honours degree in addition to the MB ChB at the end of 7 years. The objective is to increase the pool of clinician scientists, as highlighted by Mayosi *et al.*^[1]

The final 3 years, referred to as the clinical years, remain largely unchanged from the old curriculum. Students rotate through all clinical departments in their fourth and fifth years of study at UCT, including the old favourites of medicine, surgery, paediatrics and obstetrics and gynaecology. There is now a medical specialties block in the fifth year, which includes a 4-week combined neurology and neurosurgery rotation.

But I'm still a medical student – why should neurosurgery matter to me?

As an eloquent Dr Chris Barnard once said: 'Die hart is maar net 'n pomp'. It is an impressive organ, but simply cannot approach the brain for its complexity in form and function.

For too long, medical students and junior doctors have painted neurosurgery into a corner as a field only applicable in specialised circumstances, beyond the scope of core knowledge required at medical school. Interrogating it further, one realises that this seemingly esoteric subject has many core principles that are integral to the practice of good medicine at all levels of care (Fig. 1).

The effort to embark on a journey to study the brain can be richly rewarding, both as a student and as a junior doctor, at exam time and in the management of patients often with limited supervision.

Sales pitch: what can neurosurgery offer medical students?

There is of course so much more than just the ideal of 'brain surgery' to offer captivated medical students. It does require some effort, and as perceptively stated by Edison: 'We often miss opportunity because it's dressed in overalls and looks like work'. Most medical students remain blissfully unaware of the vast opportunities available to them.

As described by Kozar *et al.*, positive encounters with surgeons can have an impact on how a surgical career is viewed by medical students right from first-year level.^[2] The most recent data from the UCT Surgical Society show that, from a membership of 570 students recorded in the year 2012, 268 showed interest in specific



Fig. 1. Applications of neurosurgical principles.

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Fig. 2. Undergraduate interest in surgical specialties at UCT, 2012.

surgical departments, with neurosurgery coming up trumps once again (Fig. 2).

For students, the 'wow factor' is inherently generated from the skilled and complex procedures on display in the operating theatre. In addition to this, workshops, forum discussions and international meetings provide a glimpse into the vast world that might await a future career in academic surgery. This is where a department can be instrumental in involving students and fostering interest, guiding them right from their infancy in medical school.

Informed consent for a career: tackling the McDreamy complex

Derek 'McDreamy' Shepherd, the slick neurosurgeon from the *Grey's Anatomy* television series, has made a considerable contribution to the modern lay interest in the field. Of course this fictional representation is not an accurate reflection of the world of neurosurgery, but has catapulted the profession into the limelight. Thus, as a student or junior doctor with an interest in the field, now more than ever it is imperative to gain a realistic understanding before the decision to embark on a long, focused career.

In a field still very much in its infancy, there is so much left to be done, so much left to discover. The capacity for the unknown remains one of the most thrilling aspects of the neurosurgical world, and will prove to inspire future generations of surgeons.

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Further reading

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