

Working hours in surgery: the junior's perspective

Introduction

The advent of the European Working Time Directive (EWTD) has had a massive impact upon medical training in the UK. It became law in 1998, but junior doctors were excluded until 2004. Since then, there has been a gradual reduction in the number of hours that juniors are allowed to work and this will culminate in the 52-hour week in August 2009. Whether all specialities see it as a detriment, however, is open for debate and a brief look through the literature would suggest that it is the surgical specialities who seem to discuss this the most. This article will examine the impact of the reduction in hours upon junior surgical trainees, other factors that have influenced surgical training and what can be done to maximize one's time and efforts.

What is surgical training?

Becoming a doctor typically takes 4–6 years of medical school training, although there will often be a great volume of work and effort to get there in the first place. Thereafter, the time it takes to train a doctor to become a surgeon is not strictly defined. While a core syllabus is laid down by the surgical Royal colleges, there remains a great variability in the educational content and exposure of surgical posts. Most senior surgeons will see it as the time needed to recognize problems and deal with them in clinic, casualty or on the wards, as well as the time needed to get a 'good pair of hands', i.e. become proficient in a speciality. At every level of the career ladder, training will differ and recognizing what needs to be delivered and received at each stage is crucial.

A history of overworking

In 1999, Barry Jackson, the then President of the Royal College of Surgeons of

England, said: 'My very desperate concern is that because there is this overworking, there will be occasions when the standard of work performed is less than adequate. The overwhelming majority of surgeons are extremely competent individuals, but if they are working at the pressure they are working at the moment, then there is the potential for occasional lapses. If you are tired, there is the temptation to try and get the next operation done more quickly, and if you are trying to do it more quickly you might not do it as well. There is the temptation to leave part of the operation to an assistant and there is the potential for making a technical error.' (BBC News, 1999).

Bearing this in mind, the introduction of the EWTD must have seemed like a sensible option. So why has the pendulum swung so completely the other way and why is the EWTD blamed for having a negative impact training and patient care (Morris-Stiff et al, 2005)? The answer is complex and a reduction in hours is clouded by various other issues.

Changes in rotas and the 4-hour wait

Reducing the number of hours that doctors are allowed to work has led to a change in working patterns with a subsequent abolition of the now unheard of '1 in 2' or '1 in 3' rotas. At a junior level, namely foundation and core training, while there has been an increase in the number of doctors (Martin et al, 2006) to comply with new rotas, most juniors will cross-cover specialities in order to be able to provide a service. Covering unfamiliar specialities can be dangerous and is associated when doing so with low confidence as a result of an underlying lack of training (Davis and McDonald, 2006).

In addition, there has been a change in practice in casualty departments whereby patients must be seen and either discharged or admitted within 4 hours of presentation (Department of Health, 2001). The '4-hour breach' appears to have taken precedence over the needs of the patient and in such an inflexible system, theatre or clinic opportunities will suffer since casualty will inevitably beckon for the on-call junior surgeon.

Reduced experience

The effects of the changes secondary to the EWTD on junior doctors have been highlighted by Garvin et al (2008) where the introduction of a compliant rota for senior house officers (FY2–CT2 equivalent) resulted in an overall feeling of dissatisfaction with training, with missed opportunities to attend clinic and theatre. Perhaps more importantly, continuity of patient care was felt to be suffering.

Operating at night

The confidential enquiry into perioperative deaths (Buck et al, 1987) set in motion a change in operating behaviour. Ultimately, it no longer became acceptable to operate out of hours without threat to life or limb, while a reduction in numbers of unsupervised operations was advocated. As a consequence, junior and middle grade surgeons cannot take non-urgent cases to theatre and muddle through things in the way that older generations did. Furthermore, increased supervision means that independent operating at a junior level has decreased. It could be argued, however, that this is a good thing and that ultimately the best interests of the patients are at heart.

Advances in technology

Advances in technology have led to changes in surgical practice with key examples being camera-assisted surgery and the use of radiological investigations to determine treatment. For example, the number of laparoscopic appendicectomies has risen but it is important to know how to do an open appendicectomy before doing a laparoscopic appendicectomy. In the 'bad old days' when only one treatment option existed, juniors got to start performing the traditional open procedure but nowadays when a registrar is only getting used to laparoscopic procedures, where does this leave the junior surgeon?

Surgical and physician assistants

A relatively new phenomenon is the surgical and physician assistant; usually a nurse who either assists in theatre or participates in administrative duties on the ward. It could be argued that they have taken on the role of the junior and again marginal-

Mr Shelain Patel is Specialist Registrar, **Mr Fahad S Hossain** is Clinical Research Fellow and **Mr Henry Colaco** is Specialist Registrar in the Department of Trauma and Orthopaedics, University College Hospital, London NW1 2PG

Correspondence to: Mr S Patel

ized their role. However, this is not borne out by the evidence (Alex et al, 2004; Herbertson et al, 2007) and, lest it be forgotten, their role will only ever be as the assistant. Opportunities to learn different skills from them should be grabbed with both hands.

The American experience

It is not just in the European Union that working time regulation has occurred. In the United States, residency training programmes were required to institute restricted duty hours of 80 hours per week after 2003. Even though their working week remains 30 hours more than that in the UK, they still feel that this reduction has negatively impacted education, continuity of care, and operative experience (Zuckerman et al, 2005).

Take opportunities

Ultimately the EWTD was brought in to allay the concerns that overworking was occurring and, in medicine, this was negatively impacting upon patients' health. It is here to stay and rather than moan, one needs to ask 'what can I do to improve my training?'

When it is quiet and the mess beckons, don't forget that there is a wealth of clinics and theatre sessions in every hospital. This is the arena where most pathology will be seen. Rather than thinking that it is not your responsibility to help, try and instead use your free time to add cases to your logbook or see patients in clinic. With clinics, at the very least patients will be seen quicker and everyone will go home sooner, while the best scenario is that you see something you see something that you've never seen before in real life, you learn about it and your senior colleagues notice your enthusiasm.

The same applies to theatre. Here there are two options which very much depend on the dynamics of the workforce. If possible, it is always best to go to your own consultant's operating lists. Try and swap your on-calls to achieve this. When this isn't possible, take any opportunities when the assigned junior is on annual, study or sick leave to go to his/her theatre list and get your face noticed. The more times you scrub in, the more familiar you get with the set-up and more likely the lead surgeon is to let you start doing parts of the operation.

Use your free time

While most jobs start in the morning and end in the evening, being a doctor is different. It is a career. That means that even when you are not at work, you should set aside some of your time for career progression. This can involve reading, revising or undertaking audits or research. In a profession where the pyramid structure seems to get worse every year, it is important to realize that no matter how good you are, you need to show it. While it is true that undertaking research does not make you a better surgeon at a junior level, it does show a documented level of commitment. That will always be recognized and encouraged.

Conclusions

A reduction in working hours was needed and has occurred. Whether doctors now think that working hours are too short to

enable them to learn properly is open for debate and certainly the issue is clouded by other factors. However, for the foreseeable future, the EWTD is here to stay and working at your best within the confines of the system is your best chance of success. **BJHM**

Conflict of interest: none.

- Alex J, Rao VP, Cale AR, Griffin SC, Cowen ME, Guvendik L (2004) Surgical nurse assistants in cardiac surgery: a UK trainee's perspective. *Eur J Cardiothorac Surg* **25**(1): 111–15
- BBC News (1999) Risk from overworked surgeons. 2 August (<http://news.bbc.co.uk/1/hi/health/408336.stm> accessed 13 February 2009)
- Buck N, Devlin HB, Lunn JN (1987) *The report of a confidential enquiry into perioperative deaths*. The Nuffield Provincial Hospitals Trust and Kings Fund, London
- Davis SJ, McDonald S (2006) Covering ENT out of hours: how confident are senior house officers? *J Laryngol Otol* **7**: 587–90
- Department of Health (2001) *Reforming emergency care: first steps to a new approach*. Department of Health, London
- Garvin JT, McLaughlin R, Kerin MJ (2008) A pilot project of European Working Time Directive compliant rosters in a university teaching hospital. *Surgeon* **6**(2): 88–93
- Herbertson R, Blundell A, Bowman C (2007) The role of clinical support workers in reducing junior doctors' hours and improving quality of patient care. *J Eval Clin Pract* **13**(2): 272–5
- Martin S, Smith PC, Leatherman S (2006) *Value for money in the English NHS: summary of the evidence*. Health Foundation, London
- Morris-Stiff GJ, Sarasin S, Edwards P, Lewis WG, Lewis MH (2005) The European Working Time Directive: One for all and all for one? *Surgery* **137**(3): 293–7
- Zuckerman JD, Kubiak EN, Immerman I, Dicesare P (2005) The early effects of code 405 work rules on attitudes of orthopaedic residents and attending surgeons. *J Bone Joint Surg Am* **87**(4): 903–8

KEY POINTS

- The European Working Time Directive has dramatically reduced overworking.
- Factors outside of the European Working Time Directive have also affected training.
- Training and possibly patient care have been affected through changes in working practices and technological advancements.
- Optimal doctor training and patient care is an ideal which needs to be aspired to.