Letter to the Editor

European Working Time Directive implementation and cardiothoracic training: larger centers may optimise training

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I read with interest the article by Lim and coworkers, detailing the effect of implementation of the European Working Time Directive (EWTD) on operative training at Papworth Hospital [1]. The findings of this study are impressive, but may not reflect the wider experience of UK trainees.

The Royal College of Surgeons of Edinburgh has performed nationwide surveys of the attitudes of UK and Irish cardiothoracic trainees towards their training in 2003 and again in 2005–2006, before and after implementation of the EWTD 58-h limit [2]. There are important contrasts between their results and the Papworth study.

During the initial study period at Papworth, 39% of all cardiac cases were performed by trainees, rising to 40% after EWTD implementation. In the year after EWTD implementation, the seven trainees performed a mean of 99.3 cases each. Papworth is a large hospital, performing 3312 cardiac procedures in 2 years.

In contrast, the UK survey respondents performed a mean of only 42.6 cardiac cases/year after EWTD implementation, and worked in units performing a mean of 1043.9 cases/year. Only 37% of respondents expressed satisfaction with their training in 2003, falling to 30% in 2005–2006. 100% of respondents who expressed a view felt that EWTD implementation had impacted negatively upon training.

There was an important correlation between trainee satisfaction and their cardiac operative experience (72.7 cases/year vs 26.7 (satisfied vs not satisfied), \( p = 0.005 \)). Larger units, as assessed by the annual number of cardiac cases (1586.2 vs 828.4, \( p < 0.001 \)), number of intensive care beds (20.6 vs 8.9, \( p < 0.001 \)) and ward beds (68.7 vs 35, \( p < 0.001 \)), was also associated with increased trainee satisfaction.

Trainees’ satisfaction with EWTD implementation and the quality of their training in the UK is worryingly low. Large hospitals with many trainees may find it easier to implement shift working while continuing high-volume operative training. Trainees appear to prefer such environments. It may be that larger units such as Papworth will be better able to provide training following EWTD implementation — certainly, Lim and coworkers’ findings suggest they are adapting well.

Registrar numbers are set to decline, and it is likely that not all units currently training will continue to do so. Evidence of high-quality operative training, and trainee satisfaction with individual units, will be crucial to decide where the smaller cohort of future trainees are best employed.

References


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Reply to the Letter to the Editor

Reply to West

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We thank Mr West for his comments [1] on our paper [2], and agree that the experience at Papworth is not reflective of the wider experience of UK trainees. It was certainly not our intention to deliver such a message.

From the United Kingdom survey, it is clear that the majority of trainees are dissatisfied with their training and all felt that their training was negatively impacted by the shortening hours.
Our manuscript highlights a fundamental point that if an institution is committed to training, training can be sustained despite shortening hours.

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Letter to the Editor

Adapt or die. The imperative for a culture of innovation in cardio-thoracic surgical training

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In a recent Editorial [1], Mestres et al., give a personal view of the possible impact of the full application of the European Working Time Directive (EWTD) on training in cardio-thoracic surgery. The authors go to the extreme of describing the directive as ‘a well planned and organized assassination of surgery’.

It has been claimed that under this directive the cardio-thoracic surgical trainees will have only a fraction of the time allowed to their predecessors to become competent surgeons.

The answer to this challenge must be that of adaptation to the new environment in order to survive. The way training in cardio-thoracic surgery is conducted must therefore change. Below we propose some alternatives to optimise time spent in hospital in order to streamline training and produce competent surgeons in a 48-h week environment.

Processes for the selection of trainees in cardio-thoracic surgery in Europe are heterogeneous. Commonly, the methods used for selecting cardiac-thoracic surgical trainees are inappropriate to identify the attributes and skills required in a trainee to be. These fail to measure qualities such as manual dexterity, complex problem solving ability, willingness to work in or lead a team, ability to take responsibility, commitment etc. Time and resources spent in these processes would ensure the selection of those candidates most likely to progress through a training programme effectively.

Models for teaching basic and advanced surgical techniques in the wet lab must be developed. Retention of motors skills appears to be most dependent on the degree to which the skill was perfected, rather than other variables. The amount of transference of skills between tasks depends on the similarity between the two tasks. This implies that appropriate skills learnt in the wet-lab can be carried out effectively in the operating theatre [2].

Structured models for transfer of knowledge have been shown to optimise surgical training [3]. When compared with traditional teaching strategies based in the traditional apprenticeship method, the former have been applied very scarcely, and its broader use would certainly speed up the learning process.

The rate of progress during the training period varies amongst trainees. Therefore, establishing fixed training periods can be considered as unrealistic. Competence based training ensures that training is tailored to the trainee needs and abilities [4]. In it, progress is made by achievement of predetermined competencies. For instance, once a trainee is deemed competent in saphenous vein harvesting, he/she can move on to learn a new procedure. From then onwards needlessly performing simple, repetitive tasks, such as vein harvesting, compromises the overall learning continuum and advancement of trainees.

Evolution’s rules are simple: creatures that adapt to threats and master the evolutionary game thrive; those that don’t, become extinct. There are tools available to successfully train cardiothoracic surgeons in a 48-h week environment. Some have been discussed in the text; many others have been left in the inkpot. It is our obligation to make good use of all of them and continue the research in this field.

References


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