Clinical & Scientific letters

Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section. Clinical and scientific letters should not exceed 500 words and may include one table and up to five references.

Impact of a European Working Time Directive-compliant working pattern on delivery of medical specialty teaching for senior house officers in a teaching hospital

Introduction

With the introduction of the European Working Time Directive (EWTD) junior doctor's working hours have been reduced and working patterns have changed.1 The introduction of 'EWTD-compliant' rotas has led to concerns that training may be affected both by less clinical exposure and by reduced ability to attend teaching sessions.² This is of particular importance at a time when UK medical training is becoming streamlined due to Modernising Medical Careers (MMC) which has significantly changed medical training in the UK.3 Concerns were expressed by senior house officers (SHOs) that they were missing programmed teaching sessions following a change in rota, in order to provide EWTD compliance. We prospectively evaluated the impact of the introduction of this EWTD-compliant rota on our ability to deliver programmed specialty-focused teaching sessions to SHOs.

Methods

Data were collected from SHOs on two occasions: first, for a six-week period before (June–July 2005) and second for a six-week period after (November– December 2005) the introduction of the new EWTD-compliant rota. Although the groups of SHOs were different they were comparable in terms of training and years of experience. An attendance sheet was completed by SHOs at each teaching session. Those SHOs who did not attend the session were subsequently contacted by the trust's Royal College of Physicians Associate Tutor in order to establish reasons for non-atten-

dance. In our trust, which employs SHOs to cover inpatients with infectious disease- and HIV-related problems, genitourinary medicine (GUM) outpatient clinics or a combination of both, SHO rotas were originally a partial shift system which included eight SHOs. On this rota there was one SHO on late shift Monday to Friday 1300-2200, and one SHO at the weekend working a long day (0900-2130), with no night duties, with prospective cover. This was changed to a full shift rota including 10 SHOs, which involved each SHO working a week of nights every 10 weeks, followed immediately by a compensatory rest week of seven days, plus a 1 in 10 long day shift (0900-2100), and an additional second SHO on weekend duty (0900-1700). On weekdays actual on-call duties started at 1700, with regular ward work carried out between 0900 and 1700. The new rota included programmed annual leave. Both rotas were paid at Band 1A.

There is a defined curriculum for training these SHOs, with teaching topics on aspects of infectious diseases, GUM and HIV medicine, which is delivered by consultant medical staff on a repeating sixmonth cycle. Teaching for SHOs takes place for two hours on a Wednesday morning (1000–1200) and one hour on a Friday morning (0830–0930).

Results

In the first six-week period, pre-EWTD compliant rota, with eight SHOs participating in the on-call rota and attending teaching twice a week, there was a total of 96 potential teaching attendances. Three sessions were cancelled in this first period (representing a total of 24 attendances, due to consultant teachers being unavailable at the last minute and transport problems following the 7 July 2005 terrorist incident). In the second six-week period, with 10 SHOs, representing a total of 120 possible

teaching attendances, two were cancelled (20 attendances, due to consultants not available at the last minute). Some Wednesday teaching sessions were more GUM in topic and were not attended by SHOs who were doing ward work (both pre- and post-rota change) (21.5%).

Overall, 36.7% of available teaching sessions were attended by all SHOs. During the period before introduction of the EWTD-compliant rota, SHOs failed to attend 47.2% (34/72) of teaching sessions. Of these, 1/34 (2.9%) was due to rotarelated reasons (being on call that evening, therefore working day starting at 1 pm). Following introduction of the EWTDcompliant rota SHOs missed 31% (31/100) teaching sessions. Shift-related factors were given as the reason in 10/31 (32.3%) occasions. Of note the most common reasons for the non-attendance of SHOs at programmed teaching were annual leave and study leave.

Discussion

These data suggest that attendance at programmed teaching was similar before and following the introduction of a new EWTD-compliant rota, but these results are derived from a small sample of two different groups of SHOs, and are influenced by individuals' behaviour. However, nonattendance at teaching sessions after the new rota was introduced was more likely to be due to rota-related problems such as working nights or time off after nights.

Concerns regarding access to teaching opportunities have prompted questionnaires which have shown that reducing junior doctors' hours is felt to have adversely affected medical education as well as professionalism.⁴ Reducing hours worked was not shown to improve educational satisfaction.⁵

By 2009 the maximum working hours for doctors in training in the UK will be 48 hours per week and working patterns may change again.¹ As training becomes shorter with the implementation of MMC there may also be a necessity to increase the number or length of teaching sessions to compensate for the reduction in clinical experience. In order to ensure that junior doctors-in-training (foundation years 1 and 2 (FY1/FY2) and specialist training years 1 and 2 (ST1/ST2) grades) continue

to be able to receive delivered medical training it is vital that local (trust- and sitespecific) provision of medical education addresses the issue of individual doctorsin-training who experience difficulties in attending programmed activities due to work-shift patterns. Timing of educational sessions should be addressed by individual medical education departments in order to facilitate delivery of optimum opportunities for attendance, taking into account SHO (FY1/2, ST1/2) shift patterns and changeover times. This may require repetition of teaching, or the provision of videos of teaching sessions. Alternative methods of training need to be considered, including use of core teaching material held online by specialties or those contributed to by Colleges.6

SHERIE ROEDLING¹
ANGELA ROBINSON¹
CAROLINE LOUGH-WHITE²
ROBERT MILLER³
¹ Department of Genitourinary Medicine/HIV,
Mortimer Market Centre
Camden Primary Care Trust, London
² Medical Education Department, Camden
Primary Care Trust,
Islington Primary Care Trust and Camden &
Islington Mental Health & Social Care Trust
³ Centre for Sexual Health and HIV Research,
Department of Primary Care and Population
Sciences, Royal Free and University College
Medical School, University College London

Notes on contributors

S Roedling was RCP Associate Tutor for Camden Primary Care Trust (PCT) at the time of this study and has an interest in postgraduate medical education. C Lough-White is Assistant Director of Medical Education for Camden PCT. RF Miller is Royal College of Physicians Tutor for Camden PCT. A Robinson is Clinical Tutor for Camden PCT.

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The diagnosis of recurrent venous thrombosis – can a risk stratified approach at initial presentation be helpful?

Diagnostic criteria exist for the diagnosis of deep vein thrombosis (DVT) and there are also often regional protocols, which assist in following an algorithmic approach to confirm the diagnosis. But, the diagnosis of a recurrent DVT remains a problem mainly because the tests used for the initial diagnosis may have serious limitations in confirming a recurrence. Hull *et al* demonstrated that a diagnosis of recurrent DVT can only be confidently made in 30% of patients.¹

An ultrasound duplex scan is not reliable for recurrent DVT unless they have been shown to normalise prior to the suspected recurrence. In particular, thickening and increased echogenicity of the vessel wall and resistance to compression may be detected (and become permanent) in up to 70% of patients despite no evidence of recurrent disease in the year following a DVT.² A recent study has suggested that a change of thrombus length of more than 9 cm is required to accurately diagnose recurrent DVT.³ It may be appropriate to perform a follow-up ultrasound between 3 and 6 months after anticoagulation (A/C) is initiated, to serve as a baseline in the event that symptoms recur. As it may be impractical to follow this procedure for all individuals who were diagnosed with DVT, a 'selection criteria' could be applied (Fig 1).

D-dimer estimations are also useful in the diagnosis of an initial DVT and the success of the test for predicting DVT recurrence has been demonstrated.^{4,5,6} D-dimer levels measured 1 month after A/C withdrawal were shown to have a high negative predictive value for recurrence in subjects with unprovoked venous thromboembolism (VTE) who are either carriers or non-carriers of congenital thrombophilia.⁵ In total, 599 patients with a previous VTE episode were evaluated. Altered D-dimer levels were found in only 15.6% at the time, whereas levels increased to 40.3% and 46.2% after 1 and 3 months respectively. The negative predictive value of D-dimer obtained 1 month after withdrawal of A/C was 92.9%. In patients who had elevated D-dimer levels 1 month after cessation of A/C, the

Fig 1. An algorithm for the risk stratification to help the diagnosis of recurrent deep vein thrombosis (DVT). APTT = activated partial thromboplastin time.

