Impact of EWTD on Teaching and Training in Irish Paediatric Medicine: Positive or Negative?

Abstract:
DM Slattery
The Childrens University Hospital, Temple St, Dublin 1

The European working time directive (EWTD) was instituted in Childrens University Hospital, Temple St, Dublin, September 2004. This study was aimed to assess the impact of the EWTD on teaching and training in hospital paediatric medicine. Research tools included questionnaire and focus group. Twenty out of a potential 52 non-consultant hospital doctors (NCVDs) with paediatric training experience (n=19) felt it did not result in increased consultant or registrar teaching time. Thirty five percent (n=10) felt it had reduced registrar supervised training time. The EWTD enabled NCHDs to attend teaching sessions less tired (65%, n=13) but they missed significant teaching due to enforced rest and cross cover arrangements.

Methods
A prospective study was performed between January and April 2011, at CUH Ethical approval was obtained from CUH Ethics committee. Research tools employed included both questionnaire and focus group which were completed at the end of a 3 month period working in a EWTD compliant environment. The questionnaire was developed by the research team amongst the NCHDs. Questionnaires collected both quantitative and qualitative data pertaining to the impact of the EWTD on teaching and training opportunities. Data was inserted into excel files, analysed using SPSS version 14.0 and Cronbachs alpha coefficient calculated. Qualitative data from the questionnaire and the focus group was analysed thematically, by the author and verified by a second consultant. The focus group comprised of 2 senior house officers, 2 registrars, an independent observer who transcribed notes and recorded discussion and a facilitator (the author).

Results
Twenty out of a potential 52 NCHDs (not working shift work), completed the questionnaire of which 12 were female (60%). Response rate was 38.4%. Cronbachs alpha co-efficient for the questionnaire was 0.78. The majority (n=18, 90%) were training in paediatric medicine, 2 (10%) were training in general practice while 16 (80%) had > 2 years of paediatric training completed. All 20 (100%) had completed at least 3 months working in a EWTD compliant hospital (CUH). Thirteen (65%) respondents agreed the EWTD had an impact on teaching with 15 (75%) stating the EWTD made it more difficult for consultants to plan teaching time. A majority (13, 65%) reduced consultant teaching time. Approximately, two thirds (n=13, 65%) of respondents did not feel the EWTD resulted in the development of an improved structured teaching programme but stated they were less tired at teaching sessions prior to its introduction, (n=13, 65%). The majority (n=16, 80%) favoured early morning teaching sessions (8-9am). Regarding impact of the EWTD on supervised training (Table 2), the majority did not feel the EWTD had an impact on consultant or registrar supervised training time (65%, n=13 and 60% n=12 respectively) in specific procedures e.g. lumbar puncture. There was unanimous agreement (n=20, 100%) that the EWTD did not increase consultant supervised training time within the 48 hour week. A majority (57%, n=11) stated that increased consultant supervised training time was not available to them and no improvement in structured teaching or training opportunities. The significant group of non-responders is concerning and may reflect disinterest in learning or inability to attend due to clinical concerns regarding this issue. Fatigue was a common complaint of 'trainees' and many stated they had made errors which they attributed to same. Fatigue impairs human performance. Sleep deprivation has been shown to be equivalent to the effect of alcohol intoxication.

Discussion
The key points highlighted in this study, is that NCHDs in hospital paediatrics feel that the introduction of the EWTD has resulted in teaching sessions being more difficult to attend, with reduced consultant and registrar teaching time available to them and no improvement in structured teaching or training opportunities. The significant group of non-responders is concerning and may reflect disinterest in learning or inability to attend due to clinical concerns. Despite recent media attention, there is a significant paucity of data regarding the impact of EWTD on teaching and training in hospital paediatric medicine.
teaching and training in paediatric medicine. This is the first paper identified, despite the authors extensive search. A recent systematic review of the impact of reduction in working hours, for doctors in training, on post graduate training has suggested that reducing hours from >80 hours per week has limited effect on post graduate training, that these studies are often of poor quality revealing conflicting results and that only 2 out of 41 papers pertained to non surgical or non-anaesthetic specialities.

The majority (27) showed no change in training outcomes, with 12 reporting a deterioration. Our study demonstrates a dis-improvement in teaching but not specifically in supervised training for a specific procedure. A recent Irish surgical study highlighted that 88% of surgical senior house officers reported a reduction in quality of surgical training at a University hospital since introduction of EWTD.

Specialities with small numbers of NCHDs find it more difficult to comply with EWTD so it is important that NCHDs demonstrated flexibility and interest to attend teaching and training in the trainees own time, outside of work hours. This area should be maximised as advocated by Temple in the recent Medical Education England (MEE) report. A willingness to learn during unpaid time is crucial to ongoing teaching and training and should prevent the need for increased length of training, if teaching and training is well structured. Being less tired is important to trainees regarding teaching and training and here this study concurs with others internationally, many of which highlighted that doctors after working 24 hour shifts, are more prone to making medical errors, have twice as many road traffic accidents and have a doubling of intrusive attentional failure at night. Missed teaching sessions was a significant negative of the EWTD identified in this study, which concurs with others that identified a detrimental association between reduced work hours and measures of post graduate training and teaching. Our NCHDs called for more staff. Significant provision for extra staffing has been made in the USA and UK but not in Ireland. Potential options include, increase in consultant or registrar number, development of grade staff, introduction of interns to paediatrics and/or allocate certain tasks from NCHDs to other professionals e.g. phlebotomy.

A weakness of this study is that it was performed in one hospital only, which may lead to bias but CUH was the only EWTD compliant paediatric hospital with an ICU in the Republic at the time of the study. Prospective multi-centred studies are required. In the words of John Temple “training is patient safety for the next 30 years”.

References

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