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The impact of the European Working Time Regulations on Ophthalmic Specialist Training – A national trainee survey

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ABSTRACT

Summary and introduction: To assess ophthalmic trainees' perspective of the impact of the European Working Time Regulations (EWTR) on their training.
Methods: All trainees in ophthalmology in the UK were emailed a link to an electronic survey asking about their experiences of the EWTR.
Results: 324 trainees (46% of those invited) responded to the survey. 44.4% of trainees reported that their posts were compliant with the EWTR. 40.7% felt that training had been adversely affected. 49.1% thought that ophthalmic trainees should opt out of the EWTR to work more than 48 h per week, with 57 the mean number of hours suggested appropriate.
Discussion: Many ophthalmic trainees in the United Kingdom are working in rotas which are not compliant with the European Working Time Directive. Many trainees feel that implementation of the EWTD has had a negative effect on training and feel it would be acceptable to work a higher number of hours per week.

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1. Introduction

The European Working Time Regulations 1998[1] (EWTR) limited all employees in the United Kingdom to forty-eight hours of work per week. Recognising the extensive changes required to the working practice of doctors to achieve this, a derogation of this regulation[1,2] exempted junior doctors from the full effects until 2009 with a staged reduction of the limits from 58 h in 2004 to 56 h in 2007 and then to 48 h in 2009.

The EWTR also requires a rest break of 20 min after no more than six hours' work, and a rest period of at least 11 h in a 24 h period. Further European case law (SiMAP and Jaeger rulings[3,4]) defined on-call hours as work when present in the hospital.[5] Most ophthalmic on-call is non-resident and thus only time spent performing duties in the hospital or receiving calls counts as working time under these definitions.

At the same time as the imposition of this legal framework for the limitation of working hours, new terms and conditions of employment for junior doctors were introduced ("The New Deal") by agreement between the Government of the United Kingdom and the British Medical Association.[6] These provided a contractual framework for limiting hours, with increased remuneration for employees working longer hours to provide an incentive for employers to reduce hours. The limits in the New Deal differ from those in the EWTR however, with a maximum limit of 72 h of work permitted per week in the New Deal.

As doctors-in-training we are acutely aware of the balance between reducing fatigue-induced mistakes and maintaining high quality training with appropriate exposure to all aspects of ophthalmology. Implementation of the EWTR has dramatically reduced the amount of time available for training, and there is a perception among some trainers and trainees that the overall quality of training is being affected.

We wanted to assess the trainee's perspective of the impact of these changes in order to protect the quality of training for ophthalmologists of the future. An initial survey was performed in October 2009 and had a 27% response rate which produced many interesting viewpoints on the impact on training.[7] A similar questionnaire was used in this survey and we include the results for comparison later in this paper.

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2. Methods

In order to assess the national experience of the effect of the EWTR on ophthalmic trainees' working lives, an electronic survey was undertaken by the Royal College of Ophthalmologists trainee representative body known as the Ophthalmic Trainees' Group (OTG). This survey was performed in October 2010.

A link to an electronic questionnaire was sent by email to the 709 ophthalmic trainees registered with the Royal College of Ophthalmologists in the United Kingdom. A copy of the survey is available as supplementary material with this paper (see Supplementary Material). The questions were aimed at assessing: the number of trainees working in EWTD compliant rotas; the changes that had been put in place to make the rotas compliant; and the perceived impact on training from the trainees' perspective. The survey was anonymous and one reminder email was sent prior to the survey closing. Two weeks were allowed for completion of the survey. The results were analysed and presented alongside the results from the survey carried out in 2009.

3. Results

There was an improved response rate of 46% to this survey. 324 out of 709 ophthalmology trainees registered with the Royal College of Ophthalmologists (London, UK) completed the survey, from a range of regions across the country. The response rate was improved when compared to the survey undertaken in 2009. The numbers of each training grade that responded can be seen in Table 1. 60% were from doctors who have completed at least two years of specialist training (either Specialist Registrars or Specialty Registrars in years 3 through 7). 179 respondents were first on-call doctors, 73 were second on-call, 43 worked a combination of on-call types and 29 did not declare their level in the on-call team.

Table 2 shows the responses to questions regarding compliance with the EWTR, with the responses from 2009 for comparison. The results found a total of 56% ($n = 180$) of trainees reported they were working more than 48 h per week. In addition 52% ($n = 167$) confirmed that they did not have a twenty minute rest period when working 6 h or more as required by law. During periods on call 38% ($n = 122$) of trainees stated that they did not have a minimum consecutive rest period of 11 h. When asked specifically whether their service was compliant with the EWTR, 44% ($n = 144$) of trainees stated that it was. Remarkably, 46% of respondents did not know whether their service was compliant. Response rates have remained similar to those from 2009, with the exception of more trainees reporting compliance with 11 h continuous rest in 2010 than in 2009.

When the trainees were asked what measures had been invoked to achieve EWTR compliance, 12% ($n = 38$) reported that certain eye departments had been forced to close to eye emergencies after a certain time of day, 33% ($n = 108$) of trainees stated ST3-7 level trainees were now being used on the 1st on-call rotas and 22% ($n = 72$) reported non-training grade doctors were now on the on-call rota. Comments recorded about rota changes in eye units throughout the United Kingdom included that the rota appeared EWTR compliant on paper, but that trainees were unofficially expected to work extra hours voluntarily through early starts and late finishes. This included pre-operative ward rounds which the Royal College of Ophthalmologists states are important to ophthalmic training.

A total of 41% ($n = 132$) of trainees reported that delivery of their training had been adversely affected, less than in 2009 (Table 3). The reasons given for deterioration in training included 27% ($n = 88$) stating a reduction in the chance of repairing a penetrating

Table 1
Responses shown by training grade.

Grade	No of respondents in 2009 survey (%), $n = 189$	No of respondents in 2010 survey (%) $n = 324$
Specialist registrar (SpR)	33 (18)	35 (11)
Specialty registrar year 1–2 (StR 1/2)	51 (27)	71(21)
Specialty registrar year 3–7 (StR 3–7)	89 (47)	161 (50)
Fixed term specialty training appointment (FTSTA)	9 (5)	11 (3)
Locum appointment for training (LAT)	7 (4)	21 (6)
Other	0 (0)	25 (8)

Table 2
Summary of responses to survey questions on compliance with EWTR.

	2009 survey (%)	2010 survey (%)
Do you work 48 h or fewer per week?		
Yes	90 (48)	144 (44)
No	99 (52)	180 (55)
Do you get a rest break of at least 20 min per six hours worked?		
Yes	91(48)	157 (48)
No	98 (52)	167 (52)
Do you receive a minimum of 11 h rest when on call for more than 24 h?		
Yes	87 (46)	202 (62)
No	102 (54)	122 (38)
Is your service compliant with the requirements of the European Working Time Regulations?		
Yes	84 (44)	144 (44)
No	22 (12)	30 (9)
Don't know	83 (44)	150 (46)
Which, if any, of these methods has your department used to achieve compliance with the European Working Time Regulations?		
Closing the eye department to emergencies after a certain time	19 (10)	38 (12)
Consultants being first on-call	2 (1)	4 (1)
SpR/ST3-7 being first on-call	47 (25)	108 (33)
Already having enough junior staff to run a compliant rota	33 (17)	98 (30)
Involvement of SAS (non-training) doctors in rota	27 (14)	72 (22)
Changes in structure and timing of rota	21 (11)	35 (11)
Being given time off before or after an on-call	22 (12)	60 (19)
Other	18 (9)	65 (20)

Table 3
Effect of EWTR on ophthalmic training.

	2009 survey (%)	2010 survey (%)
Do you feel your training has been adversely affected by the implementation of the European Working Time Regulations?		
Yes	90 (48)	132 (41)
No	99 (52)	192 (59)
Reasons given for above:		
Reduced experience at repairing penetrating eye trauma	38 (20)	88 (27)
Reduced exposure to managing eye emergencies	39 (21)	72 (22)
Missing surgical experience due to rest periods	48 (22)	77 (24)
Missing clinical experience due to rest periods	35 (19)	56 (17)
Missing teaching sessions	16 (12)	45 (14)
Other/not sure	12 (6)	20 (6)
Do you feel it is acceptable to ask trainees to opt out of a 48 h limit to working hours?		
Yes	106 (56)	159 (49)
No	83 (44)	165 (51)

ocular injury, 22% ($n = 72$) felt a reduced exposure to managing eye emergencies, and 24% ($n = 77$) stated they were missing surgical experience due to rest periods.

With regards to maintaining training standards, 49% of trainees felt it was acceptable to ask trainees to opt out from working a 48 h week. Only 40% of those working fewer than 48 h agreed with this while 63% of those working more than 48 h a week agreed. 49% of more junior trainees (less than 2 years' experience) felt this compared to 38% of those with more than 2 years' experience. 51 respondents quantified how many hours they felt were appropriate to work and train as an ophthalmologist. The mean was 57.2 h (range 48–70). For those working first on call, the mean was 57.4 h, for second on call the mean was 53.1 h, and for those working a combination, 58.5 h.

4. Discussion

The EWTD was heralded as a piece of legislation to protect the health and safety of employees. Stories of junior doctors working excessively long hours were commonplace prior to the implementation of the new contract and the EWTR.[8] It could be imagined that the specialty of ophthalmology would be relatively immune to the effects of the EWTR as serious ophthalmic emergencies requiring immediate surgical intervention occur rarely out of hours, and doctors can reasonably be on-call from their home if it is within reasonable distance of the hospital.

However the results of this survey highlight a number of important issues to ophthalmic and wider surgical training today. Firstly, it is concerning that so many trainees feel required to work beyond scheduled hours to maintain the quality of both service and their training. Secondly, it is perhaps more concerning that trainees feel that the delivery of training has been adversely affected by the implementation of the EWTR. Surgical experience and the exposure to emergencies including the repair of penetrating trauma are important aspects of training which trainees feel have been affected. Thirdly, even within the year between the two surveys mentioned in this report there are signs of a shift in working patterns with more senior trainees taking on the usually busier "first on-call" role out of hours and perhaps losing daytime experience due to imposed rest periods as a result.

Lastly, it is notable that almost half of all ophthalmic trainees feel it acceptable to opt out of the EWTR, which would cast doubt on how appropriate the legislation is to young professionals in training. Interestingly, the more junior trainees, i.e. those who have less experience of working longer hours before the imposition of the regulations, are keener to opt out than their more senior colleagues but those working within the hours limits are less keen to opt out.

Why has ophthalmology been affected by the EWTR in this way? It is difficult to quantify but possible explanations include the reduction in the number of training posts, coupled with the required changes in working patterns and senior cover to make rotas compliant. There may be other issues such as increased demand on emergency services due to an ageing population and rising expectations of accessible care. Furthermore, there may be a reduction in the exposure of primary care trainees to ophthalmic cases due to the effects of the EWTR that may be increasing referrals to out-of-hours ophthalmic services.

A number of trainee surveys from other specialties have been carried out. The Royal College of Surgeons of England[9] reported a 59% non-compliance rate in July 2010, coupled with a high rate of concerns over patient safety and quality of care. Surgical trainees reported 65% of their available time for training has decreased. These findings were echoed in a similar survey by the Association of Surgeons in Training and the British Orthopaedic Trainees' Association in 2009.[10] Similar findings have also been reported in a survey of surgical trainees in 2011 by Remedy UK[11] in which over half were exceeding contracted hours and 85% felt that hours of work affected training. As these survey results have initiated debate, both the Association of Surgeons in Training and a group representing Australasian trainees have argued for longer working hours for surgical trainees,[12,13] while the British Medical Association continues to support the existing EWTR limits.[14] The Royal College of Ophthalmologists has developed guidance for ensuring compliance with the EWTR[15] but to date has not expressed an opinion on their validity or appropriateness.

The General Medical Council (GMC) surveys trainees annually on the quality of training, and participation in the survey is a requirement of specialty training contracts in the United Kingdom. Surprisingly, the 2010 survey results[16] show that 82.2% of trainees in ophthalmology were compliant with the regulations. They reported that 63.4% of trainees were working longer than their scheduled hours more than once per month. The training needs of 18.3% of respondents were not felt to be met within the time limits specified by the EWTD, and 16.8% were unsure. As a result of these time limits, 26.2% felt that it was taking longer to achieve the required competencies.

There are marked differences between the responses to the GMC's survey and our survey. Trainees are contractually obliged to complete the GMC survey, with a resultant higher response rate. However the dual role of the GMC as regulator of doctors' professional activity and training may dissuade trainees from reporting breaches of EWTR limits. Fear of sanctions could discourage trainees from reporting poor training as a result of the working time limits. Despite this, a sizable minority of trainees have voiced their concerns.

Our survey represents a snapshot of trainee opinions and working practices. As a voluntary survey, it has shortcomings not least with reporting bias. The consistency of responses between 2009 and 2010 despite much increased participation increases the validity of the results. It gauges the opinions of trainees, but doesn't include those trainers or patients. Attempts have been made to measure the objective effects of the limits to working hours[17] but it may be too soon to detect meaningful trends in objective outcomes, particularly given the length of post-graduate surgical training programmes. There could be a role for professional opinion in identifying effects on training.

More work is required to elucidate the exact effects of reduced working hours on surgical training. It is possible that some of the detrimental effects will be mitigated by improvements in the quality of training such as those outlined in the Temple report into the effects of the EWTR on training,[18] including making the most of the limited time available for training and explicitly designing hospital services to support and reward training. Trainees can also take the initiative to improve their own training by being proactive at seeking available training opportunities and identifying issues to their seniors.[5] It is in the interests of patient safety that we must ensure high standards of training are maintained despite reduced working hours. We would urge ophthalmic trainees in other European countries to publish their experiences of the impact of the EWTR on their training to obtain a clear picture of how high quality training is delivered across Europe. We hope that this survey enables trainees' voices to be heard, and invite debate on the concerns raised so that we can safeguard high quality training for the future.

Many ophthalmic trainees in the United Kingdom have working arrangements which are not compliant with the European Working Time Directive. Many trainees feel that implementation of the EWTD has had a negative effect on training and feel it would be acceptable to work a higher number of hours per week. Further debate on the full impact on training is required.

Ethical approval

N/A.

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Author contribution

All authors were equally involved in study design, data collection and data analysis. MOG and GL wrote the manuscript, which was edited by KM and TM.

Conflict of interest

None.

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Appendix A. Supplementary data

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