IJMS International Journal of Medical Students

A Reflection and Comparison of Physician Training in the United States of America and United Kingdom

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The Experience.

As a final year medical student at the University of Birmingham in England, I am very familiar with the training structure of physicians in the National Health Service (NHS). Recently, I had the opportunity to do 4 months of clinical electives at the University of Massachusetts in Worcester, Massachusetts and Mount Sinai Medical Center in New York City, New York. This experience allowed me to gain insight on the American training system for medical student graduates that provided a new perspective on physician training. The following reflection will be based on my experiences in the two countries and focus on the working guidelines for junior doctors in the United States that is based on the Accredited Council of Graduate Medical Education (ACGME) Duty Hours protocol, and will be compared to the European Work Time Directive (EWTD) guidelines for British junior doctors.

Structure of Training Systems in the U.S and UK

In the following text, Foundation year doctors are physicians in the UK who have just graduated from medical school, whereas registrars are more senior junior doctors who are pursuing specialized training in a particular field to become a consultant. Interns in the U.S are similar to foundation year doctors, as they are also physicians that have just graduated from medical school, and residents are more senior junior doctors who are specializing in a field. In the UK the training system entails of being a foundation year doctor for 2 years, and then another 6-8 years as a registrar depending on the specialty, before becoming a consultant. In the U.S, recent medical student graduates are interns for 1 year, and then are residents for 3-4 years, again depending on the specialty. After completing residency, the physician can choose to stay as a consultant or further specialize for 1-3 years by doing a fellowship in a sub-specialty.

Residency Training in America

After investigating the training system in the U.S, it should be noted that the ACGME in 2011 introduced a new set of guidelines for the work hours of residents. Previously the working hours were based on the 2003 ACGME guidelines, which stated that residents had a limit of working 24 hours in one shift, with a maximum of 6 additional hours of education learning. Consequently, they could not work more than 30 hours continuous at one time. This has now been changed to 16 hours as of July 1, 2011, and interns by law are supposed to have a minimum 8 hours of rest between any 2 shifts. Residents have to work 24-hour shifts with an additional four hours of work education learning purposes, or a total of 28 hours continuous.[1]

Based on my interaction with residents of different specialties it became apparent that the new changes to the working guidelines were positively received, as many thought that working 24 hours continuously for one shift was excessive. On the other hand, physicians such as the Associate program director of the University of Nebraska surgery program feel that their learning is being compromised due to the restricted work hours, but also states "We all should be resident advocates, but at the end of the day, we're patient advocates. We need to find a happy medium between the two".[1]

The trigger for these newly implemented changes in the U.S training system can be credited to The Institute of Medicine of the National Academies (IOM). IOM is a non-profit committee in the U.S that conducts surveys and collects information from the public sector on how the healthcare system in the U.S can be improved. In 2007, the U.S Congress requested the IOM to investigate the work hours of junior doctors in the nation, and suggest changes that should be made based on the 2003 ACGME guidelines. In 2008, the IOM began their investigation, and much of their work revolved around three main concepts: preventing excessive fatigue, optimizing resident education and improving patient safety error and detection.[2]

Preventing excessive fatigue looked primarily at sleep patterns of residents. The guidelines suggested by the IOM

Submission: 2012, May 15.
Accepted: 2012, July 19.
Process: Peer-Reviewed.

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was that interns should not work more than 16 hours continuously, should have a set amount of time to sleep between shifts (preferably 8-10 hours, rather than the present 5 hours) and should not be allowed to work in addition to the 80 hours.2 Optimizing resident education was the key is to improve supervision of residents. IOM suggested that committees that overlook residencies (training programs) in their respective specialties should set a limit on the number of patients a resident can treat during a shift, which would then allow for the resident to have more spare time to improve their medical knowledge. Lastly, reducing patient error was investigated. The transfer of patient care between two physicians proved to be an issue. This is because transferring care, or "handovers", meant there was a higher risk for mistaken information to be conveyed to the receiving physician or a lack of communication, and therefore resulting in physician error.[2]

Training as a Junior Doctor in the UK

In the UK, the system implemented in August 2009 is based on the 48-hour/week guideline that is regulated by the Department of Health, and is known as the EWTD. In addition to working 48 hours a week, the guideline also states the following: A minimum daily consecutive rest period of 11 hours, a minimum rest break of 20 minutes when the working day exceed six hours, a minimum of four weeks' paid annual leave and a maximum of eight hours' work in any 24 hours for night workers in stressful job.[3]

There have been mixed reactions regarding the new guidelines for junior doctors, and recently the British Medical Association (BMA) conducted a survey with physicians regarding their opinion on the work directive. The survey was sent to over 3000 physicians who were members with the BMA, and the response rate was 16% (470 physicians).[3] The results were overall negative. In particular, only 20% of the respondents felt that the EWTD would improve patient care or safety, and over two-thirds believed it would have a negative effect on their training, believing 48 hours is not enough time to properly learn new skills and procedures.[3]

Before 2009, the workweek restriction was 56 hours. The survey included several comments about the new guidelines, some of them including: "48hr weeks mean more splitting of shifts which means more antisocial hours impacting on family life" or "48 hours is far too little hours to be adequately trained."[3] This is further evident in the following figure that shows over 66% want the BMA to become more involved and ensure that quality of training does not decrease, despite the new EWTD guidelines. The overall mood regarding the EWTD is clearly mixed, but seems to be that generally physicians are unhappy with the guidelines and feel that their training will be compromised in their given specialties.[3]

Dr. Peter Simpson, President of the Royal College of Anesthetists, gives an excellent analysis on how the EWTD will impact the training doctors as well as consultants in their specialty. He discusses the reduction in the number of hours is 75 to 100% less than what previous registrars would spend working in the same number of years, and therefore expresses concern that the new batch of anesthetist consultants will not be nearly as competent as the last generation.[4]

Professor Sir John Temple, the Chair and Research Development Council of the Healing Foundation, was requested by Medical Education England (MEE) to do an analysis on the EWTD and how it would impact training of junior doctors in the UK.[5] Sir Temple in his analysis came up with several points that demonstrate the improvements that can be made with the present working guidelines, as well as examining with specialties would be affected the most by the EWTD.[5] According to Sir Temple, acute hospital services particularly A&E would be most affected, due to the rising number of patients as well as the pressure to meet service targets, which is difficult to achieve when work hours are restricted.[5]

Conclusion

As a final year medical student in the UK, I have come across foundation year doctors who echo the sentiments described earlier in this reflection, as there is general dislike for the EWTD working rules. More importantly, I have come across consultants who are also unhappy with the EWTD, as a few of them have discussed how their training was far more rigorous in terms of hours, and therefore do not feel that the next generation of consultants will be as competent. In the US, I was engrossed in the healthcare system for over 4 months, which gave me an excellent view on structure of the training, as well as discussing with residents and consultants with regards to the ACGME guidelines. It is evident that both countries are amidst a transition period in their respective training systems for junior doctors, and hopefully over time each system will evolve and become a structure that is widely accepted and supported by the next generation of physicians.

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Acknowledgements

I would like to thank my elective supervisors Dr. Susan Lerner and Dr. Rebecca Spanagel for helping me carry out this clinical work in the United States of America.

Conflict of Interest Statement & Funding

The Author has no funding, financial relationships or conflicts of interest to disclose.

Cite as:

Aiyer RS. A Reflection and Comparison of Physician Training in the United States of America and United Kingdom. Int J Med Students 2013;1(1):48-50.