What have shorter working hours for Doctors achieved?

The first years after qualification are difficult for all doctors. Its a lot of responsibility for someone in their mid-twenties. The work is hard and complex and it takes time to acquire the ability to translate the theoretical knowledge acquired at medical school into clinical practice. Neal Chatterjee has recently described the initial rawness and impact of hospital life on the new resident. There are ever-lit hallways, the cacophony of overhead pages, near constant beeps and buzzes and the stale smell of hospital linen. Its a foreign world in which the new doctor encounters daily stressful experiences. The question now being asked is whether it needs to be so daunting. Can the working conditions and the environment be improved?

It has been accepted for many years that the long hours of duty add further to the doctors anxiety and fatigue. All hospitals and health services have tried to reduce doctors hours on the premise that it is safer for the patient and better for the clinician. It is difficult however to measure the benefits. The UK has done more than most other countries to reduce working hours. In 1996 it first placed restrictions on the hours worked by medical trainees. Initially the directive was 56 hours weekly averaged over 26 weeks with no maximum shift length. In 2004 the maximum shift length was capped at 13 hours. In 2009 the working week was reduced to 48 hours averaged over 26 weeks with maximum shift length being maintained at 13 hours. In the US the hours worked have always been longer than their European counterparts. In 1989 New York State reduced the working week to 80 hours, the maximum shift length being 24 hours. In its most recent recommendation (2009) the Institute of Medicine (US) states that while the working week remains at 80 hours, the maximum shift length is set at 30 hours with a 5 hour protected sleep period between 10pm and 8pm. In Ireland working time directives have met with limited success. A number of pilot schemes were introduced to test the feasibility of bringing down the hours worked and shortening the shift time. Shortening the maximum shift length to 13 hours was particularly difficult to implement except for emergency departments in the larger hospitals. It is clear that a call of at least 9 doctors is required in order to make a rota EWTD compliant. This is not possible in smaller hospitals with fewer medical staff.

The shortened hours of work was initially given a mixed reception and to the present day there are concerns that the restricted time limits reduce clinical experience and have an adverse effect on training. Surgical trainees may not get sufficient exposure to operative emergencies. Similarly medical trainees may not obtain enough experience in the care of critically sick patients. Those in favour of shorter hours point out that the apprenticeship system with its long hours model is archaic. The introduction of quality teaching and training programmes can substantially reduce the necessity for spending long hours at work. Most training bodies support the shorter hours model. Professor Terence Stephenson, President of the RCPCH, stated recently that trainees working 48 hours will still be among the best doctors in the world and be able to enjoy a reasonable work-life balance along the way.

As junior doctors hours have been getting shorter over the past 20 years a number of commentators have been posing, questions whether this change has improved outcome for patients or adversely affected training. Moolnainghe et al examined 72 studies - 38 reporting training outcomes, 31 describing outcomes in patients and 3 reporting both. All the studies were either from the US or the UK. While reduced hours do not appear to have adversely affected training, it is difficult to find evidence that the process has benefited patients. It is uncertain whether this lack of effect on patient care is real or whether it reflects a weak evidence base. Reed et al undertook a similar exercise from a US perspective. They also found a lack of precise data on which to draw conclusions. In particular it remains unclear how many hours can be worked in an individual shift. However like a number of other studies they recommend protected sleep time, nap time. 

Horwitz has analysed the findings that the reduction in working hours has not improved patient care. She points out that it is possible that the regulations have only been partly implemented or that the residents have not used the additional time off to sleep. This possibility, however, is contradicted by the observation that since the introduction of shorter hours, road traffic accidents, needlestick injuries and mental illness has been reduced among medical trainees. Other important considerations are that the shorter hours have not been accompanied by a commensurate increase in additional doctors. The hours have been reduced but the day is more hectic with doctors being compelled to cram more work into a shorter time frame. This heightened activity could lead to potential errors. Other problems are lack of continuity of care and incomplete handovers. These issues may offset the potential gains of reduced hours. The American studies place considerable emphasis on the need for doctors to implement comprehensive handovers.

While shorter working hours are here to stay it is necessary to explore how the maximum gain can be achieved for patients. More effective performance indicators are needed in order to assess the impact of changing hospital medical care.