## **Editorial**

# Maximum working hours and minimum monitoring standards-need for both to be mandatory

This issue carries an article regarding sleep deprivation resulting in compromised patient care among medical personnel, especially anesthesiologists.<sup>[1]</sup> Prolonged working hours as a cause of accidents have been recognized by the aviation industry since a long time, which has led to stringent rules for maximum flying hours for pilots and the mandatory rest period between flying duties. Presently, a single pilot does not fly for more than 6-8 hours at a given time. Similarly, an analysis of medical errors and litigations against physicians has shown that claims against doctors for negligence are simply due to lack of attention span towards the patient.<sup>[2]</sup> Though minimum monitoring standards for patients undergoing anesthesia have been adopted by most of the anesthesiology colleges and societies in the world, maximum working hours for anesthesiologist have yet to be universally adopted. The work-associated sleep deprivation is well-known inciting agent for change in behavioral pattern of humans. It not only makes their reflexes sluggish at work but also adds a short temperament in their personality.<sup>[3]</sup> British medical system has recognized the importance of relationship of attention span and maximum working hours and has advocated stipulated working hours for all resident and consultant doctors.<sup>[4]</sup> The Accreditation Council for Graduate Medical Education in America also has recommended that "duty hours of residents must be limited to 80 hours per week, averaged over a 4-week period, inclusive of all in-house call activities and all moonlighting".<sup>[5]</sup> A survey of residents showed that residents averaging more than 80 hours per week were more likely to be involved in a personal accident or injury or in a serious conflict with other staff members.<sup>[6]</sup> Attention span of anesthesiologists could surely be improved if a ceiling is made for working hours per day and per week and mandatory rest periods documented. Monitoring standards with minimum essential monitors are likely to be effective if the anesthesiologists monitoring the patients are mentally alert and have an optimum attention span. A lot needs to be done in this regard in the developing and the underdeveloped countries. The phenomenon of overwork and fatigue is not only prevalent in public hospitals but also corporate medical institutions. One

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reason for not decreasing the working hours is the possibility of substandard training due to decreased clinical experience,<sup>[7]</sup> which could be compensated by increasing the training period. Most of the present healthcare policy makers have put in long duty hours during their younger days and hence expect the same from the young hardworking doctors of today. This point of view needs to be changed, as safety during anesthesia administration has attained paramount importance in current times.

Limited simulation-based studies have been carried out on anesthesiologists to assess their performance after sleep deprivation and long shift duties.<sup>[8,9]</sup> More research on this aspect is required with the help of high fidelity simulators so that universally accepted guidelines can be promulgated similar to the minimum monitoring standards.

The working hour cut offs are likely to have financial implications for both-the employing health boards/hospitals and the physicians. It is common for resident staff in many countries to work for shifts for 24 hours at a stretch or work continuously after a night duty till the next evening. There is a possibility that the remunerations for resident doctors may be decreased if they are not allowed to work for presently allowable long arduous hours as the employing boards would need to employ more doctors. This should be acceptable to all, in interest of the patient safety. However, to ensure adequate availability of staff, more trained doctors would be required, which in the present context, would mean more trained anesthesiologists. Increasing the number of trainees and development of suitable teaching and training facilities for such anesthesiologists would also be essential.

In conclusion, it is time that there should be uniform guidelines in regard to optimal working hours for practicing anesthesiologists akin to the minimum monitoring standards so as to ensure the safety of patients and anesthesia providers while administering anesthesia.

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