

Exploring fatigue as a social construct

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Valorisation

The research presented in this thesis has relevance that extends beyond resident work hour restrictions. As I outlined in the Discussion chapter, there are plenty of opportunities for future research, which include exploring issues of fatigue among practicing physicians and healthcare teams. Rather than revisiting these considerations, I will first acknowledge the knowledge translation that I have engaged in during the course of my research and then elaborate on further anticipated practical implications of this work.

Knowledge Translation

Over the past four years, I have disseminated my research through presentations at local, national and international levels within the medical education research community. This has amounted to a total of 20 presentations. At the national and international levels, this included the International Conference on Residency Education, Association for Medical Education in Europe, Canadian Conference on Medical Education and Association of Academic Professionals in Obstetrics & Gynecology. Locally, I presented my research at the Centre for Education Research & Innovation and during medical grand rounds within the Department of Obstetrics & Gynecology and the Department of Medicine at my training institution. I also shared my research as an invited speaker within the Best Practices in Education Research lecture series at the University of Toronto.

In addition to these well-established forums for disseminating research, I sought opportunities for knowledge translation through other means at both local and national levels. Early on during my doctoral studies, I accepted an invitation to participate in a national consensus committee meeting hosted by the Royal College of Physicians and Surgeons of Canada. This meeting was attended by all members of the expert working groups who were tasked with the challenge of deciding how Canada would address the issue of trainee fatigue and work hours at the postgraduate level. That experience reaffirmed the relevance of my research, as it was clear that there was still much to be understood about the problem of trainee fatigue. Subsequently, I was invited to join a new expert working group on fatigue risk management plans, which was established by the Royal College of Physicians and Surgeons of Canada. Through my ongoing involvement in this working group, my research on fatigue as a social construct has helped to shape emerging policies on how to manage fatigue. I will elaborate on this contemporary and influential aspect of my research in the paragraphs that follow.

Addressing the Taboo

One of the key findings from this research was that many trainees felt that it was taboo to talk about fatigue, especially in a meaningful way that acknowledges the potential for harm. The medical training environment lacks a sanctioned language and acceptable forum for talking about fatigue as hazardous. One way to address the taboo would be to acknowledge fatigue and sleep deprivation alongside other well-established threats such as communication errors as part of existing dialogues about quality assurance. The morbidity

and mortality conferences conducted by many training programs are an appropriate forum for serious, open discussions of fatigue and the role that it plays as a patient safety threat. Another practical approach is to make fatigue more visible by having trainees wear coloured wristbands, for example, that correspond with the number of hours they have been on shift. This approach was used in South Africa and instituted by the junior doctors as a form of protest after one of their colleagues was killed in a motor vehicle crash while driving home fatigued after a long shift¹. Unless we experiment with such opportunities to make fatigue visible and worthy of discussion, we have little hope of seeing fatigue as a hazard to be managed.

Consider the system

Residents, program directors, faculty and hospital administrators are collectively responsible for preserving existing social constructs of fatigue; thus, they are an essential part of any movement to incite change. Currently, there is much greater emphasis placed on the responsibility of individual trainees, rather than the system, to solve the problem of managing fatigue. The notion that fatigue can be overcome if an individual is motivated enough to rise to the challenge is one salient example. A comprehensive approach to fatigue management must combat this unsubstantiated, yet pervasive rationale. Work schedules that are aligned with sleep physiology principles are only the first step. Such schedules displace some of the burden for managing fatigue from individual trainees but only if issues of work compression and inadequate handover are also addressed. Existing frameworks for managing fatigue in the training environment rely on the trainee to will him or herself into overcoming the fatigue. Instead, programs would benefit from feasible and non-punitive contingency plans in the event that a trainee finds him or herself impaired from fatigue, regardless of work schedules. This might include having an extra, more senior resident or supervisor available from home to provide back up, making it more acceptable for trainees to reach out for help. Although this will require creative reorganization of human resources, such policies send a clear message that fatigue-related impairment must be taken seriously. By shifting our attention away from individual trainees to consider the role of the system, new solutions emerge that may help to reduce the overall impact of fatigue in medical education.

Managing Energy

This research demonstrated that residents engage in various forms of recovery that serve a purpose beyond making up for lost hours of sleep. Managing energy, or recovering, is simply another way of thinking about mitigating fatigue. This realization has implications beyond the training environment since the recovery routines established during residency are likely to persist during independent practice as well. This has certainly been the case for many of my colleagues and for me. In light of current epidemics of burnout in health care providers, off-duty time during residency provides a necessary opportunity for trainees to establish intentional self-care practices. Although self-care needs are very personal and

individualized, there is a role for the system to support trainees addressing these needs. Opportunities exist at multiple levels. First, residents should be educated about existing principles of good sleep hygiene, including strategic caffeine intake and napping. Second, environmental changes are warranted that allow healthy decisions to be the default, easy decision. This might include having a workout facility within the hospital, providing access to call rooms so trainees can take a nap before driving home fatigued and serving nutritional food during morning handover so that residents are less inclined to stop by the drive-through on their way home. Finally, programs should consider instituting policies that allow for personal time away, at the discretion of the trainee. Residents appreciate this autonomy as recognition of their maturity and professionalism. It leads to greater workplace satisfaction, regardless of whether they actually take the time off.²

Summary

Through this research, I have learned that successful change implementation requires that we consider a problem from multiple perspectives and take a careful inventory of the multi-dimensional sociocultural forces at play. I now maintain a sense of skepticism about straightforward solutions to complex, socially situated problems because I have seen how easily unintended consequences can detract from intended benefits. These realizations will continue to shape my conversations about fatigue and working hours with my near-peers in the clinical workplace as well as my co-committee members in the Fatigue Risk Management Plan Working Group.

References

1. Sidley P. South African doctors protest long shifts by wearing coloured wristbands. *British Medical Journal Publishing Group*; 2016.
2. Cedfeldt AS, Bower EA, English C, Grady-Weliky TA, Girard DE, Choi D. Personal time off and residents' career satisfaction, attitudes and emotions. *Med Educ*. 2010;44(10):977-984.