473574 - ANESTHESIA RESIDENT STRESS: IMPLICATIONS FOR CANADIAN POSTGRADUATE TRAINING PROGRAMS

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Introduction: There is a common perception that Anesthesiologists experience a high degree of stress & may be at risk of burnout (1,2). Substance abuse & suicide also have been associated with the profession (1). Sleep deprivation is associated with compromised patient & provider safety (3). Anesthesia residents may be particularly prone to stress and strain outcomes because of their intense training, compounded by a lack of experience, knowledge, and control. To date, no study has examined the perceived stress and health of Canadian Anesthesia residents and the factors that mitigate this stress. We (a) examined the health behaviours and levels of stress and burnout experienced by residents in Canadian Anesthesia training programs; (b) compared the differences in stress and health among the program years; and (c) compared these stress and burnout levels to other occupations.

Methods: With institutional REB approval & permission from all Program Directors, residents registered for 2007/8 in all 16 Anesthesia programs were invited to participate in an anonymous web-based survey. Participants reported on personal & work-related background information, degree of job control, work hassles, overload, conflict, & ambiguity, coping strategies, level of support (program, coworkers, spouse, & family), general health, work-life conflict, burnout, and work satisfaction.

Results: Of 619 residents, 241 (38%) responded. 65% were married or in a common-law relationship (30% with another physician) and 24.6% had at least one child. Residents worked on average 65 hours/week & 5 calls/month. Regarding well-being, very few residents smoke (91.5% nonsmokers), 65% eat a well balanced diet, 60% take some time to relax. More than 1/3 consume caffeine "ALL of the time," & 65% said they consume caffeine fairly often or more. Less than 35% sleep between 7-8 hours/night, and 45.3% frequently skipped meals. Moreover, 68.1% of residents agreed that they feel at least "slightly" stressed at work, and 23.4% have thought about leaving their program.

Comparing trends across years of training, senior residents tend to engage in a more unhealthy lifestyle ($r = -.22$, $p < .001$), use more maladaptive coping methods ($r = .17$, $p < .01$), report more confidence in their training ($r = .22$, $p < .05$), feel that less help is available from staff supervisor and residency program when they need it ($r = -.23$, $p < .001$; $r = -.16$, $p < .05$), and are less likely to feel that residency program cares about their opinion, well-being, & satisfaction at work (r 's from $-.14$ to $-.28$, $p < .05$). Residents reported significantly more emotional exhaustion and cynicism than nurses and management professionals (t 2.18, $p < .05$ to 7.71, $p < .001$). However, residents also reported significantly more professional efficacy than nurses ($t(224) = 6.38$, $p < .05$) & psychiatric workers ($t(224) = 8.73$, $p < .05$).

Discussion: These results indicate Anesthesia residents in general are experiencing

stress, burnout, & work-life conflict. Senior residents tend to report less healthy behaviours than junior residents. By understanding the program & individual factors that may exacerbate or alleviate stress, Anesthesia programs may help improve resident health & performance by possibly tailoring the training and support that they provide their residents.

References: (1)J Bone Joint Surg Am. 2004 (2)Br J. Anaes. 2003(3)CMAJ 2004