CORRESPONDENCE

Substance use disorder in Canadian university departments of anesthesia

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To the Editor,

Boulis *et al.* are to be congratulated for their attempt to establish the incidence of substance use disorder (SUD) during the ten years ending in June 2014 through a retrospective survey sent electronically to Canadian university departments of anesthesia.¹ The Canadian element of this worldwide issue has had little exposure to date. I trust the current article will serve as the stimulus for an ongoing focus on the issue.

Unfortunately, Boulis *et al.* received only 53 electronic responses from the 98 individuals initially contacted, and five of the surveys were returned unanswered. This left 48 (49%) surveys available for analysis. The authors acknowledge the low response rate and the resulting limitations of their survey and suggest possible alternate approaches for future surveys.

The authors estimated a SUD incidence of 1.6% for residents and 0.3% for fellows, but they were unable to establish a rate for attending staff due to lack of information regarding the numbers of staff.

Boulis *et al.* overlooked a very significant report involving a study of 44,612 anesthesia residents in the United States over the period 1975–2009.² The analysis for that study integrated anonymized data from the American Board of Anesthesiology (ABA), the National Death Index, and the Disciplinary Action Notification Service of the

Federation of State Medical Boards. The overall incidence of SUD during anesthesia training was 0.86%, with 384 SUD cases identified. However, the annual rates varied more than threefold, with higher rates in the later years of the study period. The 1.6% incidence of SUD in Canadian residents reported by Boulis *et al.* is similar to the rates reported in the final years of the US study.

An important extension of the US study was the addition of a matched cohort (age, sex, site of training, program start date) of residents with no evidence of SUD to compare with the 384 residents with SUD.³ Those with SUD were 15 times more likely not to complete their training, ten times more likely not to become Board (ABA) certified, and seven times more likely to have adverse medical licensure actions. The risk of death after training was 7.9 times higher in the SUD cases.

Canada shares the SUD problem but to date has been less active than other jurisdictions in acknowledging the issue and examining steps for potential mitigation. Boulis *et al.* suggest that the Association of Canadian University Departments of Anesthesia (ACUDA) should take a lead role in handling the issue. Since the SUD problem is not unique to anesthesia, and since the Royal College of Physicians and Surgeons of Canada (RCPSC) oversees all specialty training in Canada, a broad approach led by the RCPSC would seem preferable.

The design of future studies on the SUD issue in Canada could benefit from the large number of reports on the issue from many sources. The two articles discussed^{2,3} contain many important lessons for study design. Substance use disorder may never be eliminated, but we in Canada must improve our approach to the problem. Boulis *et al.* have helped us get started!

Conflicts of interest None declared.

This letter is accompanied by a reply. Please see Can J Anesth 2016; 63: this issue.

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