

## Letter to the Editor Regarding the Article: “Quality of Sleep among Portuguese Anaesthesiologists: A Cross-Sectional Study”

### Carta ao Editor Relativa ao Artigo: “Qualidade de Sono dos Anestesiologistas Portugueses: Um Estudo Transversal”

**Keywords:** Anesthesiologists; Portugal; Sleep; Sleep Initiation and Maintenance Disorders/drug therapy

**Palavras-chave:** Anestesiologistas; Distúrbios da Iniciação e Manutenção do Sono/tratamento farmacológico; Portugal; Sono

Dear Editor,

Valente F *et al*,<sup>1</sup> recently published a cross-sectional study regarding the quality of sleep of Portuguese anaesthesiologists. The results showed that anaesthesiologists, which are, a high-risk group due to work-shifts and early start at work presented a poor quality of sleep, excessive daytime somnolence, high perceived stress and high rate of use of sedatives. Insomnia, the most prevalent sleep condition, is a worldwide problem, affecting about one-third to half of the adult population.<sup>2</sup> Valente F *et al*<sup>1</sup> identify that 20.7% of the participants take sleep medication at least once a week. In 87.3% of participants benzodiazepines were the medicine of choice. It is known that Portugal is the European Union country with the highest consumption of this pharmacological class<sup>3</sup> (anaesthesiologists are in particular risk due to the easy access to sedatives). This is concerning due to the long-term side effects of benzodiazepines like physical tolerance and dependency, risk of

falls and cognitive impairment. Specifically, regarding sleep, benzodiazepines and benzodiazepine analogs Z-drugs alter sleep architecture, reduce deep sleep (N-REM, phase 3) and REM sleep, resulting in diminished sleep efficacy.

Other drugs used to promote sleep or treat comorbid anxiety and depression, like antidepressants [SSRIs, SNRIs, tricyclics, noradrenergic and specific serotonergic antidepressant (Nassa)] or antipsychotics (typical or atypical) are also not risk-free because of their numerous adverse effects and the possibility of altering sleep architecture as well (for example, SSRI suppress REM-Sleep).

These highlight the unmet need for additional safe treatment options to sleep conditions. It is necessary to raise awareness of this and adopt new measures, such as cognitive behavioral therapy for insomnia, psychotherapy (efficacy already proven by several metanalysis<sup>4</sup>) or new drugs that have been emerging like suvorexant and lemborexant. They are dual-receptor 1 and 2- orexin receptor antagonists (DORAs), and have already been approved by the Food and Drug Administration (FDA) but not by the European Medicines Agency (EMA). This drugs blocks the vigilance promoter orexin system, resulting in decreased sleep latency and increased deep (phase 3, N-REM) and REM- sleep and total amount of sleep,<sup>5</sup> as well. Although longitudinal and comparative studies are needed to better assess the risks and efficacy of those, promising results indicate that it is a valid option for the treatment of insomnia, with a good tolerability profile. It can be especially useful for individuals who do not tolerate or have contraindications to the use of benzodiazepines or their derivatives.

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