

Abstract

Obesity is a major health care problem in the U.S. and is associated with a multitude of disease processes, including obstructive sleep apnea (OSA). Surgical patients with OSA are at increased risk of perioperative complications, but due to lack of symptom awareness and screening protocols, about 80% of OSA patients are undiagnosed. The STOP-Bang Questionnaire is the most validated OSA screening tool; however, a needs assessment revealed many anesthesia providers do not incorporate routine screening into clinical practice, thus increasing perioperative complications for high risk patients. The purpose of this project was to educate anesthesia providers on OSA and the STOP-Bang Questionnaire through an online simulation-based educational module. Key aims were to increase provider knowledge of OSA in obese patients and to elicit a practice change to incorporate preoperative OSA screening with the STOP-Bang Questionnaire among participants. Lewin's 3-Step Model of unfreezing, moving, and refreezing was used as the theoretical framework to translate evidence into practice. Implementation occurred over a three week period in which participants completed a pre-test of knowledge-based OSA questions; viewed the educational module; then completed a post-test to evaluate an increase in knowledge and participants' willingness to change practice. Results showed an increase in post-test scores of 38%, which was statistically significant according to a paired t-test. Also, 95% of participants indicated willingness to change practice, demonstrating clinical significance to incorporate best practice recommendations for patients with suspected OSA. This project has the opportunity to transform clinical practice by enhancing patient safety and improving outcomes.

Keywords: obesity, obstructive sleep apnea, STOP-Bang Questionnaire, educational module, 3-step model, anesthesia providers