Using Evidenced Based Practice (EBP) To Develop Guidelines for Improve Obstructive Sleep Apnea (OSA) Patient Care

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Introduction: Surgical patients with OSA and having elective surgery are a very vulnerable population. Many patients have OSA or suspected OSA and never sought treatment or been formally diagnosed.

Identification of the problem: After two sentinel events resulting in patient deaths, an EBP project was initiated to improve OSA patient care.

EBP Question/Purpose: Currently patients that have undiagnosed and diagnosed OSA are not being identified preoperatively and are not receiving specialized post-operative care in the Post Anesthesia Care Unit (PACU), nursing unit or at home. This increases risk of respiratory complications.

Methods/Evidence: A literature review found the S.T.O.P.-B.A.N.G. assessment tool is the most widely accepted, reliable and valid tool. Key stakeholders gathered to discuss the review findings and get buy-in on S.T.O.P.-B.A.N.G.'s scoring as the basis of a PACU treatment plan. An intervention algorithm based on score ≥ 5 was developed. A patient discharge instruction forms on defining & treating OSA was developed and implemented. Education was given to staff nurses on use of S.T.O.P.-B.A.N.G. and the discharge instructions. Intervention compliance by staff was monitored with the electronic medical record. Patient compliance on instruction to follow-up with primary care provider was assessed with follow-up phone calls.

Initial staff feedback was the S.T.O.P.-B.A.N.G. score was too sensitive with a high false-positive rate. Further literature review found ≥ 2 score acceptable to reduce the number of false positives and protocol was revised.

Significance of Findings/Outcomes: With the modified protocol, time and resources were saved by 71 % reduction in false positives. This resulted in increased time spent by nurses on patient education with those who needed the education and phone follow up once the false positive group was reduced.

Implications for perianesthesia nurses and future research: Undiagnosed OSA patients are among the most vulnerable for postoperative complications. Further research is needed treatment guidelines and educational protocols to assess, educate, and treat patients based on the S.T.O.P.-B.A.N.G. assessment tool.