

## **Reducing Pain and Anxiety Scores: Implementation of Recorded Music Therapy as an Adjunct to Pharmacological Interventions**

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**Introduction:** Approximately, 60.9% of orthopedic surgery patients report anxiety and severe pain post-operatively. Listening to music has been shown to decrease pain and anxiety scores.

**Identification of the Problem:** 70% of adult orthopedic surgery patients in the PACU experience severe pain and anxiety. Anxiety leads to activation of the sympathetic nervous system which influences response to pain management. Currently, the PACU staff do not utilize non-pharmacological interventions such as music therapy as an adjunct to standard care to address post-operative pain and anxiety.

**QI Question/Purpose of the Study:** To reduce post-operative anxiety and pain scores among adult post-orthopedic surgery patients and improve compliance to The Joint Commission's (TJC) requirement among nursing staff in the PACU by implementing and measuring the impact of recorded music therapy as an adjunct to pharmacological interventions.

**Methods:** The following steps were performed to implement this project: Two relaxing music channels were added to the hospital TV channel list; PACU nursing staff were educated regarding the intervention through nursing huddles and emails. The nursing staff filled out an electronic HIPPA-protected music therapy initiation survey after the completion of the intervention by scanning laminated Velcro QR codes that were made and placed on each computer in each PACU bay. The project leader has performed chart audits for six weeks and will continue collecting data for 15 weeks.

**Outcomes/Results:** The study will be completed in December 2024. Collected data up to this point showed that 34 out of 101 orthopedic patients in the PACU received music therapy as an adjunct and reported improvement in their pain score (2-5/10) on the numeric rating scale and anxiety scores (0/4) on the RASS scale.

**Discussion:** TJC's new regulation mandates hospitals to offer a non-pharmacological intervention as an adjunct to manage post-operative pain and anxiety. Current literature supports the addition of calming and relaxing music to pharmacological interventions to reduce postoperative pain and anxiety.

**Conclusion:** Preliminary results showed that the addition of calming and relaxing music to pharmacological interventions reduces postoperative pain and anxiety scores in adult post-operative patients.

**Implications for perianesthesia nurses and future research:** Identifying unit-based champions to assist with implementing the intervention facilitates the practice change. This intervention is feasible, inexpensive, safe, and can be implemented in various settings.