

THE EFFECT OF MUSIC IN THE PACU ON RECOVERY TIME AND PATIENT SATISFACTION

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Introduction: Undergoing surgery can be highly stressful, as can the post-anesthesia care unit (PACU); where patients may experience pain, anxiety, and disorientation. Although debatable, some studies have shown that music may reduce pain perceptions, decrease PACU time, and increase patient satisfaction relative to usual ambient noise.

Identification of the problem: Methods promoting patient comfort and reducing anxiety may shorten average patient recovery time in PACU. Providing music in PACU may improve patients' experiences without deleterious side effects of additional staff time.

Purpose of the Study: The purpose of this project was to determine if patient-selected music provided by ear buds in the immediate postoperative period would decrease recovery time and/or improve patient satisfaction relative to previously collected PACU comparison data.

Methodology: Informed consent was obtained preoperatively from a convenience sample of weekend emergency surgery patients aged 18-89 years. Participants selected music from 5 pre-recorded genres for playing within 5 minutes of arrival. Demographic characteristics and PACU data (including vital signs and pain scores) were compared to 39 controls matched for surgery type. Time in PACU was computed as the difference between arrival time and time the participant met institutional criteria for discharge. A standard patient satisfaction questionnaire was sent to all participants postoperatively and evaluated by an independent research analyst (compared to a random sample of same year surgery patients). Continuous measures were compared via t-tests and categorical variables via chi-square, using a 0.05 significance level.

Results: There were no differences between music and control patients on any demographic variable. Patients receiving music had significantly shorter average PACU recovery time of 43 minutes versus 51 minutes and were more likely to report satisfaction with their hospital experience (81% versus 67%, $p < .05$). A trend for decreasing pain medication requirements was noted, with $p = .096$. Qualitative responses of patients receiving music in the PACU were exceptionally positive, with no negative comments.

Discussion: Music as a low cost, non-invasive, non-pharmacological therapeutic intervention is a ready nursing tool to facilitate patient recovery (Fredriksson et al., 2009). This study showed music in the immediate postoperative period reduced PACU recovery time and improved patient satisfaction. There was a trend for decreased pain medication. Roy's Adaptation Model identifies the need for patients to have control over their environment, especially when facing stressful situations such as surgery. Patient-selected music provides a therapeutic tool that decreases external stimuli by providing distraction; subsequently reducing anxiety and pain perception (Thorgaard et al., 2005).

Conclusion: Music via ear buds may decrease PACU recovery time and improve patient satisfaction in this institution at very low cost to the institution.

Implications for perianesthesia nurses and future research: Providing music in the PACU may benefit unit efficiency by reducing patient recovery time while maintaining ASPAN patient-per-nurse requirements. Additional research examining effects of music on decreasing pain medication requirements during the immediate postoperative time should include larger, randomized, prospective study.

References:

- Fredriksson, A., Hellstrom, L., & Nilsson, U. (2009, August). Patients' perception of music versus ordinary sound in a post-anesthesia care unit: A randomized crossover trial. *Intensive Critical Care Nursing, 25*(4), 208-213. doi: 10.1016/j.iccn.2009.04.002.
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