



KEY POINT SUMMARY

OBJECTIVES

The aims of this study were: (i) to test the hypothesis that patients will experience a higher degree of well-being if they listen to music compared to ordinary PACU sounds during their early postoperative care; (ii) to determine if there is a difference over time, and (iii) to evaluate the importance of the acoustic environment and whether patients prefer listening to music during their postanaesthesia care period.

Patients' Perception of Music versus Ordinary Sound in a Postanaesthesia Care Unit: A Randomized Crossover Trial

Fredriksson, A., Hellstrom, L. & Nilsson, U. 2009 | *Intensive and Critical Care Nursing* Volume 25, Pages 208-213

Key Concepts/Context

A healing environment helps patients refocus from negative stimuli to something pleasant and familiar, allowing them to escape into "their own world." One feature of such an environment might be soothing music, an intervention that can help patients focus their awareness on the music and help in relaxation. Music is also closely linked to emotions and arousal. Evidence suggests that listening to music modulates emotional arousal as indexed by changes in cardiovascular and respiratory activity. It has also been suggested that music has an analgesic effect in reducing anxiety and directing attention away from negative experience, thus helping patients cope with emotional stress.

Methods

This study used an experimental single-blind crossover design.

Sample

The sample population consisted of 44 patients.

Setting

This study took place in a Post-Operative Care Unit (PACU).

Metrics and Measurement

Two groups received a three-phase intervention: one group (n = 23) experienced music-ordinary sound-music (MOM) and the second group (n = 21) experienced ordinary sound-music-ordinary sound (OMO). Each period lasted 30 minutes, and after each period the patients assessed their experience of the sound. Music was



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delivered using an ergonomic audio pillow, 65 cm×30 cm (Wellness Musicpillow, 2009). The pillow contained two loudspeakers connected to a compact disc (CD) player. Only the patient lying on the pillow heard the music, which was inaudible to other patients or the staff.

Data Analysis

To identify changes over time in the two intervention groups, MOM and OMO, researchers used the Friedman and McNemar tests for related samples. To test differences between groups they used Mann-Whitney and chi-square tests for independent samples. A p -value below 0.05 was considered to indicate a statistically significant difference. All statistical analyses involved the use of the SPSS program for Mac OS, version 13.0 (SPSS Inc., Chicago, Illinois, USA).

Findings

The results demonstrated a significant difference ($p < 0.001$) between groups in the proportions of patients reporting that the acoustic environment was of great importance for their well-being during the three-phase intervention, and most participants ($n = 36$ versus $n=8$) noticed that they were exposed to different sounds during the PACU period. The results also revealed that most participants ($n = 32$) preferred listening to music versus listening to ordinary sound ($n = 3$) while in the PACU ($p < 0.001$).

Design Implications

The present study contributes to the knowledge of music's importance for patients' experience of environmental sounds. It also shows that patients prefer to listen to music instead of ordinary "hospital sounds." The findings presented in this study lend support to the use of music interventions in establishing a healing environment for patients at a postanesthesia care unit. Music enhances the environment of patients recovering from surgery by providing them with an environment of reassuring sounds to help them awake from anaesthesia in a calm and comforting manner.

Limitations

Methodological concerns exist with this study and are acknowledged. First, the questionnaire did not undergo psychometric testing, such as internal consistency, homogeneity, or content validity, and some of the answers were dichotomous. Secondly, the intervention was not strictly blinded to the participants, i.e., the participants were aware of the music but not of their assigned group and the purpose of comparing music with ordinary sound. Thirdly, the sample size in this study was small.