

TARGETED QUIET TIME INTERVENTION IN THE PACU

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Background Information: Noise remains a significant source of patient discomfort and impaired rest after surgery in the PACU with staff conversation a significant source. Baseline patient surveys were taken to indicate the dissatisfaction with noise level and inability to rest.

Objectives of Project: The purpose of this study was to evaluate the effect of a targeted noise reduction strategy on noise levels and patient satisfaction after surgery

Process of Implementation: Adult patients recovering from general anesthesia were studied in a post-anesthesia care unit (PACU) in a university hospital. Exclusion criteria included sedated or intubated patients and those with PACU stay of greater than 8 hours. Noise levels were studied with a digital decibel meter hourly during both day and evening shifts and patients queried regarding noise levels and their recovery. After baseline data accumulation (50 patients over two weeks), targeted staff education (in-service education, posters, team leader reminders focused on staff voice levels) a three hour Quiet Time period per shift was implemented. This was followed by three weeks of post-intervention data analysis. No changes were made to equipment alarms or other ambient sources of sound. Statistical analysis was performed with paired and unpaired T-test for continuous variables and Chi-squared test for dichotomous survey data. Differences were considered significant at $p < .05$.

Statement of Successful Practice: Baseline noise levels exceeded national ambient guidelines (81.1 dB average daytime, 100.3 dB daytime peak, 69.7 dB average nighttime, nighttime peak 80.9 dB). Baseline patient surveys indicated 24/50 patients were dissatisfied, 30/50 felt noise affected their ability to rest and 14/50 felt noise impaired their ability to rest. After institution of Quiet time measures, noise levels significantly decreased to 59.1dB (daytime average) and 50.4 dB (nighttime average). Patient surveys (n=50) demonstrated statistically significant increases in patient satisfaction (36/50) and the ability to rest (33/50).

Implications for Advancing the Practice of Perianesthesia Nursing: Targeted health care provider education can significantly decrease noise levels and increase patient satisfaction and recovery. Quiet time is an inexpensive means of effectively reducing noise and improving patient satisfaction without affecting patient safety devices (alarms) or costly structural modifications to reduce environmental noise. Further study of Quiet Time is warranted as a positive intervention for patient recovery after surgery.