

Impact of Noise on Nursing Patient Care in the Post-Anesthetic Care Unit (PACU)



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Introduction

- PACU recovery is a critical part of perioperative process that relies heavily on nursing personnel for vigilant monitoring of complications
- Noise is a common issue, hypothesized to contribute to rates of error and emergence delirium .
- We aimed to evaluate the noise level in our PACU and its impact on nursing patient care.



Methods

- Conducted in the shared PACU of a mixed pediatric-adult academic tertiary hospital
- Using a calibrated commercially available application, noise levels were continuously measured over a 28-day period
- Standardized questionnaires were administered anonymously to nursing staff at random intervals regarding their perceived impact of noise on patient care duties

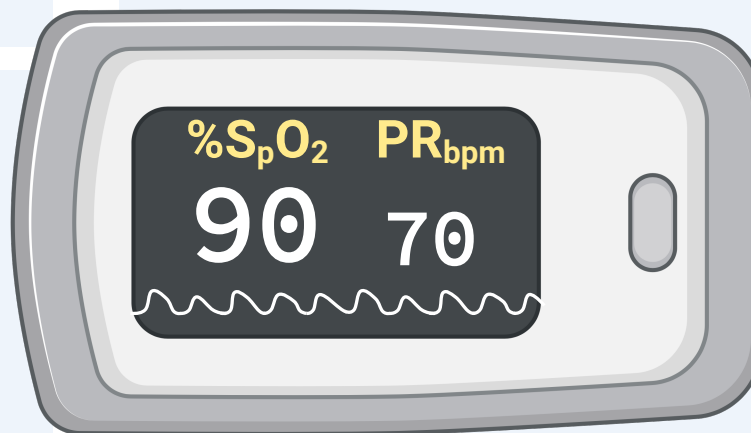


Conclusion

- Noise levels in our PACU exceeded recommendations set out by WHO/national guidelines with perceived consequences to nursing patient care and nursing workplace attitudes
- High degree of perceived modifiability and the main sources of noise identified provide areas for future improvement

Results

- Average noise level was 61.4dBA with minimum and peak noise levels of 44.0dbA and 114.9dBA, respectively
- 107 questionnaires were delivered



- 63% of respondents agreed: PACU noise modifiable
- Noise higher with:
 - Weekday > weekend
 - increased patient:nurse ratio
- No difference in noise with:
 - PACU hold
 - number of nurses working
 - demographics/ experience of nurses

Providing clinical care overall	4 [3-4]
Communication with patients	4 [2-4]
Communication with interprofessional team members	3 [2-4]
Maintaining patient comfort	3 [2-4]
Monitoring patient vital signs	3 [2-4]
Concentration	4 [3-4]
Feeling annoyed	4 [3-4]
Feeling anxious	3 [2-4]
Feeling fatigued	3 [2-4]
Job satisfaction	3 [2-4]

