



KEY POINT SUMMARY

OBJECTIVES

To test a pilot strategy directed at reducing noise-induced stress in ED patients.

Using Music to Reduce Noise Stress for Patients in the Emergency Department A Pilot Study

Short, A. E., Ahern, N., Holdgate, A., Morris, J., Sidhu, B., 2010 | Music and Medicine. Volume 2, Issue 4, Pages 201-207

Key Concepts/Context

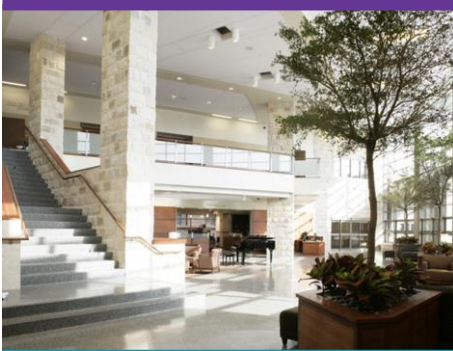
High levels of noise within emergency departments (EDs) have been associated with higher levels of patient stress. Noise and the stress it causes have been observed as a contributing factor to slower recovery rates and overall lower rates of satisfaction among patients. Researchers are exploring a wide variety of different options for decreasing noise levels, with some measures being more drastic than others. Solutions that are relatively inexpensive and easily manageable, such as small mp3 music players with disposable headphones, are in need of further investigation.

Methods

All study participants were over 18 years of age, lacking any major hearing deficits, and were recruited after their ED medical consultation. A total of 30 patients were recruited and divided into two groups; one group received an mp3 music player with disposable headphones, while the other group received neither. All participants completed questionnaires concerning stress levels and perceptions of noise during their ED visits.

Findings

Patients who used the musical intervention reported reduced noise-induced stress levels and no adverse effects from the intervention, indicating that it was beneficial overall. All other survey items showed sharper decreases in negative perceptions among patients using the musical intervention. This is especially noteworthy considering that this group of patients indicated higher levels of stress prior to experiencing the intervention. Equipment alarms, intercoms and pagers, visitors, and sounds generated by other patients were cited as the most common sources of noise in the ED.



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Limitations

This study took place in a single healthcare center with a relatively small sample size of patients. Data were collected over a relatively short period of time. The authors note that the participants were male, leaving female patients underrepresented and thus reducing the generalization of the findings.

Design Implications

Providing ED patients with access to music or other ways to cancel out surrounding noise could lead to reduced stress levels and higher levels of overall satisfaction. Using mp3-players or other noise-cancelling interventions in this way could be a cost-effective solution to address especially busy or noisy EDs. Designers might consider the implementation of “listening stations” or other methods for administering the musical intervention that would mitigate the loss or damage of materials.

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