



KEY POINT SUMMARY

OBJECTIVES

The article summarizes a project that aimed to reduce levels of intrinsic background noise on an adult mental health ward, combining a quantitative measure on decibel level and incidences of violence, and a qualitative measure on perceived stress reduction.

Low-stimulus environments: reducing noise levels in continuing care

Brown, J., Fawzi, W., Shah, A., Joyce, M., Holt, G., McCarthy, C., ... & Solomon-Ayeh, K. 2016 | *BMJ Quality Improvement Report, Volume 5*
DOI:10.1136/bmjquality.u207447.w4214

Key Concepts/Context

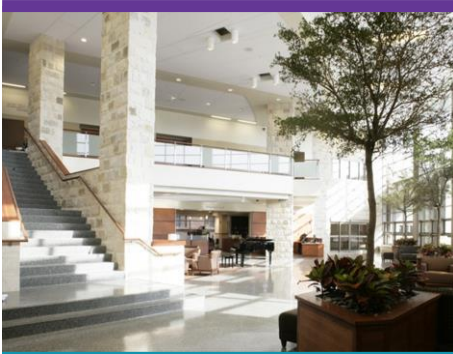
This article highlights a project that aimed to reduce levels of intrinsic background noise on an adult mental health ward. Following intervention, the ward was able to decrease the background noise decibel level from 60dB to 53dB (on average).

Methods

Baseline measures were taken using a decibel measure, and review of hospital records for incidences of violence. The model for improvement was used to design the project. First, a small team downloaded a dB measure tool (phone app), and time and locations for measurement were standardized (five minutes, three times per day); averages were recorded. Second, a poster was developed and posted to remind staff, patients and carers of the benefits of lower noise levels. Third, a visual tracker called the “Yacker Tracker” was installed, showing visual cues and colors of noise levels using a traffic light design. Finally, simple modifications to furniture was made, such as adding felt pads to the chair legs.

Findings

The noise level quickly dropped from 62dB to 53dB and remained low throughout the project time. In addition, days between incidences of violence increased from one every three days to one every six days from early 2014 to late 2015. Staff absentee rates also decreased by 40% over the project period, based on reports by Human Resources.



The Center for Health Design:
Moving Healthcare Forward

The Center for Health Design advances best practices and empowers healthcare leaders with quality research that demonstrates the value of design to improve health outcomes, patient experience of care, and provider/staff satisfaction and performance.

Learn more at
www.healthdesign.org

Design Implications

Successful design implications included the following:

1. Use of posters to remind staff and caregivers about noise levels
2. Visual indication of noise level in public spaces, such as Yacker Tracker
3. Addition of soothing background music

Adaptation to furniture, such as adding felt pads on tables and chairs to reduce scrapping of furniture legs

Limitations

It is not possible to conclude that noise reduction alone has a direct impact on violence reduction when combined with other measures. This project took place in one adult mental health ward, and results may not be generalizable to all adult mental health settings.

The Knowledge Repository is provided with the funding support of:



Additional key point summaries provided by:



RESEARCH DESIGN
connections