



KEY POINT SUMMARY

OBJECTIVES

To document the roles of noise and its detrimental effects in healthcare environments, particularly in mental healthcare facilities, while also examining the existing literature to find new ways of interpreting and managing soundscapes in

The role of noise in clinical environments with particular reference to mental health care: A narrative review

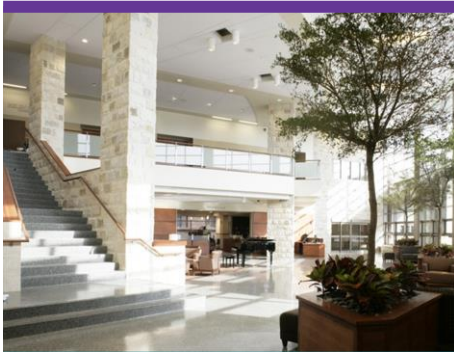
Brown, B., Rutherford, P., & Crawford, P. 2015 | *International Journal of Nursing Studies* Volume 52, Issue 9, Pages 1514-1524

Key Concepts/Context

The problem of noise in healthcare environments has been discussed in a variety of contexts, including psychology, sociology, built environment studies, and nursing. It has been well documented that the element of noise within clinical settings can elevate stress, impede recovery, and disturb sleep. But despite the extensive literature discussing the effects of noise in clinical settings, scarcely any research has been done on the role noise plays in mental healthcare environments. Additionally, what we commonly refer to as “noise” could also be called the “soundscape of healthcare;” beyond the quality of annoyance that is often attributed to them, these soundscapes might contribute to patterns of life, structures of authority, and social meaning within healthcare settings.

Methods

- A multidisciplinary, wide-ranging literature review was conducted for this study. Data from both older and more contemporary studies concerning noise perception, acoustics, and noise abatement in clinical settings were extracted from Scopus, PubMed, The Applied Social Sciences Indices and Abstracts (ASSIA), and Web of Knowledge using numerous search terms, including health, hospital, noise, and soundscape. Studies that did not take place in healthcare environments or that lacked human participants were excluded from the review.
- All searches reported in this study were up to date as of October 2014, but some resources involved date back as early as 1860 (in particular, Florence Nightingale's *Notes on Nursing*).
- Over 100 resources were eventually compounded and divided into five exploratory themes: 1) Noise, stress, and healthcare systems, 2) Sleep, noise,



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and hospital environments, 3) Noise in intensive care units, 4) Implications for hospital inhabitants – service users and staff, and 5) Towards a new paradigm in the study of clinical noise: the meaning of soundscapes.

Findings

Analysis of the literature concerning the first theme (noise, stress, and healthcare systems) found relatively few studies that discuss negative mental health effects associated with noise. Review for the second theme (sleep, noise, and hospital environments) found that noise in this context has been repeatedly pigeonholed as an aversive stimulus, while virtually no consideration had been given to what the noises mean to the people listening or to the people making the noises. Review for the third theme (noise in intensive care units) found that noise levels were often exceeding recommended guidelines in these settings and adding stress to an already physically and emotionally sensitive environment. The fourth theme (implications for hospital inhabitants – service users and staff) found results that mirrored the first three almost identically. The fifth theme (towards a new paradigm in the study of clinical noise: the meaning of soundscapes) posited that patients and staff who are able to view the “noise” in hospital settings as “soundscapes” may be able to help enact more socially useful and constructive understandings of sound’s role in clinical settings.

Design Implications

Efforts to reduce noise in healthcare environments should be carefully considered due to its adverse effects (increased heart rate, respiration rate, blood pressure, etc.), which are repeatedly highlighted in this literature review. Conversely, in line with the authors’ primary argument, providing simple explanations of the purposes of sounds in a given environment could foster a new culture of patients and staff members who learn to instead value the noises and interpret them as “soundscapes.”

Limitations

This study entails broad literature review that involves studies from several different fields. Accordingly, no original empirical evidence, qualitative data, or quantitative data are gathered to reinforce the conclusions drawn by the authors.

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