

Background Music Playback in the Preoperative Setting: Does It Reduce the Level of Preoperative Anxiety Among Candidates for Elective Surgery?

Galina Kipnis, MA, OR, RN, Nili Tabak, MA, PhD, LLB, RN, Silvia Koton, PhD, MOCCH, RN

Background: Contemporary medicine and nursing use music to stabilize mood, relieve tension and anxiety, and achieve higher treatment efficiency. Preoperative anxiety may be responsible for cognitive and behavioral changes affecting treatment efficiency.

Purpose: To evaluate the effect of background music on preoperative anxiety in elective surgery patients and on noise levels in the surgery waiting room.

Design: One hundred fifty-nine elective surgery patients were divided into an intervention group ($n = 82$) and a control group ($n = 77$). Data were collected and evaluated on the evening before surgery in the department, on entering the waiting room, and 30 minutes later in the preoperative setting. Data were gathered using the State-Trait Anxiety Inventory scale and by measuring vital signs. Daily noise levels in the preoperative waiting room were recorded as well.

Findings: Exposure to background music was associated with decreased levels of state anxiety irrespective of age, sex, and previous exposure to surgery or anesthesia ($P < .001$). Background music was also related to environmental noise reduction in the surgery waiting room ($P < .0001$).

Conclusions: Background music can be useful as a means of decreasing preoperative anxiety.

Keywords: state anxiety, vital signs, preoperative period, environmental noise, background music.

© 2016 by American Society of PeriAnesthesia Nurses

HEALING SOUNDS HAVE BEEN CONSIDERED an important component of treatment in medical practice for ages. Modern medicine and nursing rely on the therapeutic effectiveness of music

for the treatment of a variety of diseases and health conditions. Anxiety before surgery can change the way a person thinks, feels, and acts. It may also influence the patients' cognitive

Galina Kipnis, MA, OR, RN, Head Nurse, Pediatric Cardiac Operating Room, Chaim Sheba Medical Center, Tel Hashomer, Israel; Nili Tabak, MA, PhD, LLB, RN, Head of Tel Aviv University's Steyer School of Health Professions, and is also head of TAU's Department of Nursing MA program; and Silvia Koton, PhD, MOCCH, RN, Associate Professor, Chair of the Department of Nursing, Stanley Steyer School of Health Professions, Sackler School of Medicine, Tel Aviv University; Adjunct Associate Professor; Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD; Consultant Epidemiologist, Comprehensive Stroke Center Chaim Sheba Medical Center, Tel Hashomer, Israel.

Conflict of interest: None to report.

Address correspondence to Nili Tabak, Department of Nursing, Tel Aviv University, The Stanley Steyer School of Health Professions, POB 39040, 6997801 Tel Aviv, Israel; e-mail address: ntabak@post.tau.ac.il or tabak.nili@gmail.com.

© 2016 by American Society of PeriAnesthesia Nurses
1089-9472/\$36.00

<http://dx.doi.org/10.1016/j.jpnan.2014.05.015>

status and behavior as well as affect their vital signs.¹ Studies have examined the effects of music on patients using headphones²⁻⁵ or listening to classical or New Age music in quieter environments with no background noise.⁶ In the present study, given the presence of disruptive background noise, we aimed to evaluate the effect of background music on the level of patients' preoperative anxiety and on the level of environmental noise in the preoperative waiting room.

Literature Review

Irrespective of the disease, hospitalization and especially forthcoming surgery induce anxiety in patients. According to several surveys, a surgery waiting room is a source of potential threat, upsetting the patients' mental stability and causing anxiety.⁷⁻⁹ Grieve⁸ described the factors associated with preoperative anxiety, noting that surgery was linked to the possibility of pain, loss of independence and control, changes in body image, and unfavorable diagnosis. Other threats included the uncertainty of recovery, concerns about family members, and one's job.¹

Spielberger (referred to in Ref.¹⁰) defines anxiety as an emotional state consisting of tension, fear, nervousness, and concern, including a stress reaction involving the autonomic nervous system. Spielberger distinguishes between two components of anxiety—state and trait anxiety. State anxiety reflects temporary emotional responses to perceptions of environmental stressors, whereas trait anxiety reflects a constant tendency toward the same responses to different stressors.¹⁰ Differences in responses to stress have been reported for men and women and are associated with the patient's personal history. Women are exposed to more stressors and show greater sensitivity to preoperative anxiety.^{9,11} Women also differ from men in the way they experience stress and in the ways of coping with it. Gender differences are also related to biological differences and to women's social role in the family setting. In their study of 734 patients, Kindler et al¹² found that young female patients with lower formal education who had never experienced anesthesia or who had some negative experience with it showed higher preoperative anxiety levels.

Different sounds affect patients in a variety of ways. They may produce pleasure and calmness, but may also have undesired negative effects. Sound levels of 30 dB are defined as quiet, 60 to 80 dB is considered noisy, and levels of more than 80 dB are detrimental. In hospitals, it is recommended to maintain background noise levels below 45 dB,¹³ but noise levels are usually twice as high.¹⁴ According to Thorgaard et al,¹⁵ 55% of patients report reduced environmental noise in the presence of background music in the surgery waiting room. In the waiting room setting used for the present study, at any time during the morning, as many as 16 patients will be waiting for their surgery. Together with the nurses, doctors, anesthetists, surgeons, and stretcher bearers, they generate considerable background noise.

Music has always been used to influence human health. Archaeological evidence suggests that our primitive ancestors used music to appease the gods.¹⁶ In the 18th century, Florence Nightingale identified the beneficial effects of music on wounded soldiers recovering in hospitals during the Crimean War. Nightingale believed that nurses should take control of the patients' environment to contribute to a faster recovery process, and this included the use of music as a therapeutic means. The healing use of music expanded in the early 20th century when music, pain relief, and anesthesia were combined. In 1926, nurse Ilsen founded the National Association of Music in Hospitals in the United States, which disseminated guidelines on the therapeutic use of music. Nurse Ilsen identified the significance of rhythm as a basic treatment factor.¹⁶

Different theories and proposed mechanisms have attempted to explain the effects of music on health. In 1990, Dr Thaut¹⁷ suggested that music affects human biology and behavior and that this effect is generated by specific brain functions related to memory, learning, and specific emotional states. Auditory perception of music takes place in the brain's auditory center. Located in the temporal lobe, the auditory center transmits signals first to the thalamus and then to the midbrain, pons, amygdale, medulla, and finally the hypothalamus.¹⁷ Theory suggests that music decreases the levels of stress, pain, and anxiety

Download English Version:

<https://daneshyari.com/en/article/2665925>

Download Persian Version:

<https://daneshyari.com/article/2665925>

[Daneshyari.com](https://daneshyari.com)