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1: Birth 2000 Dec;27(4):272-276

Using music during childbirth.

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BACKGROUND: The application of music in pain management has become popular in the past two decades. This article describes the responses of primiparas to the use of music therapy during the births of their children. METHOD: Eleven women who attended childbirth education classes in Brantford, Ontario, Canada, volunteered to participate in a music therapy exercise. During pregnancy each participant selected preferred music, listened to it daily, and received instruction about focused listening. Within 72 hours after birth they were interviewed about their use of music as a coping strategy during labor. RESULTS: Women selected the combination of music and labor support as a helpful coping strategy during labor. All women used the music during labor to help distract them from the pain or their current situation. CONCLUSION: The planned use of music by mothers and caregivers can be an aid to prenatal preparation and an important adjunct in pain and stress management during labor and birth.

PMID: 11251514 [PubMed - indexed for MEDLINE]

Anesth Analg 2001 Oct;93(4):912-6

Music decreases sedative requirements during spinal anesthesia.

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Ambulatory surgery can create significant anxiety. This prospective study measured whether music can influence anxiety and perioperative sedative requirements in outpatients undergoing surgery with spinal anesthesia. We also evaluated the correlation between two anxiety measures, the State-Trait Anxiety Inventory test (STAI) and the 0- to 10-cm visual analog scale (VAS 0-10), with 0 meaning complete relaxation and 10 the worst feeling of anxiety possible. Fifty unpremedicated patients were randomly assigned to listen to music of their choice via headset during the perioperative period (Group I) or to have no music (Group II). All participants used patient-controlled IV midazolam sedation and underwent repeated evaluations of their anxiety level with the STAI and the VAS 0-10. Midazolam requirements during surgery (Group I, 0.6 +/- 0.7 versus Group II, 1.3 +/- 1.1 mg; $P < 0.05$) and for the whole perioperative period (Group I, 1.2 +/- 1.3 versus Group II, 2.5 +/- 2.0 mg; $P < 0.05$) were smaller in patients listening to music. Anxiety levels, measured with STAI or VAS 0-10, were similar in both groups. The Spearman's coefficient values between STAI and VAS 0-10 ranged from 0.532 to 0.687. We conclude that patients listening to music require less midazolam to achieve a similar degree of relaxation as controls and that measures of anxiety obtained from the STAI and the VAS 0-10 are positively, but only moderately, correlated. IMPLICATIONS: It is possible to decrease sedative requirements during surgery under spinal anesthesia by allowing patients to listen to music to reduce their anxiety.

Publication Types:

- Clinical Trial
- Randomized Controlled Trial

PMID: 11574356 [PubMed - indexed for MEDLINE]

1: Crit Care Nurs Clin North Am 2000 Jun;12(2):219-25 Related Articles, Books, LinkOut

State of the science of music interventions. Critical care and perioperative practice.

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Music therapy is an easy to administer, relatively inexpensive, noninvasive intervention that can reduce anxiety and pain in critical care and perioperative patients. Libraries of relaxing music selections need to be compiled, reflecting diverse musical tastes. Providing patients with the opportunity to partake in music therapy sessions, selecting their own music, and providing them with quiet, uninterrupted time to listen to the music provides patients with a sense of control and separation from the multiple environmental stressors they are experiencing. Although there is now an extensive empirical base for the therapeutic usefulness of music therapy, particularly with the myocardial infarction population, few hospitals have adopted music therapy programs. Patient satisfaction and outcomes clearly have improved after music therapy sessions have been implemented. Further study with more diverse samples with a wider variety of medical conditions is indicated. Most of these studies used only one or two music sessions. It is not known whether effectiveness of music therapy sessions improves with repeated exposures. Further, there are little data with respect to optimal time for implementation of music therapy, length of music therapy sessions, or types of music to use. The effects of cultural diversity have not been addressed. Music therapy can improve the quality of care that critical care and perioperative nurses deliver to their patients.

Publication Types:
Review
Review literature

PMID: 11249367 [PubMed - indexed for MEDLINE]

Oncol Nurs Forum 2001 Jun;28(5):855-62

Music as a therapeutic intervention for anxiety in patients receiving radiation therapy.

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PURPOSE/OBJECTIVES: To determine whether music moderates the level of anxiety that patients experience during radiation therapy. DESIGN: Experimental, longitudinal, random assignment to music or no music therapy. SETTING: Urban radiation oncology center in a Department of Veterans Affairs hospital in the southeastern United States. SAMPLE: Forty-two men (19 in the experimental group, 23 in the control group) aged 39-80 years (74% white, 12% African American, 12% Hispanic, and 2% other) receiving definitive external beam radiation therapy for pelvic or abdominal malignancies. METHODS: Patients in the experimental group listened to music of their choice provided via audiotapes and headphones before and during their simulation and daily treatments for the duration of the planned course of therapy. The control group received standard care. The State-Trait Anxiety Inventory was administered initially to participants in both groups at the time of evaluation (time 1), post-simulation (time 2), at the end of the first week (time 3), at the end of the third week (time 4), and at the end of the fifth week or end of radiation therapy (time 5). MAIN RESEARCH VARIABLE: State anxiety. FINDINGS: No significant difference existed between the two groups to suggest that music moderated the level of anxiety during radiotherapy. However, post-hoc analyses identified changes and trends in state anxiety scores, suggesting a possible benefit of music therapy during radiotherapy. CONCLUSIONS: Despite a lack of group differences, early intervention with music therapy for patients with high levels of anxiety may be beneficial. IMPLICATIONS FOR NURSING PRACTICE: Nurses and other clinicians may administer state anxiety scales at the initial visit or prior to pretreatment radiation planning (simulation). Individuals who have high state anxiety scores may receive nursing interventions tailored to reduce anxiety during simulation and the early part of radiotherapy.

Publication Types:

- Clinical Trial
- Randomized Controlled Trial

PMID: 11421145 [PubMed - indexed for MEDLINE]

1: Nurs Clin North Am 2001 Mar;36(1):83-92

Music as intervention: a notable endeavor to improve patient outcomes.

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Music interventions have been used in medicine and nursing throughout history. Music therapy is an easy-to-administer, relatively inexpensive, noninvasive intervention that has been used to reduce heart rate, blood pressure, myocardial oxygen consumption, gastrointestinal function, anxiety, and pain. A review of theoretic and empirical base for the use of music therapy to improve patient outcomes in a variety of areas of clinical practice is presented. Implications for practice and future research are suggested.

Publication Types:

- Historical Article
- Review
- Review, Tutorial

PMID: 11342404 [PubMed - indexed for MEDLINE]

Gastroenterol Nurs 2000 Jul;23(4):148-156

Effects of a single music therapy intervention on anxiety, discomfort, satisfaction, and compliance with screening guidelines in outpatients undergoing flexible sigmoidoscopy.

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Screening flexible sigmoidoscopy (FS) is an effective tool for the detection of colon cancer. Nonetheless, persons are reluctant to undergo FS for a variety of reasons such as anxiety, discomfort, and the possibility of abnormal findings. Nurses caring for FS patients can implement interventions to allay anxiety and promote comfort in an effort to enhance satisfaction and future compliance. Music therapy is one nonpharmacologic intervention that has been shown to be effective in allaying anxiety, reducing discomfort, and promoting satisfaction in other patient populations. A two-group pretest, posttest experimental design with repeated measures study recruited 64 subjects undergoing FS from one Midwestern tertiary care center. Subjects were randomly assigned to a control condition of usual procedural care or to an experimental condition of music therapy during the examination. State and trait anxieties were measured at pretest. State anxiety, discomfort, satisfaction, and perceived compliance with future screening were measured after the procedure. Subjects in the music group reported less anxiety and discomfort than subjects in the control group. There were no differences on satisfaction ratings or perceived compliance with screening guidelines. Nurses caring for patients undergoing screening FS can offer music therapy as one nonpharmacologic intervention to ameliorate anxiety and reduce discomfort.

Publication Types:

- Clinical trial
- Randomized controlled trial

PMID: 11310081 [PubMed - indexed for MEDLINE]

: J Child Fam Nurs 1999 Nov-Dec;2(6):432-3 Related Articles, Books, LinkOut

Children's responses to immunizations: lullabies as distraction.

Huth MM.

PMID: 10847028 [PubMed - indexed for MEDLINE]

1: Acta Anaesthesiol Scand 2001 Aug;45(7):812-7

Improved recovery after music and therapeutic suggestions during general anaesthesia: a double-blind randomised controlled trial.

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PURPOSE: This study was designed to determine whether music or music in combination with therapeutic suggestions in the intra-operative period under general anaesthesia could improve the recovery of hysterectomy patients. METHODS: In a double-blind randomised clinical investigation, 90 patients who underwent hysterectomy under general anaesthesia were intra-operatively exposed to music, music in combination with therapeutic suggestion or operation room sounds. The anaesthesia was standardised. Postoperative analgesia was provided by a patient-controlled analgesia (PCA). The pain scores were recorded by means of a visual analogue scale. Nausea, emesis, bowel function, fatigue, well-being and duration of hospital stay were studied as outcome variables. RESULTS: On the day of surgery, patients exposed to music in combination with therapeutic suggestions required less rescue analgesic compared with the controls. Patients in the music group experienced more effective analgesia the first day after surgery and could be mobilised earlier after the operation. At discharge from the hospital patients in the music and music combined with therapeutic suggestion group were less fatigued compared to the controls. No differences were noted in nausea, emesis, bowel function, well-being or length of hospital stay between the groups. CONCLUSION: This double-blind study has demonstrated that intra-operative music and music in combination with therapeutic suggestions may have some beneficial effects on postoperative recovery after hysterectomy. Further controlled studies are necessary to confirm our results.

Publication Types:

- Clinical Trial
- Randomized Controlled Trial

PMID: 11472279 [PubMed - indexed for MEDLINE]

1: Forsch Komplementarmed 1999 Jun;6(3):135-41 Related Articles, Books, LinkOut

[Investigations into synchronisation of heart rate and musical rhythm in a relaxation therapy in patients with cancer pain].

[Article in German]

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OBJECTIVE: Registration of the influence of musical rhythm on synchronisation and coordination of heart rate. DESIGN: Randomized pilot study. PROBANDS: 28 patients with chronic cancer pain in a stable phase of the disease. Intervention:14-day training of a relaxation therapy designed for improving the falling asleep, including a 30-minute lullaby-like, rhythmically dominated music with gradually decreasing tempi. No training in the control group. OUTCOME MEASURES: Continuous registration of heart rate and comparison with musical beat on day 1 and 15. Analysis of the degree of synchronisation, i.e. the coordination of systole and musical central time point (1st beat of the 6/8 time alla breve). Recording of the time of falling asleep and registration of the patient's subjective evaluation of the relaxation therapy and the pain intensity using verbal rating scales. Documentation of the use of analgetics. RESULTS: Under the relaxation therapy trained patients showed an increasing synchronisation and coordination of heart rate and musical beat. At a musical tempo between 48 and 42 beats per min a very stable 2 : 3 synchronisation occurred. Trained patients who reported the best relaxing and analgetic effects showed the highest degree of synchronisation. Relaxation therapy led to an improvement of falling asleep and to a decrease in consumption of analgetics. CONCLUSIONS: Lullaby-like music within a special range of tempi can induce a trainable synchronisation of heart rate, functionally associated with the formation and intensity of a relaxation reaction. Further investigations are promising, however, substantial improvements in the measurement and documentation methods are needed.

Publication Types:
Clinical trial
Controlled clinical trial

PMID: 10460982 [PubMed - indexed for MEDLINE]

: Enferm Intensiva 1996 Jul-Sep;7(3):95-103Related Articles, Books, LinkOut

[Factors causing stress in patients in intensive care units].

[Article in Spanish]

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Intensive care units have been considered stress generating areas. Knowing the causes why this happens will allow us to take specific measures to prevent or minimize it. This study has been performed with the aim to identify stress raising factors, as they are perceived by intensive care patients. The study has been performed in 49 patients most of whom were being attended in postoperatory control. The valuation of the degree of stress was performed using the "Scale of Environmental Stressors in Intensive Care" by Ballard in 1981, modified and adapted to our environment, with a result of 43 items distributed in six groups; Immobilization, Isolation, Deprivation of sleep, Time-spacial disorientation, Sensorial deprivation and overestimulation, and depersonalization and loss of autocontrol. The level of stress perceived by patients was low. The factors considered as most stressing were those related to physical aspects; presence of tubes in nose and mouth, impossibility to sleep and presence of noise, whereas those less stressing referred to Nursing attention. We conclude that patients perceive ICU as a little stressing place in spite of the excessive noise, remark the presence of invasive tubes and the difficulty to sleep as the most stressing factors, and in the same way, express a high degree of satisfaction about the attention received.

PMID: 8997954 [PubMed - indexed for MEDLINE]