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**Date:** 22 Jun 2017

**Sources Searched:** Medline, Embase, Cinahl, Amed, The Cochrane Library.

## Music in Waiting Areas

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[See full search strategy](#)

### **1. The effectiveness of interventions aimed at reducing anxiety in health care waiting spaces: a systematic review of randomized and nonrandomized trials.**

**Author(s):** Biddiss, Elaine; Knibbe, Tara Joy; McPherson, Amy

**Source:** Anesthesia and analgesia; Aug 2014; vol. 119 (no. 2); p. 433-448

**Publication Date:** Aug 2014

**Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article Review

**PubMedID:** 24942321

Available in full text at [Anesthesia and Analgesia](#) - from Ovid

**Abstract:**BACKGROUND Reducing waiting anxiety is an important objective of patient-centered care. Anxiety is linked to negative health outcomes, including longer recovery periods, lowered pain thresholds, and for children in particular, resistance to treatment, nightmares, and separation anxiety. The goals of this study were (1) to systematically review published research aimed at reducing preprocedural waiting anxiety, and (2) to provide directions for future research and development of strategies to manage preprocedural waiting anxiety in health care environments.METHODSWe performed a systematic review of the literature via ISI Web of Knowledge, PubMed, PsycINFO, EMBASE, CINAHL, and Medline. Included in this review were studies describing measurable outcomes in response to interventions specifically intended to improve the waiting experience of patients in health care settings. Primary outcomes of interest were stress and anxiety. Exclusion criteria included (a) studies aimed at reducing wait times and management of waiting lists only, (b) waiting in non-health care settings, (c) design of health care facilities with nonspecific strategies pertaining to waiting spaces, (d) strategies to reduce pain or anxiety during the course of medical procedures, and (e) interventions such as massage, acupuncture, or hypnosis that require dedicated staff and/or private waiting environments to administer.RESULTSWe identified 8690 studies. Forty-one articles met the inclusion criteria. In adult populations, 33 studies were identified, wherein the effects of music (n = 25), aromatherapy (n = 6), and interior design features (n = 2) were examined. Eight pediatric studies were identified investigating play opportunities (n = 2), media distractions (n = 2), combined play opportunities and media distractions (n = 3), and music (n = 1). Based on results from 1129 adult participants in the 14 studies that evaluated music and permitted meta-analysis, patients who listened to music before a medical procedure exhibited a lowered-state anxiety ( $-5.1 \pm 0.53$  points on the State Trait Anxiety Scale) than those who received standard care. The efficacy of aromatherapy was inconclusive. Studies reporting on the impact of improved interior design of waiting areas, while positive, are minimal and heterogeneous. For children, insufficient evidence is available to corroborate the effectiveness of

play opportunities, media distractions, and music for mitigating anxiety in children awaiting medical procedures. **CONCLUSIONS** Music is a well-established means of decreasing anxiety in adult patients awaiting medical interventions. The effect of music on children's anxiety is not known. Limited studies and heterogeneity of interventions and methods in the areas of aromatherapy, interior design, digital media, and play opportunities (for children) suggest the need for future research.

**Database:** Medline

## **2. Music interventions for preoperative anxiety.**

**Author(s):** Bradt, Joke; Dileo, Cheryl; Shim, Minjung

**Source:** The Cochrane database of systematic reviews; Jun 2013 (no. 6); p. CD006908

**Publication Date:** Jun 2013

**Publication Type(s):** Research Support, Non-u.s. Gov't Meta-analysis Journal Article Review

**PubMedID:** 23740695

Available in full text at [Cochrane Library](#), [The](#) - from John Wiley and Sons

**Abstract:** **BACKGROUND** Patients awaiting surgical procedures often experience significant anxiety. Such anxiety may result in negative physiological manifestations, slower wound healing, increased risk of infection, and may complicate the induction of anaesthesia and impede postoperative recovery. To reduce patient anxiety, sedatives and anti-anxiety drugs are regularly administered before surgery. However, these often have negative side effects and may prolong patient recovery. Therefore, increasing attention is being paid to a variety of non-pharmacological interventions for reduction of preoperative anxiety such as music therapy and music medicine interventions. Interventions are categorized as 'music medicine' when passive listening to pre-recorded music is offered by medical personnel. In contrast, music therapy requires the implementation of a music intervention by a trained music therapist, the presence of a therapeutic process, and the use of personally tailored music experiences. A systematic review was needed to gauge the efficacy of both music therapy and music medicine interventions for reduction of preoperative anxiety. **OBJECTIVES** To examine the effects of music interventions with standard care versus standard care alone on preoperative anxiety in surgical patients. **SEARCH METHODS** We searched the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library 2012, Issue 7), MEDLINE (1950 to August 2012), CINAHL (1980 to August 2012), AMED (1985 to April 2011; we no longer had access to AMED after this date), EMBASE (1980 to August 2012), PsycINFO (1967 to August 2012), LILACS (1982 to August 2012), Science Citation Index (1980 to August 2012), the specialist music therapy research database (March 1 2008; database is no longer functional), CAIRSS for Music (to August 2012), Proquest Digital Dissertations (1980 to August 2012), ClinicalTrials.gov (2000 to August 2012), Current Controlled Trials (1998 to August 2012), and the National Research Register (2000 to September 2007). We handsearched music therapy journals and reference lists, and contacted relevant experts to identify unpublished manuscripts. There was no language restriction. **SELECTION CRITERIA** We included all randomized and quasi-randomized trials that compared music interventions and standard care with standard care alone for reducing preoperative anxiety in surgical patients. **DATA COLLECTION AND ANALYSIS** Two review authors independently extracted the data and assessed the risk of bias. We contacted authors to obtain missing data where needed. Where possible, results were presented in meta analyses using mean differences and standardized mean differences. Post-test scores were used. In cases of significant baseline differences, we used change scores. **MAIN RESULTS** We included 26 trials (2051 participants). All studies used listening to pre-recorded music. The results suggested that music listening may have a beneficial effect on preoperative anxiety. Specifically, music listening resulted, on average, in an anxiety reduction that was 5.72 units greater (95% CI -7.27 to -4.17,  $P < 0.00001$ ) than that in the standard care group as measured by the State-Trait Anxiety Inventory (STAI-S), and -0.60

standardized units (95% CI -0.90 to -0.31,  $P < 0.0001$ ) on other anxiety scales. The results also suggested a small effect on heart rate and diastolic blood pressure, but no support was found for reductions in systolic blood pressure, respiratory rate, and skin temperature. Most trials were assessed to be at high risk of bias because of lack of blinding. Blinding of outcome assessors is often impossible in music therapy and music medicine studies that use subjective outcomes, unless in studies in which the music intervention is compared to another treatment intervention. Because of the high risk of bias, these results need to be interpreted with caution. None of the studies included wound healing, infection rate, time to discharge, or patient satisfaction as outcome variables. One large study found that music listening was more effective than the sedative midazolam in reducing preoperative anxiety and equally effective in reducing physiological responses. No adverse effects were identified. **AUTHORS' CONCLUSION** This systematic review indicates that music listening may have a beneficial effect on preoperative anxiety. These findings are consistent with the findings of three other Cochrane systematic reviews on the use of music interventions for anxiety reduction in medical patients. Therefore, we conclude that music interventions may provide a viable alternative to sedatives and anti-anxiety drugs for reducing preoperative anxiety.

**Database:** Medline

### **3. Exploring the effect of sound and music on health in hospital settings: A narrative review.**

**Author(s):** Iyendo, Timothy Onosahwo

**Source:** International Journal of Nursing Studies; Nov 2016; vol. 63 ; p. 82-100

**Publication Date:** Nov 2016

**Publication Type(s):** Academic Journal

**Abstract:** Background Sound in hospital space has traditionally been considered in negative terms as both intrusive and unwanted, and based mainly on sound levels. However, sound level is only one aspect of the soundscape. There is strong evidence that exploring the positive aspect of sound in a hospital context can evoke positive feelings in both patients and nurses. Music psychology studies have also shown that music intervention in health care can have a positive effect on patient's emotions and recuperating processes. In this way, hospital spaces have the potential to reduce anxiety and stress, and make patients feel comfortable and secure. This paper describes a review of the literature exploring sound perception and its effect on health care. **Data sources and review methods** This review sorted the literature and main issues into themes concerning sound in health care spaces; sound, stress and health; positive soundscape; psychological perspective of music and emotion; music as a complementary medicine for improving health care; contradicting arguments concerning the use of music in health care; and implications for clinical practice. Using Web of Science, PubMed, Scopus, ProQuest Central, MEDLINE, and Google, a literature search on sound levels, sound sources and the impression of a soundscape was conducted. The review focused on the role and use of music on health care in clinical environments. In addition, other pertinent related materials in shaping the understanding of the field were retrieved, scanned and added into this review. **Results** The result indicated that not all noises give a negative impression within healthcare soundscapes. Listening to soothing music was shown to reduce stress, blood pressure and post-operative trauma when compared to silence. Much of the sound conveys meaningful information that is positive for both patients and nurses, in terms of soft wind, bird twitter, and ocean sounds. **Conclusions** Music perception was demonstrated to bring about positive change in patient-reported outcomes such as eliciting positive emotion, and decreasing the levels of stressful conditions. Whilst sound holds both negative and positive aspects of the hospital ecosystem and may be stressful, it also possesses a soothing quality that induces positive feelings in patients. Conceptualizing the nature of sound in the hospital context as a soundscape, rather than merely noise can permit a subtler and socially useful understanding of the role of sound and music in the hospital setting, thereby creating a means for improving the hospital experience for patients and nurses.

**Database:** CINAHL

**4. The Efficacy of a Brief Nature Sound Intervention on Muscle Tension, Pulse Rate, and Self-Reported Stress: Nature Contact Micro-Break in an Office or Waiting Room.**

**Author(s):** Largo-Wight, Erin; O'Hara, Brian K; Chen, W William

**Source:** HERD; Oct 2016; vol. 10 (no. 1); p. 45-51

**Publication Date:** Oct 2016

**Publication Type(s):** Journal Article

**PubMedID:** 26744039

Available in full text at [HERD : Health Environments Research and Design Journal](#) - from ProQuest

**Abstract:**BACKGROUND There is a growing recognition that environmental design impacts health and well-being. Nature contact is a design feature or exposure that is especially important in public health and healthcare. To date, there are limited findings on the impact of nature sounds. OBJECTIVE This experimental study was designed to examine the effect of nature sounds on physiological and psychological stress. METHOD Participants were randomized into one of three groups-silence (n = 9), nature sound (n = 17), and classical music (n = 14)-and listened to the assigned sound for 15 min in an office or waiting room-like environment. Pre- and postdata were collected including muscle tension (electromyogram), pulse rate, and self-reported stress. RESULTS With the exception of pulse rate, there were no statistical differences in baseline or demographics among groups. A paired t-test by group showed a decrease in muscle tension, pulse rate, and self-reported stress in the nature group and no significant differences in the control or the classical music groups. The significant reduction in muscle tension occurred at least by 7 min of listening to the nature sound. CONCLUSION This study highlights the potential benefit of even very brief (less than 7 min) exposure to nature sounds. Brief nature sound "booster breaks" are a promising area for future research with important practical implications.

**Database:** Medline

**5. A randomized controlled trial of the effect of a photographic display with and without music on pre-operative anxiety.**

**Author(s):** Gómez-Urquiza, Jose L.; Hueso-Montoro, César; Urquiza-Olmo, Josefa; Ibarrondo-Crespo, Rocío; González-Jiménez, Emilio; Schmidt-Riovalle, Jacqueline

**Source:** Journal of Advanced Nursing; Jul 2016; vol. 72 (no. 7); p. 1666-1676

**Publication Date:** Jul 2016

**Publication Type(s):** Academic Journal

Available in full text at [Journal of Advanced Nursing](#) - from John Wiley and Sons

**Abstract:**Aims To determine the effectiveness of photographic display at reducing pre-operative anxiety in an ear, nose and throat surgery unit; alone and in combination with music. Background The waiting time prior to the surgery is often unpleasant and a time of anxiety for patients. Anxiety can affect physical recovery and psychological well-being; lengthening convalescence and hospital stay after the surgery. Improving pre-operative anxiety is a challenge with potential impacts on improving patients' satisfaction and well-being and decreasing the cost of care. Design A clinical trial was conducted with two intervention groups and one control group. Methods The sample consisted of 180 subjects from the otolaryngology major ambulatory surgery unit in a tertiary hospital in the province of Granada, with 60 subjects per group. The outcome variables measured were state anxiety, heart and respiratory rate and blood pressure. The data were collected from May-December 2013. Results After the intervention, in the comparison between control group and photographic

display group, all variables had lower means in the intervention group, although a significant P value was only obtained for respiratory rate using one-way anova test. When comparing control group and photographic display combined with music group, using one-way anova test, all mean values were lower in the intervention group and a significant P value were observed for all variables except diastolic blood pressure. Conclusion Photographic display in combination with music is more effective at reducing pre-operative anxiety than the standard intervention and photographic display alone.

**Database:** CINAHL

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

**Author(s):** Kipnis, Galina; Tabak, Nili; Koton, Silvia

**Source:** Journal of perianesthesia nursing : official journal of the American Society of PeriAnesthesia Nurses; Jun 2016; vol. 31 (no. 3); p. 209-216

**Publication Date:** Jun 2016

**Publication Type(s):** Journal Article

**PubMedID:** 27235957

**Abstract:**BACKGROUNDContemporary 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.PURPOSETo evaluate the effect of background music on preoperative anxiety in elective surgery patients and on noise levels in the surgery waiting room.DESIGNOne 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.FINDINGSExposure 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).CONCLUSIONSBackground music can be useful as a means of decreasing preoperative anxiety.

**Database:** Medline

## **7. The influence of ambient scent and music on patients' anxiety in a waiting room of a plastic surgeon.**

**Author(s):** Fenko, Anna; Looock, Caroline

**Source:** HERD; 2014; vol. 7 (no. 3); p. 38-59

**Publication Date:** 2014

**Publication Type(s):** Journal Article

**PubMedID:** 24782235

Available in full text at [Health Environments Research & Design Journal \(HERD\)](#) - from EBSCOhost

Available in full text at [HERD : Health Environments Research and Design Journal](#) - from ProQuest

**Abstract:**OBJECTIVEThis study investigates the influence of ambient scent and music, and their combination, on patients' anxiety in a waiting room of a plastic surgeon.BACKGROUNDWaiting for an appointment with a plastic surgeon can increase a patient's anxiety. It is important to make the waiting time before an appointment with the surgeon more pleasant and to reduce the patient's anxiety. Ambient environmental stimuli can influence people's mood, cognition, and behavior. This experimental study was performed to test whether ambient scent and music can help to reduce patients' anxiety.METHODSTwo pre-studies (n = 21) were conducted to measure the subjective pleasantness and arousal of various scents and music styles. Scent and music that scored high on pleasantness and low on arousal were selected for the main study. The field experiment (n = 117) was conducted in the waiting room of a German plastic surgeon. The patients' levels of anxiety were measured in four conditions: (1) without scent and music, (2) with lavender scent; (3) with instrumental music; (4) with both scent and music.RESULTSWhen used separately, each of the environmental factors, music and scent, significantly reduced the level of patient's anxiety compared to the control condition. However, the combination of scent and music was not effective in reducing anxiety.CONCLUSIONSOur results suggest that ambient scent and music can help to reduce patients' anxiety, but they should be used with caution. Adding more ambient elements to environment could raise patients' level of arousal and thus increase their anxiety.KEYWORDSHealing environments, patient, patient-centered care, quality care, satisfaction.

**Database:** Medline

## **8. Low degree of formal education and musical experience predict degree of music-induced stress reduction in relatives and friends of patients: A single-center, randomized controlled trial**

**Author(s):** Tilt A.C.; Alam H.B.; Warshaw A.L.; Jazbar B.; Booker A.; Stangenberg L.; Lillemoe K.D.; Conrad C.; Brown D.F.; Parry B.A.; Fricchione G.L.; Benson H.; Werner P.D.

**Source:** Annals of Surgery; May 2013; vol. 257 (no. 5); p. 834-838

**Publication Date:** May 2013

**Publication Type(s):** Article

**PubMedID:** 23574990

Available in full text at [Annals of Surgery](#) - from Ovid

**Abstract:**OBJECTIVE: To determine the factors that may predict music-induced relaxation in friends and family of patients in the emergency department. BACKGROUND: It remains unclear to date which demographic and experiential factors predict the effectiveness of music-induced relaxation. Furthermore, in-hospital stressors for friends and family of patients rather than patients themselves are underresearched and deserve in-depth investigation to improve this group's experience in health care environments. METHODS: A total of 169 relatives and friends of patients in the emergency department-waiting area completed a series of questionnaires, including the Spielberger State-Trait Anxiety Inventory (STAI), the Music Experience Questionnaire (MEQ), and a demographic survey.

They were then randomly assigned to either Case Group (1 hour in the waiting area with classical music in the background) or Control Group (1 hour with no music) before completing a second, identical copy of the STAI to measure change from baseline. Data were analyzed for associations between music intervention, change in STAI scores, MEQ scores, and demographic characteristics. RESULTS: Participants who underwent the music intervention experienced a 9.8% decrease in overall mean State Anxiety, whereas those in the Control Group experienced no change over time ( $P = 0.001$ ). Higher education significantly inversely correlated with the effectiveness of music intervention: participants with no formal education beyond high school showed a greater overall mean decrease in State Anxiety than those with a college education or beyond in response to classical music ( $P = 0.006$ ). Furthermore, MEQ scores indicated that the Social Uplift scale (a measure of one's tendency to be uplifted in a group-oriented manner by music) was highly predictive of the effectiveness of music intervention. CONCLUSIONS: Music is an effective and inexpensive means of reducing anxiety in friends and family of patients, who are underresearched in medicine. Moreover, low educational attainment and tendency to respond positively to music in a group setting can predict the effectiveness of music-induced relaxation. Copyright © 2013 by Lippincott Williams & Wilkins.

**Database:** EMBASE

### **9. Evidence that music listening reduces preoperative patients' anxiety**

**Author(s):** Lee K.-C.; Hsieh H.-Y.; Chao Y.-H.; Yiin J.-J.; Dai W.-J.; Chao Y.-F.

**Source:** Biological Research for Nursing; Jan 2012; vol. 14 (no. 1); p. 78-84

**Publication Date:** Jan 2012

**Publication Type(s):** Article

**PubMedID:** 21278165

**Abstract:**Background: Patients often exhibit preoperative fear and anxiety that may influence the process of induction and recovery from anesthesia. Music is thought to be an alternative to medication for relief of fear and anxiety. Objectives: The purpose of the present study was to explore the feasibility of using heart rate (HR) variability (HRV) for evaluating the efficacy of music listening to relieve the patients' anxiety during their stay in the operation room waiting area and to compare the HRV measures with subjective Visual Analogue Scale (VAS) scores. Methods: In total, 140 patients were randomly assigned to the experimental ( $n = 64$ ) or control group ( $n = 76$ ). The intervention consisted of a 10-min period of exposure to relaxing music delivered through headphones. Anxiety levels were measured by VAS (a 10-point scale) and 5 min of HRV monitoring before and after the music intervention. Results: The music group demonstrated significant reductions in VAS scores, mean HR, low-frequency HRV, and low-to high-frequency ratio and an increase in high-frequency HRV, while patients in the control group showed no changes. The subjective results of patients' VAS anxiety scores were consistent with the objective results of HRV parameters. Conclusions: Listening to music can significantly lower the anxiety levels of patients before surgery. The frequency-domain parameters of HRV can be indicators for monitoring the change in anxiety level of preoperative patients. © SAGE Publications 2012.

**Database:** EMBASE

### **10. Emergency department waiting room stress: can music or aromatherapy improve anxiety scores?**

**Author(s):** Holm, Lydia; Fitzmaurice, Laura

**Source:** Pediatric emergency care; Dec 2008; vol. 24 (no. 12); p. 836-838

**Publication Date:** Dec 2008

**Publication Type(s):** Case Reports Journal Article Evaluation Studies

**PubMedID:** 19050663

Available in full text at [Pediatric Emergency Care](#) - from Ovid

**Abstract:**UNLABELLEDThe aim of this study was to determine the effect of music alone, aromatherapy alone, and music in addition to aromatherapy on anxiety levels of adults accompanying children to a pediatric emergency department waiting area. **METHODS**The study was conducted over 28 consecutive days, assigned to 1 of 4 groups: no intervention, music, aromatherapy, and both music and aromatherapy. Adults accompanying children to the emergency department of an urban pediatric tertiary care referral center were given a survey including a Spielberger state anxiety inventory with additional questions about whether they noticed an aroma or music and if so their response to it. The music was classic ingenre with a tempo of 60 to 70 beats per minute. The aromatherapyused the essential oil Neroli dispersed using 2 aromatherapydiffusers placed in strategic airflow ends of the emergency department. **RESULTS**The 1104 surveys were completed. There was a statistically significant decrease in anxietylevel on those days when music was playing (36.3 vs. 39.2;  $P = 0.017$ ). There was no difference in anxiety levels on those days when aromatherapy was present compared with the nonaromatherapy days (37.3 vs. 38.0;  $P = 0.347$ ). **CONCLUSIONS**Music is an easy and useful way to decrease the anxiety of visitors in an emergency department waiting area. Although no difference was detected for the aromatherapy group, this could be because of environmental conditions or imprecise application of the aromatherapy; further study is needed to either prove or disprove its effectiveness in this setting.

**Database:** Medline

### **11. The use of music to aid patients' relaxation in a radiotherapy waiting room**

**Author(s):** Cooper L.; Foster I.

**Source:** Radiography; Aug 2008; vol. 14 (no. 3); p. 184-188

**Publication Date:** Aug 2008

**Publication Type(s):** Article

**Abstract:**Patient-centred practice and increasing user involvement adds impetus to built environmental research within the health care setting. Much work has been centred around stress reduction initiatives for improving health outcomes for patients and staff. This study examined the influence of music choice on patients' anxiety levels whilst seated in a radiotherapy waiting area. Patients' stress levels and perceptions were assessed in the absence/presence of music. The opinions of patients were elicited through a questionnaire following exposure to a range of music types. Music therapy was shown to have clear benefits when individuals enjoyed the music to which they listened. Although clear preferences were indicated, the results were skewed by the negative effects of music not enjoyed by patients. Further investigation needs to take account of the impact of personal variables and the value of 'quiet areas'. © 2007 The College of Radiographers.

**Database:** EMBASE



## **12. Music and its effect on anxiety in short waiting periods: a critical appraisal.**

**Author(s):** Cooke M; Chaboyer W; Hiratos MA

**Source:** Journal of Clinical Nursing; Feb 2005; vol. 14 (no. 2); p. 145-155

**Publication Date:** Feb 2005

**Publication Type(s):** Academic Journal

**PubMedID:** 15669923

Available in full text at [Journal of Clinical Nursing](#) - from EBSCOhost

Available in full text at [Journal of Clincial Nursing](#) - from Ovid

Available in full text at [Journal of Clinical Nursing](#) - from John Wiley and Sons

**Abstract:**AIMS AND OBJECTIVES: This paper undertakes a critical appraisal of the methodological issues associated with studies that have investigated the extent to which music decreased the anxiety experienced by patients in short-term waiting periods such as day surgery. BACKGROUND: Investigations and surgery undertaken on a day basis have significantly increased in number over the last decade. Music has been evaluated as an appropriate nursing intervention in relation to pain, discomfort and anxiety in a number of clinical settings but its usefulness for decreasing anxiety in short-term waiting periods such as day surgery is only beginning to be understood. CONCLUSION: A number of methodological limitations are identified by this critical review, particularly in relation to the design of research studies. Recommendations to strengthen research in this area are suggested and include (i) describing methods clearly and with detail to allow assessment of the validity and rigour of study results; (ii) using permuted block randomization; (iii) recruiting from a variety of surgical procedures and cultural groups; and (iv) standardizing the health care provided during waiting period. RELEVANCE TO CLINICAL PRACTICE: Music as a simple and cost-effective intervention to reduce the anxiety experienced in limited time periods will have enormous impact on clinical practice where patients wait and undergo invasive investigations, procedures or surgery. However, the evidence of its utility in these unique environments is only beginning to emerge and this critical review provides a basis for considerations for future research.

**Database:** CINAHL

## **13. The effect of music on preprocedure anxiety in Hong Kong Chinese day patients.**

**Author(s):** Lee, David; Henderson, Amanda; Shum, David

**Source:** Journal of clinical nursing; Mar 2004; vol. 13 (no. 3); p. 297-303

**Publication Date:** Mar 2004

**Publication Type(s):** Research Support, Non-u.s. Gov't Clinical Trial Journal Article

**PubMedID:** 15009332

Available in full text at [Journal of Clinical Nursing](#) - from EBSCOhost

Available in full text at [Journal of Clincial Nursing](#) - from Ovid

Available in full text at [Journal of Clinical Nursing](#) - from John Wiley and Sons

**Abstract:**AIMS AND OBJECTIVES To identify the effect of music on preprocedure anxiety levels of Hong Kong Chinese patients undergoing day procedures in a local community based hospital. DESIGN Pre and post-test quasi experimental design with non-random assignment. METHOD A total of 113 participants were assigned to the control group or intervention group depending on the day of their procedure. Participants' anxiety levels were measured objectively by comparing their vital signs and subjectively by the Spielberger State Trait Anxiety Scale. Participants' physiological parameters (blood pressure, pulse and respiration) and State Trait Anxiety Scale were measured at two time periods. The control group undertook the usual relaxing

activities provided in the waiting room compared with the intervention group who listened to music of their own choice in reclining chairs while waiting for the procedure. **RESULT** The physiological parameters for both the control and intervention groups dropped significantly during the waiting period, however, only the intervention group had a significant reduction in reported anxiety levels. **CONCLUSION** These results suggest that providing self-selected music to day procedure patients in the preprocedure period assists in the reduction of physiological parameters and anxiety, yet, a relaxing environment can assist in the reduction of physiological parameters. **RELEVANCE TO CLINICAL PRACTICE** The administration of self-selected music to day procedure patients in the preprocedure period can be effective in the reduction of physiological parameters and anxiety.

**Database:** Medline

#### **14. The benefits of music in hospital waiting rooms.**

**Author(s):** Routhieaux, R L; Tansik, D A

**Source:** The Health care supervisor; Dec 1997; vol. 16 (no. 2); p. 31-40

**Publication Date:** Dec 1997

**Publication Type(s):** Journal Article

**PubMedID:** 10174442

**Abstract:** This study investigated the impact of music on visitors in a hospital surgery/intensive care unit waiting room. The researchers controlled the presence/absence of music in the waiting area. Visitors' stress levels and perceptions of customer service were assessed through a questionnaire handed out by hospital volunteers. Results indicated that music reduced self-reported stress levels and that visitor stress levels were inversely related to perceptions of customer service. The implications of these findings for supervisors and other health care personnel are discussed.

**Database:** Medline

## Strategy 227664

#	Database	Search term	Results
1	Medline	(music* OR "music therapy").ti,ab,su	21476
2	Medline	(waiting ADJ2 (room* OR area*)).ti,ab,su	2121
3	Medline	(1 AND 2)	37
4	EMBASE	(music* OR "music therapy").ti,ab	20337
5	EMBASE	exp MUSIC/	14699
6	EMBASE	exp "MUSIC THERAPY"/	5593
7	EMBASE	(4 OR 5 OR 6)	26049
9	EMBASE	exp "WAITING ROOM"/	1255
8	EMBASE	("waiting room*" OR "waiting area*").ti,ab	2918
10	EMBASE	(9 OR 8)	3176
11	EMBASE	(7 AND 10)	50
12	CINAHL	(music* OR "music therapy").ti,ab	6466
13	CINAHL	exp "MUSIC THERAPY"/	2758
14	CINAHL	exp MUSIC/	4922
15	CINAHL	(12 OR 13 OR 14)	9858
16	CINAHL	exp "WAITING ROOMS"/	468
17	CINAHL	(waiting ADJ2 (room* OR area*)).ti,ab	784
18	CINAHL	(16 OR 17)	1102

19	CINAHL	(15 AND 18)	15
20	PsycINFO	(music* OR "music therapy").ti,ab	32028
21	PsycINFO	exp MUSIC/	15387
22	PsycINFO	exp "MUSIC THERAPY"/	4250
23	PsycINFO	(20 OR 21 OR 22)	33833
24	PsycINFO	(waiting ADJ2 (room* OR area*)).ti,ab	744
25	PsycINFO	(23 AND 24)	16
26	AMED	(music* OR "music therapy").ti,ab	1162
27	AMED	exp MUSIC/	188
28	AMED	exp "MUSIC THERAPY"/	784
29	AMED	(26 OR 27 OR 28)	1317
30	AMED	(waiting ADJ2 (room* OR area*)).ti,ab	31
31	AMED	(29 AND 30)	1