Table des matières

Dental anxiety

Anxiété des soins dentaires : évaluation de l'acupuncture

1. Systematic reviews and meta-analysis

1.1. Steenen 2024

Steenen SA, Linke F, van Westrhenen R, de Jongh A. Interventions to reduce adult state anxiety, dental trait anxiety, and dental phobia: A systematic review and meta-analyses of randomized controlled trials. J Anxiety Disord. 2024 Jul;105:102891. https://doi.org/10.1016/j.janxdis.2024.102891

Background	Dental anxiety and phobia represent a major barrier to dental care, encompassing transient state anxiety during dental procedures and chronic trait anxiety that can meet criteria for specific phobia. Various behavioral, pharmacological, and complementary interventions have been proposed, yet their relative efficacy remains uncertain.
Methods	Seven databases were systematically searched for randomized controlled trials addressing adult state anxiety, trait anxiety, or dental phobia. A total of 173 RCTs were included, with 67 qualifying for 14 pooled meta-analyses. Random-effects models were used to compute standardized mean differences (SMDs), and certainty of evidence was assessed using GRADE.
Results	For state anxiety during oral surgery, moderate-certainty evidence supported hypnosis (SMD = –0.31, 95 % CI –0.56 to –0.05) and low-certainty evidence supported benzodiazepines (SMD = –0.43, 95 % CI –0.74 to –0.12). Evidence was inconclusive for psychotherapy and showed no support for virtual reality exposure therapy, distraction, music, aromatherapy, video information, or **acupuncture**. For trait anxiety, moderate-certainty evidence supported Cognitive Behavioral Therapy (CBT; SMD = –0.65, 95 % CI –1.06 to –0.24). For dental phobia, low-to-moderate certainty evidence supported psychotherapy (SMD = –0.48, 95 % CI –0.72 to –0.24) and CBT (SMD = –0.43, 95 % CI –0.68 to –0.17), but not virtual reality exposure therapy.
Conclusion	Dental anxieties are treatable conditions. Hypnosis and benzodiazepines can reduce acute state anxiety, whereas CBT is most effective for chronic trait anxiety and dental phobia. Acupuncture did not demonstrate efficacy in reducing dental anxiety. Future trials should minimize bias and adhere to CONSORT standards to strengthen evidence quality.

1.2. Weisfeld 2021

Weisfeld CC, Turner JA, Bowen JI, Eissa R, Roelk B, Ko A, Dunleavy K, Robertson K, Benfield E. Dealing with Anxious Patients: An Integrative Review of the Literature on Nonpharmaceutical Interventions to Reduce Anxiety in Patients Undergoing Medical or Dental Procedures. Journal of Alternative and Complementary Medicine. 2021;27(9):727-737. [223071].https://doi.org/10.1089/acm.2020.0505

Objectives	A previous systematic literature review (SLR) evaluated 501 experiments on reducing patient anxiety across medical and dental environments. This integrative review examines those interventions and explores possible mechanisms leading to relative success or failure within those environments, in the interest of interprofessional education and communication.
Methods	Reviewers evaluated 501 experiments testing interventions for reducing patient anxiety in a variety of medical and dental health care settings. Methodology for the SLR, largely following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, is briefly reviewed.
Results	A total of 501 experiments (from 408 articles) met review criteria. One hundred and forty-three Music experiments were included, and Music interventions were largely effective, except in the case of colonoscopy. Education is the only intervention that occasionally (5 times of 130 experiments) raised patient anxiety in the face of a procedure; the discussion focuses on the wisdom of assessing patient need for information. Thirty-seven Cognitive Behavioral Therapy (CBT) experiments of various types are included, with a success rate of 89%, with a particularly high rate of success (12 of 12 experiments) in dentistry. Massage has a success rate that is similar to that of CBT, but Massage has been tested in far fewer specialty areas. Relaxation has been tested in every specialty area, except mechanical ventilation, with promising results. **Acupuncture and Acupressure have not been widely tested, but their effectiveness rate is 100% when it comes to reducing patient anxiety in various procedural settings**. Similarly, experiments show Hypnosis to be successful in 90% of trials. In contrast, Distraction was successful in only 40% of the experiments summarized, although it was more effective in dentistry. A variety of Nature-based Interventions (Aromatherapy, Nature Sounds, and Visual Stimuli) were highly successful across a variety of settings.
Discussion	Possible mechanisms are discussed, along with commentary on feasibility. Limitations include publication bias, small sample sizes, and the lack of placebo controls. Future areas of research are pointed out.

1.3. Allan 2018

Allan FK, Peckham E, Liu JP et al. Acupuncture for anxiety in dental patients: Systematic review and meta-analysis. European Journal of Integrative Medicine. 2018;20:22-35. [206295]. doi

Introduction	Dental anxiety affects an estimated 4% to 30% of the adult population in countries world-wide. The objective of this study was to conduct the first systematic review and meta-analysis of randomised controlled trials of acupuncture to reduce anxiety in dental patients.
Methods	Online databases (OVID/AMED, Cochrane Library, CINAHL, OVID/Medline, EMBASE, PROSPERO, PsycINFO, PubMED, as well as databases in Chinese, Portuguese, Spanish and German) were searched up to July 2017 for eligible trials involving dental patients receiving an acupuncture intervention with measured anxiety scores. Comparators were placebo, usual care, or another dental anxiety intervention. Included studies were assessed using the Cochrane Risk of Bias Tool.
Results	From 129 trials identified as potentially eligible, **six trials with 800 patients** were included in this review. Two trials (combined n = 249) were rated as moderate-to-high or high quality, both used auricular acupuncture, and were the only two trials to report continuous post-intervention anxiety scores, both using the (80-point) State-Trait Anxiety Inventory (STAI). A meta-analysis comparing acupuncture with no-intervention controls found a statistically significant and clinically relevant reduction in anxiety of −8.43, 95% CI (−11.90, −5.00). A meta-analysis comparing acupuncture to placebo/sham acupuncture found a clinically irrelevant and non-significant reduction of −1.54, 95% CI (−4.73, 1.64), a contrast that might be explained by context effects.

Conclusions	There is limited evidence from two good quality trials that auricular acupuncture can achieve a significant and clinically meaningful reduction of anxiety in dental patients. There is no conclusive effect of acupuncture when compared with a sham/placebo control.

1.4. Gordon 2013

Gordon D, Heimberg RG, Tellez M, Ismail AI. A critical review of approaches to the treatment of dental anxiety in adults. J Anxiety Disord. 2013. 27(4):365-78. [170645].

Dental anxiety and specific phobia of dental procedures are prevalent conditions that can result in substantial distress and oral health impairment. This paper critically reviews 22 randomized treatment trials aimed at reducing dental anxiety and avoidance in adults, published in peer-reviewed journals between 1974 and 2012. The following treatment techniques are reviewed: various forms of cognitive-behavioral therapy (CBT), relaxation training, benzodiazepine premedication, music distraction, hypnotherapy, **acupuncture**, nitrous oxide sedation, and the use of lavender oil scent. CBT delivered in a variety of formats, including one-session treatment, has the most evidence for its efficacy. Cognitive techniques, relaxation, and techniques to increase patients' sense of control over dental care are also efficacious but perform best when combined with repeated, graduated exposure. Other interventions require further study in randomized trials before conclusions about their efficacy are warranted. Limitations of the extant outcome research and implications for future treatment and research are discussed.