

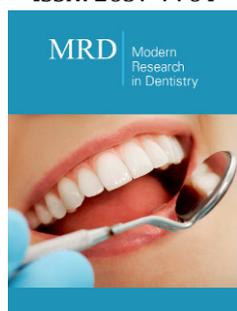
# Dental Anxiety: Interprofessional Research into an Intractable Global Problem

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## Abstract

This article offers an initial mini-review of dental anxiety and identifies future directions for research into nonpharmacological, therapeutic approaches to addressing this significant health issue.

**Keywords:** Dental anxiety; Nonpharmacological; Therapeutic approaches; Interprofessional; Oral health; Psychotherapy; Eye movement desensitisation reprocessing

## Introduction

Question: What do you get when you cross (or at least introduce) a professor of oral health with a professor of psychotherapy? Answer: A common interest in psychological health and dental anxiety. This mini-review arose from a meeting of the two authors and our obvious identification of dental anxiety as a focus for joint research and research supervision. We emphasise health before illness as we both agree that just as mental health is critical to general health [1,2], so there can be no general health without oral health [3].

## Review

Dental anxiety and fear are a significant public health problem in Aotearoa New Zealand, affecting one in eight of the population. Global estimates of this form of anxiety are comparable in other countries [4,5]. Dental anxiety is a significant barrier to oral health services that adversely affects the oral health of affected individuals and is recognised to have a multifactorial aetiology [6]. However, to date, the standard response to and management of this health issue is predominantly pharmacological, with sedation and general anaesthesia being common. This practice is cumbersome, expensive and requires a high standard of care to be administered safely but does not provide a cure for the underlying anxiety or phobia. Also, patients with dental anxiety are perceived as complex and thus consume disproportionate healthcare time and resources. Moreover, given the higher rates of tooth decay, dental pain and treatments requiring general anaesthesia in both Māori and Pasifika populations in Aotearoa New Zealand, any interventions that reduce dental anxiety particularly in these populations would redress significant inequities in this aspect of this country's population health.

Nonpharmacological responses and interventions for dental anxiety and phobia have included hypnosis and hypnotherapy [7]; eye movement desensitisation reprocessing (EMDR) [8]; cognitive behavioural therapy (CBT) [9]; and exposure treatment [10]. While patients and clients may be discussing this form of anxiety in personal therapy, we consider this is unlikely, and, in any case, it is not reported in the psychotherapeutic literature. A search of the Psychoanalytic Electronic Publishing database (comprising over 100,000 articles) returned only one match on the subject and that being from the 1940s [11].

EMDR has gained empirical support in the areas of post-traumatic stress disorder (PTSD) and anxiety across the lifespan and is recommended by the UK's National Institute of Clinical Excellence (NICE) as an empirically supported PTSD and phobia treatment. Research applying EMDR to dental anxiety is however sparse, though two reports in the literature on a limited number of patients promisingly showed the efficacy of EMDR in reducing dental anxiety in patients undergoing dental treatments [6,12]. Moreover, NICE is arguably biased against therapeutic approaches other than CBT, i.e., those based on psychoanalytic/psychodynamic and humanistic therapies, so we do not have any robust evidence of possible comparative therapeutic intervention efficacy or otherwise.

### Future Directions

As a result of this mini-review, planned research will be undertaken in two phases, both of which will be examples of interdisciplinary professionals working in the health sector. This is not only promoted at our own university, the Auckland University of Technology (AUT), but also through a review by the Health and Disability Commissioner [13] which identified that many complaints to the Commissioner arise from failures in teamwork across professions, and hence all New Zealand health care practitioners are obligated to practice collaboratively in order to improve health outcomes as enshrined (from 2019) in the Health Practitioners Competence Assurance Amendment Act [14].

The first phase is a scoping review, in effect, a "mapping" of key nonpharmacological/therapeutic responses to dental anxiety, first globally, and then nationally with regard to their availability in Aotearoa New Zealand. According to Wilson et al., scoping reviews map important ideas supporting a research area and the main sources and types of evidence available [15]. As this includes locating a varied set of sources, such as qualitative research studies, textbooks, reports, and what is referred to as "grey" literature, this analysis aligns with the aim of this project to identify and map the "scope" of literature in the broader sense than that of a systematic review [16]. This phase will commence with the joint supervision of an undergraduate Summer studentship.

The second phase will compare the efficacy of different therapeutic interventions such as hypnotherapy, EMDR, CBT and other, more generic psychotherapeutic approaches in reducing or curing dental anxiety.

### Conclusion

Dental anxiety is a major barrier to dental services and considering it is a complex health issue, will require well-

coordinated interprofessional collaboration to inform treatment. Increased uptake in dental care can lead to an increase in oral health in the population.

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