

# Psychological Aspects of Odontophobia

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## ABSTRACT

Some studies have also been included in it to understand this common dental anxiety among people and their coping strategies. The term Odontophobia means an extreme level of anxiety from dental visits and the treatment practices carried over by dental surgeons in their clinics to avail the dental problem solutions to the people, but often it has been seen that people who are treated by the dental surgeons have explained painful experiences while visiting a dentist. So this article is just a small step to make the dental treatment experiences less painful for those patients who are generally suffering from Odontophobia. Every dental practitioner should keep some psychological facts in his mind about dental phobias among people while arranging any appointment for such kind of patients. This article throws light on the psychological aspects of Odontophobia with initializing it from its meaning, etiology, symptoms, causes and treatment.

**KEYWORDS:** Dental anxiety, Odontophobia, Psychological facts

## INTRODUCTION

The term Odontophobia is often called dental fear, dental phobia, dentist phobia or dental anxiety. It is a kind of extreme fear of receiving dental care. It is generally been caused due to post-traumatic stress disorder by previous traumatic dental experiences.<sup>1</sup> Dental phobia is explained as an devastating feeling of hyper-tension, terror, trepidation and uneasiness that is associated with an strange threat towards dental treatments.<sup>2</sup> According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for Dental phobia, is a "marked and persistent fear of clearly discernible, circumscribed objects or situations"<sup>3</sup>, so that it has been categorized in the list of specific phobias. All such type of terms as dental phobia, dental fear, Odontophobia and dental anxiety are frequently used interchangeably in the psychological and dental journalism.<sup>4</sup>

A survey done in US stated in its report that about 75% of US adults have dental fear, span ranges mild to severe extent.<sup>5-7</sup> In most of the countries, it has been found that about 5 to 10 percent of children as well as adults are considered to experience dental phobia; which is resulted in the avoidance of dental care at all costs.<sup>6</sup> Women show more dental anxiety compared to men. Children tend to report more dental phobia than adults.<sup>8</sup> Dental anxiety encountered invasive procedures of dental care such as oral surgery, professional dental cleanings, root canal or prophylaxis.<sup>9</sup>

## PSYCHOLOGICAL FACTORS ASSOCIATED WITH ODONTOPHOBIA

**Predisposing personality characteristics:** Dental anxieties are generally associated with the personality

types and one's susceptibility towards anxiety rather than being a part of previous painful dental treatment.<sup>10</sup> Pahoja et al. (2011) studied the association between a dental fear and anxiety or depressive disorders by using a standardized structured psychiatric interrogation process with the patient. The results showed that dental anxiety was associated with GAD (generalized anxiety disorder) and with comorbidity of depressive and anxiety disorders when controlling the confounding factors.<sup>11</sup> The conclusion of the study shows that the people who are encountered with anxiety or depressive disorders were tend to show more anxiety while taking dental care rather than those without such disorder or psychological factors associated with them.

**Fear of pain:** The fear of pain is often stimulated with the instruments in used by dental practitioners such as injections, drills and other equipments. Udoye et al. (2005) carried out a study to find out that which treatment is associated with the highest dental anxiety by using a questionnaire based on Corah Dental Anxiety Scale (DAS) which was used before starting the dental care practices. It was prior to all kind of dental practices such as root canal therapy, scaling and polishing, extraction and filling etc. The results concluded that the most phobic situations are associated with the root canal treatment and tooth extractions.<sup>12</sup> Another study done by Nair M et al. in Udaipur to find out the pervasiveness of dental fear among the oral surgical patients in Pacific Dental College, Udaipur. The results concluded that highest fear of dental treatments included fear from dental injections in 35.5% of patients.<sup>13</sup>

**Dental practitioner and patient relationship:** Several studies showed that dentally anxious people have an unfavourable attitude towards dentists. It affects the dentist-patient harmonious relationship, which is tending to be an essential part of all kind of treatments. Many

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researches have shown that patient who reported visiting an angry dentist or the dentist who making disdainful remarks have more dental fear rather than those who visited a co-operative and friendly dentist.<sup>14</sup>

**Negative dental experiences:** A study published in Journal of Dental Association carried out by Smith and Heaten (2003) concluded that dental anxiety is associated with the painful experiences encountered by the patients while taking dental care.<sup>15</sup> The findings of the study showed that despite the use of modern and advanced techniques and very effective anesthetics, patients still tend to report the same degree of dental fear as they did it many years ago. It is also generalized by model learning effects, such as fearful experiences described by other people.

**Other factors:** Some other factors such as family history of fearful and anxious dental care experience encountered by family members, age and gender also play an important role in considered the dental experiences as more or less anxious. Some studies showed that children show more dental fear rather than the older people as well as women are more dentally anxious in comparison of men.<sup>14,15</sup>

## SIGN AND SYMPTOMS OF ODONTOPHOBIA

This type of phobia is characterized under specific phobias according to DSM-IV. In DSM-IV it has been described as an intense or irrational fear of dentists or receiving dental care. Exposure, observation or even such type of discussions or thoughts of dental treatments, dentists or dental clinics, often causes an immediate anxiety reaction. Many resources and literature on Odontophobia includes the following symptoms of this dental anxiety listed below:

- Over sweating
- Hyperventilating
- High blood pressure
- Feeling of terror
- Rapid heartbeat
- Nausea
- Irrational fear of teeth
- Feeling of panic
- Shortness of breath
- Dry mouth
- Anxiety
- Panic attacks
- Feeling of dread
- Trembling<sup>16</sup>

## DIAGNOSIS AND TREATMENT OF ODONTOPHOBIA

Phobia of dental care can be diagnosed by using standardized scales such as Corah's Dental Anxiety Scale or the Modified Dental Anxiety Scale. Prior to arranging any appointment of such kind of patients, a dental practitioner should undertake some psychological aspects

in his/her mind to decrease the anxiety level of patients and carrying over a successful dental treatment. A dental practitioner should attend a workshop organized by clinical psychologist or they can visit them to take some important advice on Odontophobia and the fears related to dental treatments reported by the patients.

Odontophobia can be efficiently treated with some psychotherapeutic anxiety treatments for phobias, which includes relaxation techniques, systematic desensitization, cognitive behavioral therapy, and modeling techniques. A brief detail of each of them has been provided here.<sup>15,16</sup>

**Relaxation technique:** Many specialized dental clinics use both psychologists and dental practitioners to help the patient to manage the dental fears and receive the dental care at regular basis with minimum dental anxiety. Relaxation techniques are often used by dentists to reduce the dental anxiety of the patients. It is categorized under Behavioural Therapy; it involves one-to-one session with a trained therapist. This is based on the principle of exposure and a gradual desensitization. During this session, patients are asked to control their anxiety as much as possible while exposure of dental treatments. The amount of exposure is increased gradually. In this way the patient gradually learns to tolerate the dental anxiety stimulated by the exposure of dental services with the help of relaxation technique.<sup>17</sup>

**Systematic Desensitization:** This is a behavioral technique which was developed by Joseph Wolpe in 1958 for the treatment of anxiety disorders, including phobias. The technique is based on the principle of counter-conditioning, in which the phobic response towards a particular stimulus is replaced by incompatible and an alternative response to the same stimulus. The process of Systematic desensitization undertakes a gradual process of reducing a person's anxiety towards a particular stimulus. However, the treatment can be administered in various settings, it has three basic steps:

- Training of relaxation,
- Making an anxiety hierarchy, and
- Counter-conditioning.<sup>1</sup>

This technique generally involves many sessions, depending on the patient and the nature of the phobia.

Step 1: The first step of includes muscles relaxation training. Patients are asked to imagine pleasurable scenes, do calming breathing exercises, meditation, or any other types of muscles relaxation techniques.

Step 2: In the second step the patient is asked to formulate a list of imaginative phobic situations, rate each of them from 100 to 0 level of anxiety felt by the patient (100 being the greatest level of anxiety). After that the list is used by the therapist and patient to construct an anxiety hierarchy.

Step 3: Once a person learns to efficiently master the relaxation techniques and has constructed the hierarchy of anxiety, the third and final step of the therapy is started. In this step the therapist administers various treatments and

asks the patient to slowly move imagine the anxiety hierarchy, starting it with the least anxiety-provoking situation, and associating the situation with the learned relaxation techniques. The steps involve imagined situations (the patient is asked to envisage the situation as vividly as possible), by inserting him/her in the actual situation (referred to as *in vivo*), or it can be a combination of the two. As the person starts feeling anxious, he/she will be asked to use his/her relaxation techniques. This is known as counter-conditioning, because a person cannot have both feeling of anxiety and relaxation at the same time. However, systematic desensitization may not be considered as the best treatment for every phobia, yet it is often administered by the therapist before beginning treatment.<sup>17,18</sup>

**Cognitive behavioral therapy:** This is a psychological treatment used for mood and anxiety disorders as well as phobias. Cognitive behavioral therapy includes the reformation of maladaptive thoughts and beliefs acquired by the person about some particular things. It is a widely used psychotherapy in the U.S. as well as other countries.<sup>19</sup> It combines both the cognitive therapy and behavioral therapy to treat mental health problems. It is very helpful in dentistry also to treat the Odontophobia and other dental fears. The cognitive component of the therapy examines the person's thoughts and patterns of thinking. The cognitive therapy focuses on the reduction of maladaptive beliefs and patterns of thinking that lead a person to negative emotions and actions which modify their thinking pattern and improve their ability to cope. This is called cognitive restructuring.

**Modeling:** Modeling is a type of behavioral therapy technique developed by Albert Bandura. In this technique the person (often a phobic patient) observes others (the "models") and learns from them how to face phobic situations. In the case of phobias, a person observes another person in a fearful situation (often related with the phobic objects) and see that the person is relaxed and doesn't afraid. In this way the patient learns to encounter the phobic situations.<sup>20</sup> In the field of dentistry the dental practitioners can also use this technique the decrease the dental anxiety of the patients.

## CONCLUSION

The psychological review of Odontophobia helps a dental practitioner to understand the fears or dental anxiety of the patients which often interrupt in the proper treatment of their dental problems. Every dental practitioner can use the psychotherapeutic techniques in their field to make the treatment process more effective and less painful for the patients. It will also help the people to improve their oral health by visiting a dentist on regular basis which will improve their physical health too without having any dental anxiety.

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