Management of dental anxiety

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Abstract
Anxious patients are familiar to all clinicians but identifying the best means of managing them is often difficult. This paper aims to provide an overview of the current knowledge regarding the management of anxious patients. The current literature suggests that predictability during treatment, educating our patients in the use of coping skills, and exposure to anxiety provoking stimuli are the most effective options for the management of anxious dental patients.

Introduction
As healthcare providers we must be sensitive to the individual needs and requirements of our patients: it is vital that we communicate, and demonstrate patience and empathy at all times. This is particularly important with our anxious patients. Armed with a good understanding of your patient’s anxiety level you can work towards alleviating it. There are several ways of achieving this.

Pharmacological approach
For a patient with a high level of anxiety this is often the most appropriate method, particularly if they have several dental treatment needs. Following a successful session of treatment such patients are positively encouraged and find it easier to cope with subsequent treatment. However there are some medical risks involved, particularly with general anaesthesia. Furthermore, repeated treatment in this manner ultimately may not help them to overcome their fear, or learn to use coping strategies to deal with their anxiety. Conscious and unconscious methods utilised for persistent dental anxiety prior to dental treatments include:
1. General anaesthetics
2. Relative analgesia: inhalation of a mixture of nitrous oxide and oxygen
3. Intravenous diazepam (a tranquillizer) or midazolam as a sedative
4. Hypnosis

Non-pharmacological approaches
Non-pharmacological approaches involve behavioural therapy and cognitive therapy. Behavioural therapy employs behaviour modification techniques to change maladaptive behaviours, whereas cognitive therapy mainly concentrates on maladaptive beliefs and thoughts by restructuring the interpretations in the mind.

Behavioural therapies
In behavioural therapy pain, discomfort or physiological arousal are often the cause of anxiety and subsequent avoidance and attendance for dental care. It is essential that the clinician recognises each individual’s uniqueness - in age, personality and previous experiences - and tailor the therapy accordingly. By identifying the patient’s personal strategies for coping with anxiety the process of cooperation is enhanced and may bring about a more successful result in turn. Below are examples of some techniques that can be used in dental settings to help patients:

Preventing anxiety
Excellent prevention strategies will obviously impact and deter the traumatic events of oral diseases. Optimum oral health can be achieved and maintained in the early stages of a child’s life with a healthy diet, good oral hygiene habits and dental care on regular basis. Should invasive dental treatment be required, this should be delayed at the first visit to instil the idea that the surgery is a safe environment.

Reducing uncertainty and increasing control and predictability
Many people are unfamiliar with dental procedures or the use of dental instruments. Good open communication and dialogue with patients increases their perception of control and helps overcome some difficulties during the treatment, and may increase their pain tolerance. With many patients their anxiety is linked to uncertainty as to what is going to happen to them in the chair. The following are suggestions of ways that information can be exchanged between clinician and patient, before or during the dental procedures to ease the task:

Before task:
By providing accurate and truthful information to patients, or in the case of children, the parents or siblings, prior to the treatment, as to what the procedure will entail, increases their knowledge and understanding and sense of control.

During task:
Tell-Show-Do is a good way to introduce children and adults to dental equipment and procedures in the surgery and dental chair.

Enhancing the patient’s control by giving them the authority to communicate with signs, or offering choices to enhance their comfort during the treatment will promote their confidence and sense of being in control of the situation.

Modelling
A patient’s behaviour depends not only on the consequences of their own actions but also on observing the consequences of other people’s behaviour. There are some studies to confirm that one way of helping the anxious patient is via observing cooperation of others visually or by using films. By modelling, a patient can see that the treatment does not have any lasting adverse effects or causes distress, and the clinician can be perceived as a caring individual whose only concern is the welfare of the patient.

Relaxation and distraction
Learning the techniques of relaxation and distraction can help to reduce anxiety. This can be achieved by such techniques as controlled breathing or progressive muscle relaxation, as well as focusing a patient’s attention away from the distressing procedure or situation. Control theory by distraction focusses our attention on our environment details rather than our body because we are limited in the amount of information that can be processed at once. As environmental information increases we have less mental capacity to process bodily information.

Systematic desensitisation and encouragement
This technique can be best explained by Gale and Ayer’s case study, where the patient is gradually introduced to the feared object or situation in a hierarchy of steps. Relaxation techniques are employed to enable them to tolerate each step, from the least fearful to most feared. Progress to the next step can only be achieved when the
patient is comfortable with the previous step. By repeating the gradual systematic scenario, the patient becomes desensitised to the feared object or situation. With a systematic desensitisation approach it should be possible to change small aspects of behaviour one at a time, so that over a long period considerable improvements can be made. Furthermore, valuing the patient’s ability to overcome their anxiety encourages them to become more positive and find the strength to repeat the act for further improvement. The possibility that a person will behave in a certain way depends on the consequences of that behaviour. When someone completes an action and the consequence is rewarding, the person is likely to repeat that action again in the future.

Emotional and educational support

Each individual’s needs must be taken into account, by listening to and responding to their requests, in order to build a trusting relationship. It is vital that we identify the patient’s worry or concerns, about the clinician or the treatment, and work to relieve or demystify these apprehensions. Calming and positive dialogue is always helpful in anxious situations. It is also important that we are aware of ethnic minorities’ beliefs and cultural differences with regards to health, to minimise any miscommunication. Educating and motivating these anxious patients is important and it should be our aim to encourage them to take ownership of their health behaviour and improve their oral health. An educational approach provides part of the answer to changing behaviour but it should be combined with empathy and understanding.

Cognitive therapy

Anxiety also has adverse effects on cognitive function causing memory malfunction, weakening of concentration and performance activities.\(^4\) This could happen when apprehensive thoughts get activated in response to autonomic arousal and catastrophic imagery. This behaviour would affect the decision-making ability as well as resulting in avoidance behaviour, such as avoiding or postponing a dental appointment. In severe cases a patient may also resort to ‘illness’ behaviour as a way of preventing anxious arousal or coping with the related stressful situation.

Cognitive therapy is concentrated on thinking processes and how to restructure the thoughts about the situation. The way people think about events plays a central role in their emotions.\(^3\) Cognitive restructuring is often used in combination with behavioural therapy - as behaviour is reshaping it helps that the way of thinking is also changing at the same time. In the case of dental anxiety, the idea is to encourage your patient to challenge and alter their way of thinking as it relates to children’s cooperative dental behavior. \(ASDC\) \(J\) \(Child\) \(Dent.\) \(1975;40(4):265-71.\)

It is important to understand anxiety and identify this, and related stressful situation.

**Conclusion**

To treat dental disease successfully we require the development of special communication skills and an ability to provide reassurance, personal care and comfort. This will improve the anxious patient’s satisfaction with treatment as well as ensuring high quality dental care. It is important to understand anxiety and identify this, and related behaviours, early in life to safeguard the future dental health of these individuals.

About the author: Ellie qualified as dental hygienist in June 2005 from Kings College University. She has worked in various areas: general practice, holistic practice, periodontal practice, practice consulting, hospital, teaching and research.

Ellie also has an BSc (Hons) in analytical chemistry from University of London, which she studied for while working full time as a dental hygienist.

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