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ADVANCED DENTAL NURSING SERIES

- COMMUNICATION
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Management of dental anxiety

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Introduction

Dentists have a duty to provide and patients have a right to expect adequate pain and anxiety control. Pharmacological methods of pain and anxiety control include local anaesthesia and conscious sedation techniques. (From *Maintaining standards;* General Dental Council, 2001.)

The avoidance of dental care due to fear of dentistry is a well known barrier to oral health. Many anxious or phobic patients will accept dental treatment if managed by sympathetic staff with the assistance of psychological therapies. A proportion of the population will, however, require sedation to help them accept dental treatment. It should be remembered that whilst fear of dentistry is commonplace there are other reasons why patients may refuse dental care: the patient may have behavioural problems or lack the capacity to understand the proposed treatment. When managing patients who are reluctant to have dental treatment it is important to understand the difference between anxiety and phobia.

Phobia

Phobia: an irrational fear of a particular object or situation – the fear response is excessive and disproportionate to the threat posed.

- The stimulus is comparatively small compared to the severity of the reaction
- This is a lasting abnormal fear that is usually deep rooted in a patient's emotions and often its origin cannot be explained, although this is not always the case
- The patient has little or no control over the phobia and logical thought is not a feature
- A phobia can significantly change a patient's behaviour
- Embarrassment and shame are often present.

Anxiety

Anxiety: a human emotion which causes feelings of apprehension, tension and discomfort and is associated with increased activity of the sympathetic nervous system.

- Anxiety is a learnt response
- Anxiety can be beneficial (eg it is often anxiety that precipitates a candidate to study for examinations), but anxiety is not always a helpful state to be in
- An anxious patient is in a state of unease
- Anxiety can be measured by using self-reported questionnaires such as the Modified Dental Anxiety Scale (Fig. 1).[1,2]

Dental anxiety has implications for both the patient and the dental team. A variety of studies have shown that the prevalence of dental anxiety is high, affecting up to one third of the UK population. The 1998 Adult Dental Health Survey identified that 32% of dentate patients in the UK population 'always feel anxious about going to the dentist'. This figure rises to 46% in dentate patients who only attend when they have

Can you tell us how anxious you get, if at all, with each dental visit?

PLEASE INDICATE BY INSERTING 'X' IN THE APPROPRIATE BOX

1.	If you went to your Dentist for TREATMENT TOMORROW, how would you feel?				
	Not Anxious ☐	Slightly Anxious ☐	Fairly Anxious ☐	Very Anxious ☐	Extremely Anxious ☐
2.	If you were sitting in the WAITING ROOM (waiting for treatment), how would you feel?				
	Not Anxious ☐	Slightly Anxious ☐	Fairly Anxious ☐	Very Anxious ☐	Extremely Anxious ☐
3.	If you were about to have a TOOTH DRILLED, how would you feel?				
	Not Anxious ☐	Slightly Anxious ☐	Fairly Anxious ☐	Very Anxious ☐	Extremely Anxious ☐
4.	If you were about to have your TEETH SCALED AND POLISHED, how would you feel?				
	Not Anxious ☐	Slightly Anxious ☐	Fairly Anxious ☐	Very Anxious ☐	Extremely Anxious ☐
5.	If you were about to have a LOCAL ANAESTHETIC INJECTION in your gum, above an upper back tooth, how would you feel?				
	Not Anxious ☐	Slightly Anxious ☐	Fairly Anxious ☐	Very Anxious ☐	Extremely Anxious ☐

Instructions for scoring (remove this section below before copying for use with patients)

The Modified Dental Anxiety Scale. Each item scored as follows:

Not anxious	=	1
Slightly anxious	=	2
Fairly anxious	=	3
Very anxious	=	4
Extremely anxious	=	5

Total score is a sum of all five items, range 5 to 25: Cut off is 19 or above which indicates a highly dentally anxious patient, possibly dentally phobic.

Fig. 1 Modified Dental Anxiety Scale[1,2]

some trouble with their teeth. It is interesting to note that 59% of dentate patients reported that they attended for regular dental check-ups. Anxiety therefore remains a barrier to dental care in a significant proportion of the population. Approximately 10% of the population avoids dental care because dental treatment provokes overwhelming feelings of anxiety which exceed the sufferer's ability to cope; such patients have dental phobia. Dental anxiety and phobia can be distinguished by the intensity of anxiety experienced and the patient's ability to cope with the anticipated anxiety of dental treatment. It is not unusual for a phobic patient to seek help for a dental problem from their doctor, rather than a dentist, in the hope of being prescribed painkillers or antibiotics. Many anxious/phobic patients will only seek a dental appointment when in severe or chronic pain; some are forced to do so by a friend or relative. Despite the efforts required by dental phobics to attend for treatment, it is not unusual for them to flee from the waiting room as their appointment time approaches. It is therefore not surprising that there is an association between high anxiety and missed or delayed dental appointments.

Spectrum of symptoms

Patients who are anxious or phobic about dental treatment may have generalised concerns about many aspects of dentistry or they may have very specific worries, such as a fear of injections. Other patients have a fear of the unknown or feel that they may lose control. Anticipation of pain during

'Despite the efforts required by dental phobics to attend for treatment, it is not unusual for them to flee from the waiting room as their appointment time approaches.'

dental treatment is a frequently reported reason for dental anxiety and fear. Anxiety may be based around one or more previous distressing experiences, such as pain, but it is not always possible to identify specific traumatic life events. Some adults who have accepted routine dental treatment in the past may develop dental anxiety for no obvious reason. Patients may become anxious because of incidents portrayed by family, friends and the media; this is known as vicarious learning. Not surprisingly, patient's beliefs (cognitions) about dental treatment vary considerably as does their response to stress-provoking situations. Children respond quite differently from adults. Patients with psychological or psychiatric problems may respond unpredictably to stressful situations. Some patients will experience anxiety only on the day of the appointment or when they enter the dental surgery. Other patients will start to exhibit symptoms of stress as soon as they receive the dental appointment, experiencing several sleepless nights prior to the visit. The spectrum of symptoms varies from mild psychological symptoms to physical (somatic) signs and symptoms such as those listed in Table 1.

Impact on quality of life

Research has shown that many patients who have high levels of dental anxiety also display other fears or psychological

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problems and these may adversely influence treatment outcome.

Dental anxiety can have a profound detrimental impact on the quality of life of the sufferer. One study by Cohen *et al.*[3] has shown that the impact of dental anxiety on people's lives can be divided into the five categories outlined below:

- Physiological disruption – eg dry mouth, increased heart rate, sweating
- Cognitive changes – eg negative and even catastrophic thoughts and feelings, unhelpful beliefs and fears
- Behavioural changes – eg alteration of diet, attention to oral hygiene, avoidance of dental environment, crying, aggression
- Health changes – eg sleep disturbance, acceptance of poor oral health
- Disruption of social roles – eg reduced social interactions and adverse affects on performance at work. Family and personal relationships can also be adversely affected.

Table 1 Signs and symptoms of anxiety

Clenched fists (white knuckles), sweaty hands
Pallor, sweating
Tense, raised shoulders, sitting upright unsupported in the chair, ill at ease
Fidgeting, nail biting, licking lips
Hypervigilance (constantly looking around, suspicious, extremely alert and conscious of environment)
Distracted, confused, unable to concentrate
Very quiet or extremely talkative; breathlessness
Tachycardia (heart rate of >100 bpm)
Palpitations
Hypertension
Dry mouth
Frequent visits to the toilet
Feeling nauseous, light headed or faint, vomiting, syncope, 'butterflies', stomach pains
Tremor
Hyperventilation/panic attack

Table 2 Methods of reducing anxiety

Relaxation training: breathing, progressive muscle relaxation
Positive reinforcement
Behaviour shaping
Distraction: story-telling, music
Transfer of control to the patient: stop signal, rehearsal sessions
Explanation and information: 'tell, show, do' sequence; modelling; permissible deception (being economical with the truth)
Negative reinforcement
Hypnosis
Systemic desensitisation
Biofeedback
Acupuncture
Sedation
General anaesthesia

Anxiety management

The management of anxious/phobic patients is dependent upon the severity of the condition and the treatment that needs to be

Table 3 Management strategies for anxious patients according to anxiety type

Anxiety type	Management strategy
Patients who fear specific stimuli eg needle phobics	Gradual exposure of patient to the feared stimulus (eg 'tell, show, do', systematic desensitisation). This approach will work better with a patient stop signal. Coping strategies such as relaxation techniques are also helpful.
Patients with free-floating anxiety or generalised anxiety The patient finds many situations outside of dentistry stressful; often there will be no history of a precipitating event.	The patient needs to develop coping strategies to reduce anxiety.
Patients who have a fear of physical catastrophe eg choking, retching, asphyxiating or death	Rehearsal and explanation of the patient's psychosomatic reactions are helpful. Systematic desensitisation, coping strategies and biofeedback can be beneficial once the patient acknowledges the mind-body link to their reactions.
Patients who are distrustful of dentists These patients may be confrontational in how they express their fears eg 'the dentist was always in a rush and never asked how I felt' or 'always made me feel as if the problems were my fault'.	Listening to the patient's fears and the transference of some control to the patient is helpful. Feedback must be sought from the patient throughout treatment. The establishment of a dialogue in an unhurried, open and non-judgemental manner will help improve the patient's confidence and trust.

Adapted with permission from Naini *et al.*[4]

undertaken. The medical history of the patient also influences management. It is important to control anxiety in patients who have systemic disease that is aggravated or triggered by stress, for example hypertension, epilepsy or asthma. The spectrum of patient management varies from psychological or behavioural approaches to the use of pharmacological agents such as anxiolytic drugs or general anaesthesia (GA). The spectrum of management strategies for the anxious patient are outlined in Table 2 and range from behaviour management to local anaesthesia, sedation and general anaesthesia.

Not everybody can be managed by sedation. GA is the method of choice for the pre-co-operative child and for many patients with profound learning or physical disabilities.

It is important to appreciate that the use of an anxiolytic drug is not a replacement or substitute for behavioural management of an anxious patient. The use of effective and persuasive communication techniques are still required when managing a patient under sedation.

Behavioural techniques

Behavioural techniques are employed as a matter of routine by many dentists, and are perhaps most evident when children are being treated. Positive reinforcement is frequently used as shown by the delivery of praise to an appropriately behaved patient. The age and emotional development of a child must always be taken into account when deciding upon which techniques to use. Anxious patients should always be given a stop signal as this transfers an element of control to the patient. A commonly used signal is simply raising a hand and it can be helpful for the patient to rehearse this briefly before treatment. The dental team must always respond appropriately to such signals. The trust of a patient can take a long time to build up but can be very quickly undermined or destroyed.

Behavioural management can be time consuming and expertise is required. Dentists who have access to a clinical psychologist are very much at an advantage. Patients with needle phobias can often be cured of their phobia by employing a systematic desensitisation programme. Desensitisation is a graded introduction to the feared experience/treatment – starting with the least frightening. The patient learns to cope with this before progressing onto the next stage. Finally, the patient is exposed to the most threatening situation. A long-term aim in the management of anxious/phobic patients is to modify their behaviour in order that some or all future dental treatment may be accepted without the assistance of sedation.

Some clinicians find it useful to categorise anxious patients into four types (Table 3); this is because the patient category influences the choice of behavioural management strategy. It should be appreciated that whilst this classification can be helpful, patients may have features of anxiety that belong to more than one category and several management strategies are sometimes required for one patient.

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3. Cohen S M, Fiske J, Newton J T. The impact of dental anxiety on daily living. *Br Dent J* 2000; **189:** 385-390.
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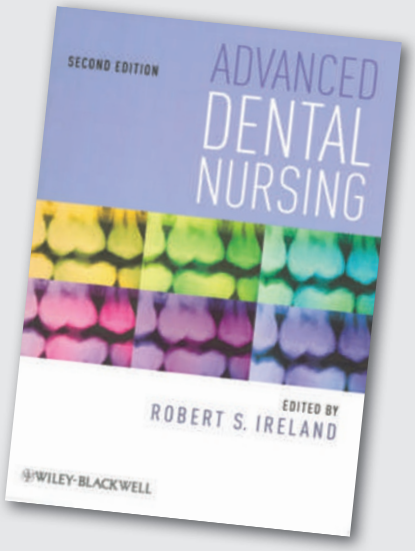

A review of Advanced dental nursing, *2nd edition can be found on page 8.*