



## VITAL GUIDE SERIES

13

Introducing the specialty of paediatric dentistry

- What is paediatric dentistry?
- Which patients are treated?
- How is the dental team involved?

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## VITAL GUIDE TO

# Paediatric dentistry

**Laura Gartshore** explains why there is a paediatric dental specialty and how DCPs are involved in treating children.

## What is paediatric dentistry?

Children are not little adults. They are unique in their stages of development, oral disease, behaviour and oral health needs – they come with their own set of specific demands. In order to provide them with the care that they deserve, the whole dental team must understand their needs and be involved with their management.

The term 'paediatric dentistry' encompasses the promotion and maintenance of child dental health. It is a growing specialty which is now recognised as involving a great deal more than fixing little holes in little teeth. In fact, paediatric dentistry is defined as 'the practice, teaching and research into the comprehensive and therapeutic oral health care for children from birth to adolescence, including care for children who demonstrate intellectual, medical, physical, psychological and/or emotional problems'.<sup>1</sup>

This means that a paediatric dentist will aim to improve the oral health of all infants, children and teenagers. Unlike other specialties in dentistry, paediatric dentistry covers all aspects of oral care. As well as providing the preventive and restorative care that a child needs, the paediatric dentist will also carry out oral surgery, provide simple orthodontic appliances and will routinely treat patients with the aid of relative analgesia, intravenous sedation and general anaesthetic.

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## Who provides paediatric dentistry?

Specialists in paediatric dentistry provide care for many of the children that general dental practitioners are unable to treat. Specialists in the UK are listed on the Paediatric Dentistry Specialist Register, held by the General Dental Council. The current requirement for entry onto this list is three years of specialist training and success in qualifying exams. Specialists may work in independent practice, dental schools and hospitals, or within the salaried health services. Many specialists undergo further training to become consultants.

It is estimated that one paediatric dentist is needed for every 20,000 children. There are

currently 234 paediatric dentists registered as specialists with the General Dental Council.<sup>2</sup> Yet the 2001 Census recorded a staggering 14.8 million children under the age of 20 living in the UK.

## Which patients do paediatric dentists treat?

Most children can be safely and successfully managed in general dental practice and it is not the role of the specialist to treat every medically compromised or anxious child, nor is it appropriate to refer children who require routine primary care. However, some children are best referred to the paediatric dentist.



**Anxious children who are unable to accept treatment under local anaesthesia**

Children with the following conditions may have increased dental anxiety and could require referral to a paediatric dentist:

- Behavioural disorders
- Autistic Spectrum Disorder
- Attention-Deficit Hyperactivity Disorder (ADHD).

Paediatric dentists have training and experience in the delivery of specialised behavioural management techniques and are able to provide dental treatment under sedation and general anaesthesia.

**Medically compromised children**

Paediatric dentists work routinely within multidisciplinary medical teams, so that they can provide safe and effective comprehensive oral health care for children. Specialists will treat children who have complex medical problems which may affect the provision of dental care. Examples include:

- Cerebral palsy
- Cleft lip and palate
- Severe learning difficulties

**Table 1 Oral and dental developmental problems that may be treated by paediatric dentists**

- Dental anomalies (defective teeth) including Amelogenesis Imperfecta
- Enamel hypoplasia
- Hypodontia (missing teeth)
- Supernumerary teeth

- Childhood cancers
- Bleeding disorders
- Severe neurological disease.

**Oral medicine and oral surgery**

Paediatric dentists accept referrals of children who require surgical procedures such as a Lingual Fraenectomy (release of a tongue-tie). They will also work closely with other specialties to diagnose oral pathology such as ulceration, swelling and cysts of the jaw.

**Dental anomalies**

Another role of the paediatric dentist is to provide specialised care for children with oral and dental developmental problems who may require complex restorative or orthodontic treatment. Such problems may occur in isolation or as part of more generalised conditions (Table 1).

**Management of complex dental trauma**

Injuries to the mouth and teeth may occur during play, sport and as a result of road traffic accidents. Dental injuries are common and affect about 15% of children.<sup>3</sup> Paediatric dentists provide specialist advice and treatment of the more complex cases when children have avulsed (knocked out) teeth or fractured (broken) teeth or have suffered other injuries to the mouth. General dental practitioners should provide initial emergency care and may then consider referral of the patient to the paediatric dentist for subsequent management of more severe injuries.

**Education and research**

Paediatric dentists provide essential dental education to dental professionals at all levels including dental care professionals, dental

undergraduates and general dental practitioners. The British Society of Paediatric Dentistry produces policy statements and clinical guidelines to help the dental team in the management of children.<sup>4</sup>

Paediatric dentists are at the forefront of research into all aspects of children's oral health (Table 2).

**Table 2 Examples of research projects in paediatric dentistry**

- Understanding why dental diseases happen
- Understanding dental anomalies
- Preventing oral disease, especially dental caries and dental erosion
- Helping to find ways of making dental treatment easier for children to accept
- Developing new strategies for improving the oral and dental health of children with serious medical disorders or disabilities

**The role of the dental therapist**

The dental therapist has an important role in promoting dental health and is also able to provide treatment for anxious and medically compromised children (Table 3).

**Table 3 Dental treatments for children provided by the dental therapist**

- Application of fluoride and fissure sealants
- Routine restorations in deciduous and permanent teeth
- Extraction of deciduous teeth under local anaesthetic
- Pulp therapy of deciduous teeth
- Placement of pre-formed crowns on deciduous teeth
- Treatment of patients under conscious sedation provided the dentist remains in the surgery throughout treatment

**The dental team approach to the anxious child**

Treating anxious children is a stressful experience for the whole dental team. Anxiety is defined as 'a vague unpleasant feeling accompanied by a premonition that something

undesirable is going to happen.<sup>5</sup> This feeling can manifest in poor behaviour and cooperation from your young patient.<sup>6</sup>

Bad experiences at the dentist can lead to dental anxiety in later life and are poor practice builders. The following hints and tips are provided to help the whole dental team when an anxious child arrives.

1. Children are often afraid of new surroundings, and uncertainty triggers anxiety. Remember, the dental surgery is full of sights, sounds and smells which a child is not used to. Make sure the surgery is bright and warm and don't be afraid to use toys and pictures in the waiting room to help a child relax.<sup>7</sup>
2. Be waiting with a smiling face when the child arrives in the surgery. If you are setting up instruments or typing on a computer the patient will feel unwelcome.
3. Try to ensure that only the absolutely necessary instruments and equipment are on display.
4. Some children are afraid of the white dental coat and if you are lucky enough to have any other colour then you may well find that this helps. Several studies have shown that children do not mind if the team wear facemasks, however, it is best not to put them on until the child is ready to begin treatment.
5. The dental nurse can be extremely helpful whilst the child is having treatment. They are in an ideal position to congratulate the child on good and helpful behaviour. A friendly smile and calm and caring approach will help enormously.
6. The nurse and dentist can embrace positive behaviour by commenting to one another throughout treatment that the child in the chair is the best that they have had all day! The nurse is also well placed to maintain reassuring eye contact with the patient.
7. Give the patient control by establishing a 'stop signal' such as a raised hand.
8. Use distraction techniques when administering local anaesthetic – this is an ideal time for the nurse to become involved by moving the suction around the mouth during the injection, helping greatly to distract the patient.
9. Criticism of the anxious patient is ineffective and will only increase anxiety and poor behaviour. The best approach with a difficult child is to calmly explain why a particular behaviour is inappropriate, followed by an explanation of what sort of behaviour would be very helpful.
10. Rename much of the surgery's equipment!



Remember that anxiety often stems from uncertainty – the dental team can reduce this anxiety by referring to equipment in words which a child can understand and which do not induce fear. For example, the suction can be called the 'hoover', the 3-in-1 can be rechristened 'magic wind', rubber dam can be referred to as

a 'raincoat' and the local anaesthetic shall from here on be known as 'jungle juice'.

11. Don't forget that the parents will have a great influence over the child's perceptions of their visit. Try to keep them present but only quietly involved – offering the minimal of contact throughout treatment. The overly reassuring parent will simply make the patient suspicious of what is to come next!

#### Table 4 Hints and tips for getting good behaviour from a child

- Greet the child by their name
- Chat to the child about non-dental topics before getting down to business
- Make sure that the child remains centre of attention – involve parents of course, but keep your focus on the child
- Acclimatisation – introduce the child to the dental surgery at their first visit but do not carry out any active treatment
- Children have a short attention span – do not launch into lengthy explanations
- Tell, Show, Do – explain what you are going to do, demonstrate the procedure on a plastic model or over the bracket table, then proceed with treatment
- Congratulate good and helpful behaviour
- Reward the child on their departure
- Tell them that you are looking forward to seeing them next time

These simple steps and the hints and tips in Table 4 should help you to improve the experience for the patient, their family and for the whole dental team.

1. The British Society of Paediatric Dentistry. Consultants and Specialists Document. <http://www.bspd.co.uk/publication-23.pdf>
2. General Dental Council website. <http://www.gdc-uk.org>
3. Child Dental Health Survey 2003. <http://www.statistics.gov.uk>
4. The British Society of Paediatric Dentistry. [www.bspd.co.uk/publications](http://www.bspd.co.uk/publications)
5. Kent G G, Blinkhorn A S. *The psychology of dental care*, 2<sup>nd</sup> ed. Oxford: Butterworth-Heinemann, 1991.
6. Welbury R R, Duggal M S, Hosey M-T. *Paediatric dentistry*, 2<sup>nd</sup> ed. Oxford: Oxford University Press, 2000.
7. Cameron A C, Widmer R P. *Handbook of Pediatric Dentistry*, 2<sup>nd</sup> ed. Mosby, 1997.

CPD questions on this article can be found on page 50.

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