Children and Young People Committee
Inquiry into Children's Oral Health

Evidence from the British Society of Paediatric Dentistry

The British Society of Paediatric Dentistry: who are we and what do we do?

The British Society of Paediatric Dentistry (BSPD) was first established in 1962 and places the oral health and well being of children at the centre of all its endeavours [1]. The membership, currently around 600, is drawn from a wide range of dental professionals who are committed to providing a high quality service for children in primary and secondary care settings. About one third of the membership is registered as specialists in paediatric dentistry with the General Dental Council and there are approximately 60 consultants who work predominantly in hospital services. The core business of the Society includes:

- Prevention of dental disease and oral disability, provision of specialist treatment for children from birth to 16 years, and ensuring appropriate transition to adult services for those with special needs
- Developing a high quality and evidence-based service through audit, service evaluation and production of clinical guidelines and policies [2]
- Safeguarding children and promoting children's rights
- Education and training of undergraduate and postgraduate dental students, professionals complimentary to dentistry, specialists and consultants
- Fostering relationships with other health care providers and agencies with the purpose of working together for better health for children
- Working with commissioners to provide a cost-effective service and engaging in local and national strategies to improve children's oral health care services
- Undertaking world class oral-health related research. Several members of the Society are currently conducting two multi-million pound randomised controlled trials, funded by the NIHR Health Technology Assessment Programme, to look at the effectiveness of restoring carious primary teeth and also the effectiveness of fissure sealants and fluoride varnish in preventing dental decay [3,4]

Summary of main points:

- The oral health of Welsh 5 year old children is the worst in the UK
- Dental caries starts in the pre-school period and preventive programmes should, therefore, target this age-group

- Access to specialist services in Paediatric Dentistry in Wales is geographically inequitable

Factual information of which we would wish the Committee to be aware:

Children's oral health needs: the scale of the problem

Dental decay remains the most common disease of childhood. Starting in the pre-school period, it has the potential for long-term functional, psychosocial and economic impacts. As with many other conditions, it predominantly affects children from the most vulnerable and deprived sectors of society.

The 2003 Child Dental Health Survey found that 43% of British 5-year-olds had some caries experience, which fell way below national targets for reductions in caries prevalence [5]. Furthermore, only 12% of 5-year-olds had any evidence of restorative care, which highlighted an ongoing decline in care indices seen in previous surveys.

In 2007/8, five out of ten (52.4%) five-year-olds in Wales were found to have no visually obvious experience of dental decay [$d_3$mft=0]. That is, they had no decayed, missing due to decay or filled teeth identifiable by eye and without radiographs. The remaining 47.6% of children who were affected by decay [$d_3$mft>0] had an average of 4 teeth either filled, extracted or with obvious decay. Levels of decay varied by unitary authority; more children in deprived areas experienced decay than those in more affluent areas. For example, while the prevalence of dental decay [d_3t>0] for Wales as a whole was 43%, it varied across unitary authority areas from 28% in the Vale of Glamorgan to 63% in Blaenau Gwent. The average number of decayed, missing or filled teeth [$d_3$mft] in Wales was 1.98; the highest average $d_3$mft being seen in Blaenau Gwent (3.25) and the lowest average $d_3$mft in the Vale of Glamorgan (0.92). As in the UK as a whole, decayed teeth made up the largest component of the $d_3$mft value. On average, five-year-old children in Wales had 1.4 decayed teeth [d_3t]. The highest average number of decayed teeth was seen in Blaenau Gwent (2.24), almost four times as high as that in the Vale of Glamorgan (0.57), the unitary authority with the lowest average number of decayed teeth. [6]

In England in the same period, more children (69.1%) were free from obvious dental decay. At PCT level there were wide variations, ranging from the East Riding of Yorkshire where only 17.7% had experience of dental decay to Middlesbrough PCT where the figure was 53.4%. These decay rates are still significantly better than those seen in Welsh children. [7]

The management of dental caries and its sequelae (pain and infection) is the most common reason for children to undergo a general anaesthetic (GA). In the UK as a whole, thousands of dental GAs are performed each year, placing a huge burden on health resources. The number of hospital admissions for dental caries extractions in children increased by 66% between 1997 and 2006. These statistics assume greater significance when one considers that caries is a preventable disease, or is readily treatable with early diagnosis and good behaviour management.

Dental decay is not the only dental condition that has the potential to impact negatively on children's quality of life and perceived well-being. Dental and facial injury, disturbances of tooth formation (structure, position and number), periodontal disease and oral

manifestations of underlying systemic disease are just some of the other conditions that are commonly seen. Regrettably, a number of publications suggest that management of some of these conditions may be unsatisfactory within general dental practice.

The Society's recommendations for achieving high quality and equitable dental care for children in Wales

The Society believes that appropriate, holistic, and patient-centred dental care should be available to all children. Prevention and access must be paramount in any strategy to improve oral health and well being. In order for these goals to be realised, we would wish to see:

- Emphasis on prevention at both individual and population levels through the use of community and school-based programmes which target ALL children , including pre-school and vulnerable populations
- Strengthened salaried services delivered by specialist led teams of appropriately skilled dentists, therapists and dental nurses
- Better access to emergency dental care to avoid acute hospital admissions, thereby reducing pain and suffering for children
- Geographically equitable access to specialist level care for children with complex behavioural, medical or dental needs (these are currently only available in South East Wales)

Regrettably, the oral health needs of children living in Wales are not being met through current policy and available resources. The Society wishes to work at the highest strategic levels to deliver evidence-based and equitable dental services for all children.

The *Designed to Smile* programme in Wales would appear to fulfil the first of our recommendations, although it is too soon for its impact to be confirmed. We would wish the Committee to note that a similar programme in Scotland (C*hildsmile)* has been shown to be beneficial. We would, therefore, wish to see the programme continued and, indeed, extended.

Key references

1. British Society of Paediatric Dentistry. http://www.bspd.co.uk
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3. FiCTION - Filling Childrens Teeth Indicated or Not? a multicentre HTA funded study to investigate different approached to managing children with dental caries. http://www.hta.ac.uk/project/1783.asp
4. Seal or Varnish? A randomised trial to determine the relative cost and effectiveness of pit and fissure sealants and fluoride varnish in preventing dental decay [http://www.hta.ac.uk/project/2202.asp

5. Children's Dental Health in the United Kingdom, 2003. http://www.statistics.gov.uk/downloads/theme_health/cdh/cdh-Summary.pdf
6. Survey of 5 year olds oral health – written report http://www.cardiff.ac.uk/dentl/research/themes/appliedclinicalresearch/epidemiology/oralhealth/index.html
7. NHS Dental Epidemiology Programme for England – Oral Health Survey of 5 year old Children 2007 / 2008 http://www.nwph.net/dentalhealth/reports/NHS_DEP_for_England_OH_Survey_5yr_2007-08_Report.pdf

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