

A hospital-based survey of oral health knowledge and practices of parents and carers in Derbyshire

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Background

Tooth decay is a preventable disease. It affects almost a quarter of 5-year-olds and was the most common reason for hospital admission for children aged 5-9 years in 2014-2015 in England¹. There is a huge financial burden of tooth decay on the NHS.

Aim

To ascertain the oral health knowledge and practices of parents and carers of children attending the Derbyshire Children's Hospital.

Methods

Between August and November 2017, parents and carers of children ≤17 years of age attending any clinical area at the hospital were approached. They were asked to complete an anonymised questionnaire for their child. The bespoke paper-based questionnaire was developed based on the 'Delivering Better Oral Health' (DBOH) toolkit. DBOH is an evidence-based document published by Public Health England². The questionnaire ascertained age group, parental oral hygiene knowledge and practice, dietary habits and the child's first dental visit. An oral health information leaflet was provided to the family upon completion. The survey was approved by the hospital's clinical audit department (Audit Ref:- JBG-Pae-2017/18-709).

Results

A total of 877 questionnaires were completed, representing about 5% of all children attending the hospital during the 2.5 month period. 711 out of 877 (81%) questionnaires were fully completed and the partially completed questionnaires were included in the relevant analyses. 458 (52%) were ≥ 7 years old, 235 (27%) were 0-3 years old and 182 (21%) were 4-6 years old.

Reported oral hygiene knowledge and practice

1 in 3 children reported correct toothbrushing habits

81% of all children brush their teeth at least twice a day.

64% of 0-6 year-olds brush their teeth twice daily with supervision.

58% of 0-6 year-olds use the recommended amount of toothpaste.

73% of parents/carers reported that their child uses fluoride toothpaste.

47% of ≥ 4 year-olds are spitting without rinsing following toothbrushing.

A breakdown of toothbrushing habits by age group is shown in Figure 1.

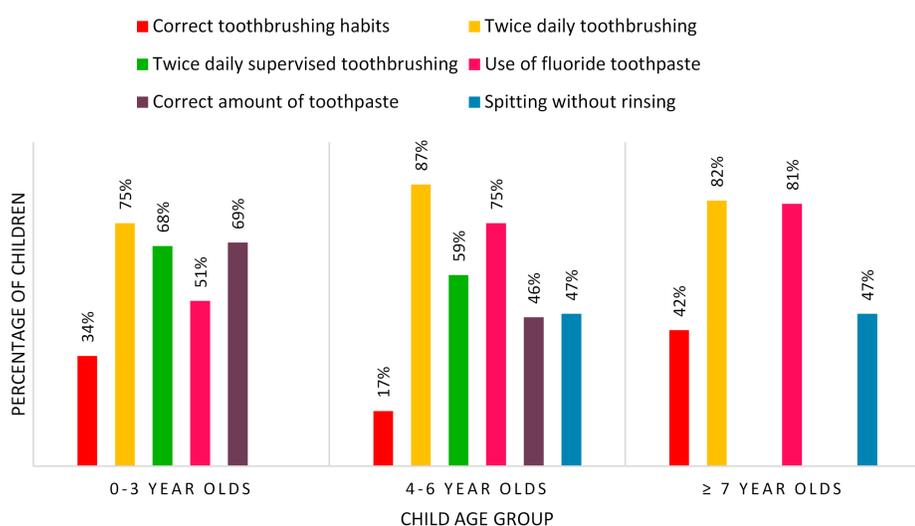


Figure 1: Toothbrushing habits of children by age group

Reported dietary habits

4 in 5 children reported snacking regularly

87% of children with poor toothbrushing habits also snack regularly.

7% of children over 1 year of age still drink from a bottle.

63% of parents/carers reported that they receive sugar-free medication for their children.

Reported dental care and dental visit

1 in 3 parents are aware that their child's first dental visit should occur as soon as the first tooth appears

95% of parents/carers are aware of free NHS dental care for children.

38%, 52% and 10% of all children's first dental visit was as soon as the first tooth appeared, 1-3 years of age and 4-6 years of age respectively.

14% of children had not visited the dentist (majority, 86% are >1 year of age).

26% of 1-6 year olds had not visited the dentist.

26% of parents/carers who were unaware of free NHS dental care for children had not brought their child to the dentist.

4% of parents/carers whose children have not been to the dentist expressed that they struggled to access NHS dental services for their children.

66% of children who have not been to the dentist have poor toothbrushing habits compared to 39% of those who have been to the dentist.

2 in 3 children who have not had their first dental visit also reported poor toothbrushing habits

Comments from parents/carers

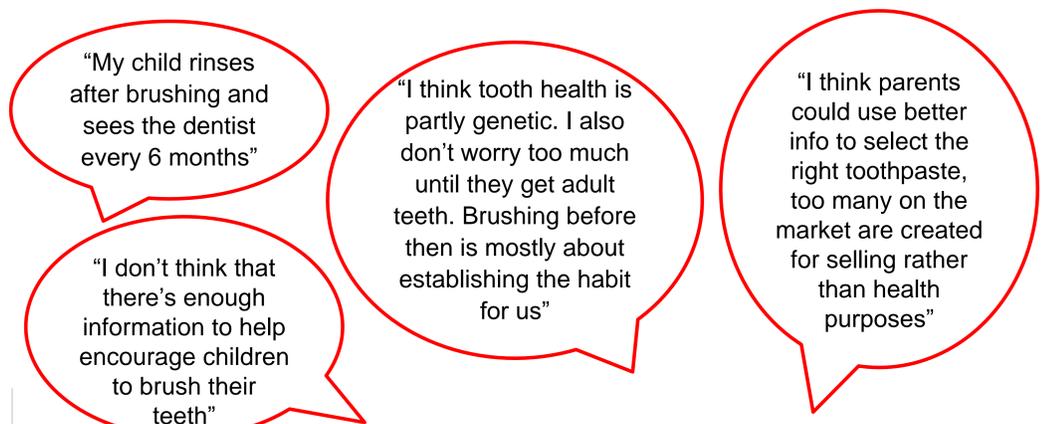


Figure 2: Examples of comments from parents/carers as provided in free text

Conclusion

To our knowledge, this is the first hospital-based child oral health survey in England. Our survey identifies important gaps in knowledge and practice amongst parents and carers. The importance of oral health promotion is highlighted and should remain on everyone's agenda. Hospital visits provide an excellent opportunity for oral health education. This requires a joint initiative between all healthcare professionals to ensure that every contact counts towards improving child oral health.

References:

- Public Health England, 2017. Health matters: child dental health.
 - Public Health England, 2017. Delivering better oral health: an evidence-based toolkit for prevention. 3rd ed.
- Acknowledgements:** We would like to thank Sheral Wood for her help in developing the questionnaire, Lorraine Jenkins and Janice Houghton (UG administrative staff), Dana Hopper, Bhasha Mukherjee and Joseph Maher (CP2 medical students), paediatric administrative and clinical staff for their help in approaching families.