



B&NES Supervised Toothbrushing Programme Pilot Results

Tooth decay is the most common oral disease affecting children and young people in England, yet it is largely preventable. Whilst children's oral health has improved over the past 20 years, reports from Public Health England (2014/15) have found that across England almost a quarter (24.7%, 2015) of five year olds and 12% (15% in B&NES, 2014/15) of three year olds had tooth decay. Tooth decay was the most common reason for hospital admissions in children aged five to nine years old in 2014 to 2015 with over 26,000 admissions (PHE, 2014). In 2014/2015 hospital trusts spent over £35 million on the extraction of multiple teeth for under 18s (PHE, 2014).

Good Oral health should form part of early years and schools responsibility towards children's health. Public Health and the DPH Award have delivered a 12 week supervised toothbrushing trial in early years and KS1. Children from 2 - 6 years old have been brushing their teeth once a day at nursery/school. Staff have been supporting children to brush their teeth and cascading information to families about dental health following training. The trial ran in 4 early years settings and 2 schools and reached approximately 300 children aged from 2 – 6 years and their families.

Number of settings taking part in the trial was 6.

Settings included:

- Childminder
- Pack away pre-school
- Primary Schools – Reception class, Year 1 and Year 2
- Infant School – Nursery class, Reception Class and Year 1
- Private nursery
- Nursery at Children's Centre

How the trial was delivered

- Settings across B&NES were invited to take part in the trial by expressing an interest to the DPHA team.
- An initial meeting was had with the setting manager/ school lead to explain further details of what was involved in the trial.
- Once the setting had committed to taking part, the DPH Award team delivered a training session to the staff at each setting. This covered an overview of oral health messages, how safety procedures and infection control should be implemented, details about dry brushing technique and amount of paste, logistics and practicalities of storage and cleaning of equipment.



- Consent was sought from parents or carers for their children to take part in toothbrushing and records were maintained by each setting. Families were informed that the brushing taking part during the setting's day was a 3rd opportunity for children to brush their teeth, in addition to the morning and evening brush at home. Along with the consent form, families were also asked to complete a pre-trial questionnaire in order to gain an understanding of their knowledge and confidence around oral health messages.
- Settings were provided with resources including: toothbrushes, toothpaste, brush bus storage racks, books, timer and puppets.
- As a guide, based on 20 children, using supermarket economy toothpaste and allowing for 1 toothbrush per term per child, the cost of the supervised brushing initiative for a year (the trial was for 12 weeks) would cost approximately as follows:
 - £20 for two brush racks (each holds 10 brushes)
 - £ 42 for 6 brushes per year for 20 children (35p per brush)
 - £10 for paste (approx. 50p for 75ml economy brand paste, 2 tubes per term for 20 children)
 - **£72 per 20 children - £3.60 per child per academic year.**
- Settings were encouraged to use the 'dry' brushing technique. This is where children do not wet their brush before putting on the toothpaste or rinse their mouth out with water after brushing. Toothbrushing took place as a circle time/small group activity, with children sitting or standing at a table, making it easy to achieve as children didn't need to be in a washroom or at a basin at the same time (this also deters them from adding water at any time). Toothbrushing took part at a time suitable for each setting and the number of staff that were required to support the children varied depending on the age of the children and the setting type.
- Staff ensured the sessions were fun as well as practical using songs, puppets, stories and role play to help children learn about keeping their teeth clean.
- The DPH award team visited part way through the trial in order to complete Appendix 4 and 7 of the Public Health England Toolkit to quality assure the brushing sessions and gather feedback from staff. The quality assurance audits were really positive and the only pointers highlighted in a couple of settings included decreasing the amount of toothpaste practitioners were providing to ensure it was in-line with the guidelines.



- Part way through the programme information on 'dry' brushing; duration of brushing; correct fluoride amount in family toothpastes and support on reducing sugar in children's diet was shared with families through leaflets and displays created in setting.
- At the end of the 12 week trial period, families were asked to complete a post trial questionnaire. Settings were also encouraged to continue brushing with children.
- Feedback from practitioners and managers who had taken part in the trial was positive once routines were established and children became familiar with brushing. This was slower in some settings where children attended less frequently e.g. once per week. Younger children needed support to collect toothbrushes and with brushing technique; whereas school aged children were able to be more independent. The uptake among families within each setting was over 90% and only a handful of families provided specific toothpaste for their child to use.
- The positive results in the increase in knowledge and confidence from those parents and carers who completed the pre and post trial results were encouraging. At the start of the trial practitioners reported that some children were requesting more toothpaste due to the amount they were used to using at home. The openness in parents and carers receiving information about oral health from their child's setting demonstrates the important role settings have in communicating and modelling lifestyle information and behaviours to families.

Questionnaire Results

Families at each setting were asked to complete a pre and post-trial questionnaire. The number of pre-trial questionnaire responses was 233 compared with 167 post trial responses.

Main findings

After completing the trial, parents and carers reported an increase in confidence around their knowledge of the appropriate toothpaste (i.e. the correct amount of fluoride needed), amount of toothpaste they should use for their child's age and how long their children should brush their teeth for.

When asked if their child was ever reluctant to brush their teeth at home, 16% reported yes, decreasing to 13% after taking part in the trial. Those that reported their child was sometimes reluctant to brush their teeth at home also decreased from 48% to 37% after taking part in the trial.



Parents and carers reporting that they ‘sometimes supervised’ their child brushing their teeth reduced from 18% to 10% after the trial. As a result, the number of parents and carers reporting that they ‘always supervise’ their child when brushing their teeth, increased from 82% to 89%.

After taking part in the trial, only 12% of parents and carers reported it to be difficult to get their child to brush their teeth twice a day every day, decreasing from 25% before the trial. 49% of parents and carers reported that it was sometimes difficult to get their child to brush their teeth after the trial, an increase from 33% before taking part in the trial. This may have been because children were still getting used to brushing their teeth three times a day.

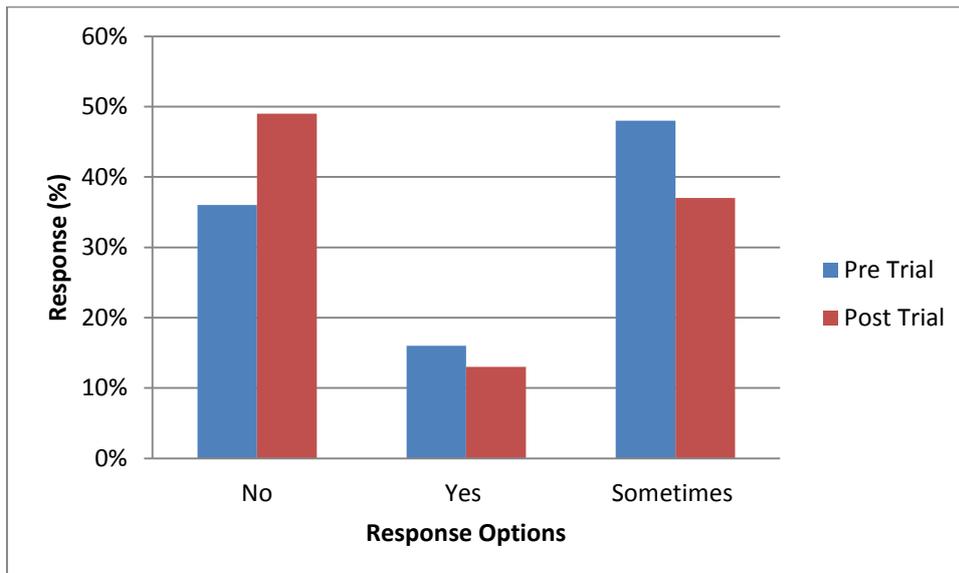
Before taking part in the trial 29% of parents and carers had heard of the “dry brushing” technique, increasing to 79% after the trial. Of those families, 82% reported that this was as a result of taking part in the supervised tooth brushing trial and the information they received from their child’s setting.

Families reporting that their child had visited the dentist increased from 71% to 86% after taking part in the trial.

At the start of the trial 79% of families asked for support or advice about dental health and tooth brushing from their child’s settings. After the trial and the supporting information had been provided to families throughout, this decreased to 41% of families. This demonstrates that settings are key to providing key messages regularly on lifestyle issues.

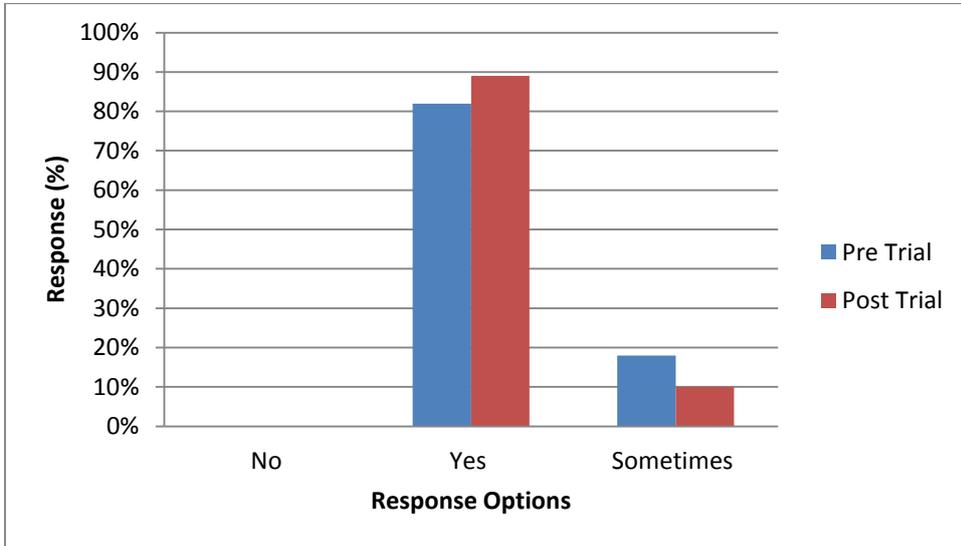
Individual question results:

1. Is your child ever reluctant to brush their teeth at home?

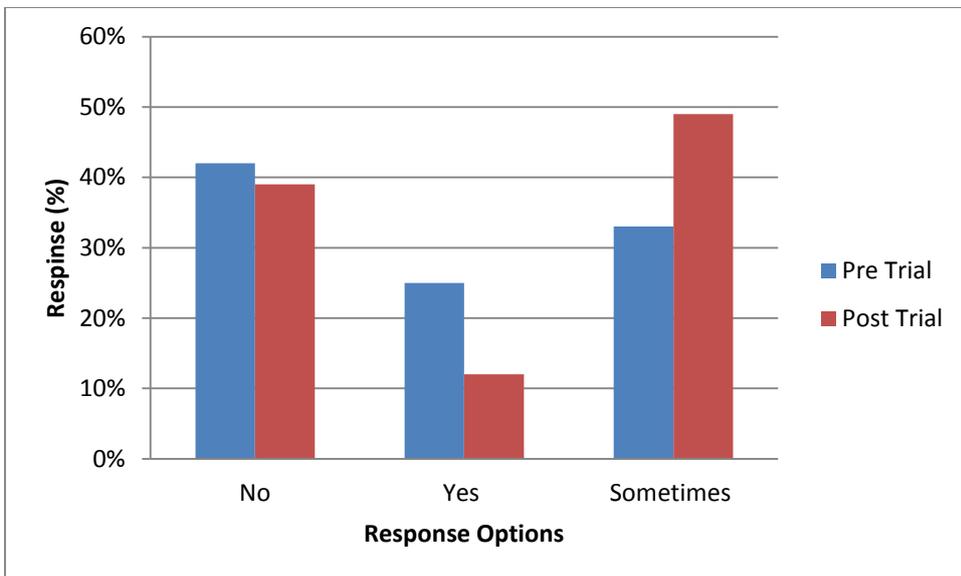




2. Do you supervise your child when they are brushing their teeth?

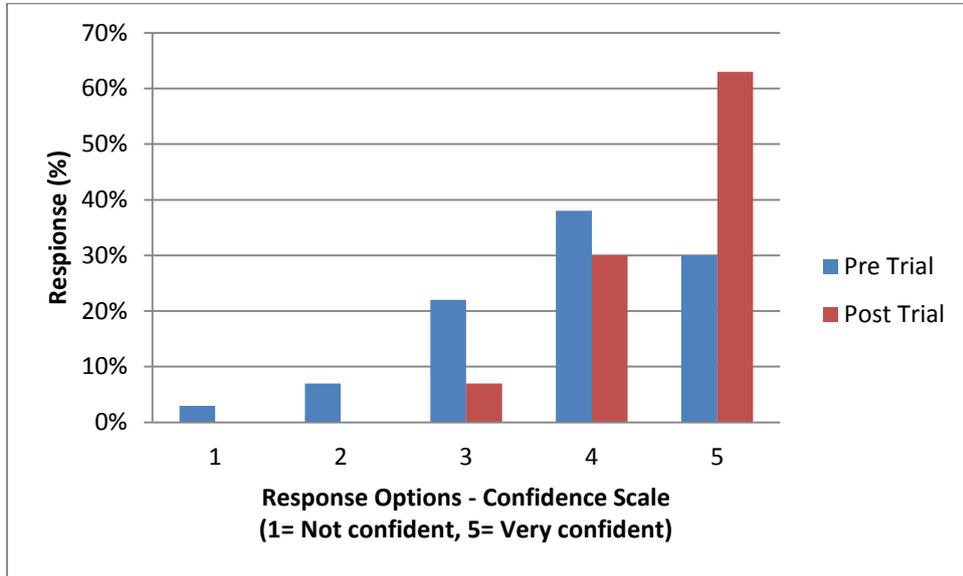


3. Can it be difficult to get your child to brush their teeth twice a day every day?

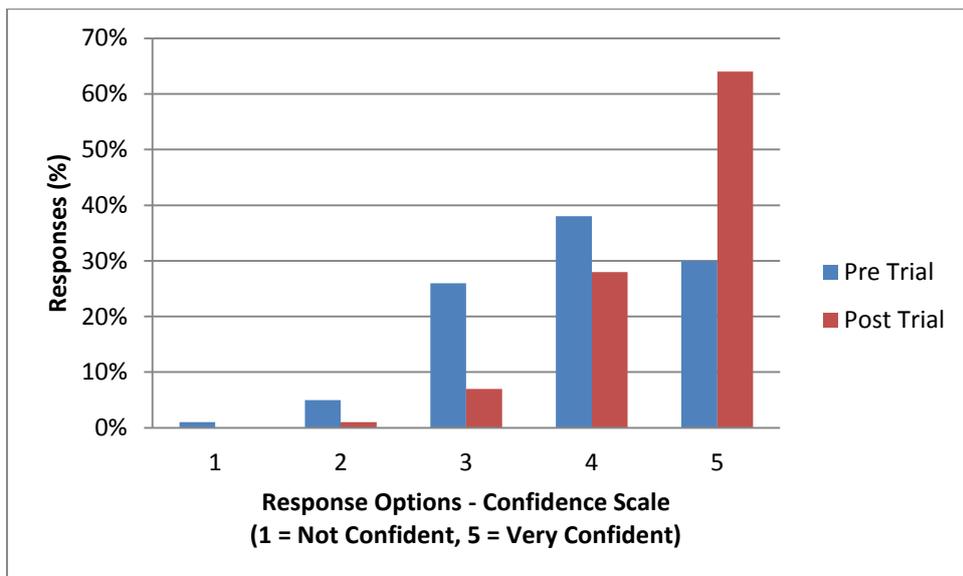




4. How confident are you that you know the appropriate toothpaste for your child's age i.e. the correct amount of fluoride needed in their toothpaste?

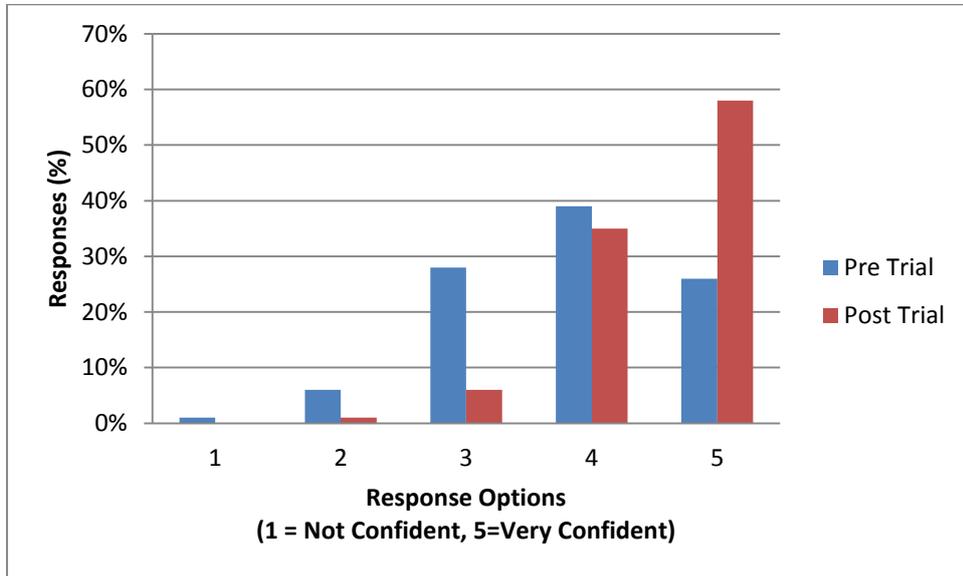


5. How confident are you that you know the appropriate amount of toothpaste your child should use each time they brush?

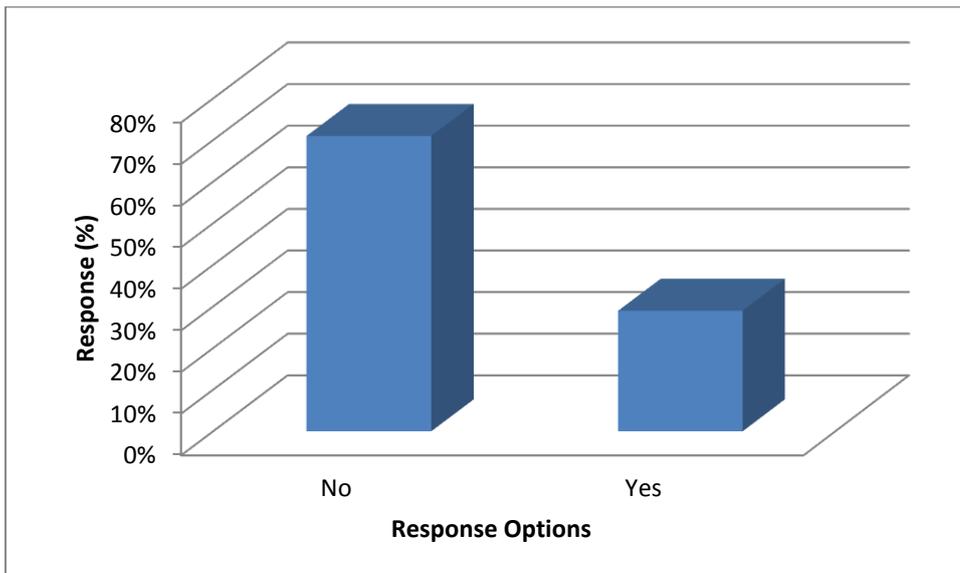




6. How confident are you that you know how long your child should brush their teeth for?



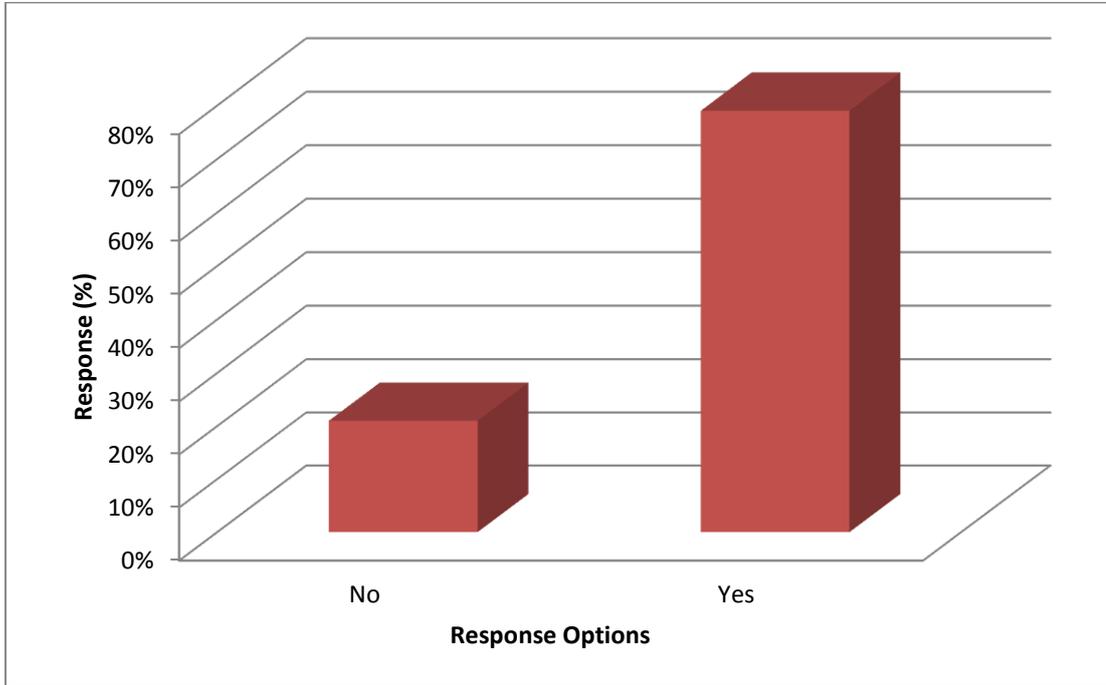
7. Have you heard of the dry brushing technique? (This was a question in the pre-trial questionnaire only)





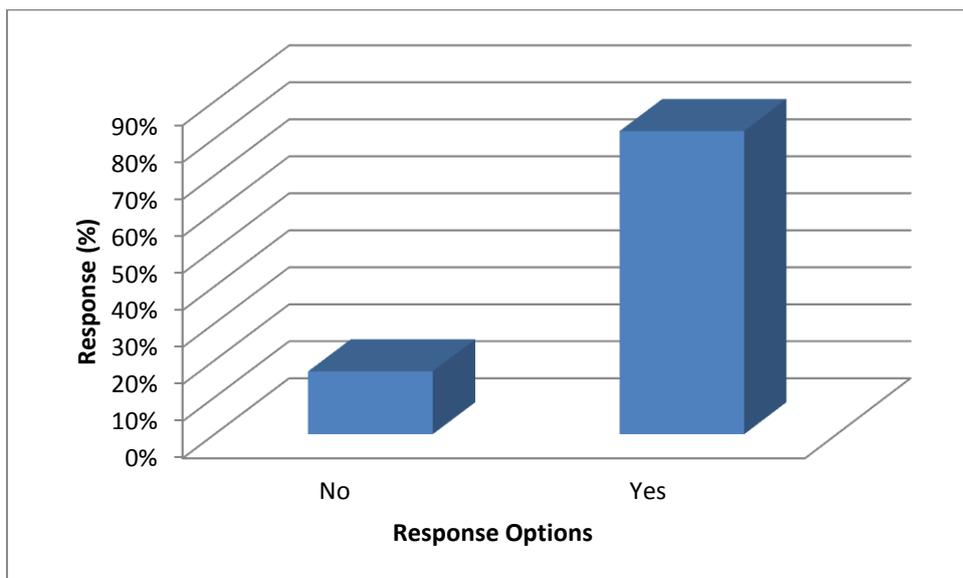
8. The next question was in two parts and was a post-trial question only.

Part a) Have you been able to encourage your child to dry brush at home?



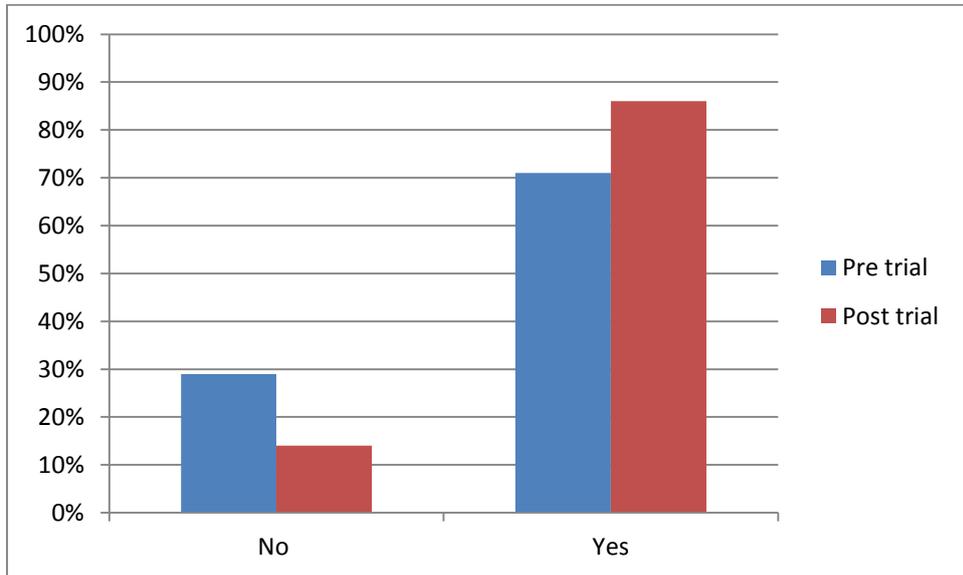
8. **Part b** – If Yes was answered to Part A

If Yes, is this a result of the information you received from your child's setting about dry brushing?

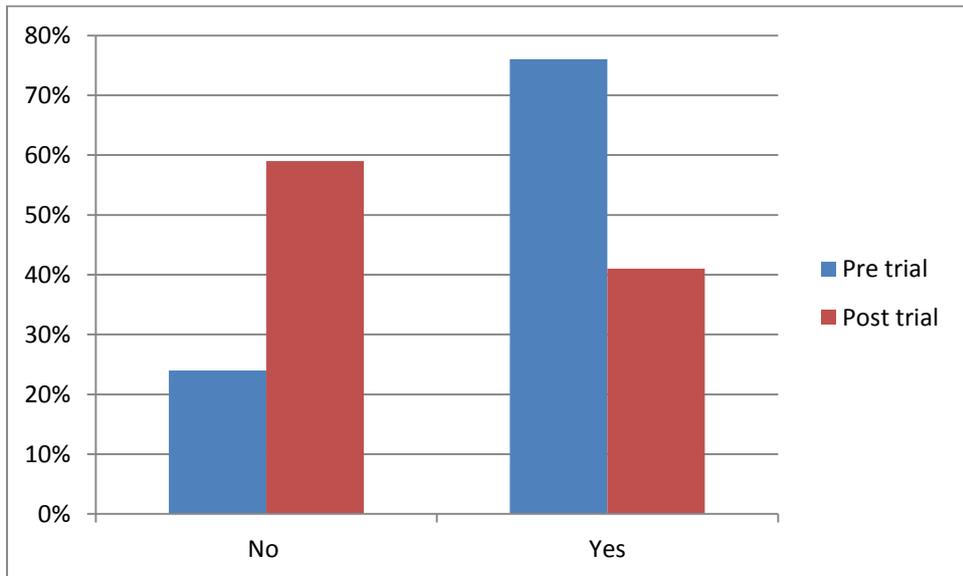




9. Has your child visited the dentist yet?



10. Would more support/advice about dental health and tooth brushing be helpful from your child's setting





Related Resources

Public Health England's ["Improving Oral Health: A toolkit to support commissioning of supervised toothbrushing programmes in early years settings and schools"](#)

4 Children's ["Smiles 4 Children"](#) pilot

For more information about the toothbrushing trial or to implement toothbrushing at your setting, please contact:

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References

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