

Behaviour change intervention (education and text) to prevent dental caries in secondary school pupils: BRIGHT RCT, process and economic evaluation

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Plain language summary

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Plain language summary

What was the problem?

Tooth decay has an impact on children and young people's daily lives, particularly those living in deprived areas. For young children, programmes to improve toothbrushing with fluoride toothpaste help prevent tooth decay. The Brushing RemInder 4 Good oral HealTh trial (BRIGHT) investigated whether a secondary-school-based toothbrushing programme would work.

What did we do?

We developed a new programme which included a lesson and twice-daily text messages sent to pupils' phones. In total, 4680 pupils, aged 11–13 years, from 42 secondary schools in the United Kingdom took part in the trial. At each school, one year group was randomly selected to receive the programme, while the other year group did not receive it. All pupils were followed up for 2.5 years to see whether there were any differences in levels of tooth decay, frequency of toothbrushing, plaque or quality of life. We also considered the programme's value for money and the views of pupils and school staff.

What did we find?

We followed up 2383 pupils and found no difference in tooth decay, plaque or quality of life. We found those who had the programme were more likely to brush their teeth twice daily after 6 months than those who did not. The programme was not good value for money overall. However, the programme appeared to be of more benefit at preventing tooth decay in pupils eligible for free school meals compared to those not eligible. In the schools with more pupils eligible for free school meals, the chance of the programme representing good value for money increased. The programme was generally liked by the pupils and school staff. Some pupils found the text messages useful, although others said they were annoying.

What does this mean?

The programme helped pupils brush their teeth more frequently in the short term, but this did not lead to less tooth decay.

Further research is needed to understand how to prevent tooth decay in secondary-school pupils.

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This article

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