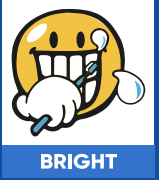


PREVENTING TOOTH DECAY IN SECONDARY SCHOOL PUPILS: THE BRIGHT TRIAL



CONTEXT

Tooth decay causes pain, difficulty eating and negatively impacts on children's school attendance. It is very common, with a higher prevalence and severity among children living in deprived areas.

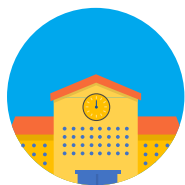
Previous programmes to promote toothbrushing with fluoride toothpaste have best shown to prevent tooth decay in young children.

In the BRIGHT trial, we focused on secondary school pupils and investigated whether a toothbrushing intervention aimed at them could prevent tooth decay.

SOLUTION

We developed an intervention which included a dental health lesson and text messages sent twice a day to the pupils' mobile phones.

Pupils aged 11-13 were followed up for 2.5 years to compare their levels of tooth decay, dental plaque, frequency of toothbrushing and life quality. We also analysed the cost-effectiveness of the intervention and asked for the views of pupils and school staff.



42 secondary schools in the UK



At each school, one year group was randomly selected to receive the programme

FINDINGS

- We followed up 2383 pupils who self-reported and found **no difference in tooth decay, plaque or quality of life.**
- **Those who participated in the intervention were more likely to brush their teeth** twice daily after 6 months than those who did not participate.
- Overall, the intervention was **not cost-effective** and delivering the text messages was challenging.
- **The intervention may have benefited the most socio-economically disadvantaged pupils.** There was a difference in how effective and cost-effective the intervention was in pupils who received free school meals (FSM), compared to non-FSM pupils.
- **The intervention was generally liked by pupils and school staff;** some pupils found the text messages useful while others said they were annoying.

RECOMMENDATIONS

- **Conduct further research** to understand how to prevent tooth decay in secondary school pupils considering the role of sugar consumption.
- **Include oral health promotion programmes** aimed at secondary schools in the curriculum, starting with at least one dental health lesson.