

Supervised toothbrushing toolkit to tackle tooth decay in children

A new toolkit to increase supervised toothbrushing for younger children aims to address health inequalities caused by tooth decay.

Researchers from the University of Sheffield, University of Leeds and Bradford Improvement Academy have developed free online resources for NHS organisations, local government, schools, nurseries and parents, as part of the BRUSH project to better support existing and new toothbrushing programmes.¹

A quarter of five-year-olds in England have tooth decay; this can rise up to 50% in deprived areas of the country. The burden of tooth decay is significant, causing pain, as well as affecting what children eat, their speech, sleep, quality of life and attendance at nursery or school.

Treatment of decay is the most common reason why young children are admitted to hospital (33,000 each year), costing the NHS over £50 million annually.

Co-lead of the study, Professor Zoe Marshman, Professor in Dental Public Health at the University of Sheffield, said: 'One of the key ways to prevent tooth decay is toothbrushing with a fluoride toothpaste. Toothbrushing programmes in nurseries and early years at school are really important to complement toothbrushing at home.'

'We already know supervised toothbrushing programmes for young children are effective in reducing tooth decay, and easy for nurseries/schools to run. However, the uptake and maintenance of these programmes has been fragmented.'

'The new toolkit will make it easier for new toothbrushing programmes to be set up, meaning more children will be able to benefit from the programmes so less children suffer from tooth decay and its consequences.'

The BRUSH project was funded and supported by the NIHR Applied Research Collaboration South West Peninsula (PenARC) and conducted by researchers from the University of Sheffield and University of Leeds. The researchers worked with NIHR Applied Research Collaboration Yorkshire and Humber to understand how best to implement



and evaluate supervised toothbrushing programmes.

Co-lead of the BRUSH study, Dr Kara Gray-Burrows Lecturer in Behavioural Science & Complex Intervention Methodology at the University of Leeds, said: 'We know that there's good practice and excellent resources out there, so our project was about bringing together all that's already good and seeing what gaps there were.'

'The toolkit is a central one-stop-shop sharing best practice and containing new materials we have developed to give organisations setting up these programmes, nurseries, schools, parents and children the relevant information and resources easily.'

Professor Claire Stevens CBE, Spokesperson from The British Society of Paediatric Dentistry, said: 'BSPD welcomes the BRUSH initiative. We know that a targeted supervised toothbrushing approach is one of the priority solutions to tackling the oral health inequalities in our society. The fact that BRUSH will provide a new free access-to-all toolkit to help facilitate supervised toothbrushing will go a long way to making this simple but highly effective intervention get traction. It will improve young children's oral health in the short-term, whilst setting them on the path to a lifetime of good oral care practice for life.'

'Whilst BSPD believes that every child

should have a "dental home" – an ongoing and preventively focused relationship with an NHS dentist – with children's dental services in crisis, we urgently need to take a creative approach to address the persistent and immoral inequalities we see in children's oral health. BRUSH provides a wonderful toolkit that will help everyone showing children how to clean their teeth.'

Hayden Ridsdale, Strategy and Transformation Programme Manager, NHS West Yorkshire Integrated Care Board, said: 'As a commissioner of dental services in West Yorkshire I think the BRUSH toolkit is a fantastic resource to enable the implementation of supervised toothbrushing schemes. In West Yorkshire we've embedded it into our contracts with our five local authority partners to ensure good practice guides service delivery.'

For more information about the BRUSH study or to download the free resources visit: <https://www.supervisedtoothbrushing.com/>.

References

1. NIHR. BRUSH (optimising toothbrushing programmes in nurseries and schools). Available at: <https://arc-swp.nihr.ac.uk/research/projects/brush/> (accessed January 2024).