**Simulation Workshop to Test STAR: a Home-based Toothbrushing Intervention within Childsmile**

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In Scotland, where socio-economic inequalities in child tooth decay persist, Childsmile’s community-based Dental Health Support Workers (DHSWs) deliver tailored interventions to families in need of additional support in the home setting, including the promotion of supervised toothbrushing in the early years.

**Aims:**The aim of this study was to test the feasibility and acceptability of the STAR toothbrushing tool with DHSWs and families in a simulated setting to support implementation of supervised toothbrushing in the home.

**Methods**: In August 2022, the STAR tool was developed/co-designed with DHSWs. It aims to help families to identify barriers to toothbrushing and provide strategies to overcome these barriers. A two day simulation workshop, was held in Glasgow Dental School, with four DHSWs, two parents and two simulated parents, who tested the acceptability and feasibility of the tool. The simulated interactions between DHSWs and parents were video recorded and analysed using the Function Resonance Analysis Method (FRAM) - a novel approach in this area. Exit interviews with participants were audio recorded and analysed using Framework analysis and the modified Consolidated Framework for Implementation Research (CFIR). Full NHS ethical approval and participant consent were obtained.

**Results**: DHSWs and parents responded positively to the use of the STAR tool and reported it was easy to use and adaptable to families with different barriers to toothbrushing.  Six weeks follow-up found that parents had been able to use the strategies given to them to make beneficial changes to their toothbrushing routines. FRAM analysis showed that the STAR tool can be used flexibly by DHSWs to provide tailored toothbrushing advice to families.

**Conclusions**: In this simulation study, use of the STAR tool was feasible and acceptable to DHSWs and parents and allowed families to make improvements to their toothbrushing routines. The STAR tool is currently being rolled out and evaluated across the 14 NHS Scotland Health Boards.

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