

A novel family-focused intervention to support physical activity among children (6–12 years) with cystic fibrosis

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Objectives: Engage with stakeholders to co-create a novel family-focused intervention to support physical activity among children (6–12 years) with CF and their families, and to make data-informed refinements to ensure it is feasible, acceptable and persuasive.

Methods: Using a Person-Based Approach (PBA), intervention content was co-developed with members of a patient and public involvement (PPI) group (9 families) and refined during workshops. Families with children with CF (5–12 years) were recruited to participate in think-aloud interviews (3 families) to refine the programme materials in June-September 2021, and retrospective interviews after having used the programme materials at home for 4–8 weeks (4 families). Data were collected between September 2021 and January 2022. Interviews were conducted via MS Teams, lasted 60–120 minutes, were audio-recorded, transcribed verbatim and analysed thematically.

Results: Findings support the acceptability and usability of the intervention materials. The core themes suggest: (1) the intervention materials allow flexibility, offer choice, act as a reminder, provide instruction and information about benefits of exercise, and can be adapted depending on time, needs and resources available; (2) participants reported increased knowledge about impact and benefits of exercise, increased interest in trying out new activities, and increased understanding of the importance of gradual exercise; (3) children identified several facilitators, such as fun, enjoyment, interactivity, and doing activities together; barriers included competitiveness, illness, and boredom. Families noted that the amount of text in the materials should be reduced for younger children.

Conclusion: The findings from this research highlight the importance of applying the PBA to develop tailored interventions to support families with children with CF. This study will inform a larger trial to enable pilot and efficacy testing of the intervention.