

1704 | Improving adolescent self-management of asthma: A pilot randomised controlled trial of a theory-based, patient-focused intervention delivered in clinical practice

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Background: Adolescence is a challenging time to manage a long-term condition. Many teenagers experience numerous barriers to self-management that can result in poor asthma control and impaired quality of life. We developed an intervention designed to enhance adolescent self-efficacy, building on our qualitative research on self-management experiences of adolescents with asthma. The intervention uses an individualised approach to improve self-management skills, knowledge and behaviours and therefore asthma control. Delivered by healthcare professionals in clinic, this represents a complex intervention, and therefore a pilot randomised controlled trial was undertaken to assess its feasibility and potential impact.

Method: A multi-centre, cluster, randomised design was used. Adolescents (12-18 years) with asthma on controller therapy were randomised to (i) a self-efficacy based intervention whereby healthcare professionals, using a validated tool (AASEQ) were directed to focus consultation conversations on self-management competencies where participants were assessed as least confident; participants also had access to specific tools and a website, or (ii) to normal care. Primary outcome was asthma control (Asthma Control Test) after 9 months. Key secondary outcomes were asthma self-efficacy, symptoms, exacerbations and adherence. Participants, parents and healthcare professionals were interviewed about their experience of the intervention.

Results: A total of 22 adolescents were recruited to the intervention and 45 to the control groups. There was no difference between groups in asthma control after 9 months (-0.1, 95%CI -2.1, 1.9) although there was a trend towards a difference in favour of the intervention group at 3 months ($P = 0.07$). Asthma self-efficacy improved in the intervention group after 9 months (6.3, 95%CI 1.1, 11.6), largest changes seen in self-management competencies where participants were least confident. There were no significant changes in symptoms, exacerbation or adherence. Feedback was generally positive although healthcare professionals felt it was hard to implement due to time constraints and confidence.

Conclusion: The intervention improved asthma self-efficacy as hypothesised, particularly in targeted low self-efficacy areas, but an initial improvement in asthma control was not sustained. Future studies with an optimised intervention will need to ensure delivery is sustained over time to maximise potential improvements in asthma control. Funded by Asthma UK—Joanna Martin Project