

The Effectiveness of Interventions to Improve Self-Management for Adolescents and Young Adults With Allergic Conditions: A Systematic Review

Rebecca C Knibb¹, Cherry Alviani^{2 3}, Teresa Garriga-Baraut^{4 5}, Charlotte G Mortz⁶, Marta Vazquez-Ortiz⁷, Elizabeth Angier⁸, Katerina Blumchen⁹, Pasquale Comberiati^{10 11}, Bettina Duca⁷, Audrey DunnGalvin^{12 13}, Claudia Gore¹⁴, Valerie Hox¹⁵, Britt Jensen⁶, Helena Pite^{16 17}, Alexandra F Santos^{18 19 20 21}, Silvia Sanchez-Garcia²², M Hazel Gowland²³, Frans Timmermans²⁴, Graham Roberts^{2 3 25}

Affiliations

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Abstract

Background: This systematic review aimed to review the literature on interventions for improving self-management and wellbeing in adolescents and young adults (11-25 years) with asthma and allergic conditions.

Methods: A systematic literature search was undertaken across eight databases. References were checked by two reviewers for inclusion. Study data were extracted and their quality was assessed in duplicate. A narrative synthesis was undertaken.

Results: A total of 30 papers reporting data from 27 studies were included. Interventions types were psychological (k=9); E-health (k=8); educational (k=4); peer led (k=5); breathing re-training (k=1). All interventions were for asthma. Psychological interventions resulted in significant improvements in the intervention group compared to the control group for self-esteem, quality of life, self-efficacy, coping strategies, mood and asthma symptoms. E-Health interventions reported significant improvements for inhaler technique, adherence and quality of life. General educational interventions demonstrated significantly improved quality of life, management of asthma symptoms, controller medication use, increased use of a written management plan and reduction in symptoms. The peer led interventions included the Triple A (Adolescent Asthma Action) programme and a peer-led camp based on the Power Breathing Programme. Improvements were found for self-efficacy, school absenteeism and quality of life.

Conclusion: Although significant improvements were seen for all intervention types, many were small feasibility or pilot studies, few studies reported effect sizes and no studies for allergic conditions other than asthma met the inclusion criteria. Research using large longitudinal interventional designs across the range of allergic conditions is required to strengthen the evidence base.

Keywords: adolescent; allergy; asthma; e-health; education; interventions; peers; psychological; young adult.

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