

# The Impact of Atopic Dermatitis on Quality-of-Life in Pediatric Patients: Search Strategy of a Systematic Review and Meta-Analysis

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**Background:** Atopic dermatitis (AD), a common form of eczema, is a chronic inflammatory skin condition characterized dry, itchy, and erythematous skin lesions. AD usually manifests in infancy and can contribute to poor quality of life (QoL) among pediatric AD patients, particularly due to its' negative impacts on physical activity, mental health, social interactions, and disturbed sleep during developmental years. The impact of AD on QoL across the pediatric spectrum should be evaluated. While reviews assessing QoL impacts in adult AD patients have been reported, to our knowledge, no systematic analyses of current evidence on the impact of QoL across pediatric groups, including infants, children, and adolescents, have been conducted in recent years.

**Objectives:** The objective of this analysis was to systematically review available literature to collectively identify QoL deficits in pediatric AD populations.

**Methods:** A comprehensive systematic review of the literature of all articles evaluating quality of life in pediatric atopic dermatitis patients is currently in-progress. The following databases were queried between the date of study commencement and November 2020: MEDLINE/PubMed, MEDLINE/Ovid, MEDLINE/EBSCO, ISI Web of Science, PsycINFO, EMBASE, Scopus, and Cochrane Library. Search terms used include: atopic dermatitis, eczema, quality of life, pediatric, child, infant, adolescent, and relevant synonyms. No restrictions based on language or publication date were enforced in the initial search.

Study inclusion criteria include experimental randomized controlled trials, observational cohort, case-control, and cross-sectional studies, and descriptive cross-sectional surveys, case reports, and case series that clearly demonstrate an evaluation of the impact of AD on QoL in a pediatric group. Population inclusion criteria include (1) patients under the age of 18 years old with a (2) diagnosis of AD. Study exclusion criteria included animal model or in vitro experiments, narrative literature reviews, editorials and opinion papers, policy reports, abstracts, and other reports lacking sufficient methodological and results data. Studies evaluating the impact of a therapeutic intervention on QoL in AD were also excluded. Population exclusion criteria include (1) pediatric AD patients currently receiving or that have previously received a QoL-targeted therapy and (2) adults patients 18 years of age or older.

A standard protocol was employed in database searches and an initial title and abstract screening was conducted by two independent reviewers. All remaining included full-text articles will be further screened using strict inclusion and exclusion criteria, followed by data abstraction and meta-analysis using Review Manager Version 5.3 (Cochrane Collaboration).

**Results:** The preliminary search strategy of databases identified 898 citations. After eliminating duplicates and articles not relevant to the study criteria, a total of 176 full-text articles were identified for the subsequent stage of screening. This review is currently ongoing at the time of abstract submission.

**Conclusion:** Poor QoL contributed by AD in childhood can result in long-lasting, harmful health consequences throughout the lifecourse. Understanding the impact of AD on QoL across infants, children, and adolescents is needed to develop and improve therapeutic interventions targeting QoL specific to pediatric AD groups. This effort to synthesize QoL deficits in pediatric AD populations will help support these future initiatives.