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Family quality of life and psychosocial burden associated with childhood atopic dermatitis and food allergy: a systematic review protocol

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Vidalis, P; Papadopoulos, NG; Dounias, G; Kikemeni, A; Trimmi, K; Merakou, K.

Corresponding author:

Pavlos Vidalis

pavlosvid@hotmail.com

Author Affiliation:

University of West Attica.

ADMINISTRATIVE INFORMATION**Support** - No support.**Review Stage at time of this submission** - Completed but not published.**Conflicts of interest** - None declared.**INPLASY registration number:** INPLASY2026100067**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 14 October 2026 and was last updated on 14 October 2026.**INTRODUCTION**

Review question / Objective What is the reported burden on family quality of life and psychosocial functioning among parents and caregivers of children and adolescents with atopic dermatitis or food allergy, and which clinical, psychological, and social factors are associated with these outcomes?

The objective is to synthesize and critically appraise observational evidence on family quality of life and caregiver burden, describe the dimensions of psychosocial and functional burden, and examine associated factors, including coping and adjustment. Associations will be distinguished from causal effects.

This objective reflects a scope modification introduced during peer review of an initially broader review of childhood allergic diseases.

Rationale Childhood atopic dermatitis and food allergy can involve substantial caregiving demands, including symptom management, treatment routines, dietary vigilance, and concerns about disease exacerbations or allergic reactions. These demands may be associated with parental distress, disrupted sleep, restrictions in social participation, and difficulties in everyday family functioning.

A synthesis focused on family and caregiver outcomes can complement child-centred assessments and help identify areas requiring clinical attention and further research. The review examines clinical, psychological, and social correlates of family quality of life while acknowledging the limitations of predominantly cross-sectional evidence.

The original review covered childhood allergic diseases more broadly. Following peer review, its scope is being narrowed to atopic dermatitis and food allergy because these conditions account for most of the included evidence. Economic burden

is no longer treated as a separate primary review objective; relevant findings on financial strain or work disruption may be described as contextual aspects of family burden.

Condition being studied Childhood atopic dermatitis and food allergy.

The review focuses on family quality of life and psychosocial burden among parents and caregivers of affected children and adolescents aged 0–18 years. Relevant aspects include emotional distress, caregiving demands, sleep disruption, social restrictions, daily family functioning, and coping.

Coexisting allergic conditions may be considered as associated clinical characteristics. Studies concerning other allergic diseases alone are outside the revised scope.

METHODS

Search strategy The original search was conducted in PubMed, Scopus, and CINAHL on 25 September 2025, covering publications from January 2005 to the search date. The search addressed childhood allergic diseases broadly, before the scope was narrowed during peer review.

The manuscript reports the following general search expression:

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(allergic disease* OR "food allergy" OR "allergic
asthma" OR "atopic dermatitis" OR "allergic
rhinitis" OR urticaria OR "venom allergy" OR
anaphylaxis)
AND
(child* OR adolescen* OR pediatric* OR paediatric*
OR infant* OR toddler* OR preschool* OR youth
OR teen*)
AND
("quality of life" OR QoL OR HRQoL OR "family
quality of life")
AND
(family OR parent* OR caregiver* OR "family
impact" OR "family burden" OR "parental stress").
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Eligible publication languages were English and Greek. Reference lists of included studies and relevant reviews were also searched, as reported in the original manuscript.

This expression describes the general search framework rather than database-specific executable syntax. The original search history will be retained, and the narrower eligibility criteria will be applied transparently during revision. Any

additional searches will be documented separately with their actual dates and strategies.

Participant or population Parents, caregivers, and families of children and adolescents aged 0–18 years with atopic dermatitis or food allergy.

Studies including participants outside the eligible age range will be considered only when relevant paediatric family or caregiver data can be extracted separately. Mixed-condition samples will be eligible only when outcomes for families of children with atopic dermatitis or food allergy can be identified separately. Coexisting allergic conditions will not automatically lead to exclusion.

Intervention Not applicable as an intervention review. The exposure of interest is childhood atopic dermatitis or food allergy. Clinical characteristics, including disease severity and comorbid conditions, are considered as potential correlates of family quality of life and psychosocial burden. Studies evaluating therapeutic efficacy are excluded.

Comparator A comparator is not mandatory. Where available, comparisons may include families of children without the condition or subgroups defined by disease severity, comorbidity, demographic characteristics, or psychosocial factors. Eligible descriptive studies without a control group may also be included.

Study designs to be included Observational studies, including cross-sectional, cohort, and case-control designs. Longitudinal observational studies are eligible when they examine family or caregiver outcomes without evaluating therapeutic efficacy. Randomized and non-randomized intervention studies, case reports, reviews, editorials, letters, and conference abstracts are excluded.

Eligibility criteria Inclusion criteria:

- Observational studies (cross-sectional, cohort, or case-control) investigating quality of life or health-related quality of life among families, parents, or caregivers of children and adolescents.
- Articles published in English or Greek between January 2005 and September 2025.
- Studies reporting quantitative or qualitative data using validated quality-of-life or psychosocial assessment instruments.
- Studies explicitly examining psychosocial, emotional, or functional aspects of family life, parental stress, or caregiver burden.

- Studies with mixed-age samples only when data for families with children or adolescents aged 0–18 years were presented separately.
- Peer-reviewed journal articles with full-text availability.

Exclusion criteria:

- Interventional studies. Longitudinal observational studies examining changes in family quality of life without evaluating therapeutic efficacy were eligible.
- Case reports, editorials, conference abstracts, letters to the editor, books, and review articles.
- Studies assessing only paediatric patients without family-level analysis.
- Studies lacking validated quality-of-life instruments.
- Studies in which age-group or family-characteristic data were unspecified or could not be extracted.
- Articles published in languages other than English or Greek.
- Studies focusing exclusively on pharmacological outcomes, diagnostic testing, or biological markers without quality-of-life assessment.
- Grey literature, unpublished material, and non-peer-reviewed sources.

Disease scope amendment:

The original eligibility criteria covered childhood allergic diseases broadly. During peer review, the disease scope is being restricted to atopic dermatitis and food allergy. The remaining eligibility criteria are retained. This modification was introduced after the original findings were known, and its consequences for study inclusion will be documented.

Information sources The original electronic information sources were PubMed, Scopus, and CINAHL. Searches were conducted on 25 September 2025. Reference lists of included studies and relevant review articles were also examined, as reported in the manuscript.

The original search did not include Embase, PsycINFO, or the Cochrane Library. These coverage limitations will be acknowledged. Any supplementary searches performed during revision will be reported separately, with the information source, search date, strategy, and resulting records.

Main outcome(s) Family or caregiver quality of life, multidimensional caregiver burden, and family functioning, assessed using validated instruments.

Measures may include the Dermatitis Family Impact questionnaire, Family Dermatology Life Quality Index, Food Allergy Quality of Life–Parental Burden questionnaire, and other validated measures meeting the eligibility criteria.

Instrument names, versions, score ranges, and scoring direction will be recorded. Outcomes will be presented using the statistics reported in the primary studies, such as means and standard deviations, medians and interquartile ranges, or proportions. For longitudinal studies, assessment time points and changes over time will be distinguished from cross-sectional findings. No single follow-up interval is required.

Additional outcome(s) Additional outcomes and correlates extracted from eligible studies include parental psychological distress, illness-related worry, coping, self-efficacy, sleep disruption, caregiver fatigue, social participation, and disruption of daily activities.

Clinical and contextual correlates may include disease severity, comorbid conditions, parental education, socioeconomic circumstances, and access to care. Financial strain and work disruption may be described when reported, but a separate economic evaluation is not planned.

Associations will be reported using the original effect estimates and uncertainty measures, where available, and adjusted analyses will be distinguished from unadjusted findings.

Data management Records were imported into Zotero for reference management and duplicate removal. Study characteristics and results were extracted into a structured Excel spreadsheet. Extracted information included study identification, country, design, population, sample size, child age, condition, diagnostic and severity measures, family outcome instruments, and reported findings.

The first author performed initial data extraction, which was checked by a second author, as described in the manuscript. During revision, changes to eligibility decisions, extracted data, and synthesis will be recorded, with links to the relevant source reports. Reasons for full-text exclusion will be reconciled with the PRISMA flow diagram.

Quality assessment / Risk of bias analysis The original review used the Newcastle–Ottawa Scale, including an adaptation for cross-sectional studies, and the RELEVANT tool. During manuscript revision, the exact appraisal criteria, scoring

procedures, and suitability of these tools for the included study designs are being reassessed.

The final registration and revised manuscript will specify the design-appropriate appraisal method, its source, the domains assessed, the reviewers involved, and the procedure for resolving disagreements. Any changes from the original assessment will be documented as post hoc methodological amendments. Study-level judgements will be checked against the original reports.

Strategy of data synthesis The original review used narrative synthesis. The revised synthesis will organize findings by family outcome domain and by clinical, psychological, and social or contextual correlates, while retaining distinctions between atopic dermatitis and food allergy.

Study characteristics, measurement instruments, and quantitative findings will be tabulated. Scores from different instruments will not be treated as directly comparable. Adjusted and unadjusted associations, and cross-sectional and longitudinal findings, will be distinguished.

Meta-analysis is not currently planned because of heterogeneity in populations, instruments, outcome definitions, and analytical approaches. Interpretation will consider study design, methodological limitations, and consistency or inconsistency across studies. The predominantly observational evidence will not be used to infer causal effects.

Subgroup analysis No formal statistical subgroup analyses are planned. Narrative comparisons will distinguish atopic dermatitis from food allergy. Where sufficiently comparable data are available, findings may also be described by disease severity, child age, comorbidity, caregiver characteristics, and study design. These comparisons will be exploratory and will not be presented as tests of subgroup effects.

Sensitivity analysis No formal quantitative sensitivity analysis is planned because the review uses narrative synthesis. Methodological limitations, study design, and eligibility uncertainties will be considered when interpreting the findings. Any additional robustness assessment undertaken during revision will be described explicitly as a post hoc analysis.

Language restriction Only studies published in English or Greek were eligible.

Country(ies) involved Greece.

Other relevant information This is a retrospective registration. The original systematic review was completed and submitted for publication before registration and is currently undergoing major revision.

The original manuscript title was “Family Quality of Life and Psychosocial and Economic Burden Associated with Childhood Allergic Diseases”. Following peer-review recommendations, the scope is being narrowed to childhood atopic dermatitis and food allergy. Economic burden is being removed as a separate primary objective, although relevant contextual findings may remain in the synthesis.

The original study findings were known before these changes were proposed. The revised scope and any other methodological amendments must therefore not be interpreted as prospectively specified decisions. The original search date was 25 September 2025. The broad search history will be preserved, and changes to eligibility and synthesis will be documented.

The final number of included studies remains subject to completion of the revised eligibility assessment, including assessment of separately extractable data from mixed-condition studies. Registration does not imply that the original review was prospectively registered.

Keywords Atopic dermatitis; food allergy; children; family quality of life; caregiver burden; psychosocial burden; systematic review.

Dissemination plans The review has been submitted to Discover Social Science and Health and is undergoing major revision. The authors intend to publish the revised findings in a peer-reviewed journal. The INPLASY record will be updated with the publication details and DOI if the review is published.

Contributions of each author

Author 1 - Pavlos Vidalis.

Email: pavlosvid@hotmail.com

Author 2 - Nikolaos Papadopoulos - Contributed to methodological supervision and reviewed the manuscript.

Email: ngpallergy@gmail.com

Author 3 - Georgios Dounias - Contributed to methodological supervision.

Email: gdounias@uniwa.gr

Author 4 - Anastasia Kikemenis - Reviewed the manuscript.

Email: nkikemenis@uniwa.gr

Author 5 - Konstantina Trimmis - Contributed to study screening and verified the extracted data.

Email: trimmaki30@gmail.com

Author 6 - Kyriakoula Merakou - Contributed to supervision, supported methodological consistency, and critically reviewed the manuscript.

Email: kmerakou@uniwa.gr