

The Clinical and Humanistic Burden of Mild-to-Moderate Atopic Dermatitis in the United States: Analyses of the National Health and Wellness Survey

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Background: Atopic dermatitis (AD) is a chronic inflammatory disorder associated with substantial burden; however, few studies explore patient-reported burden in mild-to-moderate AD.

Objective: To assess the patient burden of US adults with mild-to-moderate AD compared with matched non-AD controls and quantify the association between AD disease severity, quality of life, and psychosocial burden in mild-to-moderate AD.

Methods: US adult participants in the global 2017 National Health and Wellness Survey who self-reported physician-diagnosed AD or eczema and mild or moderate severity were propensity-score matched with non-AD controls. Rates of self-reported comorbidities (yes/no), psychological symptoms (anxiety in past 12 months [yes/no], depression [Patient Health Questionnaire-9 {PHQ-9}]), and sleep difficulties in past 12 months (none to severe, 4-level verbal rating scale) were collected along with quality of life (QoL; Short Form-36 version 2 [SF 36v2]) and health status (EuroQoL 5-dimension 5-level [EQ-5D-5L]). These were analyzed using 2-sample t tests and Chi-squared tests comparing respondents with mild-to-moderate AD versus non-AD controls.

Results: 4496 respondents reported an AD or eczema diagnosis, 4321 with mild-to-moderate severity (69.1% female; mean age=42.9 years; 74.5% mild, 25.5% moderate). Substantial comorbidities were observed in mild-to-moderate AD versus non-AD controls, most commonly allergies (54.3% vs 36.2%), pain (31.3% vs 22.1%), and food allergies (21.3% vs 10.2%). For individuals with mild or moderate AD versus non-AD controls, increased frequency of anxiety (48.4% [mild], 52.0% [moderate] vs 39.8% [control]; $P<0.0001$), moderate/severe depression (PHQ-9=10-27; 21.4%, 30.4% vs 21.0%; $P<0.0001$ across categories), and moderate/severe sleep difficulties (20.8%, 27.7% vs 16.9%; $P<0.0001$ across categories) were reported. Similarly, an increased burden in mild-to-moderate AD versus non-AD controls was consistently observed for impact of sleep difficulties, all 8 SF-36v2 domains, and EQ-5D-5L index and visual analog scale scores.

Conclusions: US adults with mild-to-moderate AD frequently reported anxiety, depression, and sleep difficulties. These comorbid conditions lead to significant decrements in health status and QoL,

highlighting the importance of improving AD disease management and reducing the impact of related comorbidities in this population.

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