

The Economic 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 associated with substantial economic burden resulting from direct costs and indirect costs from lost productivity; however, few studies have assessed these outcomes in mild-to-moderate AD.

Objective: To quantify the association between AD severity, and work-related outcomes as well as healthcare resource utilization in mild-to-moderate AD compared with matched non-AD controls in the United States.

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. Respondents reported productivity in the past 7 days (Work Productivity and Activity Impairment questionnaire), current short- or long-term disability (yes/no), and healthcare resource utilization (HCRU) in the past 6 months (number of healthcare provider [HCP] visits, emergency room [ER] visits, and hospitalizations). 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; 57.4% employed). For patients with mild or moderate AD versus non-AD controls, increased rates of absenteeism (5.3% [mild], 7.2% [moderate] vs 5.4% [control]; $P=0.0251$), presenteeism (19.7%, 26.6% vs 18.1%; $P<0.0001$), overall work impairment (21.8%, 29.1% vs 20.0%; $P<0.0001$), activity impairment (26.8%, 32.3% vs 24.4%; $P<0.0001$), and disability (5.4%, 5.4% vs 4.0%; $P=0.0060$) were reported. Increased HCRU in past 6 months was reported for mild or moderate AD versus non-AD controls (HCP visits: 5.34, 5.30 vs 4.11; ER visits: 0.25, 0.34 vs 0.24; hospitalizations: 0.12, 0.18 vs 0.11; $P<0.05$ for all).

Conclusion: Results from this large general population study indicate that adults with mild-to-moderate AD in the United States have increased work impairment,

increased activity impairment, increased disability, and increased HCRU versus non-AD controls. The burden of mild AD was similar to moderate AD in most cases.

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