**Title:** Mixed Methods Approach to the Comprehensive Impact of Atopic Dermatitis on Caregivers

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**Background:** Caregiving can take a toll on wellbeing and physical health. Studies have documented the burden of caregiving for children with atopic dermatitis, focusing on mental impacts, cost, and sleep loss. Few studies have provided a comprehensive overview of caregiver impacts or documented the burden on caregivers of both adults and children.

**Objective:** To examine the impact of atopic dermatitis on caregivers across multiple life domains.

**Methods:** A mixed methods approach was used to analyze categorical and open-ended response data from the ‘More than Skin Deep’ survey, which was an online survey that was part of the U.S. Food and Drug Administration (FDA) patient-focused drug development initiative on atopic dermatitis fielded in late 2019. Qualitative methods were used to identify themes in open-ended response data on caregiver impact.

**Results:** We analyzed data from 1,508 survey respondents, including 417 caregivers. Overall impact of atopic dermatitis was rated similarly by caregivers and patients (53% vs 51% respectively reported high or significant impact, p=0.436). Multivariable models found that disease severity, symptom control, use of topical or adjunctive treatments, time spent managing atopic dermatitis, and the presence of mood symptoms in the patient were independently associated with higher caregiver impact. Qualitative analysis of open-ended responses highlighted specific aspects of the mental burden of caregiving, the impact on daily life experiences, and the impact on sleep and wellness. Most comments focused on the mental burden, including issues around uncertainty about the disease course and best treatments, helplessness in controlling and improving atopic dermatitis, burnout from the all-consuming nature of the condition, and negative perceptions and judgements of others.

**Limitations:** Convenience sampling may have resulted in a study population of patients and caregivers more severely affected by atopic dermatitis.

**Conclusions:** Caregivers’ lives are impacted in multiple domains by atopic dermatitis. Understanding the many ways in which atopic dermatitis may impact families enables providers to more holistically address the condition and thereby improve patient outcomes.