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## Atopic dermatitis starting in childhood has a stronger impact on adults: results from the ‘Scars of Life’ international project in 27 countries

Dear Editor, The World Health Organization has urged governments worldwide to take action in addressing stigma associated with skin conditions.<sup>1</sup> Patients with atopic dermatitis (AD) commonly experience stigmatization.<sup>2,3</sup> Moreover, children and adolescents are at a critical stage of social and emotional development, and the visible symptoms or limitations caused by chronic conditions often lead to teasing, bullying or exclusion from peers. Despite this, the long-term impact of stigmatization on individuals who had AD in childhood or adolescence has yet to be thoroughly examined.

In this context, we conducted a survey within the framework of ‘Scars of Life’, a cross-sectional observational study launched at the beginning of 2024, aiming to build a large international database of patients with AD to assess the psychosocial burden of their disease. The survey was conducted in 27 countries across 5 continents. Our objective was to compare the self-reported feelings of stigmatization and psychosocial burden in individuals with AD that started during adulthood with feelings of patients whose AD started in childhood and persisted into adulthood.

A representative sample was selected using the quota method. Participants reported whether they had a physician-confirmed diagnosis of AD and the age of onset. Two groups were defined: (i) AD in both adulthood and childhood (A+C) and (ii) AD only in adulthood (OA). Participants were contacted by email to complete a structured digital questionnaire.

The questionnaire included sociodemographic characteristics, age of onset of AD, standardized self-assessment questions on clinical severity [Patient-Oriented Eczema Measure (POEM) score], and effect of AD in five domains: (i) avoidance and social isolation; (ii) relationships with family and friends; (iii) perception and treatment by others; (iv) discrimination, professional and administrative exclusion; and (v) self-image and physical appearance. The severity of perceived stigmatization due to AD was assessed using the Patient Unique Stigmatization Holistic Tool in Dermatology (PUSH-D) score.<sup>4</sup> A multivariate linear regression was performed to assess the relationship between PUSH-D and the explanatory variables: gender, time of onset of AD, age, and type of skin (fair or dark).

We included 2875 patients in the A+C group and 7383 in the OA group. In the A+C group, 1771 were women (61.6%), and mean (SD) age was 37.3 (12.5) years. POEM

score was mild in 1146 (39.9%) and moderate-to-severe in 1729 (60.1%). In the OA group, 4160 were women (56.3%), and mean age was 43.6 (15.1) years. POEM score was mild in 3811 (51.6%) and moderate-to-severe in 3572 (48.4%). The PUSH-D score in the A+C group was 23.04 (20.12) vs. 17.44 (17.17) in the OA group ( $P<0.001$ ). Figure 1 shows details of the impact in each group.

In multivariate analysis, male gender [ $\beta=1.23$ , 95% confidence interval (CI) 0.2–2.25;  $P=0.0191$ ], fair skin ( $\beta=1.37$ , 95% CI 0.04–2.7;  $P=0.043$ ), and AD during A+C ( $\beta=3.11$ , 95% CI 1.95–4.28;  $P<0.001$ ), were associated with higher values of PUSH-D. Age ( $\beta=-0.35$ , 95% CI  $-0.39$  to  $-0.32$ ;  $P<0.001$ ) was associated with lower values of PUSH-D.

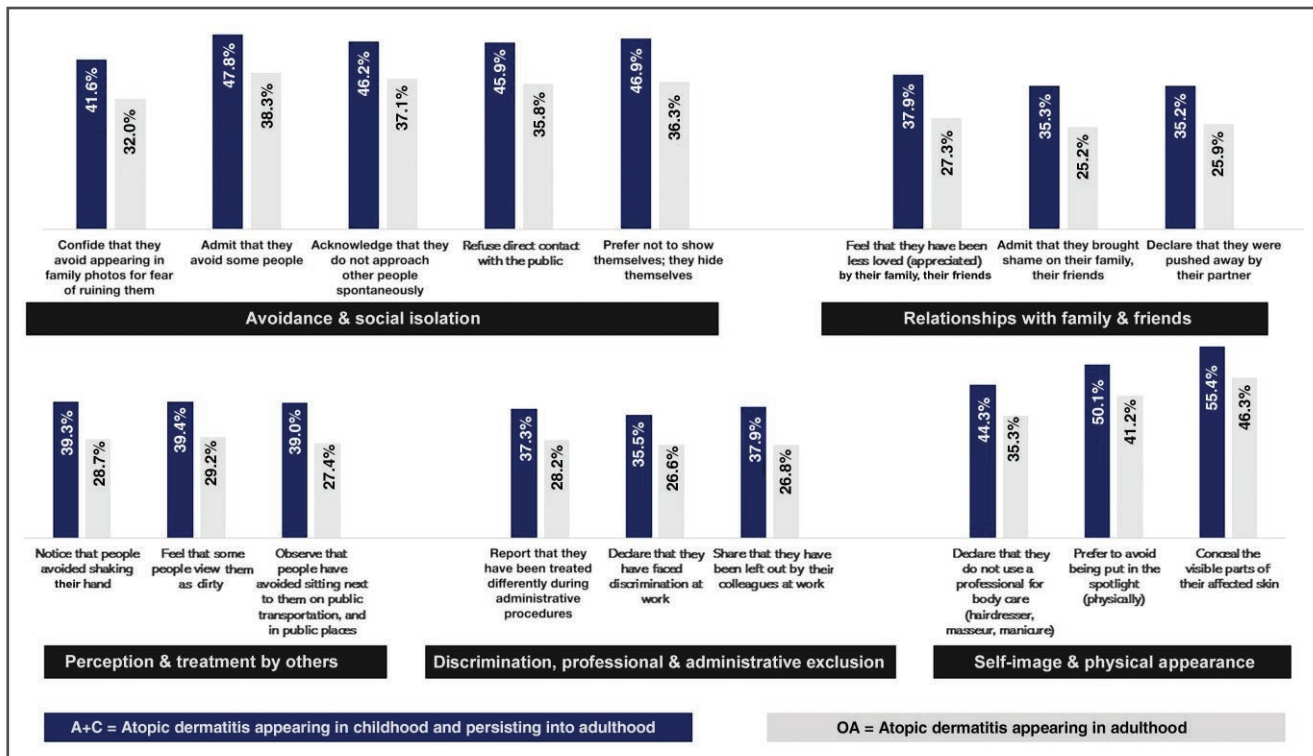
While many studies have explored AD’s psychosocial impact,<sup>5–8</sup> few address differences between A+C and OA groups. Our large-scale international study goes beyond a snapshot in time, revealing the long-term consequences of the disease, especially in the A+C group of patients.

Patients in the A+C group often avoid public interactions, family photos, and situations where their appearance is highlighted. With social media amplifying personal visibility, individuals with AD feel exposed, triggering anxiety, shame and fear of judgment. This intensifies the psychosocial toll of AD, deepening the strain on family bonds and friendships. Many patients in the A+C group report feeling unloved, bringing shame to their families and experiencing partner rejection. They also notice being avoided in public, such as people refusing to shake hands or sit near them. In professional settings, those in the A+C group report higher rates of discrimination, isolation and unfair treatment. They are more likely to avoid personal care services, such as hairdressing or manicures, and conceal affected areas of their body, eroding self-worth over time. These experiences highlight a consistent pattern of stigmatization among the A+C group of patients, differentiating them from those in the OA group. However, no significant differences were found regarding avoidance of being in the spotlight. Among all factors, A+C is the strongest predictor of stigma, followed by male gender and fair skin.

Our findings suggest that A+C and OA may represent distinct phenotypes with unique psychosocial and clinical patterns. These distinctions merit further investigation to see whether these phenotypes correlate with specific clinical signs and, ultimately, should influence treatment strategies. Given the long-term emotional burden associated with A+C, it may be necessary to reconsider how we approach the treatment of AD. The assumption that treatment of less severe cases can be deferred may underestimate the psychosocial impacts that accumulate over time.

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**Figure 1** Results of different items of each studied domain. The 27 studied countries, by continent, were: North America: Canada and the USA; Europe: France, Germany, Greece, Israel, Poland, Spain, Sweden and the UK; Africa: Cameroon, Kenya and South Africa; Latin America: Brazil and Mexico; the Middle East and North Africa: Egypt, Morocco and Saudi Arabia; Asia: China, Japan, South Korea, India, Indonesia, Malaysia, Singapore and Thailand; and Australia.

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**Data availability:** The data underlying this article will be shared on reasonable request to the corresponding author.

**Ethics statement:** The project was reviewed by a French ethics committee and was found to be in accordance with the ethical standards set forth by that committee (IDRCB 2023-A02722-43).

**Patient consent:** All patients gave written, informed consent for participation.

## Supporting Information

Additional [Supporting Information](#) may be found in the online version of this article at the publisher's website:

**Appendix S1** Complete list of author affiliations.

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