Atopic eczema: Aggravating factors experienced by patients in a global study. Results of the ALL Project.

Charbel Skayem¹, Charles Taieb², Bruno Halioua³, Catherine Baissac⁴, Yaron BenHayoun⁵, Marketa Saint Aroman⁴, **Delphine Staumont Salle⁶**

¹APHP, Hôpital Ambroise Paré, Department of Dermatology,, Boulogne-Billancourt, France, ²European Market Maintenance Assessment, Patients Priority, Paris, France, ³Dermatiologist, Paris, France, ⁴Pierre Fabre, Patient Centricity, Toulouse, France, ⁵European Market Maintenance Assessment, Data Scientist, Tel Aviv, Israel, ⁶CHU de Lille, Department of Dermatology,, Lille, France



Atopic dermatitis [AD], often referred to as eczema, is a prevalent, persistent skin condition distinguished by intense itching and recurring outbreaks.

While the disorder is widespread worldwide, the factors and triggers can differ among various regions and cultural contexts.

The proportion of patients who identified these factors as significant was as follows: 24.9% in Europe, and 46.8% in Asia; 20.7% for patients in Africa, 55.6% in North America, and 34.4% in Latin America. It is also noteworthy that one in three women (35.2%) identified hormonal variations as an exacerbating factor. Furthermore, the application of certain products to the skin was identified as an aggravating factor by 19.5% of respondents, with significant variations observed between regions: 36.2% in Africa and 19.0% in Europe.





METHODOLOGY

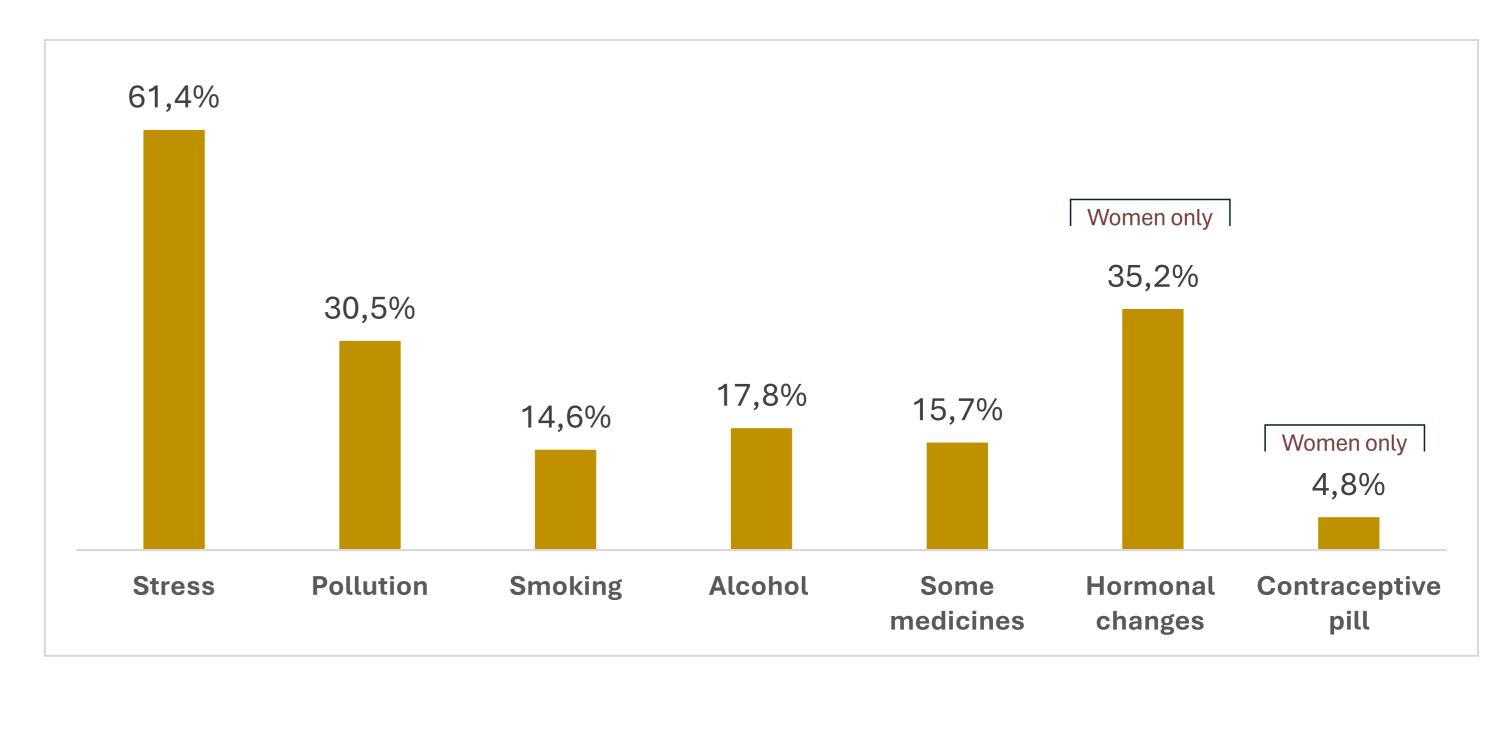
The ALL PROJECT is a large-scale study of individuals representative of the adult population in 20 countries on five continents: Europe [France, Italy, Germany, Poland, Portugal, Spain, Denmark; n=17500], Latin America[LA] [Brazil, Mexico; n=6501], Asia [China, India, South Korea; n=10500], North America [NA] [Canada, USA; n= 7500); Middle East [ME] [Israel, United Arab Emirates; n=2750], Australia [Australia; n=2000] and Africa [Kenya, South Africa, Senegal; n=1800].

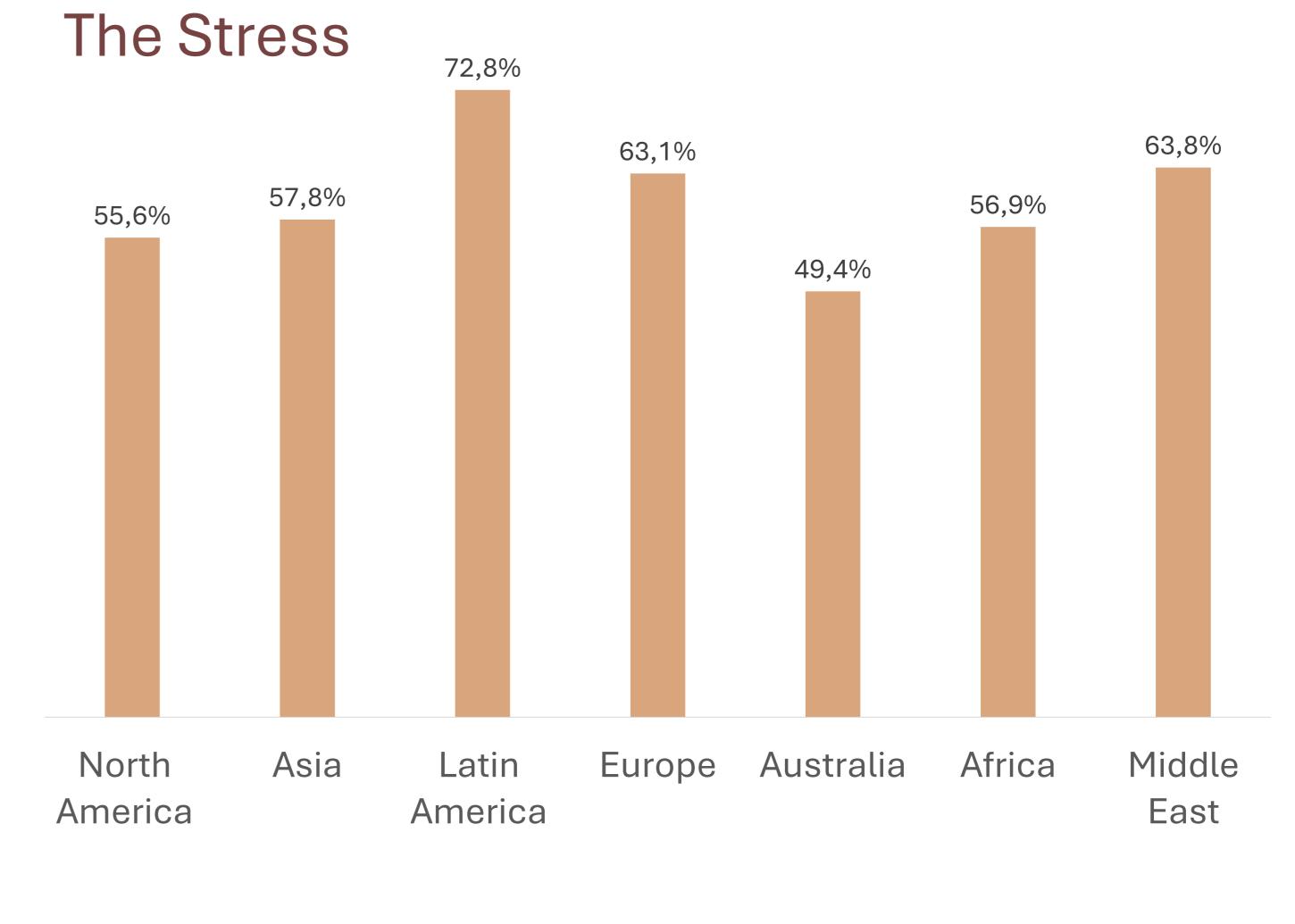
In each of the 20 countries surveyed, representative and extrapolable samples of the general population aged 16 and over were interviewed.

This methodology ensures that the results of the study can be generalized to the entire population of each country included in the project, thus providing a global and diversified perspective of the subjects studied.

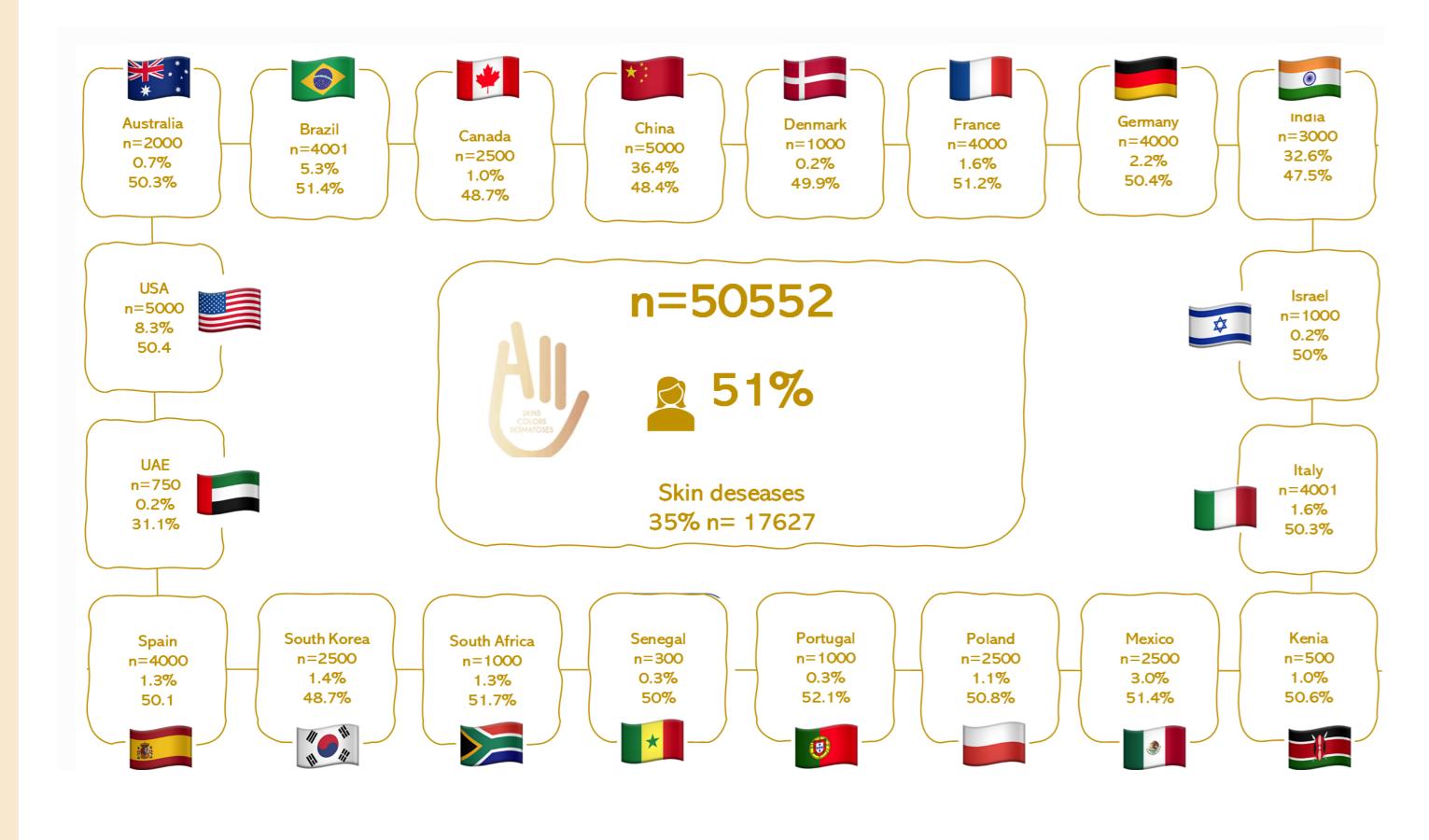
Patients reporting only atopic dermatitis as confirmed by a healthcare professional, were identified to avoid attributing effects to another skin condition.

The results were compared using chi-squared or Fisher's exact test.



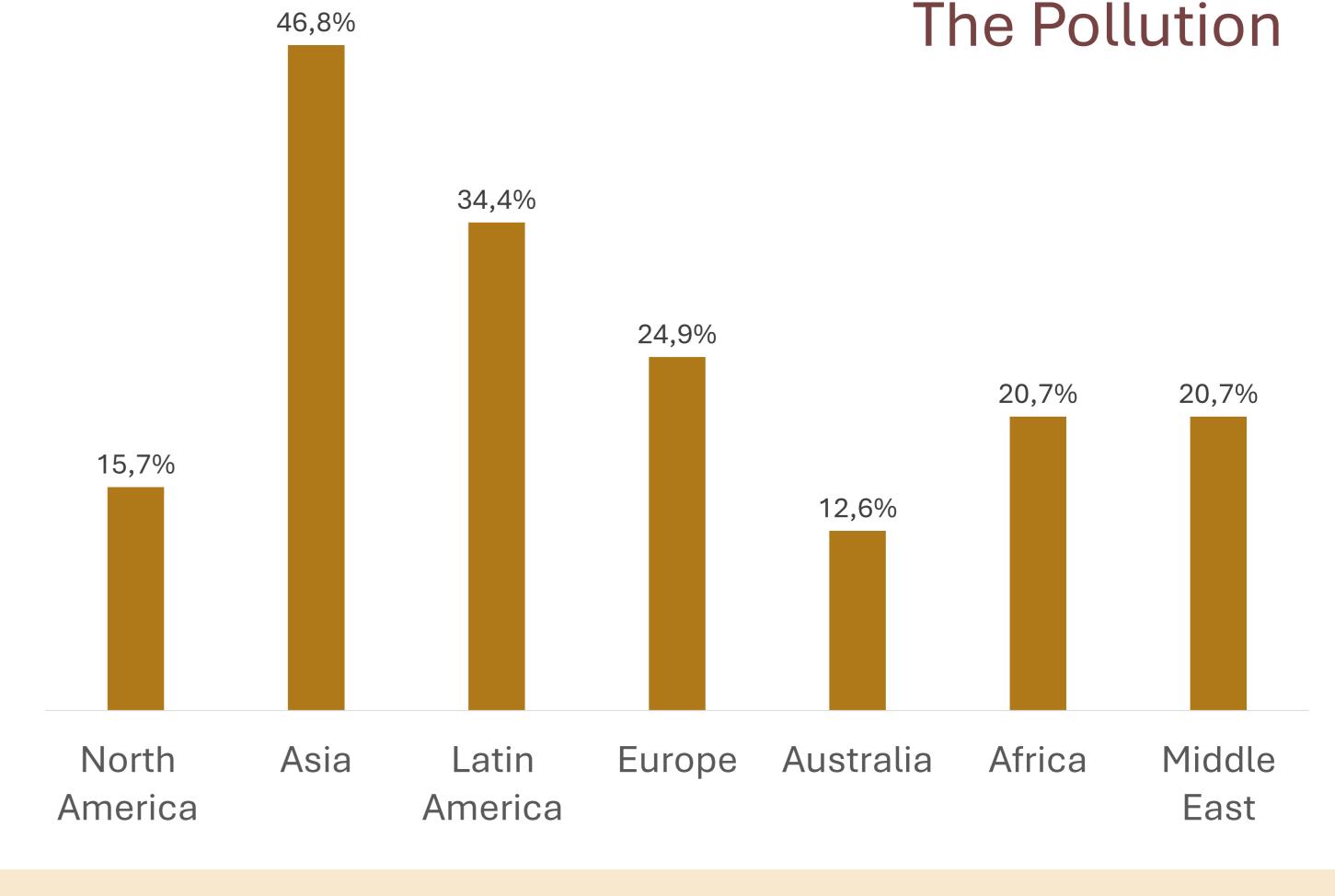


The alpha risk was set at 5% and two tailed tests were used. Statistical analysis was performed using EasyMedStat (version) 3.34; www.easymedstat.com).



RESULTS

The prevalence of atopic dermatitis in Europe is 8.9% ±



0.4%. In Asia and Latin America, the prevalence of atopic dermatitis is $13.2\% \pm 0.6\%$ and $10.2\% \pm 0.8\%$, respectively. These two regions stand out statistically with significantly higher prevalences than in Europe (< 0.001). In Africa, North America and Australia, the prevalences are significantly lower, with respective values of $6.1\% \pm 1.1\%$ for the first, $7.5\% \pm 1.1\%$ 0.6% for the second and 8. The prevalence in the Middle East is comparable to that observed in Europe, with a prevalence of $8.9\% \pm 1.334$

In order to avoid any potential bias, we have identified patients who reported no other skin disease than atopic dermatitis[n=2514]. Regardless of the continent, stress was identified as the primary factor contributing to the exacerbation of the disease, with 61.4% of respondents indicating this as a significant factor. Pollution was identified as the second most significant factor, with 30.5% of respondents indicating this as a significant factor.

DISCUSSION

The ALL-PROJECT study underscores variances in atopic dermatitis prevalence, noting elevated rates in Asia and Latin America compared to Europe, and lower rates in Africa and North America.

These regional distinctions hint at potential impacts from environmental or genetic factors. Notably, stress emerges as the primary exacerbating factor, closely trailed by environmental pollution and diet, advocating for universal stress management strategies for eczema patients.