

Mapping Psoriasis: Prevalence on a worldwide scale: Results of the ALL project

SKINS COLORS DERMATOSES

Charbel Skayem¹, Charles Taieb², Bruno Halioua³, Catherine Baissac⁴, Yaron BenHayoun⁵, Marketa Saint Aroman⁴,

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,

RATIONAL & OBJECTIVES

Psoriasis, characterized by inflammatory skin lesions known as erythematosquamous plaques, impacts millions of individuals globally.

Similar to atopic dermatitis, psoriasis exhibits a widespread presence worldwide, yet differences in prevalence and triggers illustrate the diverse nature of various regions and cultures.

METHODOLOGY

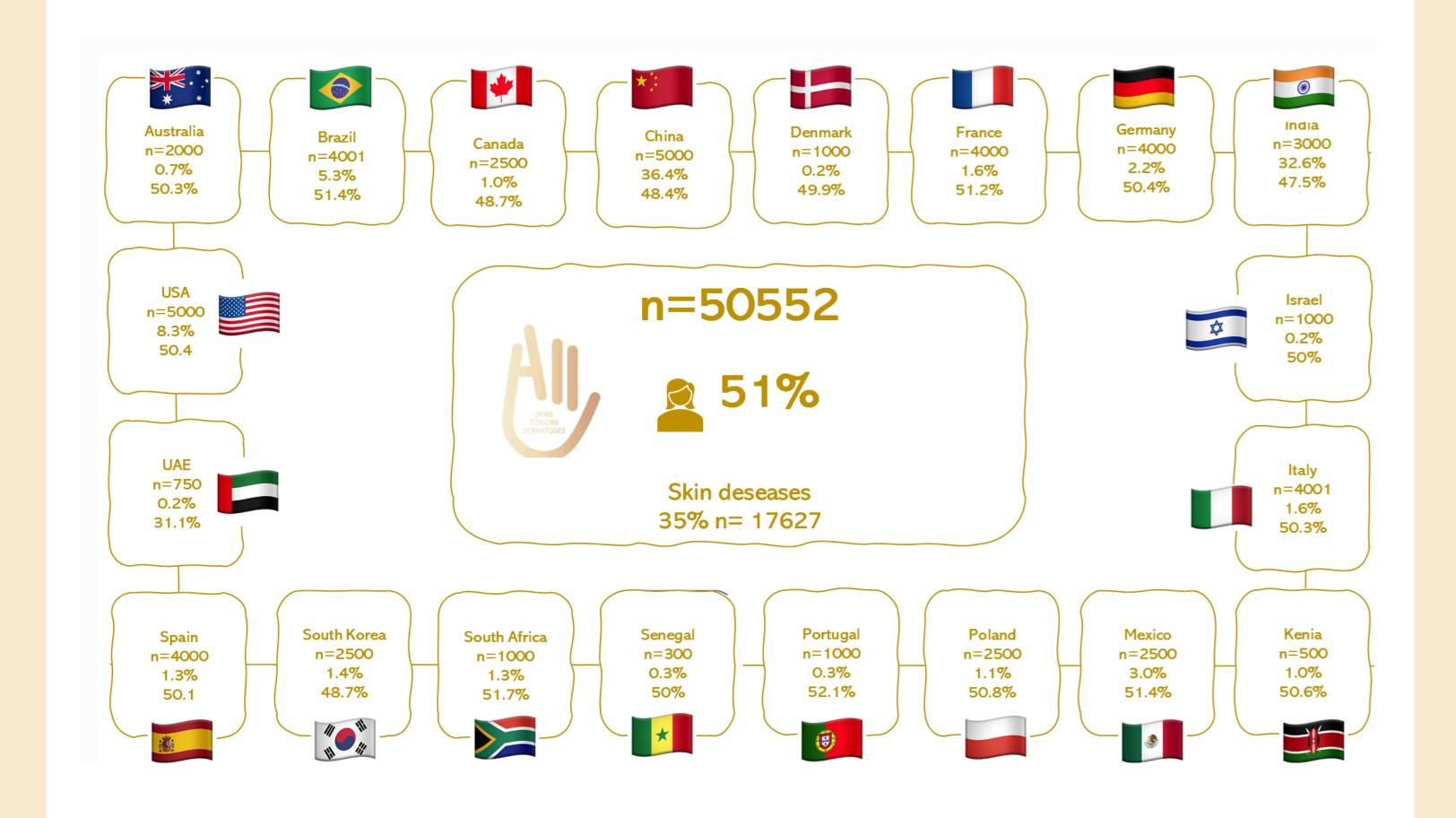
The ALL PROJECT is a large-scale study of individuals representative of the adult population in 20 countries on five continents: Europe [France, Italy, Germany, Poland, Portugal, Spain, Denmark; n=17500], Latin America[LA] [Brazil, Mexico; n=6501], Asia [China, India, South Korea; n=10500], North America [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 psoriasis 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

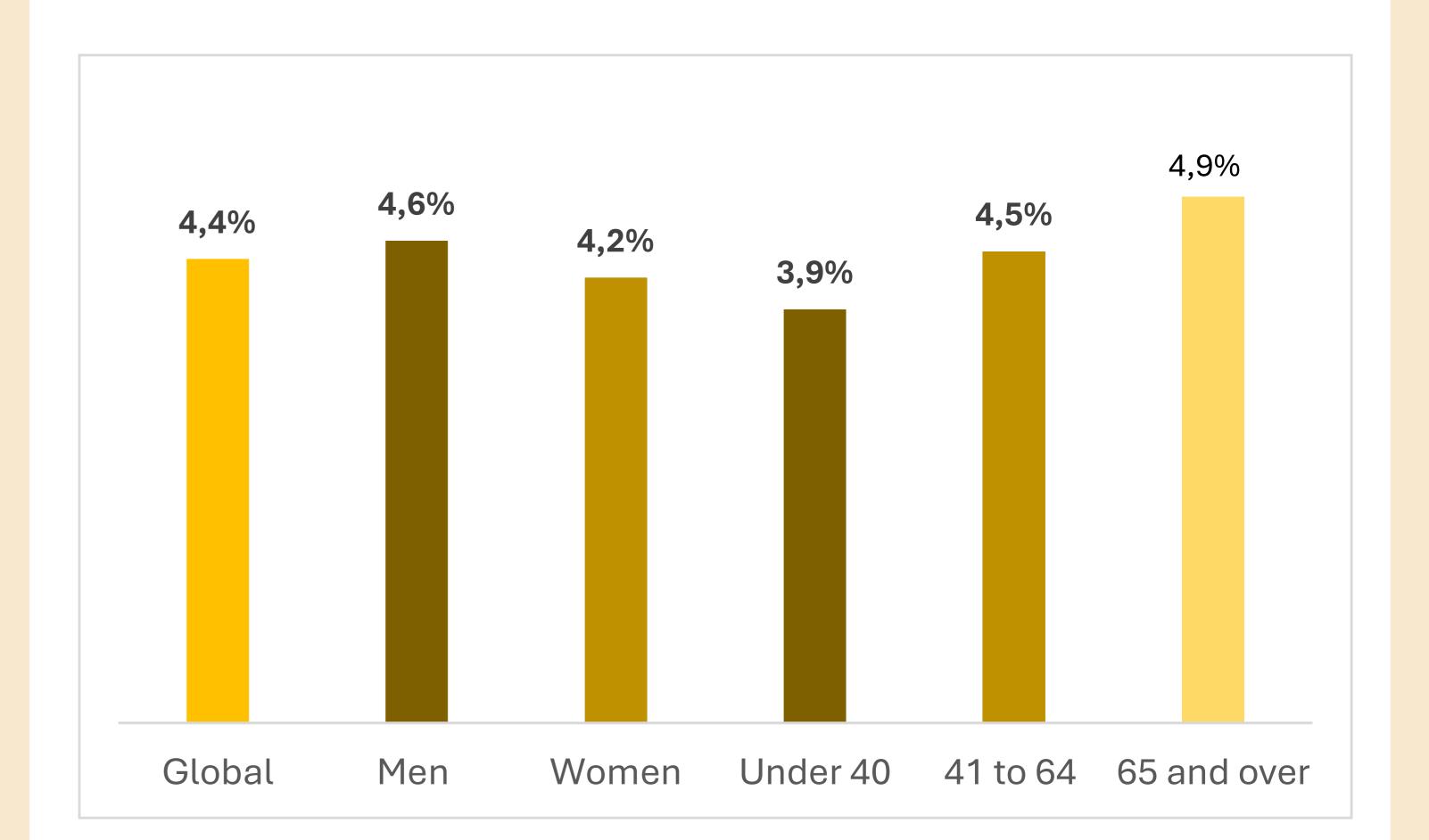
The prevalence of psoriasis varies from region to region. In Europe the prevalence is 4.6% [4.3%; 4.9%]. Asia has a higher prevalence of 5.7% [5.2% to 6.1% p-value <0.001], while Latin America has a prevalence of 3.1% [2.7% to 3.5% p-value <0.001].

These rates are statistically different from those observed in Europe. Conversely, the prevalence of psoriasis is lower in Africa and North America at 1.7% [1.1% to 2.2% p-value <0.001] and 3.7% [3% to 4.4%, p-value <0.002] respectively. Australia and the Middle East show similar prevalences to Europe at 4.6% (CI 3.7% to 5.5% P-value=0.97) and 4.9% [3.9% to 5.8% p-value =0.64] respectively, with no statistically significant difference.

Australia and the Middle East show similar prevalences to Europe at 4.6% (CI 3.7% to 5.5% P-value=0.97) and 4.9% [3.9% to 5.8% p-value =0.64] respectively, with no statistically significant difference.

In terms of gender distribution, the data show conflicting results, with women generally having a higher prevalence than men [But only the difference observed in Africa is significant.], such as in Australia, where the prevalence in women is 4.9% vs 4.3% [p=0.56], and the Middle East, where it is 5.3% vs 4.5% [p=0.45]. In NA [3.4% vs 4.1%, p=0.09], Asia [5.5% vs 5.9%, p=0.43], Europe [4.4% vs 4.8%, p=0.21]; LA [3.2% vs 3.1%, p=0.05] and Africa [1% vs 2.4%, p<0.001].

In Europe, there is no significant difference between individuals with fair skin (4.6%) and those with dark skin (4.4%) (p = 0.63). In Europe, there is no difference between rural, semi-urban and urban areas. (4.4%, 4.6%) and 4.7% respectively)



	Global Population		Men		Women	
	n	%	n	%	n	%
GLOBAL POPULATION	2237	4,4%	1168	4,6%	1069	4,2%
North America	280	3,7%	154	4,1%	126	3,4%
Asia	600	5,7%	320	5,9%	280	5,5%
Latin America	204	3,1%	98	3,1%	106	3,2%
Europe	946	4,6%	486	4,8%	460	4,4%
Australia	92	4,6%	43	4,3%	49	4,9%
Africa	30	1,7%	21	2,4%	9	1,0%
Middle East	85	4,9%	46	4,5%	39	5,3%

	Under 40		41 to 64		65 and over	
	n	%	n	%	n	%
GLOBAL POPULATION	709	3,9%	683	4,5%	845	4,9%
North America	72	2,8%	70	3,7%	138	4,5%
Asia	203	4,8%	203	5,7%	194	7,1%
Latin America	80	2,9%	75	3,6%	49	3,1%
Europe	277	4,6%	266	4,5%	403	4,7%
Australia	24	3,4%	27	5,0%	41	5,4%
Africa	15	1,5%	7	1,3%	8	2,8%
Middle East	38	5,0%	35	5,3%	12	3,7%

	Urban areas		Semi-Urban areas		Rural areas	
	n	%	n	%	n	%
GLOBAL POPULATION	1374	4,8%	512	3,8%	351	4,3%
North America	96	4,0%	112	3,2%	72	4,4%
Asia	513	6,0%	57	4,4%	30	5,0%
Latin America	170	3,4%	28	2,3%	6	2,3%
Europe	474	4,7%	254	4,6%	218	4,4%
Australia	31	4,7%	44	4,2%	17	5,8%
Africa	18	2,5%	9	1,1%	3	1,1%
Middle East	72	5,2%	8	3,6%	5	3,3%

	Global Po	Global Population		Fair Skin		Dark skin	
	n	%	n	%	n	%	
GLOBAL POPULATION	2237	4,4%	1818	4,5%	419	4,0%	
North America	280	3,7%	242	3,9%	38	2,8%	
Asia	600	5,7%	440	5,7%	160	5,9%	
Latin America	204	3,1%	146	3,2%	58	3,1%	
Europe	946	4,6%	833	4,6%	113	4,4%	
Australia	92	4,6%	82	4,8%	10	3,3%	
Africa	30	1,7%	12	2,0%	18	1,5%	
Middle East	85	4,9%	63	4,6%	22	5,6%	

DISCUSSION

The ALL-PROJECT study underscores variances in psoriasis 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.