RESEARCH LETTER

Epidemiology of Psoriasis: A Worldwide Global Study

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Although psoriasis is one of the most common dermatological diseases, comprehensive global data on its prevalence among adults remain limited. Most studies (1–3) have been region-specific, using varied methodologies that hinder comparability. To address this gap, our objective was to expand the global understanding of psoriasis by assessing its prevalence, demographics, healthcare pathway trends, and impact on quality of life in a large-scale international study.

This research was part of "Project ALL". The methodology used was described in earlier publications (4–6). The study, conducted by a polling company between January and April 2023, targeted individuals aged 16 years or older in 20 countries across 5 continents (**Fig. 1**). The population of these countries represents over 50% of the global population: The survey involved individuals ≥ 16 years old in 20 countries representing > 50% of the world's population: United States, Canada, France, Germany, Denmark, Portugal, Poland, Italy, Spain, Israel, Arab Emirates, Mexico, Brazil, Kenya, South Africa, India, South Korea, China, and Australia. Proportional quota sampling was employed, based on age, sex, environment (urban, town, rural), and income, to ensure the national representativeness of the sample. Participants were contacted via email, without revealing the survey topic, to avoid self-selection bias. Those who agreed completed a structured digital questionnaire that gathered sociodemographic data, Fitzpatrick classification, and confirmed whether they had been diagnosed with psoriasis by a physician in the last 12 months (either new onset or recurrence). We also collected information on patients' quality of life regarding psoriasis.

Results are represented in **Tables I and II**. The results showed a global prevalence of psoriasis of 4.4%. In Europe, the prevalence was 4.6%. Asia had a higher prevalence of 5.7% ($p < 0.001$), while in Latin America it was 3.1% ($p < 0.001$). Conversely, the prevalence of psoriasis was lower in Africa and North America at 1.7% ($p < 0.001$) and 3.7% ($p < 0.002$), respectively. Australia and the Middle East had similar prevalences at 4.6% ($p = 0.97$) and 4.9% ($p = 0.64$). The prevalence was 4.8% in urban areas, 3.8% in semi-urban areas, and 4.3% in rural areas ($p < 0.001$). Fair-skinned individuals had a 4.5% prevalence vs 4% for those who were dark-skinned.

Most studies on the prevalence of psoriasis have been conducted in high-income countries. Unlike prior

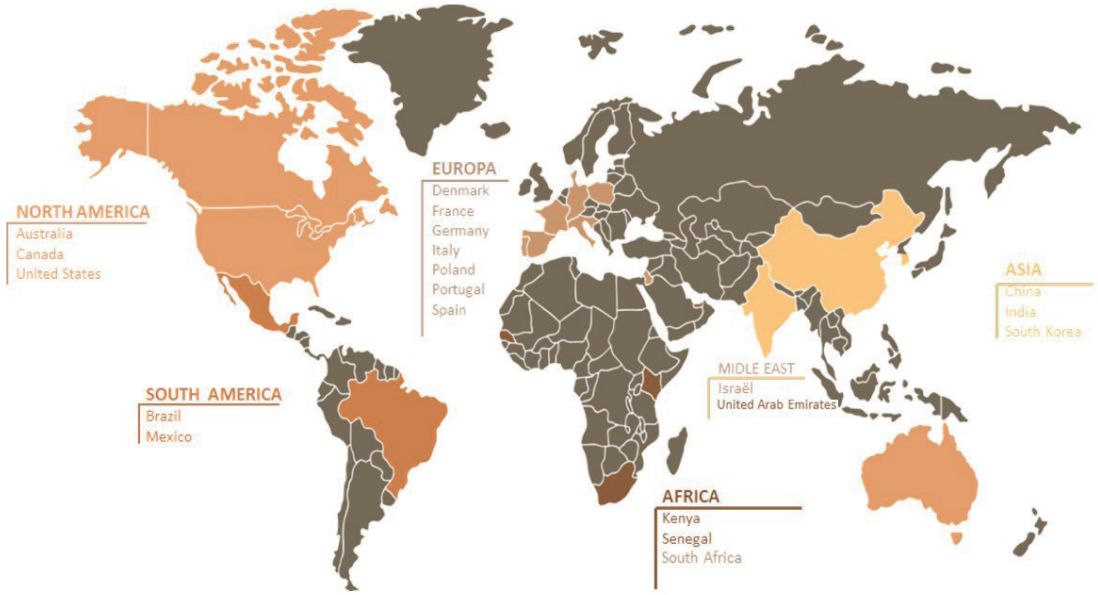

Fig. 1. 20 countries spread over the 5 continents.

Table I. Prevalence, visited healthcare professional, and impact on quality of life according to geographic regions

	North America		East Asia		Latin America		Europe		Australia		Africa		Middle East		Total worldwide	
Total sample	7,500		10,500		6,501		20,501		2,000		1,800		1,750		50,552	
Psoriasis prevalence	3.7%		5.7%		3.1%		4.6%		4.6%		1.7%		4.9%		4.4%	
Psoriasis prevalence male*	4.1%		5.9%		3.1%		4.8%		4.3%		2.4%		4.5%		4.6%	
Psoriasis prevalence female*	3.4%		5.5%		3.2%		4.4%		4.9%		1.0%		5.3%		4.2%	
Visited HCP, *n* (%)	75	56.8%	110	62.5%	60	77.9%	384	72.3%	26	61.9%	5	55.6%	17	70.8%	677	68.3%
Doctor	67	50.8%	90	51.1%	54	70.1%	333	62.7%	21	50.0%	4	44.4%	15	62.5%	584	58.9%
Pharmacist	8	6.1%	28	15.9%	9	11.7%	63	11.9%	5	11.9%	3	33.3%	3	12.5%	119	12.0%
Nurse	5	3.8%	4	2.3%	1	1.3%	13	2.4%	1	2.4%	1	11.1%	1	4.2%	26	2.6%
No consultation	57	43.2%	66	37.5%	17	22.1%	147	27.7%	16	38.1%	4	44.4%	7	29.2%	314	31.7%
If visited HCP is a doctor: *n* (%)	67	50.8%	90	51.1%	54	70.1%	333	62.7%	21	50.0%	4	44.4%	15	62.5%	584	58.9%
Dermatologist	39	58.2%	67	74.4%	37	68.5%	238	71.5%	3	14.3%	2	50.0%	15	100.0%	401	68.7%
General physician	30	44.8%	13	14.4%	12	22.2%	125	37.5%	18	85.7%	2	50.0%	0	0.0%	200	34.2%

*Total prevalence is weighted according to the countries' population. North America: United States, Canada. Europe: France, Germany, Denmark, Portugal, Poland, Italy, Spain. Middle East: Israel, Arab Emirates. Latin America: Mexico, Brazil. Africa: Kenya, South Africa. East Asia: India, South Korea, China.

research indicating the highest prevalence in Australia, our study, applying the same methodology across all 20 countries, surprisingly revealed that prevalence is highest in East Asia., with no significant difference in prevalence between Australia, Europe, and the Middle East. This finding contrasts with previous studies reporting lower prevalence rates in Asia (1, 2). These discrepancies are mostly due to the diverse methodologies employed, which prevents accurate comparison of prevalence between different regions in previous studies. Some studies indicated a higher incidence in women compared with men, while other studies showed opposing findings. Our study shows different sex patterns across regions with a global higher prevalence in men. North America was the region in the world where individuals least visited a healthcare professional for their psoriasis. Moreover, among those who visited a doctor, the proportion visiting a dermatologist was also lowest in Australia followed by North America compared with other regions in the world, which might be attributed to higher healthcare costs.

The data show no significant differences between sexes in most aspects of psoriasis-related embarrassment and specific impacts, except for beauty treatments, where women reported significantly more impact. Age differences were more pronounced, with younger patients reporting higher embarrassment levels in personal and professional life, as well as greater avoidance behaviours, including skipping social events, vacations, and feeling looked at with disgust.

In conclusion, previous studies on psoriasis prevalence have produced inconsistent estimates. Our study offers a robust global perspective on adult psoriasis prevalence by utilizing a consistent methodology across 20 countries, addressing regional disparities often overlooked in previous research. Unlike other studies, we relied exclusively on physician-confirmed diagnoses, providing

Table II. Impact of psoriasis on quality of life and stigmatization according to gender and age

Personal life embarrassment degree (responded to these questions)	Global *n* = 991	Men *n* = 541	Women *n* = 450	*p*-value	16-34 *n* = 226	35–54 *n* = 272	> = 55 n = 493	*p*-value
Very embarrassing	120 (12.12%)	58 (10.72%)	62 (13.78%)	0.431	39 (17.26%)	37 (13.6%)	44 (8.92%)	< 0.001
Quite embarrassing	321 (32.42%)	173 (31.98%)	148 (32.89%)		89 (39.38%)	103 (37.87%)	129 (26.17%)	
Not very embarrassing	365 (36.87%)	204 (37.71%)	161 (35.78%)		60 (26.55%)	88 (32.35%)	217 (44.02%)	
Not embarrassing at all	185 (18.59%)	106 (19.59%)	79 (17.56%)		38 (16.81%)	44 (16.18%)	103 (20.89%)	
Professional life embarrassment degree (responded to these questions)	**Global *n* = 950**	**Men *n* = 523**	**Women *n* = 427**	***p*-value**	**16-34 *n* = 219**	**35-54 *n* = 269**	**> = 55 *n* = 462**	***p*-value**
Very embarrassing	73 (7.69%)	30 (5.74%)	43 (10.07%)	0.085	21 (9.59%)	24 (8.92%)	28 (6.06%)	< 0.001
Quite embarrassing	272 (28.66%)	154 (29.45%)	118 (27.63%)		87 (39.73%)	90 (33.46%)	95 (20.56%)	
Not very embarrassing	347 (36.56%)	199 (38.05%)	148 (34.66%)		61 (27.85%)	107 (39.78%)	179 (38.74%)	
Not embarrassing at all	253 (26.55%)	136 (26.0%)	117 (27.4%)		48 (21.92%)	48 (17.84%)	157 (33.98%)	
Specific impact (responded to these questions)	**Global *n* = 991**	**Men *n* = 541**	**Women *n* = 450**	***p*-value**	**16-34 *n* = 226**	**35-54 *n* = 272**	**> = 55 *n* = 493**	***p*-value**
I took time off work or study	179 (18.08%)	108 (19.96%)	71 (15.78%)	0.105	61 (26.99%)	62 (22.79%)	56 (11.36%)	< 0.001
I feel shy about buying a treatment product	220 (22.22%)	119 (22.0%)	101 (22.44%)	0.926	76 (33.63%)	71 (26.1%)	73 (14.81%)	< 0.001
I give up on family or professional events	201 (20.3%)	116 (21.44%)	85 (18.89%)	0.36	79 (34.96%)	63 (23.16%)	59 (11.97%)	< 0.001
I experienced difficulties in relations	253 (25.56%)	143 (26.43%)	110 (24.44%)	0.521	74 (32.74%)	90 (33.09%)	89 (18.05%)	< 0.001
I feel my sex life has been affected	252 (25.45%)	148 (27.36%)	104 (23.11%)	0.146	74 (32.74%)	82 (30.15%)	96 (19.47%)	< 0.001
I give up on vacations or leisure activities	195 (19.7%)	110 (20.33%)	85 (18.89%)	0.625	62 (27.43%)	67 (24.63%)	66 (13.39%)	< 0.001
I lack time for self-care	304 (30.71%)	149 (27.54%)	155 (34.44%)	0.023	70 (30.97%)	108 (39.71%)	126 (25.56%)	< 0.001
I take this into account when buying clothes	301 (30.4%)	153 (28.28%)	148 (32.89%)	0.133	75 (33.19%)	104 (38.24%)	122 (24.75%)	< 0.001
I gave up beauty treatments (hairdressing)	229 (23.13%)	103 (19.04%)	126 (28.0%)	0.001	69 (30.53%)	80 (29.41%)	80 (16.23%)	< 0.001
I tend to check my appearance every time I pass a mirror	418 (42.22%)	207 (38.26%)	211 (46.89%)	0.008	114 (50.44%)	130 (47.79%)	174 (35.29%)	< 0.001
I feel that people look at me with disgust	193 (19.49%)	110 (20.33%)	83 (18.44%)	0.505	68 (30.09%)	64 (23.53%)	61 (12.37%)	< 0.001
I feel people avoid approaching me	158 (15.96%)	94 (17.38%)	64 (14.22%)	0.207	51 (22.57%)	60 (22.06%)	47 (9.53%)	< 0.001
My skin condition prevented me from taking selfies	213 (21.52%)	110 (20.33%)	103 (22.89%)	0.69	74 (32.74%)	72 (26.47%)	67 (13.59%)	< 0.001

NA: non-applicable.

a higher standard of data reliability. This research not only confirms the rising global prevalence of psoriasis but also challenges prevailing assumptions concerning geographic and gender distribution, setting a new benchmark for future global studies of psoriasis prevalence according to types and severity.

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Ethics statement: ID-RCB 2022-A01859-34: the individuals approached confirmed their agreement to answer the questionnaire and were informed that they could stop the questionnaire whenever they wanted without having to give any explanation.

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Data availability statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of interest: CB and MSA are employees of Pierre Fabre, France. BH, CT, and CS have no conflicts of interest to declare.

REFERENCES

1. Michalek IM, Loring B, John SM. A systematic review of worldwide epidemiology of psoriasis. J Eur Acad Dermatol Venereol 2017; 31: 205–212. https://doi.org/10.1111/jdv.13854
2. Parisi R, Iskandar IYK, Kontopantelis E, Augustin M, Griffiths CEM, Ashcroft DM; Global Psoriasis Atlas. National, regional, and worldwide epidemiology of psoriasis: systematic analysis and modelling study. BMJ 2020; 369: m1590. https://doi.org/10.1136/bmj.m1590
3. Richard MA, Paul C, Nijsten T, Gisondi P, Salavastru C, Taieb C, et al. Prevalence of most common skin diseases in Europe: a population-based study. J Eur Acad Dermatol Venereol 2022; 36: 1088–1096. https://doi.org/10.1111/jdv.18050
4. Saurat JH, Halioua B, Baissac C, Cullell NP, Ben Hayoun Y, Aroman MS, et al. Epidemiology of acne and rosacea: a worldwide global study. J Am Acad Dermatol 2024; 90: 1016–1018. https://doi.org/10.1016/j.jaad.2023.12.038
5. Yosipovitch G, Skayem C, Aroman MS, Taieb C, Inane M, Hayoun YB, et al. International study on prevalence of itch: examining the role of itch as a major global public health problem. Br J Dermatol 2024; 191: 713–718. https://doi.org/10.1093/bjd/ljae260
6. Halioua B, Le Roux-Villet C, Baissac C, Ben Hayoun Y, Perez-Cullell N, Taieb C, et al. The role of physical touch during patient examination in dermatology: a worldwide study in 20 countries. J Eur Acad Dermatol Venereol 2024; 38: e401–e403. https://doi.org/10.1111/jdv.19622