

# Ethnicity affects pruritus and unpleasant skin symptoms among patients living with psoriasis

Bruno Halioua<sup>1</sup> ; Catherine Baissaç<sup>2</sup>; Nuria Perez Cullell<sup>3</sup>; Yaron Ben Hayoun<sup>4</sup>; Marketa Saint Aroman<sup>2</sup>; Charles Taieb<sup>5</sup>

<sup>1</sup>-Centre de dermatologie, Paris, France ; <sup>2</sup>Patients centricty, Pierre Fabre, Toulouse, France; <sup>3</sup>Directrice Médicale, Patient et Consommateur, Pierre Fabre, Toulouse, France; <sup>4</sup>Data Scientist, EMMA, Tel-Aviv, Israël ; <sup>5</sup>Patients Priority, EMMA, Paris, France

## INTRODUCTION & OBJECTIVE

Pruritus [PrT] is the most frequently reported subjective sensation of psoriasis, it is considered the most bothersome symptom of the disease. leading to a deterioration in quality of life.

In addition to PrT that creates the urge to scratch, patients with psoriasis can suffer from other skin unpleasant sensations (SUS), such as tingling, pain, burning and tightness, which are rarely mentioned in studies. Ethnic differences in the prevalence and clinical characteristics of PrT and other unpleasant sensations have rarely been studied. The aim of the present study was to evaluate and compare the prevalence of PrT associated with psoriasis among different ethnic populations.

## MATERIAL & METHODS

The questionnaire gathered information about the patients' demographic and socio-demographic profiles. Patients were considered to be those who reported feelings of stigmatization (FS) if they reported that they felt that they were ostracized or rejected by others and/or that they felt that they were looked at with disgust and/or that people avoided touching them and/or that people avoided approaching them because of their dermatoses.

A comparison of FS and patients without FS (non-FS) was used to evaluate predictors of FS specifically: socio-demographic and clinical parameters, psychological impact on self-perception, relationships, daily life, and social or professional life. The positive response to the question assessed adherence, "Did you get tired of taking a treatment every day?". The patients in the 'visible' group showed SD on at least one visible part of the body

## RESULTS

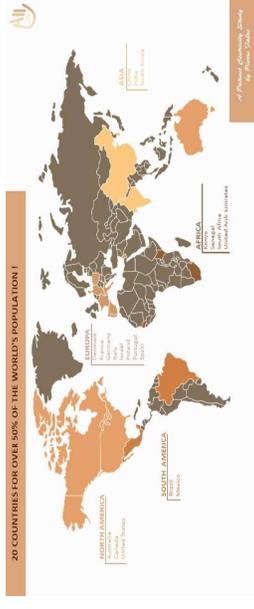
Among the 50552 individuals, 1759 patients who reported psoriasis were identified: including 924 (52.5%) males and 835 (47.5%) females. There were 73 (4.2%) AD respondents, 1086 (79.9%) CD respondents, 415 (61.7%) EA respondents and 185 (10.5%) IC respondents. A total of 1470 PR (83.6%) reported subjective skin symptoms with 1146 (65.2%) PrT and 324 (18.4%) SUS without PrT.

A total of 543 (30.9%) PR patients exclusively had PrT, while 603 (34.3%) suffered from PrT associated with the presence of unpleasant skin sensations. A total of 324 (18.4%) PR patients had unpleasant skin sensations without PrT. Only 289 (16.4%) PR had no symptoms. The absence of skin symptoms was more common in CD patients than in EA respondents (21.4% vs 8.9%, p = 5.64E-06) and in IC respondents (21.4% vs 4.9%, p<0.0001).

The prevalence of PrT (76.1% vs 61.7%, p<0.0001) was higher in EA respondents than in CD respondents (91.1% vs 78.6%, p<0.0001). The prevalence of SUS is higher in AD than in EA (37.0% vs 14.9%, p<0.0004) and CD (37.0% vs 16.9%, p<0.0008). The intensity of PrT was greater in Indian respondents than in EA (3.89 vs 3.09, p = 1.54E-14), AD (3.89 vs 3.21, p<0.0001) and CD (3.89 vs 3.15, p<0.0001). CD respondents reported significantly more days with itching than EA respondents (4.05 vs 3.21, p<0.0001), AD respondents (4.05 vs 2.88 p = 0.0006) and IC respondents (4.05 vs 3.54, p<0.007).



	Total n=1759	African descendants n=73	East Asian respondents n=415	Caucasian descendants n=1086	Indian respondents n=185
Mean intensity of Pruritus ±SD	3.21 ± 0.99	3.14 ± 0.97	3.09 ± 0.95	3.15 ± 0.97	3.89 ± 0.93



	Total n=1759	African descendants n=73	East Asian respondents n=415	Caucasian descendants n=1086	Indian respondents n=185	
Absence of Skin Symptoms	289 16.40%	11 15.1%	37 8.9%	232 21.4%	9 4.9%	
Pruritus	Pruritus total	1146 65.2%	35 47.9%	316 76.1%	670 61.7%	125 67.6%
	Pruritus isolated	543 30.9%	14 19.2%	154 37.1%	354 32.6%	21 11.4%
	Pruritus associated with SUS	603 34.3%	21 28.8%	162 39.0%	316 29.1%	104 56.2%
Skin Unpleasant Sensations isolated	324 18.4%	27 37.0%	62 14.9%	184 17%	51 27.6%	

## DISCUSSION

This is the first study to provide a comprehensive description of the frequency of Pruritus and skin unpleasant sensations in patients with psoriasis according to ethnicity.

Among psoriatic patients, the prevalence of PrT in our study, which is 65.2%, is in the range of that reported in other studies, which is estimated to range from 60 to 90% of patients with psoriasis.

We found that there are also differences in the prevalence of subjective symptoms among racial/ethnic groups, with a higher prevalence of subjective symptoms in psoriasis among IC and EA, which may be explained by differences in skin permeability and barrier function.

Our study also reported an increased prevalence of PrT with or without SUS in EA compared with CD.