

# PERCEPTIONS OF TREATMENT AND INFORMATION-SEEKING STRATEGIES: A COMPARATIVE STUDY OF CAUCASIAN AND ASIAN PATIENTS WITH ACNE LIVING IN NORTH AMERICA AND EUROPE

Bruno Halioua<sup>1</sup>, Catherine Baissac<sup>2</sup>, Yaron Benhayoun<sup>3</sup>, Marketa Saint Aroman<sup>2</sup>, Charles Taieb<sup>4</sup>

<sup>1</sup>Société Française des Sciences Humaines de la Peau, [SFSHP], Maison de la dermatologie, Paris, France, <sup>2</sup>Pierre Fabre, Patient Centricity, Toulouse, France, <sup>3</sup>European Market Maintenance Assessment, Data Scientist, Tel Aviv, France, <sup>4</sup>European Market Maintenance Assessment, Patients Priority, Fontenay sous-bois, France

## INTRODUCTION

Acne vulgaris is a ubiquitous skin disorder whose clinical manifestations, psychological impact, and therapeutic response are modulated by ethnic and cultural factors. Treatment approaches and health information-seeking behaviors remain underexplored in ethnically diverse populations living in similar environmental contexts. Few studies have directly compared Caucasian and Asian acne patients living within the same geographic regions. The primary objective of this study was to compare the perception of therapeutic approaches and the demand for acne-related information between Caucasian and Asian patients living in North America and Europe.

## MATERIELS & METHODS

Representative and generalizable samples of the population aged 16 years and older were surveyed across 11 countries: Europe (France, Italy, Germany, Poland, Portugal, Spain, Denmark; n = 17,500) and North America (Canada, United States; n = 7,500). Acne patients diagnosed by a healthcare professional were identified, and participants were categorized based on self-reported ethnicity. Data were collected via standardized questionnaires assessing types of treatments used, use of complementary therapies, perception of side effects, complementary health practices, and sources of information. Statistical analyses compared Caucasian and Asian patients living in Western contexts. Intergroup comparisons were performed using the Student's t-test or Mann–Whitney U test for quantitative variables, and Chi<sup>2</sup> or Fisher's exact test for qualitative variables. The significance level was set at p < 0.05.

## RESULTS

This cross-sectional observational study included 1,469 adult acne patients: 1,366 Caucasians (37.7% male) and 103 Asians (49.5% male), all residing in Europe or North America. Acne onset occurred significantly earlier among Asian patients (30.17 ± 12.29 years) compared to Caucasian patients (36.06 ± 14.91 years; p = 0.007). Acne treatment by healthcare providers did not differ significantly between groups, with similar rates of oral therapy use (18.5% vs. 18.4%, p = NS) and topical therapy use (32.7% vs. 33%, p = NS). Treatment fatigue was not more pronounced among Asians (50.5% vs. 46.6%, p = NS). However, self-medication with over-the-counter dermocosmetic products was significantly less common among Asians (9.71% vs. 23.5%, p = 0.002). Use of alternative therapies (e.g., yoga, acupuncture, homeopathy) did not differ significantly between groups.

Asian patients expressed significantly more concern regarding treatment side effects (52.04% vs. 39.6%, p = 0.021). Regarding information-seeking strategies, Asian patients were more likely to consult family members (34% vs. 23.28%, p = 0.02) and friends (30.1% vs. 19.5%, p = 0.015). Use of online discussion forums for acne information was also significantly higher among Asians (13.6% vs. 5.7%, p = 0.005), as was recourse to patient associations (7.77% vs. 1.61%, p < 0.001).

## DISCUSSION

This is the first study to confirm significant differences in treatment behavior, perceptions, and information-seeking strategies between Caucasian and Asian acne patients living in comparable Western environments. Although physician-prescribed oral and topical treatments were similar across groups, several significant disparities underscore the role of cultural, psychosocial, and biological factors in acne management. We found that Asian patients living in North America and Europe resorted less to self-medication, in contrast to South Asia, where self-treatment is widespread. In many Asian countries, acne is often seen as a natural part of adolescence or a cosmetic issue rather than a medical condition, which fosters a tendency for self-management. Over-the-counter products are widely available and culturally accepted in many parts of Asia. Our study also revealed significantly greater concern among Asian patients regarding treatment-related side effects.

This is consistent with the biological characteristics of Asian skin—particularly in Southeast Asia—such as a more fragile skin barrier, increased sensitivity, and reduced tolerance to standard topical acne therapies like retinoids. For instance, up to 80% of Japanese patients report mild adverse effects after one month of adapalene use, compared to 20–30% among Caucasians. These fears are amplified by the higher prevalence of post-inflammatory hyperpigmentation (PIH) and scarring in Asian skin—outcomes that are highly distressing both aesthetically and psychosocially. In this context, Asian patients are more likely to rely on alternative sources of information, including family (34% vs. 23.28%, p = 0.02), friends (30.1% vs. 19.5%, p = 0.015), online forums (13.6% vs. 5.7%, p = 0.005), and patient associations (7.77% vs. 1.61%, p < 0.001). The role of close social contacts in delivering acne-related information is well documented among Asian populations. Although existing literature does not always explicitly mention online forums, studies consistently report a preference among Asian patients for non-medical sources of advice—including media, beauty clinics, and traditional remedies. Use of alternative medicine (e.g., yoga, acupuncture, sophrology) did not differ significantly, suggesting that holistic approaches are increasingly adopted across cultures. Our findings support the need to tailor medical communication strategies for Asian patients living in Western countries. This includes recommending gentle formulations suited for sensitive skin, providing clear and reassuring explanations about potential side effects and their management, and leveraging trusted community-based channels (family, validated forums, patient associations) to improve treatment acceptance. A personalized approach that is sensitive to biological and cultural characteristics could enhance treatment adherence, patient satisfaction, and clinical outcomes.

Comparison table: Caucasians vs. Asia/Western

	CAUCASIAN (N=1366)	ASIA/WESTERN (N=103)	P-value
Oral medication	253 (18,52%)	19 (18,45%)	>0,999
Another non-medicinal oral treatment	37 (2,71%)	4 (3,88%)	0,526
A cream or ointment prescribed by a doctor	447 (32,72%)	34 (33,01%)	>0,999
Dietary supplements	118 (8,64%)	10 (9,71%)	0,716
Dermocosmetics prescribed by a doctor	103 (32,09%)	0 (0,0%)	0,035
One or more self-medicated dermocosmetics	321 (23,5%)	10 (9,71%)	0,002
Use of yoga	97 (33,92%)	12 (37,5%)	0,835
Use of meditation	86 (30,07%)	4 (12,5%)	0,039
Use of medicinal plants	72 (25,17%)	11 (34,38%)	0,29
Use of essential oils	122 (42,66%)	11 (34,38%)	0,477