

Scalp pain in women: the situation in the United States versus the rest of the world

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1 Rational

Although less commonly researched compared to other skin conditions, scalp pain stands as a crucial domain in dermatological investigation due to its substantial influence on quality of life.

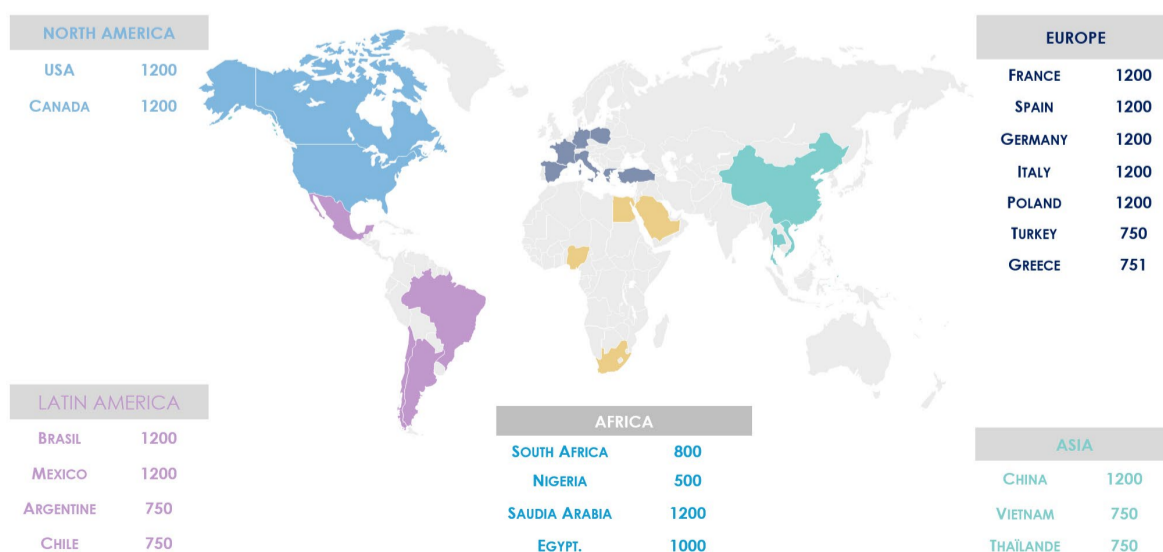
This international study seeks to investigate the prevalence of scalp pain in the American women's population (compared with the rest of the world) and its associated risk factors such as itching and burning sensations.

2 Methodology

To analyze the risk factors, we surveyed a representative sample (based on the quota method) of 20,000 women aged between 18 and 55 in 20 different countries (Latin America [LA] (n=3,900), North America [NA] (n=2,400), Europe [Eu] (n=7,500), Asia (n=2,700) and Africa (n=3,500)).

We asked these women about the presence of scalp pain, burning and pruritus. Sensitive skin was also assessed. Well-being was assessed by the WEMWBS questionnaire.

Multivariate logistic regression was performed to assess the relationship between the presence of SP and other unpleasant sensations such as pruritus and burning, also taking into account age, the presence of sensitive skin and geographical area. Statistical analysis was performed with EasyMedStat, and a p-value <0.05 was considered statistically significant.

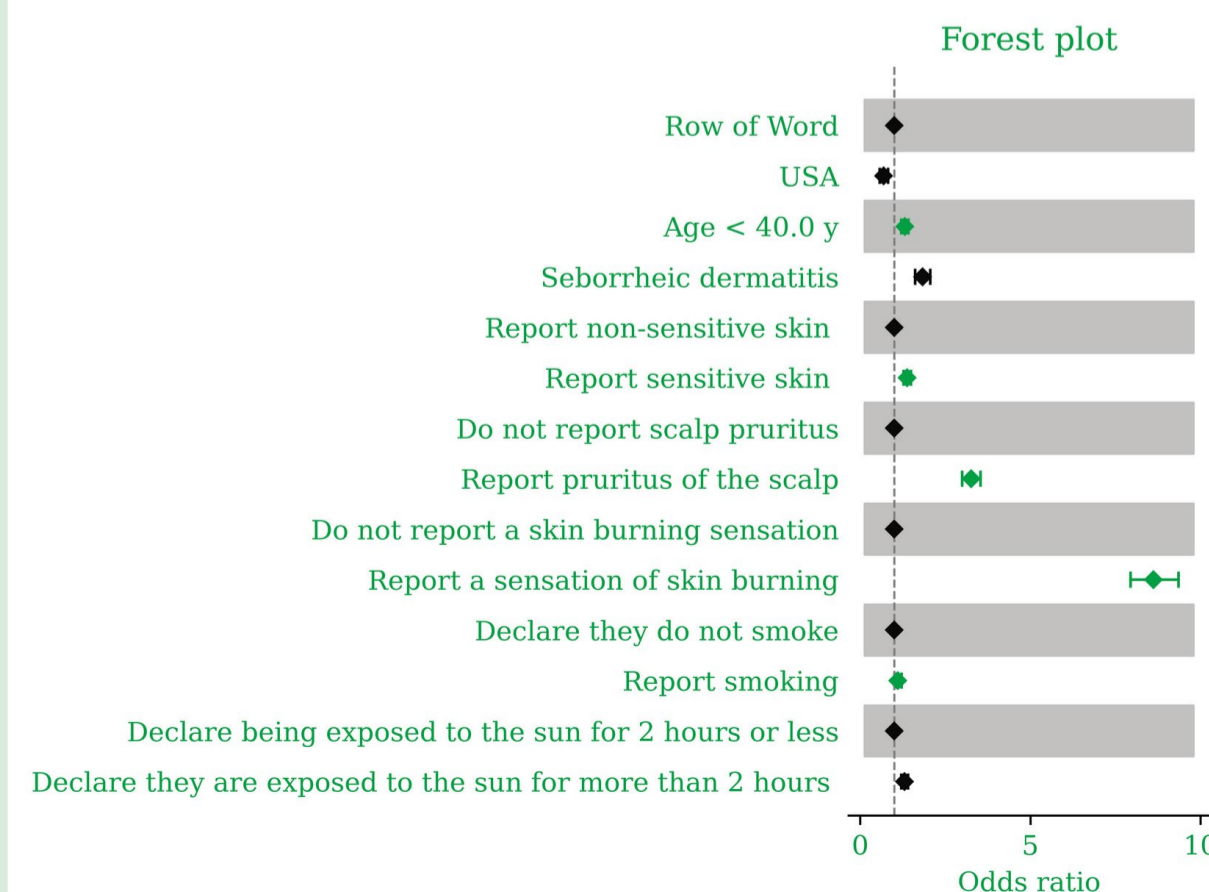


3 Results

A total of 1,200 WW were surveyed (18,801 in the rest of the world [RoW]). 9.5% of American women reported scalp pain. [The mean age was 34.52 (± 10.53) for women with SP and 37.55 (± 10.64) for American women without scalp pain (p<0.001).

Compared to the population without scalp pain, 57.7% of American women reporting scalp pain had irregular periods (vs. 33.6%, p<0.001). 76.9% and 66.2% had pruritus and scalp burn sensation respectively (vs. 33.4% and 6.1%, respectively, of American women not reporting scalp pain).

Among American women reporting scalp pain, 41% reported smoking (22.6%) and 55% reported sun exposure for more than 2 hours per week (vs. 45%). In multivariate analysis, compared with women from the rest of the world, American women (OR = 0.68, [0.57; 0.81], p < 0.0001), were associated with lower rates of scalp pain. In multivariate analysis, smoking (OR=1.11, [1.01; 1.22], p=0.0289), sun exposure of more than 2 h (OR=1.3, [1.21; 1.41], p < 0.0001), age under 40 years (OR=1.31, [1.21; 1.42], p < 0.0001), sensitive skin (OR=1.38, [1.28; 1.49], p < 0.0001), seborrheic dermatitis (OR=1.83, [1.62; 2.06], p < 0.0001), scalp pruritus (OR=3.26, [3.0; 3.54], p < 0.0001), or burning sensation (OR=8.62, [7.94; 9.35], p < 0.0001) were risk factors for reporting scalp pain.



3 Discussion

This international study sheds light on the prevalence of scalp pain in American women and its associated risk factors, such as itching and burning. The results show that 19.5% of American women report scalp pain, which is lower than in other parts of the world. However, there is a notable correlation between this pain and factors such as irregular menstrual cycles, with a significantly higher percentage of women experiencing scalp pain than those who don't. In addition, correlations were found between scalp pain and other unpleasant sensations such as itching and burning, as well as behaviors or conditions such as smoking and sun exposure. This study underscores the importance of considering lifestyle factors such as smoking and sun exposure in the treatment and prevention of scalp pain. It also calls for special attention to be paid to young women and those with sensitive skin, as they are more likely to develop this condition. These findings encourage further research to investigate the mechanisms underlying these associations and may influence future, more appropriate therapeutic approaches. Addressing pain and related symptoms could contribute to enhancing overall psychological health.

The Essentials

Although less commonly researched compared to other skin conditions, scalp pain [SPn] stands as a crucial domain in dermatological investigation due to its substantial influence on quality of life. Our study aimed to address the research gap and focuses on American women [AW] compared to the Rest of the World [RoW]. We surveyed a representative sample (constructed according to the quota method) of 20,000 women aged 18 to 55 in 20 different countries. 19.5% of AW reported scalp pain. The mean age was 34.5±10.5 for AW with SPn and 37.5±10.6 for AW NoSPn (p<0.001). Compared to the population NoSPn, 57.7% of AW reporting SPn had irregular periods [IP] (vs. 33.6%, p<0.001). 76.9% had pruritus and 66.2% scalp burn, (vs. 33.4% and 6.1%, respectively, of AW NoSPn). Among AW reporting SPn, 41% reported smoking (vs 22.6%) and 55% sun exposure for more than 2 hours-per-week (vs 45%). In multivariate analysis, and compared with women from the RoW, AW (OR = 0.68, p < 0.0001), were associated with lower rates of scalp pain. In multivariate analysis, smoking (OR=1.11, p=0.0289), sun exposure of more than 2 h (OR=1.3, p < 0.0001), age under 40 years (OR=1.31, p < 0.0001), sensitive skin (OR=1.38, p < 0.0001), seborrheic dermatitis (OR=1.83, p < 0.0001), scalp pruritus (OR=3.26, p < 0.0001), or burning sensation (OR=8.62, [p < 0.0001) were risk factors for reporting SPn. This study underscores the importance of considering lifestyle factors such as smoking and sun exposure in the treatment and prevention of scalp pain