

# Impact of feeling of stigmatization on the lives of adult patients with hand dermatitis

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## INTRODUCTION & OBJECTIVE

Chronic hand eczema (CHE) is an inflammatory dermatosis that results in a significant psychological burden similar in importance to atopic dermatitis, psoriasis, and asthma. People with CHE impaired experience social embarrassment and shame around the appearance of their hands resulting in a feeling of stigmatization (FS). There is little information about the importance and consequence of FS on daily life. The objective of this study was to investigate the prevalence and impact of CHE-associated FS on social, professional, and family life and to explore the impact of stigma on treatment adherence. There is little information about the importance and consequence of FS on daily life. The objective of this study was to investigate the prevalence and impact of CHE-associated FS on social, professional, and family life and to explore the impact of stigma on treatment adherence.

## MATERIAL & METHODS

Patients with HS were selected by completion of an online survey of the general population over 16 years of age in 20 countries in the world. Since the study used anonymised data and did not involve any clinical examination, institutional review board approvals were not required. HS was reported by the patients on the basis of a diagnosis by a doctor. The questionnaire gathered information about the patients' demographic and socio-demographic profiles. The binary outcome was derived from the initial four-point scale, where the participant was considered to have answered 'yes' if the answer given was 1 for 'very often' or a 2 for 'sometimes' and 'no' if the answer given was 3 for 'rarely' or a 4 for 'never' to questions regarding the perception of stigmatization. Patients were 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 vitiligo. A comparison of FS and patients without FS (non-FS) was used to evaluate predictors of FS among specifically: socio-demographic and clinical parameters; psychological impact on self-perception, relationships, daily life and social or professional life.

Adherence was assessed by the positive response to the question "Did you get tired of taking a treatment every day?". The patients in the 'visible' group showed HS on at least one visible part of the body (head, face, neck, arms or hands), and patients in the 'invisible' group had HS lesions on parts of the body which are usually not seen in public (abdomen, legs, feet, genitals). Descriptive analyses using absolute and percentage frequencies were performed. For constant variables such as age, mean and median and estimates of dispersion (standard deviation, range) were calculated. The test of significance was two-sided and established at 5% ( $P \leq 0.05$ ). Z-test and Pearson's Chi-squared were performed to compare subjects with reported FS and those with non-FS. The Z-test was used for percentage data and Pearson's Chi-squared for the variable 'location of residence' (Table 2). An alpha cut-off of  $P < 0.05$  was used for all significance tests.

## RESULTS

A population of 1736 ECM respondents was selected, including 843 (48.6%) males and 893 (51.4%) females respectively (mean age  $38.29 \pm 12.61$ , min 16-82 years). A total of 983 (56.6%) ECM respondents reported FS of which 713 (41,1%) felt ostracized or rejected by others, 680 (39,2%) felt looked at with disgust, 662 (38,1%) reported that people avoided touching them, and 638 (36,8%) reported that people avoided approaching them because of their HS. 753 ECM (43,4%) respondents were considered to have no FS. The FS population was on average younger than the non-FS population (mean age  $35.80 \pm 10.92$  years vs  $41.54 \pm 13.87$  years;  $P < 0.0001$ ). Gender (Men 60.1% vs 53.3%,  $p = 0.11$ ) was not predictive factors of FS. Signs/symptoms of HS such as burning sensations [45,40% vs 29,10%,  $p < 0,04$ ) and skin pain (43,80% vs 23.90%,  $p < 0,004$ ) were all significantly more frequent in patients with reported FS (Table 1). There were significant consequences for self-perception, relationships, daily life, sleep, and social and work life in subjects with reported FS (Table 2). Poor adherence to therapy was associated with feelings of stigma (76.8% vs. 43.4%,  $P < 0.001$ )

## DISCUSSION

This is the first study to establish the impact of FS, which affects 56.6% of patients with CHE. Our study established that FS was more frequent in young patients with signs/symptoms such as burning sensations and skin pain. Young adults with chronic diseases such as eczema are more vulnerable to negative psychosocial outcomes and are more likely to be bullied and to experience higher levels of anxiety, depression and suicidal ideation compared to their peers without chronic disease. Our study confirms that stigmatization in patients with CHE is associated with consequences in social interactions and dysfunction in interpersonal relationships but also in professional life. The place of the hands as a functional organ but also as a tool for communication and expression is fundamental. It is easy to understand that the stigma associated with CHE can be responsible not only for a physical and psycho-affective handicap but also for an important socio-economic repercussion by its repercussions on the activities of daily life but also on the socio-economic and professional life (alteration of social relations, absenteeism, necessity or not of a professional reconversion). In our study FS is associated with poor adherence to therapy, which can lead to a vicious cycle of mutually reinforcing negative conditions. Efforts to reduce FS in patients who live with CHE can include public education campaigns, increased access to healthcare and support services, and challenging stereotypes and prejudices through advocacy and activism. It is important to promote a message of empathy and understanding toward those affected by CHE, rather than fear and rejection.

Table1 :Signs and symptoms of ECM	Positive responses in FS n=983(%)		Positive responses in non-FS n=753(%)	
Itching	660	67,1%	515	68,4%
Prickles	374	38,0%	156	20,7%
Burning sensation	369	37,5%	125	16,6%
Tingling	358	36,4%	147	19,5%
Skin pain	393	40,0%	120	15,9%
None of these sensations	46	4,7%	141	18,7%