

Relationship between self-esteem and stigmatization in psoriasis patients

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Abstract

Introduction: Psoriasis is classified as a psychosomatic disease since its development and outcome may be modulated by various psychological factors. Due to the presence of clinical signs visible to others and poor social awareness of the disease, psoriasis patients are not infrequently classified as different or stigmatized, and their value as human beings tends to decrease.

Aim: To analyse the relationship between self-esteem and stigmatization in psoriasis patients.

Material and methods: The study included 120 patients with psoriasis vulgaris. The study participants completed Polish versions of the Rosenberg Self-Esteem Scale (RSES) and the 6-Item Stigmatization Scale developed by Evers *et al.*, as well as an original survey containing questions about their sociodemographic characteristics.

Results: Mean RSES score of the study participants was 24.1 points. Mean RSES score for female patients was nearly 2 points lower than the mean score for men. Analysis of Spearman's rho coefficients showed that the higher the self-esteem in the study participants the less often they considered themselves unattractive to others (0.23), less often believed that people gaze at their skin lesions (0.23) or avoid them because of their condition (0.38).

Conclusions: Our findings demonstrate clearly that both self-esteem and stigmatization are significant components of psoriasis' influence on the patient life. Psoriasis should not be considered merely as a somatic problem, but also as a significant psychological and social burden.

Key words: psoriasis, stigmatization, self-esteem.

Introduction

Psoriasis is a chronic, non-contagious, inflammatory disease of the skin, which affects up to 3% of the human population. Psoriasis is classified as a psychosomatic disease since its development and outcome may be modulated by various psychological factors, such as stress, sense of denial and depressed mood. All these factors may trigger the development of new disease foci or exacerbate already existing ones [1–3].

One consequence of psoriasis is its negative effect on the psychological sphere of the patient, self-esteem, and hence, quality of life. This effect is modulated not only by the topography of the lesions, stage of the disease, its duration and treatment but also by patient's psychological condition. The self-esteem of psoriasis patients may be influenced by their acceptance by close relatives,

interactions with the others, and personal or professional accomplishments [4].

Self-esteem is defined as one's attitude towards the self, in particular competencies and other socially valued traits. According to Rosenberg, at various stages of their lives, people may evaluate themselves positively or negatively and have different attitudes toward their self. According to that author, high self-esteem is one's belief that he/she is "good enough", valued human being, and others are friendly and do not constitute a threat. In turn, low self-esteem corresponds to dissatisfaction with one's self and its denial. Individuals with low self-esteem are more likely to be hurt and have a hostile attitude to the others and the world in general [5–7].

Psoriasis is considered a stigmatizing disease. Following the idea proposed by an American sociologist Ervin Goofman, Link and Phelan in their paper entitled *Con-*

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ceptualizing stigma [8] defined stigmatization as a set of interrelated elements, such as labelling, stereotyping, distinguishing between “us” and “them”, discrimination, loss of social status and emotional responses of both stigmatizing (anger, anxiety, mercy) and stigmatized ones (shame, embarrassment).

However, it should be remembered that stigmatization is particularly important for the structure of one’s self. Whenever a stigma has been imprinted on one’s self, such a person is no longer aware of his/her positive traits. As a result, the stigma becomes subjective and internalized, and one perceives himself/herself from a perspective of that label. Therefore, a person with low self-esteem is more likely to be socially denied and isolated. A stigmatized person will define himself/herself in terms of the stigmatization and treat himself/herself in accordance with the stigma [9, 10].

Aim

The aim of the study was to analyse the relationship between self-esteem and stigmatization in psoriasis patients.

Material and methods

The study included 120 patients diagnosed with plaque psoriasis (*psoriasis vulgaris*), among them 56 (46.7%) women and 64 (53.3%) men. The severity of psoriasis was assessed based on PASI scores. The scale is used for quantitative assessment of three clinical characteristics of psoriatic lesions: redness, thickness and scaling (scored from 0 to 4), and the area of skin involved (scored from 0 to 6). Only patients with plaque psoriasis and PASI scores ≤ 10 were qualified for the study. Other inclusion criteria were: duration of the disease > 2 years, age ≥ 18 years, lack of somatic and mental comorbidities, and lack of major stressogenic events (e.g. job loss, divorce, funeral) during three months preceding the study. Descriptive statistics for patient age, duration of the disease and age at the diagnosis are presented in Table 1.

The study participants completed Polish versions of the Rosenberg Self-Esteem Scale (RSES) [6] and the 6-Item Stigmatization Scale developed by Evers *et al.* [11], as well as an original survey containing questions about their sociodemographic characteristics (sex, age, place of residence, marital status).

RSES is an instrument for the evaluation of general self-esteem, i.e. a relatively stable disposition defined as a subjective (positive or negative) attitude to one’s self [6]. The scale consists of 10 statements describing respondent’s attitude towards his/her self, each scored on a 4-item scale, from “strongly agree” (1 point), to “agree” (2 points), “disagree” (3 points) and “strongly disagree” (4 points). The overall score is calculated as the sum of scores for individual statements, after inverting the scores for items 1, 2, 4, 6 and 7. The crude score can range from 10 to 40 points. To verify whether the crude score corresponds to low or high self-esteem, it should be converted to sten score; the higher the latter, the higher one’s self-esteem.

The 6-Item Stigmatization Scale consists of six single choice questions, each with four possible responses scored from 0 to 3 points: “not at all” (0 points), “sometimes” (1 point), “very often” (2 points) and “always” (3 points). The overall score can range from 0 points (complete lack of stigmatization) to 18 points (maximum sense of stigmatization) [11–14].

The protocol of the study was approved by the Local Bioethics Committee at the Medical University of Białystok.

Statistical analysis

The results were subjected to statistical analysis with SPSS 17 package. The following tests were used during the analysis:

- Spearman’s rank correlation, a non-parametric equivalent of the parametric Pearson’s *r*-correlation. During the analysis of Spearman’s correlation, individual results are assigned ranks. This allows for the analysis of relationships between variables expressed on various scales regardless of their distribution. Moreover, due to assigning the ranks, Spearman’s rank correlation coefficients are less prone to the confounding effects of outliers.
- Mann-Whitney *U*-test, to compare two independent groups. A primary advantage of this test stems from the fact that it analyses variables that are at least ordinal (although they may be also quantitative). Further, Mann-Whitney *U*-test does not require equal sizes of the groups, normal distribution and homogeneous variances. All these characteristics make it a widely applied statistical test.

Table 1. Detailed descriptive statistics of patients’ age

Patient characteristic	Mean	Median	Minimum	Maximum	SD
Age	44.3	41.0	18.0	72.0	13.0
Duration of the disease	19.6	19.0	2.0	53.0	11.6
Age at the diagnosis	21.0	19.0	8.0	63.0	11.6
PASI	5.95	6.0	0	10	2.96

SD – standard deviation.

– Chi-squared (χ^2) test, to analyse relationships between pairs of nominal variables. The test is based on the comparison of observed values (empirical values obtained during the study) with the expected values (i.e. hypothetical values describing a situation when two variables are completely unrelated). A substantial (statistically significant) difference between the observed and expected values suggests that there is a relationship between the two analysed variables.

The result of each test was expressed as its significance level $p < 0.05$, under the assumption that each statistically significant relationship found in the analysed sample could be generalized onto the whole population of psoriasis patients.

Results

Self-esteem evaluated with the RSES

Mean RSES score of the study participants was 24.1 points (Table 2). Mean score for women was 24.59 points (Me = 24; SD = 3.62; min. = 18; max. = 26), and mean

score for men was 26.48 points (Me = 26; SD = 3.38; min. = 24; max. = 39).

When the crude results were converted to sten scores, the majority of female respondents (41.1%) scored 5 or 6, which corresponded to moderate self-esteem. No predominant self-esteem sten score could be identified among men due to a nearly even distribution of their crude results between various sten categories: 1 or 2 sten – 7.8%; 3 or 4 sten – 23.4%; 5 or 6 sten – 26.6%; 7 or 8 sten – 28.1%; 9 or 10 sten – 14.1%.

Analysis of the stigmatization level

Analysis of the results obtained with the 6-Item Stigmatization Scale demonstrated that responding to the survey questions, most respondents chose answers “always” and “very often”. Mean score for the study group was 9.85 points. Based on Spearman’s rho values we analysed a relationship between age of the respondents and their stigmatization level. The analysis of correlation showed that the older the respondents, the less often they experienced stigmatization (Table 3).

Table 2. Rosenberg Self-Esteem Scale

Scale RSES	Strongly agree n/%	Agree n/%	Disagree n/%	Strongly disagree n/%	Mean ± SD [points]
I feel that I am a person of worth, at least on an equal plane with others	38/31.7	36/30	32/26.7	14/11.7	2.18 ±1.01
I feel that I have a number of good qualities	35/29.2	28/23.3	36/30.0	21/17.5	2.35 ±1.07
All in all, I am inclined to feel that I am a failure	22/18.3	39/32.5	32/26.7	27/22.5	2.45 ±1.03
I am able to do things as well as most other people	41/34.2	31/25.8	29/24.2	19/15.8	2.22 ±1.09
I feel I do not have much to be proud of	28/23.3	35/29.2	34/28.3	23/19.2	2.43 ±1.05
I take a positive attitude toward myself	25/20.8	22/18.3	55/45.8	18/15.0	2.55 ±0.99
On the whole, I am satisfied with myself	32/26.7	26/21.7	38/31.7	24/20.0	2.45 ±1.09
I wish I could have more respect for myself	30/25.0	29/24.2	36/30.0	25/20.8	2.47 ±1.08
I certainly feel useless at times	34/28.3	37/30.8	28/23.3	21/17.5	2.33 ±1.07
At times I think I am no good at all	21/17.5	37/30.8	28/23.3	34/28.3	2.63 ±1.08

Table 3. 6-Item Stigmatization Scale and Spearman’s rho correlation coefficients between the age of the study participants

6-Item Stigmatization Scale	Always n/%	Very often n/%	Sometimes n/%	Not at all n/%	Mean ± SD [points]	Age (rho)
Other people sometimes make annoying comments about my skin disease	11/9.2	36/30.0	54/45.0	19/15.8	1.33 ±0.84	-0.15
Other people think that my skin disease is contagious	19/15.8	44/36.7	41/34.2	16/13.3	1.58 ±0.90	-0.19
Others are not attracted to me due to my skin disease	21/17.5	48/40.0	42/35.0	9/7.5	1.68 ±0.85	0.11
I think that others stare at my skin disease	30/25.0	46/38.3	34/28.3	10/8.3	1.80 ±0.91	0.07
Other people avoid me due to my skin disease	14/11.7	47/39.2	35/29.2	24/20.0	1.43 ±0.94	-0.18
Others feel uncomfortable touching me due to my skin disease	54/45.0	28/23.3	27/22.5	11/9.2	2.04 ±1.02	-0.26

Table 4. Stigmatization level according to respondent sex

6-Item Stigmatization Scale	Sex	Mean	Mann-Whitney U-test	P-value
Other people sometimes make annoying comments about my skin disease	Women	58.93	0.49	0.623
	Men	61.88		
Other people think that my skin disease is contagious	Women	61.20	0.22	0.826
	Men	59.89		
Others are not attracted to me due to my skin disease	Women	53.97	2.03	0.042
	Men	66.21		
I think that others stare at my skin disease	Women	63.17	0.82	0.411
	Men	58.16		
Other people avoid me due to my skin disease	Women	53.31	2.21	0.027
	Men	66.79		
Others feel uncomfortable touching me due to my skin disease	Women	60.51	0.003	0.998
	Men	60.49		

P-value – significance level.

Table 5. Spearman's rho correlation coefficients between self-esteem and stigmatization scores

Stigmatization	Self-esteem (rho)
Other people sometimes make annoying comments about my skin disease	0.10
Other people think that my skin disease is contagious	0.01
Others are not attracted to me due to my skin disease	0.23
I think that others stare at my skin disease	0.23
Other people avoid me due to my skin disease	0.38
Others feel uncomfortable touching me due to my skin disease	0.06

Then, we verified if women and men differed in terms of their responses to questions about stigmatization. The analysis with Mann-Whitney *U*-test demonstrated that men less often than women felt unattractive to others and less often believed that people avoid them because of their skin condition (Table 4).

Analysis of the relationship between self-esteem and stigmatization

Analysis of Spearman's rho coefficients showed that the higher the self-esteem in the study participants the less often they considered themselves unattractive to others, less often believed that people gaze at their skin lesions or avoid them because of their condition (Table 5).

Discussion

In the case of psoriasis, patient's mentality can be both a cause of the disease and its consequence, con-

tributing to a depressed mood, lower self-acceptance and self-worth, and underestimation of self-esteem [15–18].

Due to the presence of clinical signs visible to others and poor social awareness of the disease, psoriasis patients are not infrequently classified as different or stigmatized, and their value as human beings tends to decrease. The stigmatization may manifest as harsh statements, comments and hostile attitudes towards the diseased person. However, also psoriasis patients may stigmatize themselves discrediting their self-image and believing that the same opinion is also shared by the others [19, 20].

Krueger *et al.* emphasized that self-esteem may be a significant determinant of stigmatization [21]. Self-esteem reflects both one's perception by the others (physical attractiveness, interpersonal skills) and the way he/she perceives himself/herself (self-image) [21].

Our study with the RSES scale demonstrated that women had slightly lower self-esteem scores than men (24.59 points vs. 26.48 points). Up to 64.3% of women and 57.8% of men presented with very low, low or moderate self-esteem. However, respondents' sex did not exert a significant effect on the distribution of self-esteem scores ($p = 0.345$).

Aydin *et al.* demonstrated that psoriasis patients had lower self-esteem than healthy persons, but did not find a link between duration of the disease and self-esteem scores. According to those authors, management of psoriasis patients should also be adjusted for their self-esteem or quality of life as only such attitude may increase the likelihood of better treatment outcome [22].

A significant relationship between sex and self-esteem was previously reported by Kouris *et al.* [23]. According to those authors, lower self-esteem in women might result from the fact that they pay more attention

to their image than men. In this context, the results of our study should not be considered surprising.

Other authors showed that psoriasis exerted a significant effect on patient self-image, which might contribute to lower self-esteem, and hence affect the quality of life, cause sexual problems and anxiety. Up to 89% of the patients participating in previous studies felt shame and embarrassment, 58% experienced anxiety, 42% lacked self-confidence, and 24% had a history of a depressive episode [24–26].

According to Nazik *et al.* [27], self-esteem correlated with the severity of psoriasis (PASI). In this study, we surveyed patients who were homogenous in terms of their PASI scores (≤ 10), and thus, we cannot compare our findings with the results published by other authors.

Stigmatization is a multistage process during which a person is assigned an unacceptable trait, and as a result, is considered strange, different or imperfect. The assigned unacceptable trait predominates observer's way of thinking, outnumbering other traits and making the stigmatized person perceived primarily from the perspective of his/her "defect". The stigma of the disease contributes to social exclusion and isolation, and hence, diminishes one's opportunities, chances for self-fulfilment, and eventually results in the loss of social status. Stigmatization may also negatively affect one's self-esteem, the sense of self-efficacy, psychological well-being and quality of life. However, some authors consider self-stigmatization as an opportunity to gain or regain self-control over one's life and treatment, which is associated with the improvement of self-esteem and the sense of self-satisfaction [28].

The results of our study conducted with the 6-Item Stigmatization Scale confirmed that psoriasis patients experienced negative reactions from others, which unequivocally implies that they were socially stigmatized. Moreover, psoriasis turned out to be the skin disease which had been most often analysed in the context of its effect on the stigmatization level [29].

The study conducted by Hrehorów *et al.* [30], with the same 6-Item Stigmatization Scale, demonstrated that only 9.8% of the respondents did not have the sense of stigmatization. According to Dimitrov *et al.*, only 12% of participants of their study did not feel stigmatized at all, and another 16.7% presented with a minimum stigmatization level [31]. When asked about their most serious concerns, patients participating in the two studies mentioned above pointed to comments from the others and a common social belief that psoriasis is a contagious disease [30, 31]. Also, in our study, psoriasis patients identified those problems as important, but their most serious concern was verbalized in the statement "people who touch me feel discomfort because of my skin lesions", chosen by 45% of the respondents.

In turn, Dimitrov *et al.* identified location of the lesions (face) and itchiness as the strongest determinants of stigmatization [31].

Planning this study, we hypothesized that age and sex might determine a tendency to lower self-esteem and stigmatization. Indeed, the study confirmed that the older the respondents, the less often (in their subjective opinion) they heard harsh comments about their ailments, the less frequently they had an impression that their disease is considered a contagious condition or that others feel discomfort touching their skin lesions, and the less often they were avoided because of their illness. Our findings are consistent with the results published by Lu *et al.* [12] who found a higher degree of stigmatization in younger persons, with either psoriasis or atopic dermatitis. Similar observations regarding a link between age and stigmatization have also been reported by other authors [32, 33].

Our observations regarding a relationship between stigmatization and sex are consistent with the results reported by Schmid-Ott *et al.* [34, 35] and Ginsburg and Link [13], who demonstrated that women had a stronger sense of stigmatization than men. The differences in the degree of stigmatization in women and men with psoriasis may result from their different perception of their body image and different satisfaction with the latter. This hypothesis is also supported by the results published by Smith *et al.*, according to whom women pay more attention to their image than men, and are generally less satisfied in this matter [36]. Lower self-image scores in women in whom the severity of skin lesions is the same as in men may be a cause of the stronger sense of stigmatization and greater impairment of social functioning, which is eventually reflected by the worse quality of life [36].

Despite a growing number of published papers about stigmatization in dermatological patients [29], still little is known about the link between self-esteem and the sense of being stigmatized. Stigmatized persons perceive themselves in the context of their illness which makes them distinct from others. Therefore, their self-image may be distorted, underestimated and negatively affect their self-esteem. Identification with such distorted self-image causes social withdrawal, self-isolation, or promotes a demanding attitude towards healthy persons. As a result of such attitude, individuals with low self-esteem are less socially accepted, and in effect, may feel stigmatized [10].

Conclusions

Our findings demonstrate clearly that both self-esteem and stigmatization are significant components of psoriasis' influence on the patient life. Psoriasis should not be considered merely as a somatic problem, but also as a significant psychological and social burden. Thus, aside from the choice of an effective anti-psoriatic treatment, also the psychological well-being of the patients should be a priority. Only a holistic approach may improve the quality of life in psoriasis patients, boost their

acceptance of the illness and its consequences, and make them feel fully valuable persons, free from limitations imposed by their external appearance.

Conflict of interest

The authors declare no conflict of interest.

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