

Body image and depressive symptoms in person suffering from psoriasis

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Summary

Aim. The purpose of the research study was specifying the relationship between severity of psoriasis and body image and self-reported depressive symptoms, taking into account the differences between the sexes.

Methods. The research study involved 54 psoriasis patients, including 30 men and 24 women aged from 19 to 82. The level of depressive symptoms was assessed using the Beck Depression Inventory, and body image – using the Multidimensional Body-Self Relations Questionnaire. The disease severity was objectively assessed using the Psoriasis Area and Severity Index.

Results. The female psoriasis patients were more critical of their appearance than the men ($p < 0.01$), and at the same time they were more appearance-oriented ($p < 0.05$). The men rated their fitness level ($p < 0.01$) and care for good physical condition ($p < 0.01$) higher than the women. The women showed less satisfaction with their body parts than the men ($p < 0.01$) and more fear of obesity ($p < 0.05$) and overweight ($p < 0.05$). No statistically significant differences were found between men and women with regard to general evaluation of body image and self-reported depressive symptoms. Moreover, it was established that in the case of both women and men there was a correlation between lowered mood and psoriasis severity ($R = 0.416$), as well as body image ($R = -0.282$). In relation to individual scales, there was a statistically significant relationship between self-reported depressive symptoms and appearance evaluation ($R = -0.519$), health evaluation ($R = -0.585$), satisfaction with body parts ($R = -0.462$), as well as appearance orientation ($R = 0.425$).

Conclusions. Distortion of body image is correlated with self-reported depressive symptoms in psoriasis patients.

Key words: body image perception, psoriasis, depression

Intorduction

The importance of physical appearance and attitude to one's body are the key dimensions of human mental condition. Corporality, and in particular the skin appearance, is associated with adaptive mental functioning and well-being, playing an important role in the process of body image perception, an adequate self-assessment, building one's self-esteem, establishing and maintaining satisfactory relations with others [1–3]. Body image is construed as multidimensional experiencing of corporality, including thoughts, emotions, feelings and behaviors related to physical appearance, self-perception and attitude to body [4, 5].

The image is subject to change when a patient suffers from any kind of dermatosis, which consequently leads to decreased life quality perceived by the patient, accompanied by anxiety and depressive disorders, social phobias and other adaptation problems [6–8]. It is estimated that mental disorders occur among 30–60% patients with dermal diseases. The most common mental illness include depressive disorders and also suicidal thoughts and tendencies. Depression affects from 24% to 57% of psoriasis patients (depending on the research), out of whom 5% attempt to commit a suicide [9, 10]. The relation between depression and psoriasis, similarly as its relation with stress, may be bidirectional, i.e., depression may be primary or secondary to psoriasis [6].

Psoriasis may develop at any age, though two peak periods have been identified for the disease onset: the first falls between 20 and 30 years of age and the other – over 50 years of age. Psoriasis is a chronic disease with periodic remissions when the skin lesions alleviate or disappear, however, the disease symptoms tend to recur. In 1/3 of cases the disease takes an acute form and is more severe [11].

The purpose of the research study was to specify the relationship between psoriasis lesions exacerbation and body image and self-reported depressive symptoms, taking into account the gender factor.

Methods

With a consent of the Bioethics Committee at the Poznan University of Medical Sciences (Resolution no. 230/14), a research study was conducted among patients of the Outpatient Clinic of the Department of Dermatology and hospitalized in the Department of Dermatology and Venereology of the Heliodor Świącicki Clinical Hospital at the Poznan University of Medical Sciences. The research study involved 55 psoriasis patients, including 30 men and 25 women aged between 19 and 82 years. The patients' rights to confidentiality and freedom of choice were observed. The statistical analysis involving results of 54 persons (29 men and 25 women) was carried out by means of IBM SPSS Statistics 21 software. To assess the normality of distribution of the analyzed variables, the Shapiro-Wilk test was applied, to assess significance of differences between the groups: the Mann-Whitney test was used when the results distribution was non-compliant with the normal distribution, and the Student's *t*-test when the distributions were compliant. In order to specify the strength of correlation between the variables, Spearman's rank correlation coefficient was applied.

Self-reported depressive symptoms were examined using the Beck Depression Inventory (BDI). The inventory is composed of 21 questions, assessed using a 4-grade scale. Answers score from 0 to 3 points and they refer to symptoms experienced in the 2–4 weeks prior to the examination.

Body image assessment was estimated using the Multidimensional Body-Self Relations Questionnaire (MBSRQ) by Thomas Cash (2004), adapted by M. Topór, D. Matkowską, K. Schier, and M. Rzeszutek [12]. The MBSRQ contains the following subscales: Appearance Evaluation, Appearance Orientation, Fitness Evaluation, Fitness Orientation, Health Evaluation, Health Orientation, Illness Orientation, Body Areas Satisfaction, Overweight Preoccupation, and Self-classified Weight. The questionnaire includes 69 items evaluated using a Likert 5-grade scale (from 1 – “never”, to 5 – “very often”).

Severity of the disease was assessed using the Psoriasis Area and Severity Index (PASI), which allows to assess the severity of the disease taking into consideration the size of skin lesions for particular parts of the body.

Results

It was found that exacerbation of psoriasis lesions was greater in the male group ($p < 0.05$). However, no statistically relevant differences were found between men and women with regard to self-reported depressive symptoms and the general evaluation of body image, even though the differences were revealed in the individual subscales. This is because the women tended to rate their appearance lower than the men ($p < 0.01$), and at the same time they were more appearance-oriented than men ($p < 0.05$), which is indicative of attaching more importance to one’s image and caring for one’s looks. The men rated their fitness level ($p < 0.01$) and care for good physical condition ($p < 0.01$) higher than the women. The women showed less satisfaction with and acceptance of their body parts than the men ($p < 0.01$), they were more afraid of obesity ($p < 0.05$) and they were stricter in self-assessment in terms of overweight ($p < 0.05$) (Table 1).

Table 1. Comparison of the severity of psoriasis, levels of self-reported depressive symptoms, constituents of body image and total body image in men and women

Variable	Gender	N	M	Me	SD	p
Psoriasis severity	F	25	7.10	3.50	7.64	0.0150*
	M	29	14.69	13.40	11.05	
Depressive disorders	F	25	13.92	11.00	10.87	0.0926
	M	29	9.66	8.00	8.28	
Appearance Evaluation	F	25	2.93	2.86	0.78	0.0046**
	M	29	3.54	3.57	0.65	
Appearance Orientation	F	25	3.81	3.75	0.51	0.0117*
	M	29	3.46	3.42	0.53	

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Fitness Evaluation	F	25	2.85	3.00	0.87	0.0032**
	M	29	3.60	3.67	0.79	
Fitness Orientation	F	25	2.75	2.62	0.63	0.0018**
	M	29	3.27	3.15	0.72	
Health Evaluation	F	25	2.99	3.00	0.62	0.1276
	M	29	3.28	3.50	0.73	
Health Orientation	F	25	3.58	3.63	0.68	0.5018
	M	29	3.41	3.38	0.63	
Illness Orientation	F	25	3.37	3.40	0.65	0.3888
	M	29	3.54	3.60	0.71	
Body Areas Satisfaction	F	25	3.10	3.11	0.56	0.0008**
	M	29	3.70	3.67	0.54	
Overweight Preoccupation	F	25	2.81	3.00	1.00	0.0454*
	M	29	2.28	2.25	0.88	
Self-classified Weight	F	25	3.58	3.50	0.80	0.0321*
	M	29	3.07	3.00	0.81	
Total Body Image	F	25	3.18	3.20	0.27	0.2009
	M	29	3.31	3.26	0.34	

Source: own study. * $p < 0.05$; ** $p < 0.01$

It turned out that, regardless of gender, there was a very weak and irrelevant positive relationship ($R = 0.055$) between psoriasis severity and body image; a moderate positive relationship ($R = 0.416$) between psoriasis severity and self-reported depressive symptoms; and a weak negative relationship ($R = -0.282$) between body image and self-reported depressive symptoms. As for the individual subscales, quite strong negative relationships were found between self-reported depressive symptoms and appearance evaluation ($R = -0.519$), health evaluation ($R = -0.585$) and body areas satisfaction ($R = -0.462$), as well as a moderate positive correlation with appearance orientation ($R = 0.425$).

Moreover, it was established that in the case of both women and men there was an equally strong positive relationship between psoriasis severity and self-reported depressive symptoms (respectively: $R = 0.524$; $R = 0.535$) and a moderate positive relationship between self-reported depressive symptoms and appearance orientation (respectively: $R = 0.402$; $R = 0.418$); strong (women) and moderate (men) relationship between self-reported depressive symptoms and appearance evaluation (respectively: $R = -0.546$; $R = -0.398$) and a strong correlation with health evaluation (respectively: $R = -0.498$; $R = -0.572$) (Table 2 and 3).

Table 2. Correlations between psoriasis severity, levels of self-reported depressive symptoms, constituents of body image and total body image found in women

Variable	R (psoriasis lesions exacerbation)	R (depressive disorders exacerbation)
Depressive Disorders	0.524	
Appearance Evaluation	-0.278	-0.546
Appearance Orientation	0.173	0.402
Fitness Evaluation	0.158	-0.129
Fitness Orientation	0.140	-0.002
Health Evaluation	0.007	-0.498
Health Orientation	0.311	0.079
Illness Orientation	0.217	0.330
Body Areas Satisfaction	-0.225	-0.394
Overweight Preoccupation	0.295	0.121
Self-classified Weight	-0.038	-0.025
Total Appearance Evaluation	0.110	-0.277

Source: own study. Strong and moderate correlations are marked in bold.

Table 3. Correlations between psoriasis severity, levels of self-reported depressive symptoms, constituents of body image and total body image found in men

Variable	R (psoriasis lesions)	R (depressive disorders exacerbation)
Depressive Disorders	0.535	
Appearance Evaluation	-0.304	-0.398
Appearance Orientation	0.406	0.418
Fitness Evaluation	-0.147	-0.170
Fitness Orientation	-0.264	-0.347
Health Evaluation	-0.335	-0.572
Health Orientation	0.098	-0.065
Illness Orientation	0.099	0.232
Body Areas Satisfaction	-0.127	-0.343
Overweight Preoccupation	0.223	0.143
Self-classified Weight	-0.162	0.043
Total Appearance Evaluation	-0.083	-0.180

Source: own study. Strong and moderate correlations are marked in bold.

Discussion

Distortion of body image perception in psoriasis patients and relating those changes to occurrence of self-reported depressive symptoms have so far been subject of few studies. Sandra Leichtman, Joseph W. Burnett and Harry M. Robinson [13] conducted the first controlled research study regarding the impact of psoriasis lesions on body image perception, and they found significant differences between patients suffering from various severity of psoriasis. The research described in the article did not lead to the same conclusion, as it found out that the relationship between psoriasis severity and body image was irrelevant and that it was not gender-dependent.

It was also found that increased severity of psoriasis is linked to depressive symptoms among both women and men [1, 14–16]. This finding is compliant with the research results concerning the relationship between psoriasis-related skin lesions and the occurrence of typically depressive symptoms such as negative self-image due to deteriorated health, unfavorable appearance and lack of satisfaction with appearance of individual body areas. The symptoms often lead to sexual inhibitions and limiting physical activity, accompanied by the tendency to body covering and social isolation [12, 17].

Moreover, it was found that regardless of the patient's gender, there was a negative relationship between body image and self-reported depressive symptoms, and simultaneously quite strong negative relationships were found with regard to individual constituents of body image. This means that as appearance and health are evaluated lower, and as satisfaction with appearance of individual body areas decreases, the risk of depressive disorders increases. Moreover, a moderate positive correlation with appearance orientation was found, which means that the increase in preoccupation with one's appearance, probably due to the increased psoriasis severity, may be associated with depressive disorders occurrence.

Acceptance of and satisfaction with one's body and its positive image are associated with adequate self-esteem, self-confidence and feeling of personal happiness [5]. Dissatisfaction with one's body appearance may lead to negative mental conditions and distort its perception. Since psoriasis skin lesions are usually visible, they result in negative mental consequences even if they do not contribute to creating a distorted body image held by the patient. The research study has clearly shown that severity of psoriasis lesions does not necessarily further distort the body image that is already unfavorable, even though it leads to depressive disorders in both women and men. In this case we observe a specific vicious circle: the more or less consciously unaccepted body image triggers and/or enhances mental disorders of depressive nature, and these in turn contribute to exacerbation of the disease symptoms [17]. Therefore, in the case of the subjects of the research study, as their evaluations of appearance, health status and satisfaction with the appearance of the body areas affected by the disease become less favorable, the risk of depressive disorders increases. These findings are relevant for both dermatologists and psychotherapists, as they indicate the therapeutic value of actions focused on changing the psoriasis patients' emotional attitude to the currently observed and evaluated skin lesions.

Conclusions

1. Distortion of the body image is associated with the occurrence of depressive disorders among people with psoriasis.
2. Women and men do not differ in the general assessment of the body image and self-reported depressive disorders.

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