Feelings of stigmatization and depressive symptoms in psoriasis patients

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Summary

Aim. The objective of the study was to show the correlation between the feelings of stigmatization and depressive symptoms in psoriasis patients. The study has considered severity of feelings of stigmatization and depressive symptoms, as well as factors such as gender and skin lesions visibility.

Methods. The study involved 54 adult subjects suffering from psoriasis – 26 women and 28 men. The patients filled in the 33-item Feelings of Stigmatization Questionnaire and the Beck Depression Inventory. Moreover, the subjects were asked to mark the location of their psoriatic lesions on a schematic drawing.

Results. A correlation was found between feelings of stigmatization and depressive symptoms in the psoriasis patients. No differences between women and men were found with regard to depressive symptoms and feelings of stigmatization (except for the secretiveness aspect). It was found that location of skin lesions did not have an effect on occurrence of depressive symptoms and feelings of stigmatization (except for the shame and guilt aspect).

Conclusions. It is still necessary to change the public attitude to patients with psoriasis. It is also very important to provide the patients with psychotherapeutic support aimed at enhancing their self-acceptance in order to overcome any feelings of stigmatization and to prevent them from depression.

Key words: psoriasis, feelings of stigmatization, depressive symptoms

* All the authors contributed equally to this paper.
Introduction

Psoriasis is the most frequently observed skin disease, of chronic and recurrent nature. It is rarely life-threatening, although it may lead to motor disability (psoriatic arthritis), and as a result of a mental burden associated with its external symptoms, the disease may cause deterioration of life quality [1].

Causes of psoriasis still remain unknown. They are frequently attributed to a genetic predisposition. The first occurrence of psoriasis, and subsequently its recurrence, is most often triggered by factors such as bacteria, virus or parasite infections, hormonal disorders and fluctuations, medication, and also stress and mental tension [1]. Research results indicate that development of psoriatic lesions is very often related to the mental state of the patient [2, 3]. Also, the patients themselves identify stress as one of the factors that exacerbate the disease [4]. It was established that 60% of psoriasis patients identified stress as the cause of psoriasis development [5]. Due to psoriasis, 89% of the patients felt ashamed and embarrassed, 58% felt apprehensive, 42% showed lack of self-confidence, and 24% experienced a depressive episode [6].

Exacerbation of skin lesions among others preceded by experiencing a severe stress or mood disorders may indicate a relation between psoriasis and psychosomatic diseases. The somatopsychic origin of psoriasis is in turn indicated by the fact that severe stress and depressed mood resulting from experiencing the disease are major contributors to its recurrence. Therefore, patients’ mental state may be the cause of the disease as well as its effect [7].

The mutual feedback between stress and psoriasis symptoms is best described by the biopsychosocial model [8], which posits that psoriasis is a result of interactions between physiological processes, mental states and social situations, operating on the “vicious-circle” principle. Psoriasis symptoms cause depressed mood, anxiety and fear, which have an adverse effect on the persons’ self-acceptance, self-assessment and self-esteem. This in turn results in social anxiety leading to limitation or abandonment of social – also sexual – contacts. Solitude and/or isolation re-intensify anxiety and fear, which leads to further deterioration of the skin condition, and the depressed mood, anxiety and fear exacerbate even more. This situation is further aggravated by the chronic nature of psoriasis, which stigmatizes the patients and hinders their adaptation to the disease.

Skin is the most visible organ, particularly in the head, neck and hands areas, so any lesions in such places may be a source of a severe stigma [8], reinforced by any negative reactions from the social environment. Feelings of stigmatization are experienced by psoriasis patients especially in sexual contacts, as body deformations may cause shame, thus leading to the feeling of self-consciousness and sexual problems [9]. Moreover, psoriasis patients stigmatize themselves, e.g., by feeling aversion to their own physical appearance and believing that others perceive them in a similar manner [10–12]. Stigmatizing events may lead to developing an anxiety mechanism which refers to a mental representation of self and the environment, organizing the way of assimilating any information. Information is scanned in search for threats related to other people’s evaluation and reaction to the skin lesions. Thus, psoriasis patients may
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Develop excessive “vulnerability to being rejected” which is manifested by a tendency to interpret even neutral events as stigmatizing [10, 12, 13]. Exposure to continuous stress associated with feelings of stigmatization, disapproval of one’s external appearance as well as with the chronic nature of the disease results in a considerable decrease in the patient’s life quality and contributes to mood disorders [14]. Research studies have proved that depression symptoms occur more often in psoriasis patients than in the general population [15], what is more, they occur more often compared to other dermatological patients [16]. The research studies conducted in Poland using the Beck Depression Inventory found that 28.12% of the patients manifested depressive symptoms [17]. It was also found that the patients who felt stigmatized in social situations showed more exacerbated depressive symptoms than the patients who did not feel stigmatized [18].

Therefore, it was decided to find out: 1) whether the female psoriasis patients feel stigmatized by the illness to a greater extent that the male ones; 2) whether there is a correlation between feelings of stigmatization and depressive symptoms in psoriasis patients; 3) whether the skin lesion location has an impact on feelings of stigmatization and incidence of depressive symptoms.

Material

The study involved 54 patients (26 women and 28 men) diagnosed with psoriasis, who had been treated (data indicative) in the Dermatological Outpatient Clinic of the University Hospital and in the Dermatology Ward of the Poznan University of Medical Sciences. The study was conducted in 2015, with a consent granted by the Bioethical Committee of the Poznan University of Medical Sciences (Resolution no. 192/15).

Method

To survey the psoriasis patients, the Feelings of Stigmatization Questionnaire was applied [19]. The questionnaire was developed on the basis of the English original [20]. The tool consists of 33 single choice questions, scored from 0 to 5. The individual items cover 6 aspects of stigmatization: feeling of being rejected, feeling of being worse than others, vulnerability to others’ opinions, guilt and shame, positive attitude, and secretiveness. Stigmatization feeling intensity ranges from 0 to 165 points [19, 20].

Also, the Beck Depression Inventory was applied to measure the intensity of depressive symptoms. The scale consists of 21 single choice questions, scored from 0 to 3. Depressive symptoms intensity ranges from 0 to 63 points [21]. Moreover, the subjects were asked to mark the location of their psoriatic lesions on a schematic drawing.

Consistency with normal distribution was checked with the Shapiro-Wilk test. For most of the parameters the test did not show consistency with the Gaussian distribution curve, therefore nonparametric tests were applied in further analyses. Results describing the intensity of depressive symptoms, stigmatization and its constituents were compared (between women and men and with regard to visibility of psoriatic lesions) using the nonparametric Mann-Whitney test for unrelated variables. The correlation
coefficient between feelings of stigmatization and depressive symptoms was computed using Spearman’s rank correlation coefficient and applying STATISTICAPl v. 10.0 software by StatSoft. Results were considered statistically significant at \( p < 0.05 \).

**Results**

The majority (72%) of the psoriasis patients manifested moderate feelings of stigmatization (\( M = 77.07; \ SD = 15.15 \)). The feeling of stigmatization was found to be very low amongst ca. 2% of the subjects, low amongst ca. 20% and high amongst ca. 6%. Among the men, the feeling of stigmatization was not observed to be very low; however, it was so in the case of 4% of the women. The feeling of stigmatization was found low in ca. 18% of the men and 23% of the women, above average – in 71% of the men and 73% of the women, and high – in 11% of the men. In the case of the women, the feeling of stigmatization was not observed to be high. As for the individual aspects of stigmatization feelings, the most commonly found one was the feeling of being rejected, then guilt and shame, feeling of being worse than others, vulnerability to others’ opinions, positive attitude, and secretiveness.

The feeling of stigmatization in the men (\( M = 77.79; \ SD = 14.20 \)) and the women (\( M = 76.31; \ SD = 16.35 \)) was not statistically different (\( p = 0.8167 \)). The only significant exception pertained to the “secretiveness” aspect. The secretiveness was found to be higher in the case of the men (\( M = 9.00; \ SD = 3.75 \)) than the women (\( M = 6.69; \ SD = 3.64 \)) and the difference proved to be statistically significant (\( p = 0.0303 \)) (Table 1).

<table>
<thead>
<tr>
<th>Specification</th>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>Med.</th>
<th>Min.</th>
<th>Max.</th>
<th>SD</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling of being stigmatized</td>
<td>men</td>
<td>28</td>
<td>77.79</td>
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<td>55.00</td>
<td>107.00</td>
<td>14.20</td>
<td>0.8167</td>
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<td></td>
<td>women</td>
<td>26</td>
<td>76.31</td>
<td>77.50</td>
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<td>97.00</td>
<td>16.35</td>
<td></td>
</tr>
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<td>men</td>
<td>28</td>
<td>22.00</td>
<td>22.50</td>
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<td>8.00</td>
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<td>12.82</td>
<td>12.50</td>
<td>2.00</td>
<td>22.00</td>
<td>5.10</td>
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<td>11.00</td>
<td>1.00</td>
<td>20.00</td>
<td>5.36</td>
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<td>6.00</td>
<td>17.00</td>
<td>2.55</td>
<td>0.3223</td>
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<tr>
<td></td>
<td>women</td>
<td>26</td>
<td>11.77</td>
<td>11.00</td>
<td>5.00</td>
<td>18.00</td>
<td>3.83</td>
<td></td>
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<td>Guilt and shame</td>
<td>men</td>
<td>28</td>
<td>12.32</td>
<td>12.50</td>
<td>6.00</td>
<td>19.00</td>
<td>3.50</td>
<td>0.2177</td>
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<tr>
<td></td>
<td>women</td>
<td>26</td>
<td>13.31</td>
<td>14.00</td>
<td>5.00</td>
<td>20.00</td>
<td>3.33</td>
<td></td>
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<tr>
<td>Positive attitude</td>
<td>men</td>
<td>28</td>
<td>10.93</td>
<td>11.00</td>
<td>7.00</td>
<td>16.00</td>
<td>2.49</td>
<td>0.8234</td>
</tr>
<tr>
<td></td>
<td>women</td>
<td>26</td>
<td>10.96</td>
<td>11.00</td>
<td>5.00</td>
<td>17.00</td>
<td>2.44</td>
<td></td>
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<td>Secretiveness</td>
<td>men</td>
<td>28</td>
<td>9.00</td>
<td>9.50</td>
<td>3.00</td>
<td>18.00</td>
<td>3.75</td>
<td>0.0303*</td>
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<td>26</td>
<td>6.69</td>
<td>6.50</td>
<td>0.00</td>
<td>15.00</td>
<td>3.64</td>
<td></td>
</tr>
</tbody>
</table>

Source: own research. *\( p < 0.05 \)
It was found that in the case of the studied patients depressive symptoms severity was less than average \((M = 9.87; \ SD = 8.97)\) and that ca. 68% of the men and 65% of the women did not show any symptoms of this kind. Mild depression was found in 7% of the men and 31% of the women, moderate – in 18% of the men and 4% of the women, whereas its severe form was observed in 7% of the men and none of the women.

A correlation was found between feelings of stigmatization and depressive symptoms in the psoriasis patients, as \(r = 0.610 \ (p = 0.0001)\). This interdependence was also observed when the group was broken down by gender, i.e., \(r = 0.634 \ (p = 0.0003)\) for the men and \(r = 0.584 \ (p = 0.0017)\) for the women (Table 2).

Table 2. Correlation between feelings of stigmatization and depression symptoms

<table>
<thead>
<tr>
<th>Specification</th>
<th>N</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>54</td>
<td>0.610</td>
<td>0.0001**</td>
</tr>
<tr>
<td>Women</td>
<td>26</td>
<td>0.584</td>
<td>0.0017*</td>
</tr>
<tr>
<td>Men</td>
<td>28</td>
<td>0.634</td>
<td>0.0003**</td>
</tr>
</tbody>
</table>

Source: own research. *\(p < 0.05\); **\(p < 0.001\)

No statistically significant difference was found \((p = 0.7050)\) between depressive symptoms in persons with visible psoriatic lesions \((M = 10.66; \ SD = 9.94)\) and depressive symptoms in persons with invisible psoriatic lesions \((M = 8.96; \ SD = 7.80)\). Similarly, the feeling of stigmatization in the persons with visible lesions \((M = 75.72; \ SD = 15.44)\) was not statistically significantly different \((p = 0.5936)\) compared to the persons with invisible psoriatic lesions \((M = 78.64; \ SD = 14.95)\). Among stigmatization aspects, one of them proved to be statistically significant \((p = 0.0123)\): the feeling of guilt and shame in persons with visible \((M = 11.72; \ SD = 2.64)\) and invisible \((M = 14.04; \ SD = 3.83)\) psoriatic lesions (Table 3).

Table 3. Depressive symptoms, feelings of stigmatization and their aspects, by psoriatic lesions visibility

<table>
<thead>
<tr>
<th>Specification</th>
<th>Psoriatic lesions</th>
<th>N</th>
<th>M</th>
<th>Med.</th>
<th>Min.</th>
<th>Max.</th>
<th>SD</th>
<th>(p)</th>
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</thead>
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<td>29</td>
<td>10.66</td>
<td>9.00</td>
<td>0.00</td>
<td>42.00</td>
<td>9.94</td>
<td>0.7050</td>
</tr>
<tr>
<td></td>
<td>invisible</td>
<td>25</td>
<td>8.96</td>
<td>8.00</td>
<td>0.00</td>
<td>24.00</td>
<td>7.80</td>
<td></td>
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<tr>
<td>Feeling of being stigmatized</td>
<td>visible</td>
<td>29</td>
<td>75.72</td>
<td>73.00</td>
<td>31.00</td>
<td>107.00</td>
<td>15.44</td>
<td>0.5936</td>
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<td></td>
<td>invisible</td>
<td>25</td>
<td>78.64</td>
<td>81.00</td>
<td>49.00</td>
<td>104.00</td>
<td>14.95</td>
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<tr>
<td>Feeling of being rejected</td>
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<td>29</td>
<td>22.07</td>
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<td>8.00</td>
<td>38.00</td>
<td>7.61</td>
<td>0.8905</td>
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<tr>
<td></td>
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<tr>
<td>Vulnerability to others’ opinions</td>
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<td>5.00</td>
<td>18.00</td>
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<td>11.12</td>
<td>11.00</td>
<td>6.00</td>
<td>17.00</td>
<td>2.89</td>
<td></td>
</tr>
</tbody>
</table>

\(table \ continued \ on \ the \ next \ page\)
### Discussion

It was found that the psoriasis patients showed both the feelings of stigmatization and depressive symptoms, even though their intensity varied. Ca. 78% of the subjects experienced feelings of stigmatization described as moderate and high, whereas ca. 33% manifested depressive symptoms. The most stigmatizing aspect turned out to be rejection followed by guilt and shame, which confirms the results of the earlier studies [18].

As for the first research question, it was found that there were no differences between the female and male psoriasis patients in relation to the feelings of stigmatization. The only significant difference regarded the secretiveness aspect which was more often found in the men. Results of the studies conducted so far are ambiguous: some authors have indicated that the feeling of stigmatization was found to be higher in women [22, 23], while others did not find any gender differences with regard to this variable [18, 24]. The lack of differences is explained by the fact that more and more men start to pay much attention to their physical attractiveness [7, 25].

The secretiveness aspect is understood as an important component of everyday experiences of psoriasis patients [20]. Namely, they make sure to wear clothes that cover the parts of skin affected by psoriasis and they avoid situations in which their lesions could become visible. Continuous vigilance in relation to psoriasis is associated with a tendency to hide the truth of one’s disease [26, 27]. Secretiveness is also manifested by not telling the family or friends about falling ill with psoriasis or by asking them not to tell others of their disease. Moreover, secretiveness is also manifested by a conviction that this approach is correct, which resulted from experiencing rejection when trying to engage in social relations. This is due to the fact that psoriasis patients often find out that it is better for them not to admit they have psoriasis, even when directly asked about the skin lesions [19, 20]. The fact that this attitude is most often taken by men may be explained by a tendency not to appear weak, which is associated with the stereotypical understanding of a male social role [25]. This affects the socialization process, when emotional expression associated with the role is formed, accenting traits such as tendency to compete, strength, resistance and emotional control, resourcefulness and taking care of the weaker individuals [28]. Admitting to having psoriasis may be viewed as being weak, which will probably result in a cognitive dissonance in connection with playing “the male role”. Secretiveness understood in such
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a way may also explain why male psoriasis patients were afraid of losing their job more often than women [29]. That’s because admitting to having the disease might decrease the value of merits and dispositions they presented, thus lowering their competitive position on the labor market.

As for the second research question, a very strong correlation was found between the feeling of stigmatization and exacerbation of depressive symptoms, and vice versa. The same correlation was confirmed for both men and women when the gender factor was taken into account: the greater the feeling of stigmatization in men and women, the more severe the depressive symptoms, and vice versa. These findings are consistent with the results of the earlier studies [17, 18]. In cases where severity of depressive symptoms is less than average, correlation of this variable with stigmatization feeling mainly proves strength of feeling of being stigmatized caused by psoriasis.

Gupta et al. [30] compared two groups of psoriasis patients: those experiencing feelings of stigmatization and those without such feelings. The latter group reported fewer depressive symptoms, which may indicate a moderating nature of stigmatization feelings in relation to depressive symptoms. Stigmatization experienced by the patients may result not only in negative changes in self-image, flaws of logical thinking, learned helplessness and problems in social functioning, but also in mood disorders and formation of a depressive triad [10, 13, 31]. The relation between depressive symptoms and stigmatization feelings in the course of psoriasis is aptly explained by the biopsychosocial model [8], where one variable affects the other (and vice versa). Therefore, it may be supposed that the psoriasis-related feeling of stigmatization more often affects persons that manifest depressive symptoms (inter alia, mood disorders, negative convictions about oneself, the environment and the future), taking a resignation attitude, and also showing the “self-stigmatization” tendency (internalized stigma) [7, 10, 12, 14, 31]. Thus, feelings of stigmatization, depressive symptoms and psoriasis constitute a mutually propelling mechanism that adversely affects not only the patients’ mood and well-being, social functioning and choice of forms of activity, but also the their self-acceptance, self-assessment and self-esteem, and consequently the patients’ life goals, needs and expectations.

A negative answer was received to the third research question regarding the impact of skin lesions located on visible parts of the body (hands, neck, face) on exacerbation of stigmatization feelings and depressive symptoms. Combined with results of other studies [10, 18, 22], the results of this research may suggest that negative (in both individual and psychosocial dimensions) effects of psoriasis should be attributed to the disease process itself, regardless of the skin lesions location. This may be explained by referring to the aforementioned self-stigmatization mechanism triggered especially by those psoriasis patients who do not accept any lesions that adversely affect their appearance and who are convinced that others will react in the same way [7, 10, 12]. Another explanation may also be that any lesions that are normally covered by clothes tend to be exposed in some situations (e.g., when having sex or doing sports, at a swimming pool or on a beach), which may significantly affect the feeling of stigmatization and lower the mood [23]. The research results indicate that private parts are particularly vulnerable in terms of experiencing stigmatization [32]. Moreover, the conviction itself that
one has some body areas that cannot be shown to others, enhances the “vulnerability to being rejected” and may lead to considerable lowering of the mood and well-being as well as decreasing one’s self-acceptance, self-assessment and self-esteem.

The only statistically significant aspect of stigmatization feelings was guilt and shame, which more often regarded persons with invisible psoriatic lesions. Unfortunately, the authors who developed the research tool included the two emotions in one aspect, interpreting shame as a reaction to failure to meet a perfect image of self, whereas guilt is understood as a response to disobedience to moral imperatives [20]. In psychology, however, shame is usually differentiated from guilt, even though there is a serious problem with establishing clear criteria to distinguish between both concepts [33–35]. According to the theory of private and public self-awareness, shame is associated with public awareness and is generated as a result of comparing oneself to others, while guilt is related to private awareness and remorse [34, 36].

The results of this research study are not consistent with the results of other studies which showed that a more intensive shame experience was associated with a visible location of psoriatic lesions [33, 37]; as well as with those showing that shame was not correlated with the skin lesions location [38]. However, shame studied separately from guilt constitutes a totally different variable. The reason why the patients with invisible skin lesions experienced guilt and shame more intensely than the patients with visible lesions may be that the latter have nothing more to hide. As the lesions are visible, they are regularly exposed in everyday social situations, which may explain why those persons’ shame has faded away. In turn, the patients with invisible skin lesions may experience shame more strongly in situations when they have to show the lesions that normally remain hidden. The situations include visits to a swimming pool, doing sports or sexual contacts [23, 32].

Guilt, in turn, may be experienced by persons with invisible skin lesions who are aware of hiding the disease and pretending to be healthy, thus leading to remorse when establishing new relationships. This is because the disease is something concealed which will finally have to be revealed as the relationship develops, which is always hard especially in the case of sexual relationships. Another factor that evokes guilt may be a fear of passing on a gene responsible for the disease development to one’s child.

Conclusions

This research study has led to a conclusion that it is still necessary to change the social attitude towards psoriasis patients. It is also very important to provide the patients with psychotherapeutic support aimed at enhancing their self-acceptance to overcome the feeling of stigmatization and to prevent them from depression [8, 18, 39]. In the case of psoriasis patients, the Acceptance and Commitment Therapy may be effective [40, 41]. Dermatologists should pay attention to any symptoms of depression and a tendency to self-stigmatization in psoriasis patients, inform them on the course of the disease, treatment, prognosis and prophylaxis, which has a positive effect on the perception of the disease and prevents any negative psychological and social outcomes [8].
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References


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