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Body Modifications in Patients with Chronic Dermatoses: Associations with Body Dysmorphic Disorder and Illness Acceptance

Justyna PUTEK[1], Przemysław PACAN[2,3] and Jacek SZEPIETOWSKI[4*]
[1]University Centre of General Dermatology and Oncodermatology, Wroclaw Medical University, Wroclaw, Poland, [2]Department of Psychiatry, Institute of Medical Sciences, Rzeszow University, Rzeszow, Poland, [3]Lower Silesian Mental Center, Wroclaw, Poland, and [4]Division of Dermatology, Venereology and Clinical Immunology, Faculty of Medicine, Wroclaw University of Science and Technology, Wroclaw, Poland

Body modifications such as tattoos and piercings are increasingly popular, yet their psychological implications in dermatology patients remain understudied. This study examined the prevalence of body modifications, their association with body dysmorphic disorder (BDD) symptom tendencies and their relationship with illness acceptance. A cross-sectional survey was conducted among 333 consecutive dermatology outpatients in Wrocław, Poland. Participants provided demographic data, chronic skin disease status and information on tattoos and piercings. BDD symptoms were assessed with the Appearance Anxiety Inventory (AAI; score≥20 indicating high BDD risk), while the Acceptance of Illness Scale (AIS) measured psychological adaptation. Statistical analyses included *t*-tests, χ^2 tests, ANOVA and Spearman's correlation. Overall, 29.4% of participants reported body modifications – 20.7% tattoos and 15.9% piercings. BDD symptom tendencies were present in 15.9% of patients but were significantly more frequent among those with tattoos (26.1%) and piercings (34%). Individuals with body modifications were younger and more often female. AIS and AAI scores showed a significant negative correlation, suggesting that lower illness acceptance was linked to higher BDD symptomatology. Body modifications among dermatology patients are associated with increased risk of screening positive for BDD tendencies and reduced acceptance of illness. These findings emphasize the need for psychological screening in dermatological practice and training dermatologists to recognize and address underlying mental health concerns.

Keywords Acceptance of Illness Scale; body dysmorphic disorder; body modifications.

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Corr: Jacek Szepietowski, Department of Dermato-Venereology, 4th Military Hospital, 50-981, Wroclaw, Poland. Email: jacek.szepietowski@pwr.edu.pl

SIGNIFICANCE

Tattoos and piercings are increasingly common, yet their psychological implications in patients with chronic skin diseases are poorly understood. This study shows that dermatology patients with body modifications are more likely to exhibit body dysmorphic disorder tendencies and lower acceptance of illness. Since many affected individuals seek help from dermatologists rather than mental health professionals, recognizing these associations is crucial. Our findings highlight the need for psychological screening and holistic care in dermatology, ensuring that both physical and emotional aspects of skin disease are addressed.

Tattoos and piercings are common forms of body modification that mainly serve as ways for individuals to express their identity, personal style and sense of autonomy (1). People choose them for many reasons, including cultural or spiritual beliefs, aesthetic preferences or as forms of self-expression and, in some cases, as a way of coping or taking risks (2–4). Understanding these motivations is important for healthcare professionals and researchers when considering the physical and psychological effects of these practices.

People choose them for various cultural, aesthetic or personal reasons, including self-expression or as a way of coping or taking risks, which is important to consider when evaluating their physical and psychological effects (2, 3).

Body dysmorphic disorder (BDD) is a mental health condition in which individuals perceive flaws in their appearance that are imperceptible to others. Although BDD has been recognized globally for over a century, systematic research on the disorder has only gained momentum in the past 2 decades (4). Its prevalence in the general population is estimated to range from 0.7% to 2.4% (5–7). BDD is frequently linked to psychiatric conditions such as obsessive-compulsive disorder (OCD), social anxiety and atypical depression (4, 8). The condition often leads to distress, impaired social functioning and an increased risk of depression, substance abuse and even suicide (9–11). Many individuals with

BDD seek cosmetic treatments, including surgical or dermatological procedures, yet they rarely achieve satisfaction with the results (12).

Skin conditions can have a significant psychological impact on those affected, particularly due to the way they alter physical appearance, challenging societal standards of perfect skin (13, 14). That explains the higher prevalence of BDD in dermatological conditions. Studies indicate that BDD occurs in approximately 9–12% of dermatology patients seeking cosmetic procedures, while the prevalence may reach as high as 53% and 26% among individuals with trichotillomania (15–18).

Previous research has shown that BDD prevalence is higher in people with body modifications ranging from 9.8% in individuals with tattoos (19) to even up to 29.1% in people with piercings (20). There are studies investigating the prevalence of BDD in patients with dermatological conditions; however, to the best of current knowledge, no papers regarding body modifications in the context of BDD and illness acceptance in patients with chronic dermatoses have been conducted so far. Additionally, the prevalence of body modifications in dermatology patients was estimated. Therefore, the paper was conducted to run the study within patients with chronic skin conditions looking for the prevalence and type of body modifications in this group and to check whether there is a link between body modifications and BDD and chronic skin disease patients' acceptance. Clinical and research experience in the field of psychodermatology, a recognized subspecialty within dermatology, provides a solid foundation for investigating the psychological aspects of chronic skin diseases. This expertise supports the exploration of the relationship between body image disturbances, body modification practices and illness acceptance in dermatological populations.

MATERIALS AND METHODS

This was a cross-sectional study conducted on 333 consecutive dermatology outpatients between August 2024 and January 2025 in Wrocław, Poland. The study included only individuals with chronic dermatoses. Skin conditions were classified as chronic if their duration extended from several months to multiple years, whereas acute dermatoses were defined as those typically resolving within days or weeks (21). Chronic inflammatory dermatoses represent a heterogeneous group of skin disorders often characterized by persistent and relapsing inflammation, with complex underlying pathomechanisms (22). Patients with infections, nevi, benign skin tumours and malignant skin tumours were excluded from the study because these conditions are not classified as chronic dermatoses, but rather as acute, transient or distinct pathological entities. Since the study aimed to examine the correlation between chronic skin diseases and tendencies to BDD, conditions without long-term persistence were not considered to have a significant influence on BDD development.

After obtaining informed consent, each participant completed a questionnaire that included general demographic questions such as gender, age and underlying dermatological condition. Additionally, patients assessed the subjective severity of their disease, categorizing it as mild, moderate or severe. The definition of piercing in our study was more than one earring in the lobe of one ear or an earring in any other location on the body. Those with body modifications provided details on their location and number, and in the case of tattoos, the approximate percentage of body surface covered was estimated.

To screen for BDD symptoms in the study group, the Appearance Anxiety Inventory (AAI) was utilized, a tool originally designed to evaluate therapy outcomes in individuals with BDD (23). The AAI consists of 10 items rated on a 5-point Likert scale: 0 ("not at all"), 1 ("a little"), 2 ("often"), 3 ("a lot") and 4 ("all the time"). A cumulative score is obtained by adding up individual responses, where elevated totals reflect an increased probability of BDD. A cutoff of 20 points, as proposed by Yurtsever et al. (24), was applied to identify individuals at high risk for BDD. For the purpose of this research, the validated Polish-language version of the AAI was applied (25).

Further, the Acceptance of Illness Scale (AIS) was used to measure illness acceptance in dermatological conditions. The AIS, in its Polish adaptation by Juczyński et al. (26), is a standardized research tool originally developed by Felton, Revenson and Hinrichsen (27). It consists of 8 statements describing the impact of poor health, which respondents assess based on how closely they align with their own experiences. Responses are rated using a 5-point Likert scale, where 1 indicates full agreement (reflecting a lack of acceptance of the illness) and 5 indicates complete disagreement (signifying full acceptance). The total score ranges from 8 to 40 points. The cutoff points are as follows: scores between 8 and 18 indicate a lack of illness acceptance, scores from 19 to 29 suggest a moderate level of acceptance and scores between 30 and 40 reflect a high level of acceptance of the dermatological condition.

Statistical analysis

All statistical analyses were carried out using the Statistica 13 software package (Dell, Inc., Tulsa, OK, USA). Descriptive statistics, including means and

standard deviations, were computed for continuous variables. Group comparisons were evaluated through a variety of statistical tests: the two-sample *t*-test, the Kruskal–Wallis and Mann–Whitney tests for nonparametric data, one-way ANOVA for multigroup comparisons and χ^2 tests with Bonferroni correction for categorical variables. Since the data did not meet the assumption of a normal distribution, Spearman's rank correlation coefficient (r_s) was applied to assess the strength and direction of associations between variables. A p-value below 0.05 was considered indicative of statistical significance. All data were anonymized prior to analysis to ensure participant confidentiality.

The study received ethical approval (KB-234/2023). Written informed consent was obtained from all participants prior to their inclusion in the study, including consent to participate and consent for publication of anonymized data.

RESULTS

This was a cross-sectional study conducted on 333 consecutive dermatology patients from south-west Poland. One hundred and ninety-five (58.6%) respondents were women, and 138 (41.4%) were men, aged from 14 to 83 years (mean age±SD = 40.2±16.6 years).

The highest number of respondents suffered from psoriasis (*n*=103, 30.9%), followed by those with atopic dermatitis (*n*=48, 14.4%) and eczema (*n*=39, 11.7%). Conditions such as androgenic alopecia, vitiligo, lichen sclerosus and several other dermatoses were represented by the fewest numbers. A detailed breakdown of all diagnoses is presented in **Table I**.

To evaluate the intensity of dermatologic diseases, 2 instruments were applied. In the subjective assessment, most respondents rated their condition as moderate (*n*=175, 52.6%) (Table SI). According to AIS, the mean score for the entire cohort was 28.5±8.7 points, with the majority of participants classified as having a good disease status (*n*=174, 52.3%) (Table SI). The mean AAI score for the entire group of respondents was 10.5±8.6 points. Fifty-three (15.9%) participants achieved scores exceeding 20 on the AAI, meeting the screening threshold for BDD tendencies.

Ninety-eight (29.4%) patients were found to have a body modification. Sixty-nine (20.7%) respondents had a tattoo, and 53 (15.9%) reported to have a piercing. The detailed characteristics of body modifications are given in Table SII.

Eighteen (26.1%) patients with tattoos and 18 (34%) with piercings were screened positively for BDD tendencies. Patients with body modifications were significantly younger and women predominated.

Table I. Dermatological conditions and number of patients included in the study

Disease	Patients, *n*	%
Psoriasis	103	30.9%
Atopic dermatitis	48	14.4%
Eczema	39	11.7%
Acne	20	6.0%
Alopecia areata	13	3.9%
Hidradenitis suppurativa	12	3.6%
Scarring alopecia	10	3.0%
Rosacea	8	2.4%
Bullous diseases	7	2.1%
Prurigo nodularis	6	1.8%
Urticaria	6	1.8%
Mycosis fungoides	6	1.8%
Connective tissue diseases	6	1.8%
Granuloma annulare	6	1.8%
Seborrheic dermatitis	6	1.8%
Lichen planus	5	1.5%
Morphea	5	1.5%
Androgenic alopecia	4	1.2%
Vitiligo	4	1.2%
Lichen sclerosus	4	1.2%
Others (lichen aureus, vasculitis, cheilitis granulomatosa, cutaneous sarcoidosis, cutaneous plasmacytosis, cutaneous mastocytosis, porokeratosis, ulcers)	14	4.2%

These subjects had significantly higher AAI scores than patients without tattoo or piercing. Moreover, within the group of patients with body modification, the percentage of subjects screened positively for BDD tendencies was significantly higher than in those without any body modifying procedures performed (25.5% vs 10.2%) (**Table II**).

Among patients with body modifications, patients suffering from alopecia areata and hidradenitis suppurativa were significantly more numerous than in the group without tattoos and piercings (4.1% vs 3.8%, $p<0.05$ and 7.1% vs 2.1%, $p<0.05$, respectively). In contrast, among patients without body modifications, those with autoimmune bullous diseases (3% vs 0%, $p<0.05$), mycosis fungoides (2.6% vs 0%, $p<0.05$), connective tissue diseases (2.6% vs 0%, $p<0.05$) and lichen sclerosus (1.7% vs 0%, $p<0.05$) were significantly more prevalent compared to the group with tattoos and piercings.

Based on the AIS score, the group was divided into 3 subgroups (**Table III**). Patients with poor acceptance of the dermatologic disease were more frequently women and were significantly older. Although there were no differences regarding the presence of body modification between subgroups, patients with poor disease acceptance had higher AAI scores and they were screened significantly more frequently with BDD tendencies (Table III).

Among patients with poor acceptance of their illness, patients suffering from connective tissue diseases were significantly more numerous than in the group with moderate and good acceptance of the dermatological condition (5.5% vs 2.9% vs 0%, $p<0.05$). In the subgroup with good acceptance of their dermatologic

Table II. The characteristics of patients with and without body modification. Differences between groups were determined using a two-sample *t*-test and post hoc χ^2square test with Bonferroni's adjustment

	With body modification (*n*=98)	Without body modification (*n*=235)	*p*-value
Age (mean±SD)	32.4±10.9	43.5±17.5	*p*<0.001
Females	70 (71.4%)	125 (53.2%)	
Males	28 (28.6%)	110 (46.8%)	*p*<0.001
Subjective assessment of the disease			
Mild	33 (33.7%)	67 (28.5%)	
Moderate	48 (49%)	127 (54%)	
Severe	17 (17.3%)	41 (17.5%)	n.s.
AIS score (mean±SD)	29.3±8.7	28.1±8.7	n.s.
Poor acceptance of the disease according to AIS	12 (13.2%)	41 (17.4%)	
Moderate acceptance of the disease according to AIS	37 (37.8%)	85 (36.2%)	
Good acceptance of the disease according to AIS	49 (50%)	109 (46.4%)	n.s.
AAI score (mean±SD)	12.5±9.9	8.9±7.7	*p*<0.001
BDD tendencies according to AAI	25 (25.5%)	24 (10.2%)	*p*<0.001

AAI: the Appearance Anxiety Inventory; AIS: the Acceptance of Illness Scale; BDD: body dysmorphic disorder; n.s.: not significant; SD: standard deviation.

condition, patients with acne were more prevalent compared to subgroups with moderate and poor acceptance of their illness (9.2% vs 2.9% vs 1.8%, $p<0.05$). Further, 14.5% of patients assessed their illness as mild while they had poor acceptance of their diseases, and 8.6% of individuals assessed their illness as severe while the acceptance of their disease was good (Table III).

The study group was also divided into 2 subgroups based on positive screening with BDD tendencies (**Table IV**). Patients with BDD tendencies were more often women, were significantly younger and significantly more commonly assessed their disease subjectively as severe. They had significantly more body modifications, their AIS score was significantly lower and they significantly had poorer acceptance of their disease (Table IV).

Among patients with BDD tendencies, patients suffering from psoriasis (32.1% vs 30.7%, n.s.), atopic dermatitis (17% vs 13.9%, n.s.), acne (13.2% vs 4.6%, n.s.), alopecia areata (5.7% vs 3.6%, n.s.) and hidradenitis suppurativa (5.7% vs 3.2%, n.s.) were more numerous than in the group without BDD tendencies; however, these values were not statistically significant.

In contrast, among patients without BDD tendencies, those with autoimmune bullous diseases (2.5% vs 0%, $p<0.05$), urticaria (2.1% vs 0%, $p<0.05$), mycosis fungoides (2.1% vs 0%, $p<0.05$), connective tissue diseases (2.1% vs 0%, $p<0.05$), morphea (1.8% vs 0%, $p<0.05$) and lichen sclerosus (1.4% vs 0%, $p<0.05$) were significantly more prevalent compared to the group with BDD tendencies.

Younger age significantly correlated with higher number of tattoos and bigger body surface area covered by this body modification (**Table V**). The AIS score was strongly negatively correlated with the AAI score (r_s= –0.658, $p<0.001$) and with subjective disease severity (r_s = –0.481, $p<0.001$). This shows that a higher BDD score strongly correlates with poorer disease acceptance.

No correlation between age and number of pieces of piercing or AAI score was found (**Table VI**). Age significantly negatively correlated with AIS score (r_s=–0.375, $p<0.05$). The AIS score was strongly negatively correlated with the AAI score (r_s=–0.708, $p<0.001$) and with subjective disease severity (r_s =–0.587, $p<0.001$). This highlights a

Table III. The characteristics of patients with poor, moderate or good acceptance of dermatologic disease. Differences between groups were determined using a single factor ANOVA test and post hoc χ^2 test with Bonferroni's adjustment

	Poor acceptance of the dermatologic disease (*n*=55)	Moderate acceptance of the dermatologic disease (*n*=104)	Good acceptance of the dermatologic disease (*n*=174)	*p*-value
Age (mean±SD)	45.2±16.4	41.1±15.7	38.1±17.0	*p*<0.05
Females	40 (72.7%)	62 (59.6%)	93 (53.4%)	
Males	15 (27.3%)	42 (40.4%)	81 (46.6%)	*p*<0.05
Tattoo	12 (21.8%)	11 (10.6%)	36 (20.6%)	n.s.
Piercing	9 (16.4%)	13 (12.5%)	31 (17.8%)	n.s.
Subjective assessment of the disease				
Mild	8 (14.5%)	20 (19.2%)	72 (41.4%)	
Moderate	25 (45.5%)	63 (60.6%)	87 (50%)	
Severe	22 (40%)	21 (20.2%)	15 (8.6%)	*p*<0.001
AAI score (mean±SD)	19.1±11.6	12.0±7.3	6.8±5.6	*p*<0.001
BDD tendencies according to AAI	25 (45.5%)	20 (19.2%)	8 (4.6%)	*p*<0.001

AAI: the Appearance Anxiety Inventory; BDD: body dysmorphic disorder; n.s.: not significant; SD: standard deviation.

Table IV. The characteristics of patients screened positive with body dysmorphic tendencies compared to patients without these symptoms. Differences between groups were determined using a two-sample *t*-test and post hoc χ^2 test with Bonferroni's adjustment

	BDD tendencies (*n*=53)	Non-BDD tendencies (*n*=280)	*p*-value
Age (mean±SD)	33.8±12.1	41.4±17.1	*p*<0.001
Females	41 (77.4%)	154 (55%)	
Males	12 (22.6%)	126 (45%)	*p*<0.001
Tattoo	18 (34%)	51 (18.2%)	*p*<0.05
Piercing	18 (34%)	35 (12.5%)	*p*<0.05
Subjective assessment of the disease			
Mild	6 (11.3%)	94 (33.6%)	
Moderate	27 (51%)	148 (52.9%)	
Severe	20 (37.7%)	38 (13.6%)	*p*<0.001
AIS score (mean±SD)	19.9±8.2	30.1±7.8	*p*<0.001
Poor acceptance of the disease according to AIS	25 (47.2%)	30 (10.7%)	
Moderate acceptance of the disease according to AIS	20 (37.7%)	84 (30%)	
Good acceptance of the disease according to AIS	8 (15.1%)	166 (59.3%)	*p*<0.001

AIS: the Acceptance of Illness Scale; BDD: body dysmorphic disorder; n.s.: not significant; SD: standard deviation.

Table V. Spearman's rank correlation coefficient (r_s) for questionnaires used in the study in patients with tattoos

	Age	Number of tattoos	The body surface area covered by tattoos	Subjective disease severity	AIS	AAI
Age	–	–0.236 (p<0.05)	–0.269 (p<0.05)	–0.118 n.s.	–0.041 n.s.	–0.178 n.s.
Number of tattoos	–0.236 (p<0.05)	–	0.709 (p<0.001)	0.023 n.s.	0.001 n.s.	0.094 n.s.
The body surface area covered by tattoos	–0.269 (p<0.05)	0.709 (p<0.001)	–	0.024 n.s.	0.038 n.s.	0.034 n.s.
Subjective disease severity	–0.118 n.s.	0.023 n.s.	0.024 n.s.	–	–0.481 (p<0.001)	0.364 (p<0.001)
AIS	–0.041 n.s.	0.001 n.s.	0.038 n.s.	–0.481 (p<0.001)	–	–0.658 (p<0.001)
AAI	–0.178 n.s.	0.094 n.s.	0.034 n.s.	0.364 (p<0.001)	–0.658 (p<0.001)	–

AAI: the Appearance Anxiety Inventory; AIS: the Acceptance of Illness Scale; n.s.: not significant; SD: standard deviation.

strong correlation between a higher BDD tendencies and reduced acceptance of the disease.

DISCUSSION

This study is the first to compare symptoms of BDD among patients with various chronic dermatological conditions in relation to body modifications and acceptance of their illness. One of the study's objectives was to determine the prevalence of body modifications among dermatology patients.

In our sample, body modifications were present in nearly one-third of dermatology patients. Reported tattoo prevalence in the general population ranges from 8.5% to 30% worldwide (28), while in Poland, it was 8% in a 2017 survey (29). It is possible that the higher prevalence of tattoos among dermatology patients may partially reflect the clinical context. Some individuals may seek dermatological care due to tattoo-related complications (30), while others, such as patients with vitiligo, may use tattoos as a form of cosmetic camouflage to mask persistent skin changes (31). These factors could contribute to the observed tattoo prevalence in our sample and should be considered when interpreting the findings.

Piercing is even less common, with a prevalence of 6.5% in the general population (32) and up to 27% among high school students (33). No dedicated studies on piercing prevalence in Poland were found. A German study examining patients with dental and dermatological conditions reported a prevalence of nonearlobe piercings at 8.6% (33), which is comparable to findings in the current paper of 7.8%. These results suggest that dermatology patients may have tattoos more frequently than the general population (20.7% vs 8%), whereas the same trend does not appear to apply to piercings. However, further studies with control groups are needed to confirm these observations.

No significant differences were found between the presence of body modifications and the level of illness acceptance. However, tattoos and piercings were significantly more common among patients with BDD tendencies – an observation supported by other studies (19, 20, 34). These findings indicate a potential association between body modifications and increased levels of BDD-related tendencies. Interestingly, the number of tattoos or piercings did not correlate with illness acceptance or BDD tendencies. This observation, also confirmed in previous research (20), implies that the extent of body modification does not influence BDD tendencies risk. Even a single tattoo or piercing may increase an individual's susceptibility to BDD tendencies.Body modifications were significantly more common in patients with alopecia areata and hidradenitis suppurativa, while they were less frequent among those with bullous diseases, mycosis fungoides, connective tissue diseases and lichen sclerosus. This may be attributed to the earlier onset of alopecia areata and hidradenitis suppurativa compared to other dermatological conditions (35–37). Notably, in the current study, patients with body modifications were significantly younger.

The overall prevalence of BDD tendencies among dermatology patients was 15.9%, aligning with previous studies on dermatological populations, where BDD prevalence ranged from 9% to 53% (15–20). Variations in BDD prevalence among dermatology patients can be attributed to differences

Table VI. Spearman's rank correlation coefficient (r_s) for questionnaires used in the study in patients with piercing

	Age	Number of pieces of piercing	Subjective disease severity	AIS	AAI
Age	–	–0.030 n.s.	0.151 n.s.	–0.375 (p<0.05)	0.058 n.s.
Number of pieces of piercing	–0.030 n.s.	–	0.016 n.s.	0.200 n.s.	–0.034 n.s.
Subjective disease severity	0.151 n.s.	0.016 n.s.	–	–0.587 (p<0.001)	0.451 (p<0.001)
AIS	–0.375 (p<0.05)	0.200 n.s.	–0.587 (p<0.001)	–	–0.708 (p<0.001)
AAI	0.058 NS	–0.337 (p<0.05)	0.451 (p<0.001)	–0.708 (p<0.001)	–

AAI: the Appearance Anxiety Inventory; AIS: the Acceptance of Illness Scale; n.s.: not significant; SD: standard deviation.

in assessment tools and the range of conditions studied. In the current study, younger age and female sex were positively associated with BDD tendencies, findings that have been observed in other research (37, 38).

Additionally, 47.2% of patients with BDD tendencies exhibited poor acceptance of their dermatological condition, highlighting the importance of accurate diagnosis and appropriate treatment in reducing BDD tendencies risk. In literature (37), it was observed that patients reporting higher levels of perceived stigma were more likely to exhibit BDD tendencies, suggesting that societal attitudes towards skin appearance significantly impact patients' body image concerns.

Patients screening positive for BDD tendencies frequently had psoriasis (32.1% vs 30.7% in non-BDD patients), atopic dermatitis (17% vs 13.9%) and acne (13.2% vs 4.6%). However, these differences were not statistically significant, likely due to the underrepresentation of specific patient groups. Nevertheless, these findings align with those of Schut et al. (37), who reported BDD prevalence rates of 13.9% in psoriasis patients, 15.9% in those with atopic dermatitis and 16.9% in acne patients.

Given the notable prevalence of BDD tendencies in the sample, dermatologists may benefit from training to recognize psychosocial factors influencing skin disorders as affected individuals often seek dermatologic rather than psychiatric care and may intentionally conceal their symptoms, delaying diagnosis and treatment (39).

This study has several limitations, though they do not diminish the validity of the findings. First, the underrepresentation of certain dermatological conditions may have hindered the ability to detect group differences. Moreover, several diagnostic subgroups included very few patients, which limits the reliability of these subgroup analyses and requires cautious interpretation of statistically significant findings. Second, self-reported measures and questionnaires may have introduced bias. Importantly, the use of screening tools such as the AAI does not allow for a definitive clinical diagnosis of BDD – only BDD tendencies could be identified, as no formal psychiatric assessments were conducted. Third, selection bias may be present. Fourth, the study lacked a control group, which restricts the ability to draw comparative conclusions. Although numerous studies have examined BDD in the general population (5–7), the lack of a healthy control group in the present study limits the generalizability and interpretability of the findings. For the same reason, comparisons with population data regarding tattoo and piercing prevalence should be interpreted with caution. Finally, other factors influencing body image perception – such as alexithymia, stigmatization and comorbid psychiatric disorders – were not analysed.

Despite these limitations, this study provides novel insights into the link between body modifications and BDD tendencies among dermatology patients. The findings indicate that tattoos and piercings are associated with higher levels of BDD tendencies and lower illness acceptance, underscoring the relevance of BDD in dermatological practice. A holistic approach – integrating dermatological care with psychological screening and support – is essential to address both the physical and emotional needs of patients with chronic skin conditions.

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IRB approval status: The study protocol was designed in accordance with the ethical standards set forth by the Declaration of Helsinki and adhered to Good Clinical Practice guidelines. Ethical approval was granted by the Bioethical Committee of Wroclaw Medical University (approval number: KB-234/2023). Informed consent was obtained from all participants prior to their inclusion in the study.

The authors have no conflicts of interest to declare.

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