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Significant Effects of Body Image on Sexual Functions and Satisfaction in Psoriasis Patients

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ABSTRACT

Negative body image appraisals may effect the sexual functions, avoidance, and level of finding oneself sexually attractive. The aim of the study is to assess the levels of sexual dysfunction and sexual satisfaction in patients with psoriasis and the effect of the body image appraisal on sexual functions and satisfaction. In all, 216 individuals were included in the study, and 112 of them had psoriasis; 104 individuals who never experienced any skin problems participated in the study and answered questions that assess depression and anxiety levels, sexual problems and satisfaction, as well as body image appraisal. Psoriasis patients showed significantly higher levels of sexual impairments and less satisfaction with sexual life compared to controls. The psoriasis group had lower body image satisfaction compared to the controls. Depression and anxiety levels in the psoriasis group were higher than in the control group. The cognitive meaning of skin involvement as body image satisfaction was found to be the most significant risk factor that affected sexual functions in psoriasis patients. It also predicted sexual satisfaction in the patient group. However, the objective measure of the severity of the disease as Psoriasis Area and Severity Index (PASI) was not a determinant of sexual dysfunctions and satisfaction.

Introduction

Psoriasis is a lifelong chronic relapsing inflammatory skin disorder associated with multiple comorbidities. Psoriasis affects 0.5% to 4.6% of the population within different countries and races (Lebwohl, 2003). Comorbid psychosocial problems were reported in around 40% to 80% of the affected people at the onset or during the aggravation of the illness (Fava, Perini, Santonastaso, & Fornasa, 1980). The most common psychological problems in psoriasis patients are depression and anxiety, with a prevalence of 44% and 35%, respectively (Woodruff, Higgins, du Vivier, & Wessely, 1997). Furthermore, psoriasis patients were shown to experience self-consciousness, embarrassment, low self-esteem, problems in social and interpersonal relations, and social withdrawal (Choi & Koo, 2003; de Korte, Sprangers, Mombers, & Bos, 2004; Ginsburg, 1996; Gupta & Gupta, 1997; Niemeier, Nippesen, Kupfer, Schill, & Gieler, 2002; Russo, Ilchef, & Cooper, 2004). There is an increasing number of studies analyzing sexual problems in psoriasis.

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Sexual difficulties in psoriasis may be related to the physical signs and symptoms of the disease (e.g., itching, burning, bleeding, and scaling), the psychological effects on patients, concerns of the sexual partner about the appearance of the affected skin, and side effects of the medical treatments (Kurizky & Mota, 2012). Patients are likely to avoid situations where they need to expose their skin such as during intimacy or sexual relations. Thus, psoriasis increases the sexual dysfunction (SD) risk 1.27 (Chen et al., 2013) to 2.9 (Molina-Leyva et al., 2015) times. A significant link was found between SD and anxiety and depression levels, psoriatic arthritis, and genital psoriasis. Additionally, erectile dysfunction (ED) had the strongest association with anxiety and depression levels and increasing age (Molina-Leyva, Salvador-Rodriguez, Martinez-Lopez, Ruiz-Carrascosa, & Arias-Santiago, 2018)

Body image satisfaction can be defined as one's level of contentment with his or her body. In a review that compiled data from 57 studies, it was concluded that body image issues affected all domains of sexual functioning (Woertman & van den Brink, 2012). Although psoriasis patients had higher levels of negative body image perception when compared to the control group (Woertman & van den Brink, 2012), the impact of patients' body image upon distinct stages of the sexual response cycle has not been investigated in psoriasis patients.

The objective of this study is to assess the level of sexual problems and sexual satisfaction in psoriasis patients compared to controls and also to investigate the influence of body image satisfaction over sexual functions and satisfaction in patients with a psoriasis diagnosis.

Methods

Participants and procedures

This prospective case-control study was carried out between May 2014 and March 2015. In all, 112 consecutive psoriasis patients receiving treatment in a psoriasis outpatient clinic of Marmara University Hospital and 104 healthy age- and sex-matched controls were enrolled from accompanying visitors of the patients in the inpatient surgery clinics of the Marmara University Hospital. The Marmara University Ethics Committee approved the study, and it was conducted according to the principles of the Declaration of Helsinki.

Inclusion criteria were as follows: psoriasis patients aged 18 to 65, being sexually active, without a current major psychiatric disorder (schizophrenia, mood disorders, anxiety disorders, obsessive-compulsive disorder, alcohol and substance dependence, mental retardation, dementia) and lack of other dermatological diseases. Patients with severe medical comorbidities including hypertension, diabetes mellitus, cancer, inflammatory bowel disease, pulmonary disease, hepatic disease, and renal disease and patients using medications that might adversely influence sexual functions (e.g., antidepressants, antihypertensives) were excluded from the study. Treatments for psoriasis were not considered as an exclusion criterion. The control group comprised 104 healthy subjects who were sexually active, not having a history of psoriasis, other dermatological diseases, psychiatric disorders, or severe medical illnesses.

The psychiatrist obtained the sociodemographic data and performed the psychiatric assessment according to the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition, Text Revision* of the psoriasis patients and control group. The assessment measures used were applied to all the subjects. It took 45 to 60 minutes to evaluate each participant.

Main outcome measures

Sociodemographic form

The sociodemographic form includes age (years), parity, marital status, education level (years), employment status, menopause status, stable partner status (yes/no), body mass index (BMI),

Psoriasis Area and Severity Index (PASI), relationship duration, being a parent, and level of income.

PASI

The severity of psoriasis was assessed by a dermatology specialist (TE, DSG) using the PASI. PASI is based on the area of involvement and the rate of desquamation, induration, as well as erythema of plaques. PASI measures between 0 and 72 points and greater than 10 is accepted as severe psoriasis (Fredriksson & Pettersson, 1978).

Hospital Anxiety and Depression Scale (HADS)

The Turkish version of HADS was used for the rating depression and anxiety. HADS is a self-administered instrument with 14 Likert-type questions rated from 0 to 3. While odd-numbered questions of the HADS measure anxiety, even-numbered questions of the scale are related to depression (Zigmond & Snaith, 1983). In the validity and reliability study of the Turkish version of HADS, the cutoffs for anxiety and depression are 10 and 7, respectively (Aydemir, 1997).

Female Sexual Function Index (FSFI)

Female sexual function was evaluated with FSFI. FSFI consists of 19 questions and six different domains including desire, arousal, lubrication, orgasm, satisfaction, and pain. Each domain is scored from 0 (or 1) to 5 (Rosen et al., 2000). Zero indicates no sexual activity and higher scores indicate better sexual functioning. The cutoff for the full-scale score is 26.55. Validity and reliability of FSFI for the Turkish population were confirmed (Aygin & Eti Aslan, 2005).

International Index of Erectile Function (IIEF)

Male sexual function was assessed with the IIEF, which includes 15 items (Rosen et al., 1997). Erectile function, orgasmic function, sexual desire, intercourse satisfaction, and overall satisfaction are the five domains that were evaluated with the scale. Domains are rated between 0 (or 1) and 5. Lower scores indicate better sexual functioning and a 0 score means no sexual activity within the last month. The Turkish Society of Andrology conducted the Turkish translation of the scale.

Golombok-Rust Inventory of Sexual Satisfaction

The Golombok-Rust Inventory of Sexual Satisfaction is designed both for male and female sexual functions and satisfaction. The scale has 28 items (Rust & Golombok, 1985). Subscales shared by the male and female versions are infrequency, noncommunication, dissatisfaction, avoidance, and nonsensuality. Additionally, the female version includes subscales for vaginismus and anorgasmia, while the male version includes subscales for impotence and premature ejaculation. Standardization of the scale in the Turkish population was completed (Tugrul, Oztan, & Kabakci, 1993).

Body Cathexis Scale (BCS)

BCS was developed by Secord and Jourad to assess the degree of appraising the feelings of an individual toward various body parts or functions (Secord & Jourard, 1953). The scale includes 40 items which are rated with five Likert-type answers ranging from "I do not like it at all" to "I

like it very much." The lowest score is 40 and indicates total dissatisfaction, while the highest score is 200, which shows total satisfaction. The Turkish validity and reliability of the scale were carried out (Hovardaoğlu, 1993).

Statistical analysis

The NCSS 2007 (Number Cruncher Statistical System; Kaysville, Utah, USA) program was used for statistical analysis. Mean, standard deviation, median, frequency, and percentage were the descriptive statistics used to assess sample characteristics. Student's *t* test was used to compare the means of two groups when the variables were normally distributed. Mann–Whitney U test was used for comparison of two groups when the variables were not normally distributed. Spearman's correlation analysis was used to measure the degree of association between variables. The effects of risk factors on FSFI, IIEF, and Golombok-Rust Inventory of Sexual Satisfaction (GRISS) scales were assessed by backward linear regression analysis. The significance threshold was set at $p < .01$ and $< .05$.

Results

In all, 150 patients and controls were enrolled in the study; 46 were removed from the control group and 38 were removed from the psoriasis group due to lack of congruence, no sex life, having no sexual partner, or having major psychiatric comorbidity. The study population consists of 56 males (50%) and 56 females (50%) in the psoriasis group and 53 males (51%) and 51 females (49%) in the control group ($p = .888$). Mean age of participants in the psoriasis and control groups were 42.63 ± 10.82 and 41.77 ± 11.61 ($p = .571$), respectively. It was noted that 89.3% of the psoriasis group and 91.3% of the control group were married ($p = .779$). BMI (kg/m^2) was 27.91 ± 5 for the psoriasis group and 27.82 ± 4.33 for the control group ($p = .882$). Mean relationship duration in the psoriasis and control group were 19.76 ± 11.50 and 18.16 ± 12.45 years, accordingly. It was seen that 37.5% ($n = 21$) and 30.2% ($n = 16$) of the females had menopause in the psoriasis and control groups ($p = .546$), correspondingly. Additionally, there was no significant difference between the psoriasis and control groups in terms of employment status ($p = .247$), level of monthly income ($p = .218$), and educational level ($p = .944$).

The duration of the psoriasis was 15.21 ± 9.51 years in males and 16.42 ± 10.10 years in females. Medical treatments included topical treatments/phototherapy in 24 (21.4%), conventional treatments (acitretin, methotrexate, cyclosporine) in 49 (43.7%), and biological agents (adalimumab, etanercept, infliximab, ustekinumab) in 36 (32.1%). Three (2.6%) patients were out of treatment. Median PASI scores of males and females were 4.54 ± 3.61 and 5.88 ± 6.47, respectively.

There was no significant correlation between PASI and body image ($p = .718$ for females and $p = .962$ for males), sexual problems ($p = .814$ for females and $p = .847$ for males), sexual satisfaction ($p = .802$ for females and $p = .190$ for males), depression ($p = .329$ for females and $p = .743$ for males), and anxiety ($p = .363$ for females and $p = .222$ for males). Further, 30.4% and 14.3% of the male and the female patients had genital lesions, respectively.

BCS ($p = .174$ for females and $p = .826$ for males), GRISS ($p = .916$ for females and $p = .332$ for males), FSFI ($p = .991$), and IIEF ($p = .273$) total scores and depression ($p = .916$ for females and $p = .914$ for males) and anxiety levels ($p = .405$ for females and $p = .357$ for males) were compared between psoriasis patients with and without genital lesions, and no statistically significant difference was found.

Female psoriasis patients had higher levels of depression, and male psoriasis patients had higher levels of anxiety than controls in HADS ($p = .017$, $p < .001$, respectively).

The results of GRISS in both genders are summarized in Table 1. Compared to controls, female psoriasis patients scored higher in infrequency, dissatisfaction, avoidance, and nonsensuality subscales, whereas male psoriasis patients scored higher in infrequency, avoidance, and importance subscales of the GRISS scale.

Table 1. Comparison of BCS, GRISS, FSFI, and IIEF total and subscales between psoriasis patients and control group.

	Female psoriasis patients $n = 56$ Median ± *SD* (*Mean*)	Female controls $n = 53$ Median ± *SD* (*Mean*)	*pb*		Male psoriasis patients $n = 56$ Median ± *SD* (*Mean*)	Male controls $n = 51$ Median ± *SD* (*Mean*)	*pb*
BCS	131.52 ± 26.07 (129)	147.51 ± 21.50 (146)	.001 **		151.64 ± 22.07 (149.5)	162.12 ± 21.53 (164)	.013 *
GRISS				GRISS			
Female				Male			
Infrequency	5.86 ± 1.96 (6)	4.94 ± 1.97 (5)	*.017**	Infrequency	3.95 ± 1.90 (3.5)	3.10 ± 1.79 (3)	*.017**
Noncommunication	5.61 ± 2.40 (6)	5.23 ± 2.45 (5)	*.488*	Noncommunication	3.82 ± 2.44 (3)	4.29 ± 2.16 (4)	*.222*
Dissatisfaction	4.46 ± 1.89 (4)	3.42 ± 1.57 (3)	*.003***	Dissatisfaction	3.59 ± 1.40 (3.5)	3.35 ± 1.47 (3)	*.280*
Avoidance	3.86 ± 1.72 (4)	2.40 ± 1.49 (2)	*.001***	Avoidance	2.02 ± 0.88 (2)	1.39 ± 0.60 (1)	*.001***
Nonsensuality	4.23 ± 1.93 (4)	3.04 ± 1.44 (3)	*.001***	Nonsensuality	2.41 ± 1.33 (2)	2.06 ± 0.93 (2)	*.225*
Vaginismus	3.25 ± 1.75 (3)	2.66 ± 1.25 (2)	*.098*	Impotence	2.88 ± 1.54 (2)	2.24 ± 1.37 (2)	*.014**
Anorgasmia	3.25 ± 1.75 (3)	2.66 ± 1.25 (2)	*.098*	Premature ejaculation	4.38 ± 1.87 (4.5)	3.67 ± 1.69 (3)	*.051*
Total score	45.89 ± 19.80 (48)	33.30 ± 19.87 (31)	*.002***	Total score	28.39 ± 12.02 (29.5)	23.33 ± 10.95 (21)	*.018**
FSFI			*pb*	IIEF			p_a
Desire	3.17 ± 0.91 (3.0)	3.51 ± 1.25 (3.6)	.085	Erectile function	24.91 ± 5.78	27.86 ± 3.50	*.002***
Arousal	3.27 ± 1.16 (3.3)	3.62 ± 1.48 (3.6)	*.106*	Orgasmic function	8.66 ± 1.79	9.41 ± 1.22	*.012**
Lubrication	4.06 ± 1.27 (4.2)	4.38 ± 1.53 (4.8)	*.079*	Sexual desire	7.64 ± 1.72	8.31 ± 1.39	*.030**
Orgasm	3.32 ± 1.32 (3.4)	3.95 ± 1.71 (4.4)	*.013**	Intercourse satisfaction	11.13 ± 2.62	12.76 ± 2.49	*.001***
Satisfaction	3.82 ± 1.29 (3.6)	3.98 ± 1.47 (4.8)	*.306*	Overall satisfaction	8.04 ± 2.06	8.67 ± 1.73	*.091*
Pain	4.51 ± 1.45 (4.8)	4.91 ± 1.57 (6.0)	*.031**	Total scores	60.37 ± 12.44	67.02 ± 8.84	*.002***
Total score	22.16 ± 6.20 (21.9)	24.35 ± 8.45 (27)	*.045**				

BCS: Body Cathexis Scale GRISS=Golombok-Rust Inventory of Sexual Satisfaction; IIEF: International Index of Erectile Function; FSFI: Female Sexual Function Index.
[a]Student's t test *p<.05, **p<.001.
[b]Mann–Whitney U test *p<.05, **p<.001.

Table 2. Regression analysis for GRISS total scores, FSFI total scores, and IIEF total scores in psoriasis patients.

		Unstandardized coefficients		95% confidence interval for B	
Scales	Risk factors	B	*p*	Lower bound	Upper bound
GRISS female	Total Body Cathexis scores	−0.503	*.001***	−0.649	−0.357
	Relationship duration	0.437	*.014*	0.092	0.781
GRISS male	Total Body Cathexis scores	−0.304	*.001*	−0.424	−0.183
	Relationship duration	0.322	*.001*	0.133	0.512
	HAD depression scores	0.631	*.057*	−0.019	1.281
FSFI	Total Body Cathexis scores	0.161	*.001*	0.116	0.206
	Menapause	−2.908	*.018*	−5.305	−0.512
IIEF	Age	−0.269	*.012*	−0.475	−0.062
	Total Body Cathexis scores	0.351	*.001*	0.233	0.468
	HAD depression scores	−0.692	*.036*	−1.336	−0.047

GRISS: Golombok-Rust Inventory of Sexual Satisfaction; IIEF: International Index of Erectile Function; FSFI: Female Sexual Function Index; HADS: Hospital Anxiety and Depression Scale.
*p<.05, **p<.001.

The results of the FSFI are shown in Table 1. Compared to controls, female psoriasis patients showed more problems in reaching orgasm and less pain during or following vaginal penetration.

Table 1 summarized the IIEF total and subscale results of psoriasis and control groups. Male psoriasis patients had less sexual desire and intercourse satisfaction and more erectile and orgasmic dysfunction compared to control subjects.

Median scores of BCS in the psoriasis and control group were 141.58 ± 26.08 (141) and 154.67 ± 22.63 (153.5), respectively ($p = .001$). Table 1 demonstrates the comparison of body image satisfaction between psoriasis patients and controls according to gender.

Psoriasis patients had significantly lower body image satisfaction when compared to controls in both genders.

The body image scores were strongly correlated with the total scores and subscale scores of FSFI and IIEF in both genders (p = .001). The body image scores were also negatively correlated with the total scores and subscale scores of GRISS (p = .001), except correlations of body image scores with infrequency subscale scores in women and noncommunication subscale scores in men, which fail to reach statistical significance.

Table 2 shows the results of the linear regression analysis of potential factors linked to sexual difficulties and sexual satisfaction in both genders in psoriasis patients. For female GRISS and FSFI scales, age, comorbid medical disease, relationship duration, current or lifetime psychiatric disease, use of psychiatric medication, duration of the psoriasis, presence of menopause, onset age of psoriasis, PASI, presence of genital lesion, total score of BCS, HADS anxiety score, and HADS depression score were included to find risk factors that affect sexual satisfaction and problems. For male GRISS and IIEF scales, age, comorbid medical disease, relationship duration, current or lifetime psychiatric disease, use of psychiatric medication, duration of psoriasis, onset age of psoriasis, PASI, presence of genital lesion, total score of BCS, HADS anxiety score, and HADS depression score were included to find risk factors that affect sexual satisfaction and problems.

In females, being in menopause and negative body image were the determinants of sexual difficulties, whereas being in a longer-term relationship and negative body image were the determinants for sexual dissatisfaction. Determinants of sexual difficulties in males were increased age, the severity of depressive symptoms, and negative body image, while sexual dissatisfaction was determined by longer relationship duration and negative body image.

Discussion

Research regarding SD in psoriasis patients is limited. However, people experiencing sexual problems are recently increasing, and lately associated research has started to increase. In all, 40.8% of

the psoriasis patients reported decreased sexual activity following the onset of the disease (Gupta & Gupta, 1997), and 22.6% of the patients had SD (Guenther et al., 2011).

The severity of psoriasis which was measured via PASI scores was not correlated with the scores of body image, BCS, FSFI, IIEF, and GRISS in our study. This finding might mean that the objective condition of the skin might not affect sexual functions as well as sexual satisfaction without the negative subjective perception. Our results are in line with other studies that did not show a statistically significant correlation between disease severity and SD (Al-Mazeedi, El-Shazly, & Al-Ajmi, 2006; Türel Ermertcan et al., 2006). On the other hand, one study found significant correlations between PASI and SD (Guenther et al., 2011). The lack of correlation between disease severity and SD does not necessarily mean that psoriasis has no effect over sexuality. One systematic review showed that patients with psoriasis had a risk of SD 5.5-fold higher than that of healthy controls (Molina-Leyva et al., 2018).

Conflicting results in the literature might be due to the individuals' sexual function affected more significantly from perceived body image when compared to the objective measurement as PASI.

In our study, male psoriasis patients had less sexual desire, more ED, and more significant levels of orgasmic problems when compared to the control group. Furthermore, according to GRISS, male psoriasis patients had less frequent sexual intercourse and higher sexual avoidance compared to controls. Türel Ermertcan et al. (2006) found that there was no difference in terms of ED and sexual desire between psoriasis patients and controls, while other studies showed that psoriasis patients have higher rates of ED than controls (Cabete, Torres, Vilarinho, Ferreira, & Selores, 2014; Chen et al., 2013; Tasliyurt et al., 2014). Different outcomes in sexual desire and ED should be considered according to Carvalho and Nobre's research findings, which indicated that psychopathology, dyadic adjustment, and emotional variables do not directly or indirectly effect sexual desire, and sexual desire in males is not directly linked to medical factors but related to anxiety about ED, which is more connected with medical problems (Carvalho & Nobre, 2011a, 2011b).

Our study demonstrated that female psoriasis patients had more severe orgasmic problems as well as sexual pain during sexual intercourse. Besides, female patients had sexual intercourse less frequently, had less sexual satisfaction, were more prone to anorgasmia, had less pleasure from touching and caressing, and showed more avoidance compared to controls according to GRISS. Other studies also showed that psoriasis patients have more orgasmic problems (Gupta & Gupta, 1997; Mercan, Altunay, Demir, AkpİNar, & Kayaoglu, 2008; Türel Ermertcan et al., 2006) and less sexual desire than control subjects (Maaty, Gomaa, Mohammed, Youssef, & Eyada, 2013; Türel Ermertcan et al., 2006).

This study was the probably first one to use GRISS for evaluating sexual satisfaction. GRISS allowed us to assess differences in avoidance, problems with sensuality, vaginismus, frequency of sex, communication, satisfaction with a sexual partner, and premature ejaculation between psoriasis patients and healthy subjects, which cannot be evaluated by the other scales of the study. The avoidance subscale of GRISS evaluates being tense and anxious when a partner wants to have sex, avoidance of sex, refusing to have sex, and having feelings of disgust about what the partner and the patient do during the intercourse. The infrequency subscale of GRISS determines the number of sexual intercourses of the couple per week. According to our study, psoriasis patients of both genders had less frequent sex and higher avoidance of sexual intercourse compared to controls. Additionally, female and male psoriasis patients showed higher total scores on the GRISS scale that pointed at a general dissatisfaction in their sexual lives.

Studies examining body image and sexual functions are scarce. Dissatisfaction with body image was found to be a reason for not finding oneself sexually attractive (Wise, 2008). Body image could be negatively affected by operations or diseases (Dupont, 1995; Küchenhoff, Wirsching, Drüner, Herrmann, & Köhler, 1981). These operations or diseases that affect body parts or

functions may also interfere with sexual functions (Carr, 2013; Marquiegui & Huish, 1999). Many studies found out that women who had negative body image were more prone to be sexually avoidant (Faith & Schare, 1993; La Rocque & Cioe, 2011; Reissing, Binik, Khalifé, Cohen, & Amsel, 2003). When the connection between the body image and sexuality was assessed for ostomy patients, results showed that patients' sexual functions were preserved or less problematic if they had better body image (Kiliç, Taycan, Belli, & Ozmen, 2007). Psoriasis may negatively affect body image and may also cause a psychosocial problem (Nazik, Nazik, & Gul, 2017). Additionally, another study which investigates the distribution pattern of psoriasis identified certain body areas potentially related to SD, independent of anxiety and depression in psoriasis patients (Molina-Leyva et al., 2015).

Although many studies have concluded that psoriasis patients had more severe sexual difficulties in various degrees (Molina-Leyva, Salvador-Rodriguez, Martinez-Lopez, Ruiz-Carrascosa, & Arias-Santiago, 2019), none of these studies has evaluated the effects of attributions of the body image over sexual problems and overall satisfaction. In our study, body image satisfaction was lower in psoriasis patients when compared to controls. Body image dissatisfaction might be a probable determinant factor for sexual problems and sexual dissatisfaction in both female and male psoriasis patients. Total scores and subscores of the FSFI, IIEF, and GRISS were significantly correlated with the scores of the Body Image Satisfaction Scale. When body image satisfaction got worse, sexual problems increased, and sexual satisfaction decreased. These results might show the link that sexual problems and dissatisfactions might be closely associated with negative body image satisfaction in psoriasis patients.

This study has some limitations. Although the medical conditions of the patients have been questioned and those who have reported having a medical condition were excluded from the study, their metabolic status was not precisely known. Not identifying patients' metabolic status (e.g., blood glucose level) is a limitation of the study. Additionally, psoriasis patients were in treatment when included in the study.

In conclusion, this study might show that psoriasis patients were less satisfied and compassionate with their bodies than control subjects. Correlations between body image satisfaction and sexual problems and satisfaction were significant. Body image appraisal might be a significant predictor for sexual functions and satisfaction in both genders. The severity of the illness and genital psoriasis lesions might not affect sexual functions and satisfaction unless it affects body image satisfaction. In psoriasis, the effect of body image appraisal on sexual functioning should be taken into consideration.

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Conflict of interest

The authors report no conflicts of interest.

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