

Psychosocial Impact of Psoriasis: A Review for Dermatology Residents

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PRACTICE POINTS

- The psychosocial impact of psoriasis is an important component of the disease burden leading to reduced quality of life.
- Assessment of psychosocial dysfunction can be done through short questionnaires, asking patients directly about these issues and anticipating these problems in patients who are most vulnerable.
- Management of psychosocial impact ranges from pharmacological interventions to helpful resources such as the National Psoriasis Foundation website.

Psoriasis is a chronic inflammatory disease with both a physical and psychosocial burden. To offer strategies for dermatology residents to assess and manage psychosocial aspects of psoriasis, a PubMed search of articles indexed for MEDLINE was performed using the following terms: *psoriasis, depression, anxiety, work productivity, sexual functioning, and interpersonal relationships*. Selected articles covered the prevalence, assessment, and management of each of the psychosocial domains of psoriasis. Depression is a common comorbidity in psoriasis patients, and the psychosocial burden of psoriasis is immense. Dermatology providers play a vital role in assessing and managing the psychosocial aspects of the disease along with medical management.

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The psychosocial impact of psoriasis is a critical component of disease burden. Psoriatic patients have high rates of depression and anxiety, problems at work, and difficulties with interpersonal relationships and intimacy.¹ A National Psoriasis Foundation (NPF) survey from 2003 to 2011 reported that psoriasis affects overall emotional well-being in 88% of patients and enjoyment of life in 82% of patients.²

The reasons for psychosocial burden stem from public misconceptions and disease stigma. A survey of 1005 individuals (age range, 16–64 years) about their perceptions of psoriasis revealed that 16.5% believed that psoriasis is contagious and 6.8% believed that psoriasis is related to personal hygiene.³ Fifty percent practiced discriminatory behavior toward psoriatic patients, including reluctance to shake hands (28.8%) and engage in sexual relations/intercourse (44.1%). Sixty-five percent of psoriatic patients felt their appearance is unsightly, and 73% felt self-conscious about having psoriasis.²

The psychosocial burden exists despite medical treatment of the disease. In a cross-sectional study of 1184 psoriatic patients, 70.2% had impaired quality of life (QOL) as measured by the dermatology life quality index (DLQI), even after receiving a 4-week treatment for psoriasis.⁴ Medical treatment of psoriasis is not enough; providers need to assess overall QOL and provide treatment and resources for these patients in addition to symptomatic management.

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There have been many studies on the psychosocial burden of psoriasis, but few have focused on a dermatology resident's role in addressing this issue. This article will review psychosocial domains—psychiatric comorbidities and social functioning including occupational functioning, interpersonal relationships, and sexual functioning—and discuss a dermatology resident's role in assessing and addressing each of these areas.

METHODS

A PubMed search of articles indexed for MEDLINE was conducted using the following terms: *psoriasis, depression, anxiety, work productivity, sexual functioning, and interpersonal relationships*. Selected articles covered prevalence, assessment, and management of each psychosocial domain.

RESULTS

Psychiatric Comorbidities

Prevalence—A high prevalence of psychiatric comorbidities exists in psoriatic patients. In a study of 469,097 patients with psoriasis, depression was the third most prevalent comorbidity (17.91%), following hyperlipidemia (45.64%) and hypertension (42.19%).⁵ In a 10-year longitudinal, population-based, prospective cohort study, antidepressant prescriptions were twice as frequent in psoriatic patients (17.8%) compared to control (7.9%) ($P < .001$).⁶ In a meta-analysis of 98 studies investigating psoriatic patients and psychiatric comorbidities, patients with psoriasis were 1.5 times more likely to experience depression (odds ratio [OR]: 1.57; 95% CI, 1.40-1.76) and use antidepressants (OR: 4.24; 95% CI, 1.53-11.76) compared to control.⁷ Patients with psoriasis were more likely to attempt suicide (OR: 1.32; 95% CI, 1.14-1.54) and complete suicide (OR: 1.20; 95% CI, 1.04-1.39) compared to people without psoriasis.⁸ A 1-year cross-sectional study of 90 psoriatic patients reported 78.7% were diagnosed with depression and 76.7% were diagnosed with anxiety. Seventy-two percent reported both anxiety and depression, correlating with worse QOL ($\chi^2 = 26.7$; $P < .05$).⁹

Assessment—Psychiatric comorbidities are assessed using clinical judgment and formal screening questionnaires in research studies. Signs of depression in patients with psoriasis can manifest as poor treatment adherence and recurrent flares of psoriasis.^{10,11} Psoriatic patients with psychiatric comorbidities were less likely to be adherent to treatment (risk ratio: 0.35; $P < .003$).¹⁰ The patient health questionnaire (PHQ) 9 and generalized anxiety disorder scale (GAD) 7 are validated and reliable questionnaires. The first 2 questions in PHQ-9 and GAD-7 screen for depression and anxiety, respectively.¹²⁻¹⁴ These 2-question screens are practical in a fast-paced dermatology outpatient setting. Systematic questionnaires specifically targeting mood disorders may be more beneficial than the widely used DLQI, which may not adequately capture mood disorders. Over the course of

10 months, 607 patients with psoriasis were asked to fill out the PHQ-9, GAD-7, and DLQI. Thirty-eight percent of patients with major depressive disorder had a DLQI score lower than 10, while 46% of patients with generalized anxiety disorder had a DLQI score lower than 10.¹⁵ Other questionnaires, including the hospital anxiety and depression scale and Beck depression inventory, are valid instruments with high sensitivity but are commonly used for research purposes and may not be clinically feasible.¹⁶

Management—Dermatologists should refer patients with depression and/or anxiety to psychiatry. Interventions include pharmacologic and nonpharmacologic management. First-line therapy for depression and anxiety is a combination of selective serotonin reuptake inhibitors and cognitive behavioral therapy.¹⁷ In addition, providers can direct patients to online resources such as the NPF website, where patients with psoriasis can access information about the signs and symptoms of mood disorders and contact the patient navigation center for further help.¹⁸

Social Functioning

Occupational Prevalence—The NPF found that 92% of patients with psoriasis or psoriatic arthritis (PsA) surveyed between 2003 and 2011 cited their psoriasis as reason for unemployment.² In a survey of 43 patients asked about social and occupational functioning using the social and occupational assessment scale, 62.5% of psoriatic patients reported distress at work and 51.1% reported decreased efficiency at work.¹⁹ A national online survey that was conducted in France and issued to patients with and without psoriasis assessed overall QOL and work productivity using the work productivity and activity impairment questionnaire for psoriasis (WPAI-PSO). Of 714 patients with psoriasis and PsA, the latter had a 57.6% decrease in work productivity over 7 days compared to 27.9% in controls ($P < .05$).²⁰ Occupational impairment leads to lost wages and hinders advancement, further exacerbating the psychosocial burden of psoriasis.²¹

Occupational Assessment—Formal assessment of occupational function can be done with the WPAI-PSO, a 6-question valid instrument.²² Providers may look for risk factors associated with greater loss in work productivity to help identify and offer support for patients. Patients with increased severity of itching, pain, and scaling experienced a greater decrease in work productivity.^{21,23} Patients with PsA warrant early detection and treatment because they experience greater physical restraints that can interfere with work activities. Of the 459 psoriatic patients without a prior diagnosis of PsA who filled out the PsA screening and evaluation questionnaire, 144 (31.4%) received a score of 44 or higher and were referred to rheumatology for further evaluation with the classification criteria for PsA. Nine percent of patients failed to be screened and remained undiagnosed with PsA.²⁴ In a study using the health assessment questionnaire to assess 400 patients with PsA, those with worse

physical function due to joint pain and stiffness were less likely to remain employed (OR: 0.56; $P=.02$).²⁵

Occupational Management—Identifying and coordinating symptoms of PsA between dermatology and rheumatology is beneficial for patients who experience debilitating symptoms. There are a variety of treatments available for PsA. According to the European League Against Rheumatism 2015 guidelines developed from expert opinion and systematic reviews for PsA management, there are 4 phases of treatment, with reassessment every 3 to 6 months for effectiveness of therapy.^{26,27} Phase I involves initiating nonsteroidal anti-inflammatory drugs with or without glucocorticoid injections. Phase II involves synthetic disease-modifying drugs, including methotrexate, leflunomide, sulfasalazine, or cyclosporine. Phase III involves adding a second synthetic disease-modifying drug or starting a biologic, such as an anti-tumor necrosis factor, IL-12/IL-23, or IL-17 inhibitor. Phase IV involves switching to a different drug in either aforementioned class.^{26,27} Treatment with biologics improves work productivity as assessed by WPAI-PSO for psoriasis and PsA.²⁸⁻³⁰ Encouraging patients to speak up in the workplace and request small accommodations such as timely breaks or ergonomic chairs can help patients feel more comfortable and supported in the work environment.¹⁸ Patients who felt supported at work were more likely to remain employed.²⁵

Interpersonal Relationships Prevalence—Misinformation about psoriasis, fear of rejection, and feelings of isolation may contribute to interpersonal conflict. Patients have feelings of shame and self-consciousness that hinder them from engaging in social activities and seeking out relationships.³¹ Twenty-nine percent of patients feel that psoriasis has interfered with establishing

relationships because of negative self-esteem associated with the disease,³² and 26.3% have experienced people avoiding physical contact.³³ Family and spouses of patients with psoriasis may be secondarily affected due to economic and emotional distress. Ninety-eight percent of family members of psoriatic patients experienced emotional distress and 54% experienced the burden of care.³⁴ In a survey of 63 relatives and partners of patients with psoriasis, 57% experienced psychological distress, including anxiety and worry over a psoriatic patient's future.³⁵

Interpersonal Relationships Assessment—Current available tools, including the DLQI and short form health survey, measure overall QOL, including social functioning, but may not be practical in a clinic setting. Although no quick-screening test to assess for this domain exists, providers are encouraged to ask patients about disease impact on interpersonal relationships. The family DLQI questionnaire, adapted from the DLQI, may help physicians and social workers evaluate the burden on a patient's family members.³⁴

Interpersonal Relationships Management—It may be difficult for providers to address problems with interpersonal relationships without accessible tools. Patients may not be accompanied by family or friends during appointments, and it is difficult to screen for these issues during visits. Providers may offer resources such as the NPF website, which provides information about support groups. It also provides tips on dating and connecting to others in the community who share similar experiences.¹⁸ Encouraging patients to seek family or couples therapy also may be beneficial. Increased social support can lead to better QOL and fewer depressive symptoms.³⁶

Management of Psychosocial Dimensions of Psoriasis Impact

Psychosocial Dimension	Intervention
Psychiatric comorbidities	Referral for psychiatry and primary care provider; SSRIs, cognitive behavioral therapy; NPF website for information on mood symptoms and management
Occupational functioning	4 phases of treatment for psoriatic arthritis: (1) NSAIDs with or without glucocorticoid injections; (2) methotrexate, leflunomide, sulfasalazine, or cyclosporine A (synthetic disease-modifying antirheumatic drug); (3) add second synthetic disease-modifying antirheumatic drug or start biologics (anti-TNF, IL-12/IL-23, or IL-17 inhibitors); (4) switching within or between classes of drugs; plus timely breaks or ergonomic chairs in work environment
Interpersonal relationships	Support groups with other psoriasis patients through NPF website; family or couples therapy
Sexual functioning	Reduce friction, warmth, and moisture in skin folds; avoid tight clothing; reapply topical medications after sexual intercourse; apply makeup to disguise psoriasis lesions; improved disease control with psoriasis medications

Abbreviations: SSRI, selective serotonin reuptake inhibitor; NPF, National Psoriasis Foundation; NSAID, nonsteroidal anti-inflammatory drug; TNF, tumor necrosis factor.

Sexual Functioning Prevalence—Psoriasis affects both physical and psychological components of sexual function. Among 3485 patients with skin conditions who were surveyed about sexual function, 34% of psoriatic patients reported that psoriasis interfered with sexual functioning at least to a certain degree.³⁷ Sexual impairment was strongly associated with depression, anxiety, and suicidal ideation; 24% of depressed patients and 20% of anxious patients experienced sexual problems a lot or very much, based on the DLQI.³⁷ Depending on the questionnaire used, the prevalence of sexual dysfunction due to psoriasis ranged from 35.5% to 71.3%.³⁸ In an observational cohort study of 158 participants (n=79 psoriasis patients and n=79 controls), 34.2% of patients with psoriasis experienced erectile dysfunction compared to 17.7% of controls.³⁹ Forty-two percent of psoriatic patients with genital involvement reported dyspareunia, 32% reported worsening of genital psoriasis after intercourse, and 43% reported decreased frequency of intercourse.⁴⁰

Sexual Functioning Assessment—The Skindex-29, DLQI, and psoriasis disability index are available QOL tools that include one question evaluating difficulties with sexual function. The Massachusetts General Hospital sexual functioning questionnaire is a 5-item validated tool that specifically assesses sexual dysfunction.⁴¹ Distribution of lesions can help identify patients who are more likely to experience sexual dysfunction. In 160 patients who completed the questionnaire and self-reported psoriasis area and severity index, lesions on the abdomen, genitals, lumbar region, and buttocks were associated with worse sexual functioning (OR: 7.9; 95% CI, 2.3-33.4; $P<.05$).⁴² Dermatologists could assess for sexual problems using either formal questionnaires or direct conversations during the routine psoriasis visit, as patients may be suffering in silence due to this sensitive topic.

Sexual Functioning Management—Better disease control leads to improved sexual function, as patients experience fewer feelings of shame, anxiety, and depression, as well as improvement of physical symptoms that can interfere with sexual functioning.^{38,43,44} Reducing friction, warmth, and moisture, as well as avoiding tight clothing, can help those with genital psoriasis. Patients are advised to reapply topical medications after sexual intercourse. Patients also can apply makeup to disguise psoriasis and help reduce feelings of self-consciousness that can impede sexual intimacy.¹⁸

COMMENT

The psychosocial burden of psoriasis penetrates many facets of patient lives. Psoriasis can invoke feelings of shame and embarrassment that are worsened by the public's misconceptions about psoriasis, resulting in serious mental health issues that can cause even greater disability. Depression and anxiety are prevalent in patients with psoriasis. The characteristic symptoms of pain and pruritus along with psychiatric comorbidities can have an underestimated impact on daily activities, including

employment, interpersonal relationships, and sexual function. Such dysfunctions have serious implications toward wages, professional advancement, social support, and overall QOL.

Dermatology providers play an important role in screening for these problems through validated questionnaires and identifying risks. Simple screening questions such as the PHQ-9 can be beneficial and feasible during dermatology visits. Screening for PsA can help patients avoid problems at work. Sexual dysfunction is a sensitive topic; however, providers can use a 1-question screen from valid questionnaires and inquire about the location of lesions as opportunities to address this issue.

Interventions lead to better disease control, which concurrently improves overall QOL. These interventions depend on both patient adherence and a physician's commitment to finding an optimal treatment regimen for each individual. Medical management; coordinating care; developing treatment plans with psychiatry, rheumatology, and primary care providers; and psychological counseling and services may be necessary and beneficial (Table). Offering accessible resources such as the NPF website helps patients access information outside the clinic when it is not feasible to address all these concerns in a single visit. Psoriasis requires more than just medical management; it requires dermatology providers to use a multidisciplinary approach to address the psychosocial aspects of the disease.

CONCLUSION

The psychosocial burden of psoriasis is immense. Stigma, public misconception, mental health concerns, and occupational and interpersonal difficulty are the basis of disease burden. Providers play a vital role in assessing the effect psoriasis has on different areas of patients' lives and providing appropriate interventions and resources to reduce disease burden.

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