Unmet Needs in the Management of Plaque Psoriasis

A review of recently published data with an analysis for managed care decision makers
Unmet Needs in the Management of Plaque Psoriasis

Because a curative therapy does not exist for psoriasis, patients with this condition seek improvements in quality of life and a reduction in the burdens of disease. Psychosocial components of psoriasis also should be considered when managing patients.

According to the National Psoriasis Foundation (NPF), a patient advocacy group, psoriasis is a chronic, immune-mediated disease that manifests itself in the skin of patients (NPF 2008). Its most common form, plaque psoriasis, presents as inflamed red lesions or patches of skin that are covered with a silvery white buildup of dead skin cells, known as scale (NPF 2008). Severity varies among individuals, and can range from only a few lesions to moderate or large areas of affected skin (Krueger 2000). It has been estimated that between 5.8 and 7.5 million Americans have been diagnosed with psoriasis (NPF 2008).

What sets psoriasis apart from other chronic conditions is a strong psychosocial component (Figure 1), such that the degree of disease severity as perceived by the patient often does not correspond with the clinician’s severity assessment (Fortune 1998). None of the currently available therapies or combination of therapies offers a cure; thus, treatment is aimed at reducing the burden of disease and achieving an improvement in its signs and symptoms.

The unmet needs of psoriasis patients are evident in the results of surveys conducted twice a year since 2003 by the NPF. Its members differ from the general psoriatic population in several important respects: they have more extensive disease; they are better informed about treatment options; and they are more satisfied with those treatments (Nijsten 2005). However, describing NPF patients with psoriasis as “more satisfied” with their treatments is not the same as saying that they find those treatments satisfying. NPF’s spring 2007 survey reported highlights from interviews that were conducted with 403 patients with psoriasis and psoriatic arthritis by telephone (n=201) and online (n=202). Respondents were screened for a balance in gender, and more than 70 percent had moderate to severe psoriasis (not defined). Of the respondents, 29 percent said they were very satisfied with their treatment, which represents substantial improvement over the results of the spring 2004 survey, which found 15 percent of respondents with the same opinion (NPF 2007, NPF 2004). This 2004 survey interviewed 619 individuals with psoriasis and psoriatic arthritis by phone (n=200) and online (n=491), screened for balance of gender and age. Approximately 82 percent of respondents had moderate to severe psoriasis (not defined). At the same time, however, the spring 2007 survey also found that 10 percent of patients were not in treatment, either because they had “given up” or because of the cost of treatment (NPF 2007).

**FIGURE 1**
Psoriasis: impact on health-related quality of life

*Patient-reported short-form (SF)-36 scores, compared with other conditions. SF-36 scores range from 0 to 100.*

Source: Adapted from Rapp 1999.
Levels of treatment satisfaction

An analysis of six NPF surveys suggested that many people with moderate or severe psoriasis are undertreated (Figure 2). The majority of the 1,657 randomly selected respondents with moderate or severe disease reported having received no therapy or topical therapy (Horn 2007a). The most recent guidelines from the American Academy of Dermatology recommend phototherapy, traditional systemic therapy, or biologic agents for patients with extensive disease (Menter 2008).

Among patients receiving treatment for severe psoriasis, one study found that nearly 50 percent were only somewhat or not at all satisfied with their therapies, and 32 percent did not believe that their treatment was aggressive enough (Krueger 2001). These findings may indicate the existence of significant dissatisfaction with the ability of treatments to control many symptoms of psoriasis (Krueger 2001).

That patients with moderate or severe psoriasis are undertreated also is borne out by a survey of U.S. dermatologists, who indicated that topical therapy (as monotherapy or in combination with other topical agents) was the only therapy prescribed to 47 percent of patients with moderate disease (defined as affected body surface area [BSA] between 3 and 10 percent) and to 37 percent of patients with severe psoriasis (defined as affected BSA more than 10 percent) (Patel 2008). In addition, dermatologists overestimated the rate at which they prescribed biologics to patients with severe psoriasis. They reported that biologics were prescribed to 41 percent of these patients, but a review of patient records showed that biologics were prescribed for 27 percent of patients with affected BSA between 11 and 20 percent, 34 percent with affected BSA between 21 and 40 percent, and 36 percent with affected BSA greater than 40 percent (Patel 2008).

Numerous reasons have been advanced for this undertreatment, including the failure of people with psoriasis to seek medical care (Horn 2007a). Furthermore, the toxic effects of some systemic therapies often caused patients with severe psoriasis to undergo a rotation of therapies (e.g., psoralen and ultraviolet light A, then methotrexate), with the switch to an alternative regimen implemented before evidence of toxicity emerged (Greaves 1995).

Co-morbid conditions

Individuals with psoriasis are subject to numerous co-morbid conditions. However, the association between the disease and these comorbidities is unclear. Psoriasis patients appear to be at an elevated risk for such conditions as obesity (Herron 2005), myocardial infarction (Gelfand 2006a), and lymphomas (Gelfand 2006b). Patients who required hospitalization as a result of their severe psoriasis may face a higher risk of mortality from cardiovascular causes (Mallbris 2004). Patients also face a greater risk of depression — 54 percent of patients with severe psoriasis between the ages of 18 and 34 who participated in an NPF survey reported feeling depressed (Krueger 2001).

It has been suggested that psoriasis is the cutaneous manifestation of an underlying systemic disease process that also can be expressed at other body sites afflicted by chronic inflammation (Kourosh 2008). Investigators have observed that the same set of cytokines that characterize psoriatic plaque is found in atherosclerotic plaque and arthritic joints, which may help to explain why patients with psoriasis (and rheumatoid arthritis) are at increased risk of cardiovascular mortality. In a Swedish study, patients with disease severe enough to warrant inpatient
treatment prior to age 40 had a risk of cardiovascular death that was 2.6-fold that of the general public, and among those patients with three or more hospitalizations, the risk of cardiovascular death was about 3 times that seen in patients hospitalized only once (Mallbris 2004).

In addition, patients with severe psoriasis appear to have a higher risk of death compared to patients without psoriasis. Researchers conducted a retrospective cohort study using a medical records database in the United Kingdom. Compared with patients without psoriasis, male patients with severe psoriasis died an average of 3.5 years earlier, and female patients with severe psoriasis died 4.4 years earlier (Gelfand 2007).

Diminished quality of life
Various needs of psoriasis patients may remain unmet. In 2007, 79 percent of NPF survey respondents indicated that psoriasis posed a moderate or large problem in their everyday lives (Figure 3). The percentage is quite similar to the results of the previously noted spring 2004 survey, when 83 percent reported that psoriasis presented a moderate or large problem (NPF 2004). Additional indications that patients with psoriasis experience problems in their daily lives are seen in the high percentages of NPF survey respondents who consistently point to strong feelings of anger or self-consciousness, or who conceal their psoriasis with clothing (Table).

Among those with severe psoriasis, patients also report issues with receiving equal treatment in a variety of service establishments, including hair salons or barbershops (24 percent), public pools (19 percent), and health clubs (11 percent) (Krueger 2001). This study featured a four-page, self-administered questionnaire that was mailed to the entire membership of the NPF (N=40,350), with a response rate of 43 percent. Patients with severe psoriasis were then surveyed via telephone. Another study found that among a group of 137 inpatients with moderate to severe psoriasis, 26 percent reported that during the last month they had experienced an occasion when “people made a conscious effort not to touch them” (Gupta 1998).

A large percentage of respondents to NPF surveys have reported other negative psychosocial effects of psoriasis on their everyday lives, such as problems with sleeping (48 percent), interference with sexual activities (29 percent), and problems using their hands (36 percent) (NPF 2008). Of particular concern is the almost 10 percent of patients who wished to be dead, as reported in a study of 217 patients (both inpatients and outpatients) with psoriasis (Gupta 1993).

Contemplation of suicide also has been shown to differ according to a patient’s age (Krueger 2001). For patients between the ages of 18 and 34, there is a 10 percent prevalence of contemplation; that figure drops to 7 percent for those between 35 and 54, and to 3 percent for those patients 55 and older.

### FIGURE 3
**Extent to which psoriasis is a problem in patients’ everyday lives**

Respondents were asked to indicate, on a scale of 1 to 10, whether psoriasis presented a small, moderate, or large problem in their everyday life (1=no problem, 10=very large problem). In this figure, “small” includes responses from 1 to 3; “moderate,” 4 to 7; and “large,” 8 to 10. The percentages depicted are from surveys conducted in the spring of the years indicated.


### TABLE
**Quality of life factors in psoriasis**

<table>
<thead>
<tr>
<th>Percentage of psoriasis patients who report:</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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</thead>
<tbody>
<tr>
<td>Anger and frustration, strong feelings of</td>
<td>44</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>Self-consciousness, strong feelings of</td>
<td>45</td>
<td>38</td>
<td>40</td>
</tr>
<tr>
<td>Having to choose clothing to conceal psoriasis</td>
<td>47</td>
<td>46</td>
<td>40</td>
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Pсориазис is a chronic and disabling illness (NIAMS 2003). In my professional experience, patients with psoriasis are expert at hiding their disease and their suffering, so the magnitude of their distress often is overlooked. We have made incredible progress in the understanding and treatment of psoriasis over the past decade, but I believe there are still real and meaningful improvements needed to move forward in the care of this patient population.

In the past 10 years, we have gained not only a better understanding of the biology behind this chronic, immune-mediated disease, but the ability to quantify, for the first time, other dimensions of health that psoriasis can affect. The impact of psoriasis is broad, and includes decreased physical and mental well being and economic consequences (Gelfand 2007, Krueger 2001, Javitz 2002). It also includes multiple comorbidities, such as depression (Krueger 2001), obesity (Herron 2005), myocardial infarction (Gelfand 2006a), and lymphomas (Gelfand 2006b).

We are just at the infancy of being able to understand and quantify the economic impact of psoriasis. Early studies demonstrate what we have suspected all along: psoriasis is associated with an increased number of sick days and causes financial distress for people who live with it (Finlay 1995, NPF 2004). Psoriasis affects career choices because of stigmatization, and it has a negative impact on work productivity, job retention, and missed workdays (Schmitt 2006). That brings us back to therapy. I have a picture that I took several years ago after asking one of my patients to bring in the jumbled contents of his medicine cabinet. That photo is a metaphor for what many of my patients have experienced: that psoriasis therapy is a miserable, time-consuming, confusing, messy, and just unpleasant experience. More and more, however, I believe our traditional treatment paradigms are being replaced by a more holistic approach guided by all of a patient’s needs that also takes into consideration a patient’s disease severity, employment, underlying health status, and economic and social status.

I believe that patients want effective therapies that maintain clearance of psoriasis, provide rapid response, are safe enough for long-term use, and result in minimal disruption to their daily lives. Although many options are available, more than a third of people with moderate or severe disease — some of whom could likely benefit greatly in multiple ways from treatment — still end up without it (Horn 2007a). We hope this will change, as it is clear that as health care providers, we now have much to offer these patients that may enable them to integrate into the workplace and the community in productive and satisfying ways.

References
Psoriasis has a documented occupational impact, including a negative effect on work productivity, job retention, and the amount of days missed on the job (Schmitt 2006). In addition, more than half of NPF respondents have reported that psoriasis impairs their ability to work, either partially (35 percent) or completely (17 percent) (NPF 2004). An analysis of NPF surveys conducted between 2003 and 2005 found that when compared to patients with mild psoriasis, people with severe psoriasis were more likely to have annual household income of less than $30,000 (Horn 2007b). In addition, another study found that for those patients with severe psoriasis, more than half were not working or retired, and of these patients, 34 percent attributed their inability to retain a job to their disease (Finlay 1995). Employed patients reported having missed a mean of 26 days from work per year as a result of their condition (Finlay 1995). Em -ployed patients reported having missed a mean of 26 days from work per year as a result of their condition (Schmitt 1993). For those patients with severe psoriasis, more than half were not working or retired, and of these patients, 34 percent attributed their inability to retain a job to their disease (Finlay 1995). Employed patients reported having missed a mean of 26 days from work per year as a result of their condition (Finlay 1995).

Summary
Numerous unmet needs exist among people with psoriasis. In the absence of a cure, psoriasis patients seek treatment that improves signs and symptoms of their disease. Much progress has been made in the area of treatment options, but substantial gaps still exist.

References