

Treatment Satisfaction Among Patients with Moderate-to-severe Psoriasis

^aTRACEY FINCH, BM, FRCP; ^aTANG NGEN SHIM, MRCP (DERMATOLOGY); ^bLESLEY ROBERTS, PhD; ^cOLIVER JOHNSON, BMedSc(hons)

^aSolihull Hospital, Heart of England NHS Trust, Birmingham, United Kingdom; ^bWarwick Medical School, University of Warwick, Coventry, United Kingdom; ^cBirmingham University Medical School, Birmingham, United Kingdom

ABSTRACT

Objective: Various treatment options are available for the management of psoriasis; however, there remains a scarcity of literature regarding satisfaction levels among these patients. Given that treatment dissatisfaction is associated with lower levels of adherence, the objective of the present study was to establish satisfaction levels among patients with psoriasis. **Design:** A modified version of a previously validated satisfaction questionnaire was completed by patients. **Setting:** Dermatology outpatient department (Solihull, United Kingdom). **Participants:** Thirty-eight patients with psoriasis (median age 43). **Measurements:** The questionnaire addressed various domains of satisfaction including satisfaction with safety, convenience, information provision, and finally global satisfaction with 1) topical treatments, 2) phototherapy, and 3) systemic treatments. **Results:** Mean global satisfaction with phototherapy and systemic treatments was significantly higher than with topical treatments. The authors' findings also showed that 20 percent of patients receiving topical treatment were dissatisfied with the convenience of the treatment. Interestingly, the only domain causing dissatisfaction among patients receiving systemic therapies (largely biologics) was safety. Despite this, satisfaction with both systemic treatment and phototherapy was higher than has been previously reported. **Conclusion:** The findings of this study indicate that levels of satisfaction with phototherapy and systemic treatments are high, which is encouraging for both clinicians and patients. However, there are undoubtedly higher levels of dissatisfaction with topical treatments. Given that topical treatments have the greatest safety profile, they will continue to be the first-line treatment for psoriasis. Advances that focus on patient concerns should become a priority in order to improve compliance and reduce the need for more costly intervention. (*J Clin Aesthet Dermatol.* 2015;8(4):26–30.)

Psoriasis is a chronic inflammatory skin disease that affects 2 to 4 percent of the Western population and can negatively impact patients' physical, psychological, and social functioning.^{1,2} There are various options available for the treatment of psoriasis, namely, topical treatment, phototherapy, and systemic therapy. A recent systematic review conducted by Augustin et al³ found that adherence in the treatment of psoriasis varies between 23 and 97 percent; however, little is known about patients' satisfaction with these treatment options.^{3,4} Two older studies have suggested that between 25 and 38 percent of patients with psoriasis are dissatisfied with their current treatment although there remains a dearth of literature in this field of dermatology.^{5,6} In light of this, it is important to quantify patient satisfaction since it is recognized that dissatisfaction with treatment will result in poor compliance and suboptimal health outcomes.⁷ Treatment satisfaction is an emerging area of research vital to optimizing patient-

centered care and integrating patients' perspectives into clinical practice guidelines.^{8–10} The purpose of this study was to establish satisfaction levels among patients currently receiving treatment in secondary care for psoriasis and to ascertain whether satisfaction differs between the various treatment options.

METHODS

A modified version of a satisfaction questionnaire previously used by Cranenburgh et al⁴ (See appendix) was offered to patients in the dermatology outpatient department of a United Kingdom-based NHS trust (Solihull Hospital, West Midlands, United Kingdom). A convenient sampling approach was used whereby participants were identified by 1) dermatologists or nurses during consultations or 2) voluntary completion of the questionnaire by patients in the waiting room. Only patients aged 18 or over were included in this study.

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ADDRESS CORRESPONDENCE TO: Tracey Finch; E-mail: tracey.finch@heartofengland.nhs.uk

TABLE 1. Mean (standard deviation) treatment satisfaction with each of the different treatment types*

TREATMENT	n	GLOBAL SATISFACTION	SAFETY	CONVENIENCE	INFORMATION PROVISION	TOTAL SCORE
Topical	30	3.8 (1.4)	4.5 (1.3)	3.7 (1.5)	4.3 (1.2)	16.4 (4.0)
Phototherapy	26	5.2 (0.8)	5.0 (1.)	4.6 (1.3)	5.4 (0.8)	20.2 (2.9)
Systemic	13	5.2 (1.1)	4.9 (1.6)	5.1 (1.1)	5.2 (0.8)	20.4 (4.0)

*The number of patients receiving a particular treatment appears to exceed the sample size of 38 as some patients were currently receiving a particular treatment (e.g., phototherapy), but may have previously used another (e.g., topical). Each satisfaction domain has a maximum potential score of 6.

Data and analysis. The questionnaire consisted of three separate subsections, namely satisfaction with 1) topical treatment, 2) phototherapy, and 3) systemic therapy (e.g., methotrexate, ciclosporin, retinoids, or biologic drugs).

Within each of the three subsections outlined above, there were four questions relating to patients' satisfaction with that particular treatment. To evaluate global satisfaction with, for example, topical treatment, the first question asked was, "How satisfied are you with the topical cream treatment you use?" To evaluate satisfaction about perceived safety of the treatment, the second question asked was, "How satisfied are you with the safety of the topical cream you use?" To evaluate satisfaction regarding convenience of the treatment, the third question asked was, "How satisfied are you with the convenience of your topical treatment?" The final question was used to establish satisfaction with the information provided about that particular treatment, for example, "How satisfied are you with the information provided about your topical treatment?"

Questions were answered on a 6-point scale with labelled endpoints (1=not satisfied at all, 6=very satisfied). A score of 1 or 2 was considered to represent dissatisfaction. A total satisfaction score was then devised by adding all four items (range 4–24). Analyses involved reporting mean scores and standard deviations (SD) as well as proportions (%) regarding satisfaction by treatment modality. Following initial ANOVA tests, independent *t*-tests between each treatment pair were used to establish whether differences in mean scores were significant at the level of $p < 0.05$.

RESULTS

A total of 38 patients completed the questionnaire, 55.3 percent (21/38) of whom were female. Of the total sample population, 5.3 percent (2/38) were currently receiving topical creams, 50 percent (19/38) were receiving phototherapy, 23.7 percent (9/38) were receiving systemic treatment,s and 21.1 percent (8/38) were currently receiving a combination. Of the patients on a combination regime, 6/8 were being treated with phototherapy *and* topical creams while 2/8 were receiving systemic treatment *and* topical

cream. Analyses between the different combination methods were not undertaken as the sample size of this subgroup ($n=8$) was deemed to be too small to offer meaningful results. The median age for the study population was 43 (interquartile range 30–56). The mean scores for global satisfaction, safety, convenience, and information provision for each of the treatment types are summarized in Table 1.

Mean "global satisfaction" with phototherapy ($t=-4.173$, $p < 0.001$) and systemic treatment ($t=-3.047$, $p=0.04$) were significantly higher than with topical treatment. Mean "global satisfaction" did not differ significantly between phototherapy and systemic treatment. With regards to "satisfaction with safety" of the various treatment options, phototherapy had the highest mean score (5.0/6.0); however, this was not significantly different from topical or systemic. Mean scores for "convenience" of phototherapy ($t=-2.351$, $p=0.002$) and systemic treatment ($t=-3.022$, $p=0.004$) were significantly higher than for topical treatment. There was no significant difference between "convenience" of phototherapy and systemic treatment.

With respect to satisfaction with "information provision," the only statistically significant difference was between phototherapy and topical treatment ($t=-4.093$, $p < 0.001$), with phototherapy scoring higher on average than topical treatment. Finally, "mean total satisfaction" scores for phototherapy ($t=-4.065$, $p < 0.001$) and systemic treatment ($t=-2.315$, $p=0.026$) were significantly higher than topical treatment. The percentage of patients who were dissatisfied with aspects of their treatments is summarized in Table 2.

DISCUSSION

The results of this study indicate that on the whole, satisfaction with phototherapy and systemic treatments is high. These findings contrast with several previous studies that suggest levels of dissatisfaction among patients with psoriasis are as high as 40 percent.^{11–13} Phototherapy has previously been shown to be effective and safe in patients with psoriasis so it is useful to see this reflected in patients' reported levels of satisfaction.¹⁴ Equally high levels of satisfaction with the systemic treatments were also reported

TABLE 2. Percentage of patients who were dissatisfied (a score of ≤ 2 out of 6) with various domains of their treatment

TREATMENT TYPE	DISSATISFIED (%)
Topical	
Global satisfaction	16.7
Safety	6.7
Convenience	20.0
Information provision	3.3
Phototherapy	
Global satisfaction	0.0
Safety	0.0
Convenience	3.8
Information provision	0.0
Systemic	
Global satisfaction	0.0
Safety	15.4
Convenience	0.0
Information provision	0.0

and this is reassuring for both clinicians and patients. This finding is consistent with a recent published study that demonstrated high levels of satisfaction among patients treated with biologics for their psoriasis.¹⁵ However, global satisfaction with topical treatments is significantly lower. While this finding is perhaps unsurprising, it is nevertheless important as it highlights failings with regards to topical treatments. The authors recognize that “global satisfaction” is a somewhat subjective term that is open to interpretation; however, it would not be unreasonable to suggest that factors such as low levels of treatment efficacy may contribute to reduced “global satisfaction.” It was also found that one fifth of patients receiving topical treatment were dissatisfied with its convenience. These findings are consistent with a study conducted by Yeung et al,¹⁶ which reported that perceived treatment inefficacy and inconvenience were commonly cited reasons for the discontinuation of treatment for long-term psoriasis management. Similarly, Chan et al¹⁷ identified “messiness” and lack of efficacy as the main reasons contributing to poor treatment satisfaction.

The authors’ study was limited by the relatively small cohort size (n=38), which may limit the generalizability of their results. It is also worth noting that the relationship between “satisfaction” will have been influenced by the patient’s perception of treatment efficacy (i.e., clinical improvement in the severity of psoriasis). Unfortunately, clinical records of treatment responses are not available as all data were collected anonymously. It would be useful for further research to specifically explore patient’s perception of treatment efficacy. Despite this, the study still has strength in the fact that statistical significance was reached for many of the issues outlined above; more subtle differences in satisfaction may be identified by a larger survey. In addition, there will inevitably be an element of selection bias given that

the patients were recruited in secondary care and so findings of this study cannot be generalized to a primary care cohort.

In summary, topical treatments for psoriasis are lagging behind both phototherapy and systemic treatments in terms of global satisfaction and convenience. To advance the quality of psoriasis management further, more emphasis needs to be placed on improving the aforementioned aspects of topical treatment. Given that systemic treatments, in particular biologic therapies, yield such high profits for pharmaceutical companies, it is easy to see how efforts may be focussed largely on developing these novel agents. However, in the long term, it is vital from both a clinical and financial perspective that improvements in topical treatments are not neglected. It is hoped that this study will contribute to the growing body of evidence that demonstrates that there is room for improvement with regard to patient satisfaction with psoriasis treatments.

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APPENDIX. Psoriasis Treatment Satisfaction Survey

SECTION 1

Age _____ Gender: Male/ Female
 Type of psoriasis (if known): _____
 Current treatment: _____

SECTION 2

TREATMENT 1: SATISFACTION WITH TOPICAL CREAM

Do you use TOPICAL CREAM (creams you apply to the skin) for your psoriasis?

Yes Please complete the info in the box below
 No Please go to TREATMENT 2

	NOT AT ALL SATISFIED					VERY SATISFIED
1. How satisfied are you with the topical cream treatment you use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How satisfied are you with the safety of the topical cream you use? Think of side effects and complaints about treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How satisfied are you with the convenience of your topical treatment? Think about ease of application and the time this takes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How satisfied are you with the information provided about your topical treatment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TREATMENT 2: SATISFACTION WITH PHOTOTHERAPY

Do you use PHOTOTHERAPY [Ultraviolet (UV) light treatment] for your psoriasis?

Yes Please complete the info in the box below
 No Please go to TREATMENT 3

	NOT AT ALL SATISFIED					VERY SATISFIED
1. How satisfied are you with the phototherapy treatment you use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How satisfied are you with the safety of phototherapy you use? Think of side effects and complaints about treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How satisfied are you with the convenience of phototherapy treatment? Think about ease of application and the time this takes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How satisfied are you with the information provided about your phototherapy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX continued. Psoriasis Treatment Satisfaction Survey

TREATMENT 3: SATISFACTION WITH SYSTEMIC THERAPY

Do you use SYSTEMIC THERAPY (i.e., treatment that affects your whole body [e.g., methotrexate, cyclosporine, retinoids, or biologic drugs]) for your psoriasis?

Yes Please complete the info in the box below
 No Please return the questionnaire to the box by reception

	NOT AT ALL SATISFIED					VERY SATISFIED
1. How satisfied are you with the systemic treatment you use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How satisfied are you with the safety of the systemic treatment you use? Think of side effects and complaints about treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How satisfied are you with the convenience of your systemic therapy? Think about ease of application and the time this takes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How satisfied are you with the information provided about your systemic treatment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Any other general comments regarding psoriasis treatment:

Thank you very much for completing the questionnaire
 Solihull Dermatology Department

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