

Do Dermatologists Help Patients?

Using Patient-Reported Outcome Measures in a District General Hospital

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INTRODUCTION

Dermatologists need to produce evidence that their work is of a good standard and that their services improve the well-being of patients. Sources of evidence can be objective measures of outcome - such as the Psoriasis Area Severity Index (PASI score)¹, or subjective measures - such as Patient Reported Outcome Measures (PROMS). These are routinely used when treating patients with biological therapies - but otherwise their main use is as research tool. We were interested to find out whether useful information can be obtained using PROMS more widely in a DGH setting.

AIM

The aim of this study was to investigate the value of PROMS in a dermatology department in a DGH.

METHODS

(1) Patients undergoing 4 different therapies were asked to fill in a questionnaire, the Dermatology Life Quality Index², (DLQI) or the Cardiff Acne Disability Index³ (CADI) before and after treatment. The results were then analysed

Therapy	PROM used
Biological therapy in psoriasis	DLQI
Phototherapy in psoriasis	DLQI
Botulinum toxin for axillary hyperhidrosis	DLQI
Isotretinoin for acne	CADI

(2) For 15 patients receiving biological therapies in psoriasis the PASI was also calculated before treatment and 12 weeks afterwards. We were therefore able to compare the results of the PASI and the DLQI.

Cardiff Acne Disability Index

- As a result of having acne, during the last month have you been aggressive, frustrated or embarrassed?
 - Very much indeed
 - A lot
 - A little
 - Not at all
- Do you think that having acne during the last month interfered with your daily social life, social events or relationships with members of the opposite sex?
 - Severely, affecting all activities
 - Moderately, in most activities
 - Occasionally or in only some activities
 - Not at all
- During the last month have you avoided public changing facilities or wearing swimming costumes because of your acne?
 - All of the time
 - Most of the time
 - Occasionally
 - Not at all
- How would you describe your feelings about the appearance of your skin over the last month?
 - Very depressed and miserable
 - Usually concerned
 - Occasionally concerned
 - Not bothered
- Please indicate how bad you think your acne is now:
 - The worst it could possibly be
 - A major problem
 - A minor problem
 - Not a problem

Cardiff Acne Disability Index³

DERMATOLOGY LIFE QUALITY INDEX

Hospital No: _____ Date: _____ DLQI

Name: _____ Address: _____ Diagnostics: _____ Sex:

The aim of this questionnaire is to measure how much your skin problem has affected your life OVER THE LAST WEEK. Please tick one box for each question.

- Over the last week, how often have you been painful or itchy because of your skin?

Very much	<input type="checkbox"/>
A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>
- Over the last week, how embarrassed or self-conscious have you been because of your skin?

Very much	<input type="checkbox"/>
A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>
- Over the last week, how much has your skin interfered with you going shopping or looking after your house or garden?

Very much	<input type="checkbox"/>
A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>
- Over the last week, how much has your skin influenced the clothes you wear?

Very much	<input type="checkbox"/>
A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>
- Over the last week, how much has your skin affected your work or leisure activities?

Very much	<input type="checkbox"/>
A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>
- Over the last week, how much has your skin made it difficult for you to do any sport?

Very much	<input type="checkbox"/>
A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>
- Over the last week, has your skin prevented you from working or studying?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
- If 'No', over the last week how much has your skin been a problem at work or studying?

A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>
- Over the last week, how much has your skin caused problems with your partner or any of your close friends or relatives?

Very much	<input type="checkbox"/>
A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>
- Over the last week, how much has your skin caused you sexual difficulties?

Very much	<input type="checkbox"/>
A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>
- Over the last week, how much of a problem has the treatment for your skin been, for example for itching, your home misery, or for taking up time?

Very much	<input type="checkbox"/>
A lot	<input type="checkbox"/>
A little	<input type="checkbox"/>
Not at all	<input type="checkbox"/>

*DLQI: 10 items, April 1992 www.dermatology.org.uk. This must not be copied without the permission of the authors.

Dermatology Life Quality Index²

RESULTS

(1) DLQI/ADI before & after treatment

	Treatment			
	Biologics (DLQI/30)	Phototherapy (DLQI/30)	Botulinum (DLQI/30)	Isotretinoin (ADI/15)
No. patients	15	37	28	27
Score before	22.7	12.9	13.3	7.7
Score after	4.7	2.5	1.9	2.0
% improvement	80.8	81.4	81.1	71.1

(2). PASI vs DLQI

The mean % improvement for the PASI was 66.6% and for DLQI was 80%. The difference between the improvement in scores for individual patients ranged from 1.4% to 60.7% with a mean of 19.8%. The DLQI improved more than the PASI in 11/15 patients.

CONCLUSIONS

Patients in ULHT derive considerable benefit from phototherapy and biologic treatments for psoriasis, from botulinum toxin injections for axillary hyperhidrosis and isotretinoin for acne.

The differences between the objective (PASI) and subjective (DLQI) measures of severity generally revealed a greater improvement in the subjective assessment of improvement.

DISCUSSION

PROMS provide a standardised way of measuring the psychological and sociological impact of disease and are useful tools for dermatologists:

- PROMS help assess the value of a treatment to individual patients
- PROMS establish whether or not that treatment, as administered by the service, provides benefit to patients in general. This is influenced by many factors such as patient selection and operational issues such as staff attitudes, competence, facilities and concurrent patient education.
- PROMS provides feedback for those working in the service and may identify areas for development or further training.
- PROMS provides evidence for those who commission the service that it is providing health benefits for patients.

References

- Fredriksson T, Pettersson U. Severe psoriasis—oral therapy with a new retinoid. *Dermatologica* 1978; 157(4):238-244
- A.Y. Finlay, G.K. Khan. Dermatology Life Quality Index (DLQI): A simple practical measure for routine clinical use. *Clinical and Experimental Dermatology* 1994; 19: 210-216
- Motley RJ, Finlay AY. Practical use of a disability index in the routine management of acne. *Clin Exp Dermatol*, 1992; 17: 1-3