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Dermatology Life Quality Index (DLQI) as a psoriasis referral triage tool

Dear Editor,

Most primary care psoriasis referrals in the UK are triaged as 'routine', in part because of the prioritisation of skin cancer. As a result, patients with severe psoriasis may wait several months to be seen, enduring quality of life (QoL) impairment that could have been reduced. Furthermore some patients may spontaneously improve by the time they are seen by a specialist, making the appointment unnecessary at that time. Therefore, following approval from the local ethics committee, we conducted a prospective study to evaluate the usefulness of Dermatology Life Quality Index (DLQI) scores in triaging patients with psoriasis referred to our dermatology secondary health care services.

Local general practitioners (GPs) were provided with DLQI questionnaires when referring patients with psoriasis. Referrals were triaged as 'urgent' if the DLQI score was > 10 because this represents a very large effect on a patient's life.[1] Those referred with no DLQI scores, either from participating or non-participating GPs, were triaged as routine, as a control group. When patients were seen in clinic, we measured their DLQI and Psoriasis Area and Severity Index (PASI) scores, and satisfaction with the waiting time (measured on a five-point Likert scale, 1=Not at all happy to 5=Very happy). A power calculation predicted that 20 patients were required in each group to give 80% power to detect a five point difference in PASI score for an alpha significance level of 0.05. The 40 recruited patients had no significant difference in demographics and disease characteristics (Table 1). The median waiting time for the 'urgent' group was 88 days (interquartile range (IQR) 66-99 days) whereas patients triaged as 'routine' waited 256 days (IQR 228–295 days).

As expected, of those patients seen urgently 60% were 'happy' or 'very happy' with the waiting time. In contrast, in the routine group no patients were 'happy' or 'very happy'. The median PASI score in the urgent group was 6.2 (IQR 3.5–10.6) compared to 3.85 (IQR 2.8–6.3) in the routine group (no significant difference). The median DLQI score in the urgent group when seen in secondary care was four points higher compared to the routine group (urgent=16, IQR 12-20, vs. routine=12, IQR 8.5–17). In those triaged as urgent, the median DLQI score was not significantly different compared to their baseline scores at the time of referral (17.5; IQR 13.5–23).

Pressures on dermatology secondary care services in the UK and a requirement to meet skin cancer waiting time targets results in patients with inflammatory dermatoses having long waiting times. Triaging GP referrals accurately is difficult if information is incomplete and disease severity scores are not given. Asking GPs to perform a severity score involving complete skin examination, such as PASI, is not practical because of lack of time and insufficient training. However, a QoL questionnaire can easily be completed by patients while the GP documents the consultation. The DLQI is the most commonly used QoL assessment tool in psoriasis trials[2] and takes 1-2 minutes to complete.[3] Patients seen urgently due to a baseline DLQI score > 10 at referral had a DLQI score four points higher than those referred without a DLQI and seen 'routinely'. As the minimal clinically important difference (MCID) for DLQI is four points,[4] using a baseline DLQI score greater than 10 does identify those patients whose psoriasis has a particularly high impact on QoL, compared to an unselected group of psoriasis referrals.

One limitation is the lack of a separate group of psoriasis referrals with a DLQI score ≤10. However we found that almost no patients were referred with scores in this range, perhaps because GPs chose not to refer less severely affected patients. The Scottish[5] and Malaysian[6] guidelines recommend referral for DLQI scores >5 in psoriasis patients unresponsive to topical therapy and, in

keeping with our study experience, 65.5% of eligible patients in Scotland were not seen by a specialist.[7] It is possible that patients or GPs might inflate DLQI scores to reduce waiting time delays, however we mitigated this in our study by not specifying the DLQI score triage cut-off for urgent appointments.

Our long waiting time of 256 days for routine referrals reflects pressures on dermatology secondary care services in Wales. While we chose a DLQI cut off score of 10 points, as it indicates major impairment of QoL, a different cut off score could be selected depending on the attitude and resources of the referral centre.

In summary, we have demonstrated that a QoL instrument such as the DLQI can be used as a triage tool. Its use may help GPs quantify psoriasis severity, and ensure that patients whose psoriasis is causing greatest impact on QoL are seen in a timely manner. A much larger randomised study is needed to evaluate the usefulness of DLQI as a triage tool in dermatology services.

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Table 1 Participants' characteristics. HT: hypertension; IQR: interquartile range; PsA: Psoriatic arthritis.

	Routine (no DLQI at referral)	Urgent (DLQI > 10 at referral)
Number	20	20
Gender	M=9; F=11	M=11; F=9
Age median (years) (IQR)	34 (28-51)	40 (33–52)
Psoriasis duration median (years) (IQR)	13 (8.5-20)	8.5 (4-20)
Body Mass Index (BMI) (median kg/m2) (IQR)	27.1 (23.4–31.2)	29.2 (26–33.5)
Family history of psoriasis	10	9
Co-morbidities	11 (HT=5; hypercholesterolaemia=2; depression=8)	8 (HT=4; DM=1; hypercholesterolaemia=2; depression=2; PsA=2)
Waiting time median (days) (IQR)	256 days (228–295)	88 days (66–99)