Does the Occupational Contact Dermatitis Disease Severity Index correlate with quality of life in patients with occupational contact dermatitis of the hands?

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The Occupational Contact Dermatitis Disease Severity Index (ODDI) was recently developed for physicians to measure the severity and functional disability of occupational contact dermatitis (OCD) specifically of the hands (1). There have been some studies that have investigated the relationship between physician- and patient-rated disease severity and quality of life (QoL) in hand eczema but they are limited by the use of non-validated instruments for the assessment of disease severity and used indices not specifically for OCD (2). Our aim was to investigate the correlation between the ODDI and patient-reported QoL using a validated dermatology-specific QoL measure.

### Results

Of the study sample, 50.5% \((n = 48)\) were male and 58.9% \((n = 56)\) were atopic. For the whole sample, the median ODDI score was 6 (IQR 4–6), original DLQI was 10 (IQR 6–14), and the extended DLQI was 13 (IQR 8–18). There was a good correlation between the original DLQI and the extended DLQI \([\rho = 0.76; 95\% confidence intervals (CI): 0.66–0.84]\).

Table 1 displays the correlation coefficients between the ODDI and the original and extended DLQI.

<table>
<thead>
<tr>
<th>ODDI and DLQI – 1 week</th>
<th>ODDI and DLQI – 2 months</th>
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</thead>
<tbody>
<tr>
<td>Whole sample ((n = 95))</td>
<td>(\rho = 0.29 (95% CI: 0.09–0.46))</td>
</tr>
<tr>
<td>Males ((n = 48))</td>
<td>(\rho = 0.28 (95% CI: −0.004 to 0.52))</td>
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<tr>
<td>Females ((n = 47))</td>
<td>(\rho = 0.29 (95% CI: 0.008–0.54))</td>
</tr>
<tr>
<td>Age &lt; 30 years</td>
<td>(\rho = 0.23 (95% CI: −0.06 to 0.48))</td>
</tr>
<tr>
<td>Age &gt; 30 years</td>
<td>(\rho = 0.34 (95% CI: 0.06–0.58))</td>
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</tbody>
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ODDI, Occupational Contact Dermatitis Disease Severity Index; DLQI, Dermatology Life Quality Index; CI, confidence intervals.

### Discussion

The ODDI showed a moderate correlation with the DLQI that improved slightly with age and male gender. A patient’s QoL may be influenced by many factors other than the severity of their disease and it has been suggested that the two tools measure different aspects of disease. Results similar to ours have been shown previously for a number of different skin conditions (4,5).

We found a significantly higher DLQI score, implying worse QoL, than reported by other studies. Our patients were likely to be more severe as they had been referred to a tertiary OCD clinic. Furthermore, several previous studies surveyed subjects by questionnaire sent after the initial diagnosis, whereas our patients completed the survey at initial assessment when their disease was active and hence QoL would generally be lower than if assessed at a later time.

In conclusion, a moderate correlation was observed between the ODDI, a physician-assessed disease severity index, and the DLQI, in keeping with previous work suggesting that clinicians’ estimates of severity do not always correlate well with patient QoL measures.

### References


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