



## Cross-country generalizability of quality-of-life scores in atopic dermatitis

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Atopic dermatitis (AD) is a chronic inflammatory skin disease characterized by a broad spectrum of symptoms including itch, skin pain, mental health problems and difficulties in sleeping.<sup>1</sup> AD may substantially affect patients' health-related quality of life (HRQoL) and ability to work. Most available studies concerned with HRQoL in patients with AD are limited to one country, and little is known about the cross-country variation in HRQoL in this patient population. As clinical and quality-of-life data are often specific to the country of interest, their transferability to other jurisdictions remains uncertain.<sup>2</sup>

In this issue of the *BJD*, Andersen *et al.* present the results of a large online survey about self-reported severity and HRQoL in 1232 patients with AD from four countries (France, Germany, the U.K. and the U.S.A.).<sup>3</sup> The sociodemographic and clinical characteristics of the patients were well matched between the European and U.S. patient populations. However, age at diagnosis and the proportion of smokers were higher, whereas the percentage of obese patients was lower in Europe. A wide range of validated outcome measures have been used, including the AD-specific Patient Oriented Eczema Measure, the skin-specific Dermatology Life Quality Index (DLQI) and the generic instruments EuroQol EQ-5D-5L and EQ visual analogue scale (VAS). Patients assessed their disease severity using the Patient-Oriented Scoring of AD (PO-SCORAD).

The study by Andersen *et al.* is the first in the literature to estimate EQ-5D-5L index and EQ VAS scores for PO-SCORAD score bands.<sup>3</sup> EQ VAS scores indicated worse HRQoL in patients with higher self-reported disease severity. On a scale ranging from 0 (the worst health you can imagine) to 100 (the best health you can imagine), mean EQ VAS scores of patients with mild, moderate, severe 1, severe 2 and severe 3+ AD were 75.4, 66.4, 61.0, 58.1 and 49.7, respectively. In contrast, other studies reported mean EQ VAS scores of 72.4 in psoriasis, 68.0 in pemphigus and 56.8 in hidradenitis suppurativa.<sup>4-6</sup>

For all severity groups of patients, higher DLQI and lower EQ-5D-5L index were reported in Europe than in the U.S.A., but no statistically significant difference was revealed. Therefore, the results suggest that HRQoL impairment is similar and consistent between the European and U.S. patient populations. A major strength of the study is that it includes patients from four countries, which contributes to the generalizability of the

findings. Future research comparing HRQoL and clinical outcomes of patients with AD from different countries and regions, particularly from those with different sociocultural backgrounds, may provide evidence of wider generalizability. Considering the expanding arena of HRQoL instruments available for patients with AD, another future research direction could be to test the generalizability of other skin-specific or disease-specific patient-reported outcome measures for AD, such as DLQI-Relevant, Skindex, Quality of Life Index for Atopic Dermatitis, 5-D Itch Scale or ItchyQoL.<sup>7-9</sup>

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Conflicts of interest: none to declare.