OBJECTIVES: The Dermatology Life Quality Index (DLQI; 10 items) is a generic dermatology health-related quality of life (HRQoL) measure that is the most commonly used in dermatology. Despite its popularity little research has been conducted into the dimensionality of the questionnaire. The purpose of this study was to examine its scaling properties and establish whether it is unidimensional. METHODS: DLQI data were combined from two studies; one involving people with psoriasis and the other patients with atopic dermatitis. Item Response Theory was used to determine; overall fit to the Rasch model, individual item fit, targeting of scale to severity of response category, presence of DIF, and presence of Differential Item Functioning (DIF) by disease, age or gender. RESULTS: The sample included 146 psoriasis patients (male 50%, mean age = 44.2 years; range 17–83 years) and 146 atopic dermatitis patients (male 50%, mean age = 43.5 years; range = 20–82 years). The DLQI misfit the Rasch model (Chi2 = 63.38, df = 40, p = 0.01). Item 2 misfit the Rasch model and items 5 and 7 showed borderline misfit. Items 4, 6, 7, 8 and 9 had disordered response thresholds indicating that these did not work in a logical way. Results showed a lack of spread in the measurement of HRQoL with too few items covering either milder or more severe levels of HRQoL. DIF by disease was shown in items 6 and 7 and DIF by age in item 10. After removal of item 2 and rescoring the response categories the DLQI still misfit the Rasch model (Chi2 = 54.92, df = 36, p = 0.02). CONCLUSIONS: The results of the Rasch analysis showed there were several problems with the scaling properties of the DLQI and that little confidence can be placed in raw scores generated from the scale. These problems need to be addressed before the QLDS can be considered a valid and useful outcome measure.

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DEVELOPMENT AND ACCEPTABILITY OF A NEW INTERNATIONAL QUALITY OF LIFE INSTRUMENT SPECIFIC TO PHYSICAL APPEARANCE: BEAUTYQOL

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OBJECTIVES: Many studies have observed the impact of physical appearance on Quality of life (QOL) but no specific instrument has been validated at an international level. The aim of this project was to develop such an instrument and to test its acceptability across a broad spectrum of cultures. The BeautyQol is a multidimensional, self-administered QOL questionnaire specific to cosmetics and physical appearance. METHODS: Semi-direcutive interviews were conducted by clinical psychologists simulating consultation of 500 patients (49 of 309 subjects, men and women aged 18 to 70). In the second phase of development, an acceptability study in 13 countries representing 16 cultures was conducted on 874 subjects in France, UK, Germany, Spain, Sweden, Italy, Russia, USA, Brazil, Japan, India (Hindi and English) China and South Africa (Zulu, Sotho and English). Statistical techniques include Kendall correlations and Principal Component analyses. RESULTS: From the item generation phase, 62 questions were selected in describing major domains such as well being, self esteem, social life, love life, sexual life, confidence, happiness, image, status, emotion, seduction, success, vitality, charisma, motivation, joy, fun, dignity, etc. General acceptance was very good according to the very low rate of no answer. Mean time duration was 11 minutes to complete the 62 questions and 3 open questions (median: 9 min). Item reduction analysis led to a 48 questions. The next study currently underway is a global validation study involving a minimum of 1200 subjects worldwide. CONCLUSIONS: BeautyQol is the first user-centered instrument specific in physical appearance that is being developed simultaneously in 13 countries. BeautyQol will be a valuable tool for national and international assessment in Dermatology, Cosmetic surgery, and Cosmetology. It is anticipated that BeautyQol will be a useful instrument for the measurement of QOL as affected by cosmetic products, techniques and agents that alter physical appearance of disease.