Appendix S1.

MATERIAL AND METHODS

Participants

The study population comprised 201 consecutive patients who met the inclusion criteria for participation, between 12 December 2011 and 10 February 2012, at the Dermatology Outpatient Clinic of the Public Health Service hospital in Alcañiz, Spain. Criteria for participation were as follows: (*i*) men and women diagnosed with a skin condition; (*ii*) 18 years of age or older; (*iii*) given signed, informed consent to voluntary participation; (*iv*) sufficient language and communication skills to be able to take part in the project.

The work was conducted in accordance with the World Medical Association Declaration of Helsinki and the requirements of the local research ethics committee. During the recruitment period, 14 patients (9 women and 5 men) stated that they did not wish to participate as they felt that they did not have enough time to do so.

Study design and hypotheses

The first step was a pilot study. The analysis was descriptive, observational and transversal. We advanced 3 hypotheses: (*i*) patients with chronic itching would show more symptoms of anxiety-depression than patients who did not experience pruritus; (*ii*) the quality of life of the study population (patients with a dermatological condition and chronic itching) would be worse than that of the control group (patients with a dermatological condition but no itching); (*iii*) patients with chronic itching experience deterioration in their family relationships, in comparison with patients who do not experience pruritus.

Assessment instruments

Hospital Anxiety and Depression Scale (HADS) (22). A self-administrated screening scale for symptoms of anxiety and/or depression. We used the original cut-off point of 11 to identify a clinical case; the scale was validated and culturally adapted to Spain by Caro & Ibañez (23). The instrument has been used in research on pruritus in patients with terminal liver disease treated with ambulatory dialysis (24) and, more recently, in research on patients with pruritus and psoriasis (25).

Itch Severity Scale (ISS) (26). A self-administered questionnaire for measuring the severity of pruritus. There are 24 elements that comprise 7 components that explore a variety of issues related to itching: frequency, description of itch; affected body areas: intensity; sleep disruption; effect on mood; effect on sexual desire and function. Scoring for each component ranges from 0.0 to 1.0. The final total is obtained by adding the scores of each of the components and multiplying the figure by 3, giving a score of between 0 and 21. The scale used in this study was validated and culturally adapted by Dauden et al. (27).

The Dermatology Life Quality Index (DLQI) (28): a dermatology-specific, self-administered health-related quality of life (HRQoL) questionnaire of 10 questions. The 10 questions are subdivided into 6 domains: symptoms and feelings; daily activities; leisure; work/school; personal relationships; and treatment. The DLQI has been employed to evaluate quality of life in patients with atopic eczema and persistent pruritus (29, 30).

The family APGAR (31): a questionnaire concerning 5 parameters of family functioning: Adaptability; Partnership; Growth; Affection; and Resolve. The response options were designed to describe frequency of feeling satisfied with each parameter on a 3-point scale ranging from 0 (hardly ever) to 2 (almost always). The instrument was validated and culturally adapted to Spain by Bellon et al. (32).

Clinical information and procedure

Participants were visited on one occasion during the period of the study. During the visit, sociodemographic data was collected, along with details on clinical diagnosis and the presence of chronic itching. The study nurse informed consecutive first visit patients about the aims and the methodology of the study and those willing to participate were given an informed consent document to read, discuss and sign. Patients were then given the study questionnaires to complete in the waiting room, before being visited by the dermatologist.

All participants completed the ISS, and, based on their scores, the sample was divided into 2 groups: the "itch" group (X_1), and the "no itch" group (X_2). Patients in group X_1 had ISS scores that were above 0; the scores for the X_2 group were less than 0.

Statistical analysis

Data were analysed by means of SPSS 22.0. The mean values of the random variables were checked with: (*i*) Student's *t*-test, for 2 independent samples, when the variable has a normal distribution in each cluster; and (*ii*) Mann-Whitney *U*, if non-normal variables were observed. The normality of these variables was examined with the Kolmogorov-Smirnov test. With the exception of age, and the HADS subscales "Anxiety" and "Emotional Wellbeing", the variables did not follow a normal distribution. The quantitative variables were checked with Pearson's χ^2 test. Statistical significance in these tests was set at 5% and the statistical hypothesis in each case was rejected when the *p*-value had a value of less than 0.05.