**Patients and Methods**

*Evidence Search Strategy*

The search for publications relevant to our project was conducted based on the Center of Evidence-Based Medicine search strategy [9]. Firstly, the PICO method was used to identify the search terms. The terms under P (patients, population, or problem) were: acne, rosacea, folliculitis, perioral dermatitis, skin disease, anxiety, depression, suicide, and mental health. The terms under I (intervention) were: HADS and Hospital Anxiety and Depression Scale. The terms under C (comparison, control) were: healthy population and no skin disease. The terms under O (results, consequences, outcomes) have not been used based on the research methodology. A key search term was defined by a search strategy, based on which sources of literature were sought using the PubMed Database Advanced Search.

*Study Design*

A case-control study using a self-reporting anonymized survey was conducted over a 2-year period (2016–2018) to assess the mental health of patients with facial dermatosis in Vilnius, Lithuania.

The diagnosis of a facial dermatosis was based on clinical examination by a dermatovenereologist. Patients with acne, rosacea, folliculitis, and perioral dermatitis were enrolled in the analysis. Acne was diagnosed based on European evidence-based (S3) guidelines for the treatment of acne [10]. Rosacea was diagnosed based on the recommendations from the global Rosacea Consensus (ROSCO) panel [11]. We included erythematotelangiectatic, papulopustular, phymatous rosacea. The folliculitis group included only patients with facial involvement. We included patients with bacterial infectious folliculitis on the face that was not associated with systemic diseases. We also included patients with perioral and periorbital dermatitis. In order to assess patients’ mental health (anxiety, depression symptoms, and suicidal ideation) all participants were provided a survey that comprised questions on demographic data (sex, age), characteristics of facial dermatoses, and Hospital Anxiety and Depression Scale (HADS) [12–14] along with an additional question concerning suicidal thoughts.

*Study Population*

The target population included patients with facial dermatoses diagnosed and treated at an ambulatory basis at five outpatient clinics in Vilnius, Lithuania. Patients were included in the study according to the following criteria: age 18–70 years, both genders, diagnosis of acne, rosacea, folliculitis, and perioral dermatitis made by a dermatovenereologist. The exclusion criteria were as follows: other dermatologic diseases present and mental retardation or speech and cognitive disorders.

In addition, a control group of healthy subjects with no dermatological conditions was recruited. Participation in the control group was voluntary and without financial compensation.

*Questionnaires*

The HADS scale was first developed by Zigmond and Snaith in 1983. It is recognized as a reliable and valid measure for assessing clinically significant anxiety and depression [15]. The HADS scale contains 14 questions with multiple choices: 7 to assess anxiety and 7 to assess depression. Each item can be rated from 0 to 3 points, therefore both subscales can have a score varying between 0 and 21. The score can be interpreted by the following ranges: 0–7 – normal; 8–10 – mild mood disturbance; 11–14 – moderate mood disturbance; and 15–21 – severe mood disturbance. The reliability of the depression subscales is 0.92, sensitivity is 56–100%, specificity 73–94%, and positive prognostic value 19–70% [13]. The total HADS score is a valid tool for assessing “psychological distress” or “emotional distress,” therefore the HADS can be used to evaluate overall psychiatric morbidity [16].

The suicidal ideation evaluation was carried out with the inclusion of the question “Do you think about suicide because of your skin condition?” with the possible answers “often”, “moderately”, “rarely”, “never”.

*Data Analysis*

The analysis was conducted using SPSS Statistics for Windows, Version 21.0 (released in 2011; IBM Corp., Armonk, NY, USA) software. The Shapiro-Wilk test of normality was performed to verify the assumption of normality. Categorical variables were compared using the χ2 test of significance, unless frequencies were small, in which case the Fisher exact test was used. Continuous variables with abnormal distribution were evaluated using the nonparametric Mann-Whitney-Wilcoxon rank-sum test. Normally distributed continuous variables are expressed as mean (mean ± standard deviation, 95% CI). The comparison between patient and control groups was carried out using a logistic regression model to estimate odds ratio (OR) and adjusting it by gender and age. The 95% CI was measured to estimate the precision of the OR. All statistical tests were two-sided, and *p* values ≤0.05 were considered statistically significant.