Our Dermatology Online

Original Article

Quality of life in patients with psoriasis vulgaris during the COVID-19 pandemic

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ABSTRACT

Background: Psoriasis is a chronic inflammatory dermatological disease that has a major impact on quality of life. Skin diseases are the most common somatic causes of psychological disorders and, conversely, under the influence of a psychological disorder, there is usually a cutaneous manifestation. This is the main reason for conducting this research during the COVID-19 pandemic, a time when most of the population is under constant stress. The research is aimed at determining the quality of life of patients with psoriasis. **Materials and Methods:** In this research, we employed two questionnaires. One collected particulars such as the patient's age and gender. The other was a DLQI (Dermatological Life Quality Index) questionnaire. Due to the epidemiological situation, the questionnaire was completed by patients who came for a control examination, and most of them were contacted by phone; some completed the questionnaires online. One hundred six respondents participated actively in this research. **Results:** The lowest score of the Dermatological Life Quality Index (DLQI) is 3, and the highest is 29. The most commonly received scores were 4 and 8, among which the score of 4 was given to 19 (17.9%) respondents and the score of 8 was given to 21 (19.8%) respondents. 69.8% of the respondents experienced problems with the affected parts of the skin rated as answers "moderately" or "a lot." In terms of health issues, female respondents had lower values than male respondents. However, by applying the t-test to determine the statistical significance of the difference with $p \leq 0.05$, the value of t was determined to be -0.48 ($p = 0.31$), which means that there was no statistically significant difference.

Conclusion: When compared to the results of studies performed several years ago, together with this study performed during the COVID-19 pandemic, there are no major differences in terms of quality of life in patients with psoriasis.

Key words: Psoriasis; quality of life; COVID-19

INTRODUCTION

Psoriasis is a chronic inflammatory dermatological disease that has a major impact on the quality of life of patients suffering from it [1]. It is a complex health disorder occurring from an interaction of multiple genes, the immune system, and the impact of external factors [2]. The physical symptoms of psoriasis negatively affect health and social relationships [1]. In a survey by the National Psoriasis Foundation, almost 75% of patients believed that psoriasis had a moderate to large negative impact on their quality of life (QoL), with alterations in their daily activities [3]. Many patients report moderate to extreme feelings of anxiety, anger, and depression and a higher frequency of suicidal ideation [1]. Its severity is measured on the basis of skin changes (erythema, induration, and desquamation) and the size of the affected skin [4]. The influence of social function includes informal and intimate relationships with other people, avoiding contact, and feeling stigmatized. Psychological function is impaired by the reduction of self-esteem and the inability to control the progression of the disease and its impact on the quality of daily life and activities, leading to psychological disorders such as anxiety and depression and even to the use of psychotropic substances and

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formation of suicidal thoughts [5]. Skin diseases are the most common somatic causes of psychological disorders and, conversely, under the influence of a psychological disorder, there is usually a cutaneous manifestation [6]. This is the main reason for conducting this research during the COVID-19 pandemic, a time when most of the population is under constant stress.

Psoriasis and Quality of Life

The World Health Organization defines quality of life (QoL) as “an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.” Quality of life is a general perception of one’s life and an estimation of the degree to which it meets their expectations. Different aspects of life can be taken to assess such quality [7]. A number of researchers agree that predominantly the most important things in this measurement are health, emotional and material well-being, interpersonal relationships, and work. Importantly, psoriasis as a disease covers all these aspects and factors, which makes its impact even more profound. What further increases the influence of the disease on one’s quality of life is that it manifests itself on the skin, an external organ most and first exposed to the scrutiny of others. Psoriasis has a significant impact on one’s self-perception and self-evaluation. According to some authors, the improvement of the clinical appearance is of great importance for the improvement of the patient’s psychological situation, which will positively impact their quality of life [8]. The assessment of the quality of life of people suffering from psoriasis employs a number of questionnaires designed for this purpose. In our research, we chose to use the Dermatological Life Quality Index (DLQI).

Aim of the Research

This research is aimed at determining the quality of life of patients with psoriasis, in other words, at determining their satisfaction with the current level of functioning in terms of what they consider possible and ideal. The psychological reaction to the disease varies from person to person: some find it extremely difficult to deal with even a small advancement of the disease, while others cope successfully with more severe manifestations. The way one deals with psoriasis depends on its perception—a construction that has recently been studied in the field of health psychology [8]. Given the impact that psoriasis can have on daily functioning, what comes to light is the need for more studies and research that could foreground the importance of this issue, help in creating new methods of therapy, and bring more attention to the mental health of these patients, as well as raise the collective awareness of the nature of what psoriasis is.

MATERIALS AND METHODS

In our research, we employed two questionnaires. One collected particulars such as the patient’s age and gender. The other was a DLQI (Dermatological Life Quality Index) questionnaire, for which we have a license [9].

The purpose of a DLQI questionnaire is to determine how much a skin concern affects one’s life. It was designed in the 1980s as a unified tool for measuring the impact of skin disease on the quality of life of patients. It consists of ten questions related to the following: symptoms and feelings, daily activities such as shopping, housework, leisure activities, work, school, personal relationships, and treatment. The DLQI is defined as the sum of scores for each of the questions, resulting in a maximum of 30 (extremely large effect on the patient’s life) and a minimum of 0 (no effect at all on the patient’s life). The higher the score, the more quality of life is impaired [9]. The answers are scored as follows: “not at all” at 0, “a little” at 1, “moderately” at 2, and “a lot” at 3. The questionnaire is intended for persons older than 16 years.

Population and Sample

One hundred six respondents who were medically treated or receiving appropriate therapy were included in the study. The response of patients who took active part in the survey was 82.3% (Fig. 1). The respondents were divided accordingly by gender and age. Due to the current epidemiological situation, the questionnaire was completed by patients who came for a control examination, and most of them were contacted by phone; some completed the questionnaires online. All patients with a history of psoriasis who were treated regularly at our institutions, as well as the patients who were visiting private health institutions, and agreed to complete the questionnaire took part in the research.

Twenty-four respondents were thirty and younger, fifty-two respondents were between 31 and 60 years of age, and thirty were older than 61 (Table 1). The youngest patient was 18 years old, and the oldest was 82.

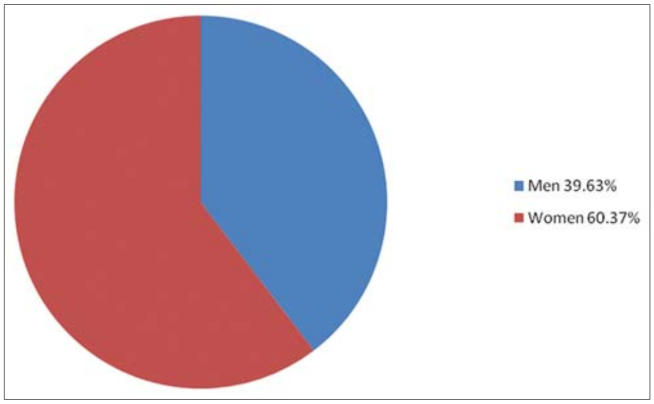

Figure 1: Distribution of respondents by gender.

Table 1: Distribution of respondents by gender and age

	N	Up to 30 years of age	From 31 to 60 years of age	Above 61 years of age	Total
Men	f	8	24	10	42
	%	7.55	22.65	9.43	39.63
Women	f	16	28	20	64
	%	15.1	26.41	18.86	60.37
Total	f	24	52	30	106
	%	22.65	49.1	28.3	100

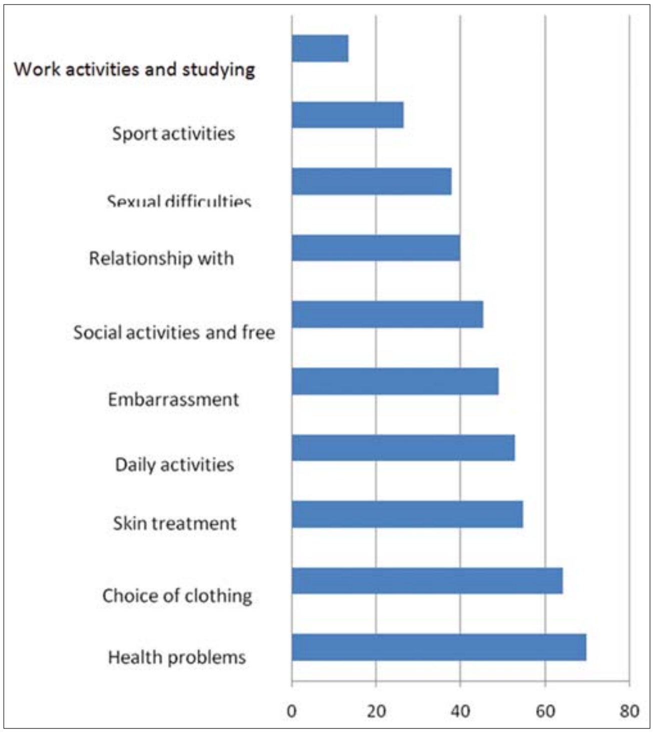

Figure 2: Areas of life in which respondents experienced moderate to significant problems.

RESULTS

According to the DLQI questionnaire—whose purpose is to determine how much a skin concern affects one's quality of life—respondents answered ten questions that were scored from 0 to 3.

The lowest DLQI score, which was 3, was obtained from 4 (3.7%) respondents, and the highest, which was 29, was obtained from 6 (5.6%) respondents. No maximum score of 30 was recorded. The most commonly obtained scores were 4 and 8, among which a score of 4 was given to 19 (17.9%) respondents. and a score of 8 was given to 21 (19.8%) respondents. 16 (15.09%) respondents had a score of 15, and the same number of respondents had a score of 16; 14 (13.2%) respondents had a score of 21, and 10 (9,4%) respondents had a score of 17.

As many as 69.8% of the respondents had problems with the affected parts of the skin rated as answers "moderately" or "a lot" (Fig. 2). The skin was itchy, tingly, sore, or inflamed. Choosing the appropriate clothes was a problem for 64.1% of the respondents. Treating the skin issues at home in terms of dirtiness and time consumption was a problem for 54.7% of the respondents. In performing daily activities, such as shopping and working at home or in the garden, 52.8% of the respondents had problems rated as answers "moderately" or "a lot." 49% of the respondents felt embarrassed by the condition of their skin. Social activities and free time were problems rated as answers "moderately" or "a lot" for 45.2% of the respondents. The relationship with the partner, friends, and relatives was a considerable problem for 39.6% of the respondents. 37.7% of the respondents experienced sexual difficulties, 26.4% experienced problems with sports activities, while only 13.2% reported difficulties with work activities and studying.

In terms of health problems, female respondents gave lower DLQI values than male respondents (Table 2). However, by applying the t-test to determine the statistical significance of the difference, where $p \leq 0.05$, the value of t was determined to be -0.48 ($p = 0.31$), which means that there was no statistically significant difference. As for embarrassment, female respondents achieved higher results than male respondents, with $p = 0.22$, which means that there was, again, no statistically significant difference. Daily activities were a more significant problem for female respondents, but a p value of 0.28 confirmed that the difference was not statistically significant either. Choice of clothing was also a considerable problem for female respondents, but with $p = 0.39$

Table 2: Mean values of the DLQI according to gender (AM – arithmetic mean; SD – standard deviation)

	Men		Women	
	AM	SD	AM	SD
Health problems	1.95	0.74	1.93	0.87
Embarrassment	1.42	1.17	1.65	1.1
Daily activities	1.61	1.04	1.65	1.1
Choice of clothing	1.9	1.09	1.93	1.11
Social activities and free time	1.5	0.97	1.46	0.99
Sport activities	1.23	1.06	0.65	1.07
Work activities and studying	0.57	0.9	0.53	0.78
Relationship with the partner, relatives, and friends	1.28	1.03	1.12	1.05
Sexual difficulties	1.33	1.12	0.81	0.98
Skin treatment	1.61	0.94	1.53	1.14

there was no statistically significant difference. As for social activities and free time, male respondents achieved higher results, but a *p* value of 0.49 confirmed that there was no statistically significant difference. Sports activities were shown to be a more significant problem for males but there was no statistically significant difference, with $p = 0.36$. Work activities and studying were a more significant problem for males, but a *p* of 0.4 showed that there was no statistically significant difference. When it comes to the relationship with the partner, friends, and relatives, male respondents gave higher scores, but $p = 0.29$ confirmed that there was no statistically significant difference. Regarding sexual difficulties, male respondents gave higher scores and a *p* value of 0.03 indicated a statistically significant difference at the level of significance of 0.05. Treatment of the ailing parts of the skin was a more palpable problem for males, but a *p* value of 0.38 did not indicate a statistically significant difference.

DISCUSSION

The research results were collected in order to determine the quality of life of psoriatic patients, in other words, to determine their satisfaction with the current level of functioning in relation to what they consider possible and ideal, as well as minimizing the risk of depression. The questionnaires made it possible to collect detailed information about numerous aspects of health disturbed by psoriasis. Patients with psoriasis were found to experience a range of challenges and obstacles on a daily basis that impaired their quality of life, either through health manifestations (itching, pain, inflammation, tingling) or time-consuming skin treatments, embarrassment, choice of appropriate clothing, and troubles with daily tasks.

CONCLUSION

Psoriasis has a profound impact on quality of life, even though there prevails a belief that skin diseases are less serious and, because they might not be as life-threatening, health workers devote to them less attention. This belief is, however, wrong, because skin diseases, especially psoriasis, have a huge impact on the patient's mental health, for instance, on physical, social, and psychological aspects of life. Research on this issue is becoming progressively more necessary in the fields of science and medicine. Given that the skin is the largest organ and its diseases have great repercussions, they impact not only the quality of life of the patient but also of their families. We concluded that, when compared with the results of studies performed several years ago [10,11], together with this study performed during the COVID-19 pandemic, there are no major differences in terms of quality of life in patients with psoriasis.

Statement of Human and Animal Rights

All the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the 2008 revision of the Declaration of Helsinki of 1975.

Statement of Informed Consent

Informed consent for participation in this study was obtained from all patients.

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