Włodarczyk Julita, Knyszyńska Anna, Lubkowska Anna. Quality of life in patients with psoriasis. Journal of Education, Health and Sport. 2019;9(6):203-211. eISNN 2391-8306. DOI http://dx.doi.org/10.5281/zenodo.3241926
http://ojs.ukw.edu.pl/index.php/johs/article/view/7010

The journal has had 7 points in Ministry of Science and Higher Education parametric evaluation. Part B item 1223 (26/01/2017).
1223 Journal of Education, Health and Sport eISSN 2391-8306 7

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The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 05.05.2019. Revised: 25.05.2019. Accepted: 09.06.2019.

Quality of life in patients with psoriasis

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SUMMARY

Background: Psoriasis is a chronic autoimmune disease. It is characterized by the occurrence of periods of exacerbation and remission. Symptoms appear in the second or third decade of life. There are many types of psoriasis, such as plaque, inverse, erythroderma psoriasis and specific parts of the body. Another form of pustular psoriasis is. There is also psoriatic arthritis, which is manifested by inflammation of the articular tissues. Various methods of treatment that are dependent form of the disease and location of lesions. Additionally, to relieve lesions uses physical procedures. Psoriasis as a chronic disease can affect quality of life.
Aim of study: The aim of the study was to analyze the impact of psoriasis on quality of life and overall spheres such as psychology, physical fitness and meeting the social roles of patients.
Materials and methods: The study included 466 people with psoriasis including 370 women and 96 men. The sample was classified by adults, regardless of place of residence and time since diagnosis. 70% of respondents were in the group of 18-40 years. Anonymous diagnostic survey conducted over the internet using a questionnaire SKINDEX-29.
Results: Patients assessed their quality of life as good. Variables such as gender, age, BMI or the time of diagnosis does not differentiate the assessment of quality of life. Patients assessed their worst quality of life in the psychological aspect. During the analysis did not show any statistical significance in the comparison of the data obtained.
Conclusions: Psoriasis does not reduce the overall quality of life of patients and has no significant impact on the various aspects: psychological, physical, psychosocial functioning. There is no relationship between gender, age, BMI, duration of the disease and the overall quality of life. Used a questionnaire is not a reliable method for testing the quality of life of patients with psoriasis.

Keywords: psoriasis, quality of life, SKINDEX-29

Background

The World Health Organization (WHO called. World Health Organization) reports that human health is a state of complete mental, physical, and social welfare, and not merely the absence of disease or infirmity. This definition is very important because it recognizes not only the corporeality of man, but also his psyche and well-being of the surrounding society. Modern holistic medicine approaches to the treatment of the patient, and therefore increasingly examine the quality of life of people affected by different diseases [1].

The definition of quality of life has not been so far clearly defined. It is understood differently by psychologists, sociologists or representatives of medical science, but the most important is a global approach to this issue, which is why in determining the quality of life of the patient should be taken into account many aspects.

Psoriasis is a chronic systemic disease immunologically conditioned, which is characterized by the symptoms of cutaneous and articular (psoriatic arthritis) [2]. It is a non-communicable disease, maculopapular - exfoliating. Of the most common skin diseases [3]. Includes 1 - 3% of the total population. The disease affects all races but with varying frequency. Most often it occurs in the Scandinavian countries: Norway - 4.5%, Denmark - 2.9%, Sweden - 2.3%. The lowest percentage of patients recorded in China and West Africa (0.2-0.3%) [1]. Also examined the population of South American Indians, numbering 26 000 and 12 500 Samoans and among these individuals there has been no case of the disease. Generally, men are passed psoriasis later than women, and the incidence of disease in both sexes is comparable with minimal majority of men suffering from some populations tested [4].

Poland has about 800,000 people affected by psoriasis [5]. The percentage of morbidity in childhood and adolescence is 0.5-2%. Approximately 30% of patients, symptoms appear before the age of 20, while in the pediatric population changes are reflected between 7 and 11 years of age. The disease begins between 10 and 40 years of age, but the peak incidence falls on the 16-22 years of age [6].

Psoriasis is characterized by periods of relapses and remissions. Characteristic of the disease erythematous changes are clearly limited to the pellets covered with scales. They can cover the entire surface of the body or only small fragments, depending on the severity of the disease. Efflorescence covering less than 3% of body surface referred to as mild, 3-10% - figure moderate and if the change occupy more than 10% of the patient's skin, said severe psoriasis [1, 6].

The most common form of the disease is chronic plaque psoriasis. Changes occur throughout the body, but there are areas in which they appear most frequently, eg .: knees, elbows, around the sacrum. Lesions can also occur within the scalp, around the nails of hands and feet, or cover the entire body (generalized psoriasis) [5, 7].

Eruptions located on the hands and feet may occur along with changes in another location, and provide a separate form of psoriasis. It makes considerable problems to patients, as characterized by a high resistance to treatment, as well as changes hands often impossible to carry out any work. In contrast, lesions on the feet often hinder walking, and make a lot of pain during this operation. Through this, patients also have mental problems associated with shame, lack of confidence, which are the result of changes on the hands that are hard to cover clothing [5, 8].

The disease can also affect joint inflammation manifesting within them (psoriatic arthritis - PsA). In the course of seborrheic dermatitis are often deformity of the joints, inflammation, the occurrence of pain, feeling of stiffness of the joints, being worse [5, 9, 10].

Many previous studies have shown a close relationship psoriasis obesity. Unfortunately, it is not known whether increased body mass is a consequence of skin disease or a risk factor for psoriasis. It was noted that obese people are more prone to this disease, as well as its course is in

them heavier. This may be the reason why patients suffer long-term stress due to their illness, which affects their eating habits [11, 12].

Treatment of psoriasis, contrary to appearances, it is very difficult, because there is no one agent acting on all forms of the disease. Problem is also the fact that each patient is a separate case and should be approached in an individual way, because that is what helps some, others - harm. People who suffer from a long time themselves know best what preparations are able to alleviate the symptoms of the disease, which can exacerbate them. However, each patient should be under constant supervision of a dermatologist. The treatment is selected to form the disease, and to the extent of psoriasis. In case of mild psoriasis and severity of small local treatment is used, but if the disease is more diffuse should go to the overall treatment. Although the topical treatment is burdensome for patients, it is better than general, as it saves in this way the digestive system [3, 5].

Bothersome symptoms associated with the disease as well lack of unified approach in the treatment of psoriasis can lead to reduced quality of life of patients.

Objective of the work

The aim of the study was to evaluate the overall quality of life of people with psoriasis, depending on the selected anthropometric variables and taking into account the duration of the disease.

Material and methods

The study was conducted via the Internet through a social networking site "Facebook", among people belonging to the group - "Psoriasis from a different perspective," bringing together people with psoriasis. In the whole group there were 8 270 people, while in the study involved 466 people (5.63%).

The main method of diagnostic survey research was conducted using an anonymous online survey consisting of two parts. The first part of this survey author containing anthropometric data such as gender, age, height and weight, place of residence, education, and the time of diagnosis of the disease. The second - is a standardized questionnaire to assess the impact of skin disease on quality of life, used in the course of dermatological diseases - SKINDEX-29.

SKINDEX Questionnaire-29 consists of three domains, ie. The emotions (10 questions), physical symptoms (7 questions) and social functioning (12 questions). The test is intended to answer the 5-point Likert scale (1-5), as is often accompanied by specific symptoms. The result is the sum of points obtained in all questions of the questionnaire. The test can get 29-145 points. the lower point values indicate better quality of life. In addition, the indicators obtained can be analyzed in various domains of the questionnaire [13-15].

For statistical analysis, the obtained results, the platform of the statistical distribution of the data was examined R. Anderson-Darling test (AD Test). For analysis of statistical significance of differences between groups was used Welch T-test and ANOVA test [16].

They studied 466 people with psoriasis of different forms. Among the respondents, there were 370 women and 96 men aged from 18 years to over 60 years. Almost half of the respondents were in the age group 18-30 years (46%). The patients were also divided into 5 groups, including the time of diagnosis of the disease. Most people have become sick for more than 10 years (51%). 209 people were characterized by normal weight, but 50% of the respondents showed characteristics of overweight or obesity. The subjects were divided into 5 groups because of the time of diagnosis of the disease. The first group consisted of 41 people who are diagnosed in the last year. In the next, there were people who are living with a diagnosis of psoriasis from 1 to 4 years - a total of 92 people. 59 of the respondents declared that they

suffer from 5 to 7 years, while 35 people suffered from 8 to 10 years. The last and the largest group of people who struggle with the disease for more than 10 years (N = 239). (Tab. 1).

Table 1. Characteristics of the study group.

variable anthropometric **Age [years]**	**Number of people [%]**
18-30	217 (46%)
31-40	114 (24%)
41-50	77 (17%)
51-60	40 (9%)
> 60	18 (4%)
Gender	
female	370 (79%)
male	96 (21%)
BMI	
≤18,5	21 (5%)
18,6-24,9	209 (45%)
25-30	142 (30%)
> 30	94 (20%)
Time from diagnosis [years]	
<1	41 (9%)
1-4	92 (20%)
5-7	59 (13%)
8-10	35 (7%)
> 10	239 (51%)

Results

Analysis of the results of research 466 people with psoriasis allowed for the calculation of average, standard deviation (SD) and statistical significance for the scores obtained in three separate domains of quality of life: the emotions, symptoms and social functioning and overall indicator SKINDEX-29.

Both the average points on the overall quality of life, and in the individual domains are very similar to each other. All were in the average range of the second point (30-59), which is good but not the best (0-29) quality of life. The highest values obtained relate to the emotional domain, which means that most disease reduces the quality of life in this area. Men obtain an average scores indicating a better quality of life assessment in relation to women in all areas analyzed. The biggest average obtained in each case the age group 41-50 years, while the smallest age group 18-30 years. Interestingly people with normal BMI more severe impact of the disease on their quality of life compared to subjects with overweight, obesity, but also having decreased BMI (<18.5). Detailed data is shown in Table 2.

Table 2. Quality of life in the different domains studied Skindex 29, taking into account gender, age, BMI.

		N	Domain SKINDEX - 29			
			emotions	**physical symptoms**	**psychosocial functioning**	**total score**
gender	**female**	370	48.91 ± 21.5	46.56 ± 22.4	43.18 ± 25.8	46.22 ± 22.3
	male	96	45.55 ± 22.7	42.56 ± 21.5	41.97 ± 27	43.36 ± 23.5
p			0.226	0.109	0.694	0.285
age [years]	**18-30**	217	45.90 ± 22.0	44.30 ± 21.7	40.71 ± 23.6	43,63 ± 22
	31-40	114	46.70 ± 23.0	43.94 ± 23	41 ± 25.4	43.9 ± 23
	41-50	77	52.28 ± 20.8	48.9 ± 22.3	46.91 ± 26.3	49.35 ± 21.9
	51-60	40	51.40 ± 21.2	46.9 ± 22	45 ± 24.4	47.8 ± 22.3
	> 60	18	50.89 ± 26.1	49.6 ± 23.7	47.4 ± 29.5	49.3 ± 25.6
p			0.113	0.311	0,228	0.188
BMI	**≤18,5**	21	46.2 ± 26	43.4 ± 26	41.67 ± 31.7	43.74 ± 27.2
	18,6-24,9	209	51.5 ± 21.2	48 ± 22.2	46.1 ± 26.1	48.5 ± 22
	25-30	142	44.5 ± 21	43.74 ± 21	38.6 ± 24.2	42.3 ± 21
	> 30	94	47.13 ± 24.6	44.2 ± 23.2	42.7 ± 26.5	44.67 ± 24
p			0.086	0.196	0.184	0.133

It has been shown that the duration of the disease did not affect significantly the assessment of the quality of life of patients. The highest point values to obtain an, patients with psoriasis diagnosed 8-10 years ago. Other groups obtained similar average point values in all tested areas of quality of life. In the realm of emotion, declared the best quality of life for people suffering for more than 10 years, which may be indicative of coming to terms with the disease (Table. 3).

Table 3. The average quality of life in different domains Skindex-29 depending on the time of diagnosis of the disease.

The time from diagnosis of disease		Domain SKINDEX - 29			
years	**N**	**emotions**	**physical symptoms**	**psychosocial functioning**	**total score**
<1	41	50.9 ± 22.3	45.4 ± 24.3	44.12 ± 26.8	46.79 ± 22.8
1 - 4	92	49.16 ± 21.2	47.1 ± 20.8	42.5 ± 25.4	46.25 ± 21.6
5 - 7	59	50.17 ± 23.4	43.1 ± 23.1	42.18 ± 26.5	45.15 ± 23.1
8 - 10	35	53.29 ± 24.6	53.16 ± 25.3	46.8 ± 28.4	51.1 ± 25.2
> 10	239	46.2 ± 21.8	44.9 ± 21.7	42.5 ± 25.8	44.51 ± 22.3
p		0.281	0.246	0.914	0.588

It has been shown that the duration of the disease did not affect significantly the assessment of the quality of life of patients. The standard deviations are very high places to reach 28 indicating a very large data scatter (variance). The group, which included individuals diagnosed from 8 to 10 years ago had the highest average points related to the quality of life in each of the domains, and as a result total, and thus they have defined their quality of life as the worst among all respondents. Emotional domain and the overall quality of life found most people suffering from the longest or diagnosed over 10 years ago, which may indicate a coming to terms with the disease after so many years of its duration.

Discussion

Over the years, can be seen growing interest among researchers quality of life depends on the health. Over the years, it appears more and more work, which check how the skin diseases affect the quality of life of patients, possibly because these are the conditions that can affect the quality of life even through the visible changes on the body, affecting primarily on the emotional sphere of the patient. Most of the available research on the quality of life of people with psoriasis combines the psychological aspects of the disease [17-24].

Analysis of the own results showed that the worst feeling of your own comfort patients evaluated in the emotional sphere. This may be related to how an important role in interpersonal relations play our external appearance, which consists of the physiological condition of the skin, which is the most exposed organ in the human body. This affects the self-esteem sick, and what's involved on their psychological state. People with psoriasis often are not able to accept your changes, they are ashamed of them, trying to hide them, adopt a negative attitude towards their condition, which live in constant stress [25].

The analysis showed that none of the analyzed: anthropometric variables - age, sex, BMI, and the time of diagnosis of the disease, do not affect in a statistically significant way to assess the quality of life in the emotional sphere. In studies Basińska et al. [25] The same lack of observed correlation between age and sex, and patient comfort.

The aging process is closely linked to the deterioration of the function of locomotion and mental state of man. This is due to the increasing number of comorbidities, which are inevitable during aging. However, in the copyright study found no correlation between age and overall assessment of the quality of life. It has been shown, however, that the longer people suffering better assess the quality of my life. Basińska et al. [25] also noticed better results in people who no longer suffer from psoriasis. This is probably due to the emotional intelligence, and hence the greater acceptance of the disease [1, 25].

As is well known for the quality of life they consist of the physical fitness and psychosocial functioning. People struggling with a variety of chronic diseases perceive their quality of life worse than healthy not only in the context of mental health, but also in terms of impaired physical function. Psoriasis although it is a skin condition also affects the physical functioning of patients, mainly due to the symptoms associated with the disease they are pain and itching. This aspect is especially important in people who suffer from psoriatic arthritis, because in addition to the pain also appears swollen joints with limitation of motion, which directly affects the limitation of physical fitness. The study Kanikowski et al. [26] have shown that almost all patients with psoriasis patients experience physical discomfort, which directly reduces the overall quality of life and mental state of respondents. Broniewska-Kolasa et al. [27] demonstrated that the quality of life of people with psoriasis worsens with age. Analysis own research showed no statistical significance in the domain of physical functioning, one can only note that the highest average points (49.62 pts.) In the study group received the oldest person (> 60 years). It is impossible to state clearly whether it is directly related to the disease or have an impact on the aging process, during which physical fitness is increasingly impaired.

research Kanikowski et al. [26] showed that patients feel a deterioration in the quality of life in the psychosocial sphere. It was found that the disease has a negative impact on family contacts, resulting in a higher incidence of depressive symptoms. Also examined the relationship between psoriasis and negative reactions disease of the surroundings. 53% of patients reported that very often or often feel shame, which was caused by visible lesions. In their study analysis showed no significant correlation between sex, age, BMI or duration of the disease and the patient comfort in the psychosocial sphere. This could be due to non-uniform in the sample, and a lack of reliability by filling out a questionnaire respondents.

Lack of acceptance by society, and above all immediate family negatively affects the quality of life of patients. Bogaczewicz et al. [19] observed a significant correlation between

acceptance by society and quality of life. It turns out that the bigger the tolerance of the immediate environment, the higher the comfort of the patients reported. [19, 27].

With the above mentioned and discussed the results can be concluded that during the test the quality of life is very important to analyze the different domains of comfort, and above all, the emotional sphere, psychosocial and physical. Each of them describes a completely different sphere of life, however, are closely linked. Therefore, the research use of such questionnaires, which examine in detail each of the domains, but also contain a lot of questions about the global quality of life.

Despite the many varied symptoms of psoriasis copyright test result indicates a very good, not perturbed by disease quality of life. The average result of the global comfort of life was 45.63 points, representing the absence of adverse effects caused by the disease [13-15]. Higher point average obtained in our study, the lower the quality of life of patients has been demonstrated in the emotional domain (48.21 points). However, this value is also interpreted as a good quality of life. These results are within the scope of the first half of the point, which may indicate minimally affected the comfort of life, but this is not the result of what could be expected. In other studies cited overall quality of life was significantly compromised in comparison to the results of their own. It can therefore be concluded that the study questionnaire SKINDEX-29 is not sufficiently reliable, as they are determined by Janowski et al [13], presenting as an excellent tool in the survey, the survey, mainly because it is universal. This means that not only is specifically dedicated to people with psoriasis, but for all patients with dermatological problems. The questions are very general, matching virtually any dermatoses. This may be his advantage and a disadvantage. Although studies confirmed [13, 15, 30] the reliability of the questionnaire to assess quality of life SKINDEX-analysis of 29 studies was not due to its own accuracy. The results of the analysis very different from other researchers. This could be due to the heterogeneous research groups or the way to reach patients, which was the survey conducted via the Internet, but also differences may result from the lack of specific psoriasis questions in the questionnaire.

Conclusions

1. Psoriasis does not reduce the overall quality of life of patients, and there is no significant impact on the various aspects of comfort: psychological, physical, psychosocial functioning.
2. There is no relationship between gender, age, time since diagnosis of disease, BMI, patients, and the overall quality of life.
3. Additional variables: gender, age, time since diagnosis of the disease, and BMI have no significant impact on the quality of life of patients in specific areas such as mental, physical and psychosocial functions.
4. Questionnaire SKINDEX-29 is not a reliable method to conduct research on the quality of life in patients with psoriasis.

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