

Factors that affect the Quality of Life of Patients with Behcet's Disease

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ABSTRACT

Objective: To assess the quality of life in patients with Behçet's disease, and to address the factors impact the domains of Quality of Life.

Methods: We surveyed 101 patients with Behcet's disease no less than 3 months before the study. Data were collected using Short Form 36 Quality of life Scale.

Results: The quality of life scores in patients with Behçet's disease were low and were adversely influenced by socio-demographic characteristics such as gender, age, work status and education status. Furthermore, disease manifestations such as oral and genital ulcerations, arthritis, and skin lesions affected the quality of life scores. Moreover, patients who experienced pain, poor sleep and fatigue lower the quality of life scale and patients whose social relations were influenced by the disease had significantly lower the quality of life scores.

Conclusion: Patients with Behcet's disease reported a low level of quality of life.

Key words: Behcet's disease, Factors affecting, Quality of life, Jordan.

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Introduction

Behcet's disease (BD) is a chronic inflammatory disorder characterized by recurrent oral and genital ulceration, skin lesions and uveitis. It is a multisystem vasculitis that affects blood vessel of all sizes. In addition, it may affect the joints, lungs, the central nervous and gastrointestinal system ⁽¹⁾. The clinical features of BD, with a few exceptions, are similar to those in different countries in the region ⁽²⁾. There are no exact figures on its incidence and prevalence in Jordan. The highest prevalence of BD is reported from Turkey (20-420 per 100,000, with about 70 per 100,000 in its European region). In Asian countries, such as Japan, Korea, China, Iran, and Saudi Arabia, prevalence ranges from 13.5 to 20 cases per 100,000. BD typically is most common in countries along the former Silk Route ⁽³⁾. This

suggests the influence of genetic and environmental factors ⁽⁴⁾. In the Middle East; males are more frequently affected than females, although this varies from study to study ⁽⁵⁾. The peak age of onset is between 20 and 35 years ⁽⁶⁾. Mild cases may only manifest as recurrent mucocutaneous lesions. However, most patients develop articular, visual, vascular, gastrointestinal and central nervous system manifestations. Ocular involvement is an important cause of blindness in 25% of those affected ⁽⁷⁾. BD can cause physical disabilities that affect patient quality of life (QoL) ⁽⁸⁾. The protean symptoms of BD may thus result in limitation of daily activities. This may impact patients psychologically and affect relations with spouses and families ⁽⁹⁻¹⁰⁾. The "QoL" utility enables researchers to assess an individual's quality of life taking into account various aspects. The tool

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measures one's emotional reactions to life events, disposition, sense of fulfillment and satisfaction, and satisfaction with work and personal relationships. The term 'quality of life' is sometimes referred to as 'well-being' ⁽¹¹⁾. Patients with BD generally have lower QoL scores than the general population. Furthermore, BD symptoms may impact patients' QoL ⁽¹²⁾. The QoL measures have eight potential uses in aiding routine clinical practice. They can be used to prioritize problems, facilitate communication, screen for potential problems, identify preferences, monitor changes or response to treatment, and train new staff. They can also be used in clinical audit and in clinical governance. The first five of these are of immediate value in the clinical encounter, while the last three contribute to training, reviewing care, and improving care in the future ⁽¹³⁾. Patients with BD have more disappointment with their capacity to take an interest in the spaces that require physical and psychosocial endeavors than healthy individuals ⁽¹⁴⁾. Evaluating the QoL in patients with BD could likewise help the development of more far-reaching medical care arrangements. The significance of patients being assessed by an all-encompassing approach will be uncovered ⁽¹⁴⁻¹⁵⁾. The aim of this study is to assess the quality of life in patients with BD. In doing so we will assess the relationship between QoL and sociodemographic characteristics such as age, gender, education level, and working status. We will also assess the relationship between QoL and disease characteristics such as disease duration, oral ulcers, genital ulcers etc. We will also assess the relationship between QoL and symptoms such as bodily pain, sleep problems, fatigue and affected daily lives. Finally, we will assess the relationship between QoL and social relations.

Methods

This cross-sectional descriptive study was performed in the Rheumatology outpatient department of the King Hussein Medical Center/ The Royal Medical Services of Jordan. The study was approved by our local Ethics Committee. Patients with BD attending the rheumatology outpatient

department between March and September 2017 were enrolled. We included literate patients who were diagnosed at least 3 months since their last visit, and who have no past history of psychiatric illness. Information was collected using the individual data form, which comprises of illustrative data about the patients and the Arabic translated "Short Form 36 Quality of Life Scale" (SF-36 Quality of life Scale), which was utilized to assess their quality of life. The individual form included 38 inquiries regarding the patients' sociodemographic background and characteristics of their disease. Ten of those inquiries were about the patient's sociodemographic background (age, sex, working status, education level, marital status and so forth). The rest of questions were aimed at addressing the factors that could affect the patient's QoL such as disease duration, system involvement, symptoms and so on. The SF-36 Quality of life Scale was utilized to assess the quality of life. The scale, which was first developed by Ware et al ⁽¹⁶⁾, includes 8 subcategories: (a) physical functioning (10 items), (b) social functioning (2 items), (c) Role Physical (4 items), (d) Role-Emotional (3 items), (e) mental health (5 items), (f) energy/ fatigue (4 items), (g) bodily pain (2 items), (h) general health (5 items). The scale was assessed taking the most recent four weeks into account. All items with the exception of the third and fourth were appraised on a Likert scale. The third and fourth items were dichotomous inquiries. The scores ranged from 0 to 100, where 0 and 100 stood for the lowest and highest quality of life respectively. This scale was first translated into Arabic. To assess the validity and reliability, a pilot study was conducted on 15 patients with BD. Some items in the tool were rewritten more clearly. Data were collected between March 01 and September 01, 2017. A consent was obtained from the participating patients who were informed about the aim and strategy of the study. Statistical analysis of the data was carried out with SPSS23.0. The mean, standard deviation, median and percentages were calculated. The Student t-test of the difference between the two means was used

for the evaluation of the energy/ fatigue, emotional well-being, and general health subscales scores with the two-category classification; analysis of variance was used in the evaluation with more than two categories. Categorical data such as physical functioning, role limitations due to physical health, role limitations due to emotional health, social functioning, and pain subscales scores were compared with the Mann-Whitney U test and the Kruskal-Wallis test. A P-value ≤ 0.05 was considered significant.

Results

Sociodemographic characteristics and QoL scores

A total of 101 patients were enrolled. Seventy-eight were male and 23 were female. There was no difference in the mean subscale scores between males and females (Table I). Forty-six patients (46%) were between the ages of 20 and 30 years and 17 (17%) were 42 or older. Patients between 20 and 30 years of age had a higher physical function, role limitations due to emotional health, and energy/ fatigue subscale scores than other age groups ($p < .018$, $.016$ and $.018$ respectively; (Table I). Thirteen patients (13%) had primary school education; 65 (64%) had secondary school education and 23 (23%) had university degrees. University graduates had a higher physical function, role limitations due to physical health, and pain subscales score than the other groups, while primary school graduates had the lowest mean score ($p < .030$, $.052$, and $.030$ respectively (Table I). Thirty-one patients (31%) were civil servants and 18 patients (18%) were housewives. There was no significant difference in mean subscale scores between them (Table I).

QoL scores

The means and standard deviations for the SF-36 Quality of life individual components were as follows: physical functioning (55.89 + 25.97), social functioning (56.262 + 26.06), role-physical (34.58 + 36.85), role-emotional (49.57 + 39.08), emotional well being (47.76 + 21.76), energy/ fatigue (39.75 + 19.47), bodily pain (51.49 + 27.07) and general health (43.42 + 16.70).

Disease characteristics and QoL scores

Thirty-nine patients (39%) had disease duration more than 7 year . Eighty-two patients (82%) had oral ulcers, and 77% had arthritis. Patients with oral ulcers had lower mean Physical function, Role physical, Role-emotional, and pain subscales score than those without oral ulcers (Table II). Those who had arthritis had significantly lower means in all subscale scores than those who did not, with the exception of social functioning subscale (Table II). Fifty-four patients (54%) had genital ulcers. Patients with genital ulcers had lower mean Role physical and general health subscale scores than those who had no genital ulcers ($p < .05$) (table 2). Forty-five patients (45%) had skin lesions. Those who had skin lesions had lower means in all subscale scores than those who did not ($p < .05$). Sixty-four patients (64%) had ocular involvement. Those who had ocular involvement had a lower mean general health subscale score than those who did not ($p < .01$) (Table II). Thirty-nine patients (39%) had vascular involvement. Seventy-five patients (75.5%) had bodily pains (e.g. oral ulcers, arthritis, and erythema nodosum) due to issues associated with the disease, and 76% stated that bodily pains affected their daily lives. Both groups had lower means in all eight subscales of the SF-36 scores than those who did not ($p < .01$) (Table III). Fifty-nine patients (59%) had sleep problems, and 56% stated that sleep problems affected their daily lives. These patients had lower means in all eight subscales of the SF-36 scores in comparison to those who did not have sleep problems($p < .01$) (Table III). Eighty-seven patients (87%) experienced fatigue. Patients who had fatigue had significantly lower means in all eight subscales of the SF-36 scores than those who did not ($p < .05$) (table 3). fatigue affected the daily lives of 75% of those patients. Patients whose fatigue affected their daily lives had lower means in all eight subscales of the SF-36 scores than who did not ($p < .01$) (Table III).

Social relationship and QoL scores

The disease affected the social relationships of 30 patients (30%). Those patients had

lower subscales than patients whose relations were not affected (Table IV).

Table I: Sociodemographic characteristics and QoL scores

Sociodemographic characteristics	N	%	SF-36 QoL subscales M + SD							
			Physical function	Role physical	Role emotional	energy/fatigue	emotional well being	social functioning	pain	general health
Gender										
Male	7	7	54.23 +	32.76 +	46.64 +	38.17	46.38 +	56.31 +	50.45	41.99
	8	7	25.96	36.74	40.00	+	22.18	26.48	+	+
						20.68			26.56	16.93
Female	2	2	61.52 +	40.76 +	59.47 +	45.10	52.43 +	56.09 +	55.00	48.26
	3	3	25.74	37.35	34.77	+	20.01	25.19	+	+
						13.73			29.10	15.27
P			0.196	0.290	0.228	0.135	0.243	0.967	0.542	0.114
Age (year)										
20_30	4	4	63.30 +	38.03	59.64 +	44.29	49.13 +	58.30 +	55.43	45.53
	7	6	22.90	+37.86	38.05	+	22.33	23.00	+	+
						16.44			23.52	15.30
31_41	3	3	49.73 +	29.19 +	38.82	32.66	42.32 +	51.22 +	47.77	39.86
	7	7	24.92	34.55	+35.66	+	18.06	26.88	+	+
						20.03			27.24	15.61
>42	1	1	48.82 +	36.77 +	45.10 +	42.65	55.82 +	61.62 +	48.68	45.29
	7	7	31.75	39.64	44.01	+	25.49	33.56	+	+
						22.47			35.16	21.83
P			.018	0.260	.016	.018	0.088	0.199	0.502	0.269
Education level										
Primary school	1	1	45.38 +	28.46 +	41.03 +	30.94	47.08 +	54.81 +	31.92	33.46
	3	3	30.65	33.69	38.87	+	28.42	29.55	+	+
						20.49			22.67	19.62
Secondary school	6	6	53.85 +	29.39 +	48.81 +	40.00	47.45 +	55.31 +	53.89	44.92
	5	4	25.64	33.77	38.27	+	21.99	26.02	+	+
						19.72			26.80	16.33
University	2	2	67.61 +	52.72 +	56.52 +	44.03	49.04 +	59.78 +	55.76	44.78
	3	3	20.44	42.30	41.97	+	17.40	24.30	+	+
						17.26			26.46	14.65
P			.030	.052	0.469	0.151	0.949	0.615	.030	0.069
Working status										
Housewife	1	1	57.22 +	33.33 +	53.72 +	43.82	54.61 +	53.61 +	54.58	46.11
	8	8	27.67	38.35	34.57	+	21.30	24.87	+	+
						13.63			29.89	16.94
Civil servant	3	3	52.97 +	28.28 +	41.76 +	33.92	40.72 +	50.00 +	47.89	36.41
	2	1	21.62	31.51	36.98	+	20.49	25.20	+	+
						15.75			23.97	14.82
Worker	1	1	49.12 +	24.27 +	41.23 +	39.63	47.41 +	52.06 +	50.59	44.71
	7	7	27.80	37.10	43.38	+	22.25	27.06	+	+
						25.39			26.39	12.81
Retired	9	9	46.67 +	30.56 +	55.68 +	41.67	57.00 +	68.06 +	52.50	52.78
			25.86	37.034	44.13	+	22.39	26.60	+	+
						21.66			30.49	11.49
Self-employed	4	4	46.25 +	37.50 +	50.00 +	40.50	47.50 +	58.13 +	53.75	42.50
			40.90	43.30	57.74	+	14.15	30.78	+	+
						19.89			37.11	17.08
Others	2	2	70.48 +	54.76 +	61.95 +	44.27	49.00 +	66.07 +	54.17	46.90
	1	1	22.91	38.42	36.96	+	23.31	25.04	+	+
						22.32			28.99	21.06
P			0.069	0.119	0.470	0.437	0.234	0.253	0.99	0.072

Table II: Disease characteristics and QoL scores

Disease characteristics			SF-36 QoL subscales M + SD									
	N	%	Physical function	Role physical	Role emotional	energy/fatigue	energy/fatigue	social functioning	pain	general health		
<i>Disease duration</i>												
3_12 mo	11	11	61.36 + 24.50	29.55 + 35.03	33.51 + 36.70	37.8 + 21.68	43.36 + 16.52	48.86 + 13.06	51.59 + 24.78	41.36 + 10.51		
1_3 yr	20	20	59.75 + 28.58	30.50 + 37.52	46.67 + 42.44	41.13 + 19.48	45.60 + 17.66	53.88 + 24.04	49.25 + 26.46	42.25 + 17.81		
4_6 yr	30	30	50.33 + 26.75	32.75 + 37.83	50.08 + 41.79	33.02 + 16.25	43.97 + 23.42	57.50 + 27.39	49.50 + 27.43	39.00 + 16.37		
> 7 yr	40	39	56.62 + 24.58	39.38 + 37.08	55.05 + 35.87	44.64 + 20.23	52.90 + 23.20	58.56 + 28.88	54.06 + 28.45	47.88 + 17.21		
			.442	.677	.577	.095	.288	.566	.863	.156		
<i>Oral ulcer</i>												
Yes	83	82	54.64 + 27.294	32.50 + 37.30	48.63 + 40.11	39.26 + 19.33	47.19 + 21.37	56.11 + 25.46	49.85 + 26.58	43.19 + 16.58		
No	18	18	61.67 + 18.15	44.17 + 34.01	53.87 + 34.64	42.03 + 20.51	50.39 + 23.93	56.94 + 29.46	59.03 + 28.81	44.44 + 17.73		
P			.393	.116	.584	.587	.575	.833	.218	.775		
<i>Genital ulcer</i>												
Yes	55	54	51.91 + 27.19	28.09 + 36.36	44.87 + 39.67	38.47 + 18.43	48.15 + 20.92	55.96 + 26.77	48.36 + 28.76	40.45 + 15.16		
No	46	46	60.65 + 23.84	42.34 + 36.30	55.18 + 38.02	41.28 + 20.75	47.30 + 22.95	56.63 + 25.48	55.22 + 24.71	46.96 + 17.90		
P			.082	.029	.128	.474	.848	.869	.198	.051		
<i>Eye involvement</i>												
Yes	65	64	55.00 + 25.69	33.23 + 34.76	46.20 + 38.98	37.31 + 18.69	44.71 + 22.86	55.39 + 26.73	48.46 + 27.57	40.15 + 17.09		
No	36	36	57.50 + 26.74	37.01 + 40.75	55.64 + 39.07	44.16 + 20.34	53.28 + 18.68	57.85 + 25.12	56.94 + 25.64	49.31 + 14.40		
P			.587	.848	.157	.090	.058	.805	.142	.008		
<i>Arthritis</i>												
Yes	78	77	52.12 + 25.63	29.71 + 34.10	44.94 + 39.45	35.73 + 18.42	44.79 + 21.63	53.75 + 24.52	45.13 + 25.06	39.23 + 15.44		
No	23	23	68.70 + 23.32	51.09 + 41.61	65.27 + 34.06	53.37 + 16.89	57.83 + 19.43	64.78 + 29.75	73.04 + 22.46	57.61 + 12.69		
P			.005	.022	.031	.000	.011	.136	.000	.000		
<i>Skin lesion</i>												
Yes	45	45	47.11 + 25.31	22.78 + 33.21	36.34 + 39.50	34.62 + 19.35	41.49 + 21.41	49.06 + 23.20	41.00 + 24.43	36.22 + 14.82		
No	56	55	62.95 + 24.49	44.06 + 37.16	60.19 + 35.65	43.87 + 18.73	52.80 + 20.89	62.05 + 26.98	59.91 + 26.33	49.20 + 15.98		
P			.002	.002	.004	.017	.009	.022	.001	.000		
<i>Vascular in involvement</i>												
Yes	39	39	51.92 + 25.30	32.56 + 35.50	45.37 + 42.27	36.58 + 21.28	47.85 + 24.45	56.67 + 25.35	48.91 + 27.00	39.87 + 15.62		

No	62	61	58.39 + 26.27	35.85 + 38.20	52.20 + 37.05	41.75 + 18.14	47.71 + 20.09	56.01 + 26.70	53.11 + 27.23	45.65 + 17.09
P			.183	.890	.532	.195	.976	.866	.535	.091

Table III: Characteristics of symptoms and QoL scores

Characteristics of symptoms	N	%	SF-36 QoL subscales M + SD									
			Physical function	Role physical	Role emotional	energy / fatigue	emotional well being	social functioning	pain	general health		
<i>Experiencing pain</i>												
Yes	8	88	52.70	28.85	45.38 +	36.95	45.38 +	53.34	+	46.99	40.90	+
	9		25.47	33.39	38.72 +	18.50	21.62	24.60	+	24.59	15.53	
No	1	12	79.58	77.08	80.64 +	60.52	65.42 +	77.92	+	84.79	62.08	+
	2		15.59	34.47	26.39 +	13.24	13.39	27.49	+	21.31	13.22	
P			.000	.000	.003	.000	.002	.003	.000	.000		
<i>Bodily pains affected daily living</i>												
Affected	7	76	50.84	25.42	42.92 +	36.46	45.04 +	51.03	+	44.81	40.39	+
	7		26.01	31.84	38.61 +	17.84	20.23	23.64	+	24.28	14.84	
No Affected	2	24	72.08	63.96	70.88 +	50.31	56.50 +	73.02	+	72.92	53.13	+
	4		18.35	37.04	33.06 +	21.09	24.55	26.89	+	24.71	18.87	
P			.000	.000	.003	.002	.023	.001	.000	.001		
<i>Experiencing sleep problems</i>												
Yes	6	59	47.42	24.25	35.62 +	31.64	40.13 +	46.63	+	41.92	37.25	+
	0		25.03	30.14	39.29 +	16.81	19.48	22.59	+	25.67	15.00	
No	4	41	68.29	49.70	69.98 +	51.62	58.93 +	70.37	+	65.49	52.44	+
	1		22.27	40.74	28.68 +	16.97	20.22	24.54	+	22.85	15.00	
P			.000	.000	.000	.000	.000	.000	.000	.000	.000	
<i>Sleep problems affected daily living</i>												
Affected	5	56	44.56	20.70	35.14 +	30.70	39.18 +	45.04	+	39.61	36.93	+
	7		24.72	28.76	38.58 +	16.68	19.58	21.67	+	23.00	15.02	
No Affected	4	44	70.57	52.56	68.26 +	51.48	58.89 +	70.80	+	66.88	51.82	+
	4		19.54	38.65	31.30 +	16.44	19.43	24.19	+	24.25	15.06	
P			.000	.000	.000	.000	.000	.000	.000	.000	.000	
<i>Experiencing fatigue</i>												
Yes	8	87	53.81	28.89	43.62 +	36.28	44.53 +	52.81	+	48.04	40.6	+ 15.39
	8		24.86	33.14	37.98 +	17.86	20.70	24.07	+	25.14		
No	1	13	70.00	73.08	89.83 +	63.27	69.62 +	79.62	+	74.81	61.92	+
	3		29.86	38.81	15.88 +	12.65	15.70	27.97	+	29.18	13.47	
P			.021	.000	.000	.000	.000	.000	.000	.005	.000	
<i>Fatigue affected daily living</i>												
Affected	7	75	50.86	22.11	38.65 +	34.09	42.08 +	49.14	+	45.13	39.08	+
	6		24.60	28.86	37.78 +	17.46	19.11	22.35	+	24.68	15.42	
No Affected	2	25	71.20	72.50	82.76 +	56.95	65.04 +	77.90	+	70.80	56.60	+
	5		24.38	32.68	19.46 +	14.76	20.45	24.93	+	25.18	13.36	
P			.000	.000	.000	.000	.000	.000	.000	.000	.000	

Table IV: Social relations affected by the disease and QoL scores

Social relationship affected by the disease	SF-36 QoL subscales M + SD														
	N	%	Physical function	Role physical	Role emotional	energy/fatigue	emotional well being	social functioning	pain	general health					
Gender															
Yes	3	3	44.68	+	19.52	+	22.64	+	31.19	34.74	+	26.69	+	39.2	36.29
	1	1	26.55		29.34		32.73		17.88	19.28		14.18		7	+
No	7	6	60.86	+	41.25	+	61.49	+	46.38	53.53	+	69.36	+	56.8	46.57
	0	9	24.27		38.03		35.74		22.18	20.36		18.18		9	+
P			.009		.004		.000		0.003	0.000		.000		.004	0.004

Discussion

The current study showed that BD influenced QoL scores. Patients with oral ulcer, genital ulcer, arthritis, skin lesion, bodily pain, sleeplessness, and fatigue had low scores of quality of life. Bernabe et al. (2010) reported similar results⁽¹⁷⁾. Women’s physical role subscale scores were higher than men’s. This difference between men and women could be attributed to the Chronic pain that seriously affects patients’ physical performance, diminishing their physical activity and even causing disability⁽¹⁸⁾. Women generally report significantly higher activity level and pain acceptance than men⁽¹⁹⁾. Patients between 31 and 41 years old had lower mean scores in physical function, role emotional, and energy/ fatigue subscales. People of this age have considerable obligations both toward their families and in the work environment. These patients need to adapt to the issues related with BD while doing their duties at home and at work. Personal satisfaction decreases as the patients experience such unpleasant times. Financial demands had a direct negative effect on functioning and well-being which persisted over time for middle-aged patients⁽²⁰⁾. A noteworthy increment in scores was seen as the patients' level of education got higher. Level of education determines one's response to situations around them. People with a higher level of education could have higher salaries and better societal position. Thus, a higher level of education may result in a higher quality of life⁽²¹⁾. Employed patients had the lowest mean score in role physical

role, emotional, and social functioning. Employed individuals are subjected to larger more worry at work and may not have enough time to rest during the times of attacks. Reduction in productivity at work as a result of physical pain, stress, rushed timetable, lack of resting time, bitterness and discouragement may adversely influence the quality of life of employed patients⁽²²⁾. In this study, it was observed that oral ulcers contrarily influence the quality of life subscales. Patients with oral ulcers had lower mean scores on physical function, role physical, energy/ fatigue, and pain. We found that genital ulcers negatively affected role physical and general health subscale scores. Genital ulcers represent the second most common manifestation of BD. The sores are usually painful and may leave scars. Patients suffering from painful genital ulcers may have distress, negative feelings, and dissatisfaction in all aspects of their lives. This could result in a significantly impaired quality of life⁽²³⁾. We found that articular involvement decreases the quality of life subscale scores. Pain, swelling, and movement difficulties are prominent in arthritis. Arthritis has a significant effect on mental health and health-related quality of life and impacts the ability of patients to partake in physical, mental and emotional tasks ⁽²⁴⁾. Eye involvement affected the general health subscale score negatively. Ocular involvement in Behçet's disease is either anterior segment iridocyclitis or posterior segment involvement. Panuveitis and posterior uveitis/retinitis occur more

frequently in males than in females. The effect of eye involvement on the QoL could be because of its propensity to relapse, which could be frightening to the patients, to the need for close follow-up, and the possibility of vision impairment as well as the development of ocular complications⁽²⁵⁾. Skin lesions in BD include erythema nodosum-like lesions, pseudofolliculitis, papulopustular lesions and acneiform nodules. The skin is without a doubt is the most unmistakable organ deciding appearance, and assumes a noteworthy part in social and sexual communication. Appearance is vital in social circumstances. Furthermore, it impacts social recognition. Patients with skin disease may experience severe symptoms, such as itching, pain, and discomfort, that can have a profound psychological impact. Furthermore, patients' social and physical activities, including sports and work, may be adversely affected because of their reluctance to allow others to see their skin disease⁽²⁶⁾. As was found in this study, skin involvement negatively affected all eight subscales of the QoL scores. As pain is a well-known factor that influences recreational activities and professional status, nature of rest and sexuality, it can play a noteworthy role in the quality of life, temperament, and recovery result. Pain results in diminished physical activity, impairing the quality of life. Further, unending pain and mental issues are firmly related, influencing physical and psychosocial working⁽²⁷⁾. Physical, emotional, social, and general health subscales were inversely affected in this study by bodily pain and its effect on daily living activities. Patients with sleep problems had lower mean scores in all QoL subscales. By expanding the danger of depression and lessening stress, diminishing intellectual execution, and concentration levels, sleep disorder and its effect on daily activities decreases the capacity to confront daily strains and can have a long-lasting impact on the QoL⁽²⁸⁾. Patients who experienced fatigue and suffered from its effect on daily life activities had lower mean scores in all QoL subscales in this study. Fatigue is related to a scope of

negative impacts, beginning with diminishing activities requiring physical effort and including the significant loss of the sentiment of being in charge. Fatigue may prevent patients from sharing in exercises they did some time recently, so they lose control on parts of their lives; prompting sentiments of depression and disengagement and a further reduction in action. This endless loop puts the patient in a dysfunction position⁽²⁹⁾. A total of 31% of patients stated that the disease negatively influences their social relationships. Those patients had lower mean scores in all QoL subscales than the ones who did not think in that manner. Because Behcet's disease is a chronic disease, it may disrupt an individual's life and this disruption may be interpreted in terms of its impact on well-being or QoL. Psychosocial well-being is compromised by two limitations: by reducing the positively reinforcing outcomes of participating in valued activities and feelings of personal control and by limiting the ability to obtain positive outcomes or avoiding negative ones⁽³⁰⁾. While Chronic patients who have positive social relationships can have a more positive approach towards the disease, thereby having a higher quality of life⁽³¹⁾.

Limitations of study:

Because the number of patients included in our study is limited, the study outcomes could only be generalized to limited strata of the population. We recommend conducting further studies on a larger sample size that represents patients from different care facilities and those with various cultural characteristics. Also, medication usage was not addressed which can have an impact on patient Quality of Life e.g. steroids and other immunosuppressants.

Conclusion

In conclusion patients' sociodemographic characteristics such as age, gender, education level and work status seem to affect the quality of life scores. Additionally, we found that disease characteristics such as the presence of oral ulcer, genital ulcer, arthritis and skin lesion have an impact on the quality of life scores.

Besides, we found that the symptoms that the patients experienced such as bodily pain, sleeplessness and fatigue also affect the quality of life scores. Patients who demonstrated that the illness affects their social connections likewise demonstrated lower QoL scores.

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