Impact of Behcet Disease on Work Productivity in a Sample of Iraqi Patients

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Abstract: A chronic, recurrent, inflammatory vasculopathy whose cause is unclear cause is Behçet's disease. The concept and outcome measure of work productivity have been characterized from a number of angles, including occupational and illness settings as well as personal and environmental contextualization. To assess how Behçet's illness affects patients' everyday activities and job productivity are affected. From January 2024 until January 2025, a case-control study was conducted in the Baghdad Teaching Hospital's Rheumatology Unit. Two groups made up the sample: the case group, which included 80 individuals with a diagnosis of Behçet's illness, and the control group, which included 80 people with good health. The selected patients and the control group were questioned to learn more about their sociodemographic, clinical, and illness-related activities. The Behçet patients had substantially greater mean values for absenteeism, presenteeism, as well as daily activity impairment than the control group (21.4 ± 33.2 vs 0), 52 ± 28.1 vs 12.0 ± 21.2, and 47.6 ± 28.1 vs 8.0 ± 14.7, respectively, having a p-value of 0.001 for each. There was a significant difference (P-value = 0.001) in the WAI levels between the study groups. While 81.3% of participants for the control group experienced a good WAI, more than 50% of individuals of the Behcet patient population reported a poor WAI. Compared to the control group, all WPS parameters were considerably greater for Behcet patients (P-value = 0.015 in question 2 & 0.001 for the remaining questions). Behçet's illness had a major effect on the patients' productivity at work.

Keywords: behçet's disease, work productivity, ocular lesions.

INTRODUCTION

The pathogenesis of Behçet's disease (BD), a chronic, recurrent inflammatory vasculopathy, remains unclear. Hulusi Behçet, a dermatologist, initially identified the illness in 1937 as a tri-symptom complex that included uveitis, vaginal ulcers, and recurring mouth ulcers (Bernabe, E. *et al.,* 2010; Bhakta, B. B. 1999). While the illness is widespread, it is far more prevalent in communities along the historic 'Silk Road,' which connects Eastern Asia to the Middle East & Mediterranean, than in Western nations. Along the Silk Road, the incidence of BD ranges from 14 to 20 per 100,000 people; in Turkey, it is most prevalent, with a frequency of 20 to 602/100,000. (Bodur, H. *et al.,* 2006; Boonen, A. *et al.,* 2010; Burton, W. *et al.,* 2006)

The age of illness onset, which is relatively early in life, is a noteworthy epidemiological feature of BD. The majority of BD diagnoses occur in people between the ages of 15 and 45, with an average age of about 30 upon diagnosis. Making a fresh diagnosis in BD prior to the age of 15 and following the age of 50 is unusual. Men are believed to experience a more severe course of the disease, despite the fact that the two sexes are equally affected. The primary clinical characteristics and early manifestations of the illness in Iraqi patients are comparable to the conventional descriptions of the illness from other regions of the world. (Gignac, M. A. *et al.,* 2004; Haglund, E. *et al.,* 2013; Hamuryudan, V. *et al.,* 1999)

One of the main criteria for BD is oral aphthae, which are frequently the first symptom. Though isolated lesions may occur, the most prevalent areas are the lips, buccal mucosa, tongue, as well as soft palate. These lesions often form in clusters of three to ten or more (Hatemi, G. *et al.,* 2014; International Study Group for Behçet's Disease. 1990). It is thought as among 97 and 100 percent of people with BD have mouth ulcers, often known as aphthae. It is a shallow, round-to-oval, painful, localized ulcer that is frequently encircled by an erythematous halo and covered in a gray fibromembranous slough. Herpetiform dispersion can occur anywhere in the oral cavity, and it can be mild or large (Kocyigit, H. A. O. *et al.,* 1999). Speaking, eating, and drinking might become

difficult due to mouth ulcers, which lower one's quality of life. (Mehta, P. *et al.,* 2014)

It was discovered that sixty percent to ninety percent of people had vaginal ulcers, also known as aphthae. They resemble their oral counterparts and are the second most prevalent onset symptom (Melikoglu, M., and Melikoglu, M. A. 2014). They develop at some stage of the illness and are deeper and bigger than mouth lesions. Apart from ocular diseases, retinal detachment, secondary glaucoma, and optic atrophy—all of which frequently result in permanent visual loss—are ocular symptoms of BD that may endanger eyesight. About half of patients with repeated, explosive inflammatory events have these symptoms; 86% of patients have bilateral symptoms, and male patients are more likely to have them and to have them more severely. (Mumcu, G. *et al.,* 2017; Oliveira, A. C. *et al.,* 2011; Reilly, M. C. *et al.,* 1993)

PATIENTS AND METHODS

Between January 2024 and January 2025, case-control research was carried out at the Teaching Hospital's Rheumatology Outpatient Clinic in Iraq/Baghdad. In order to recruit 160 individuals, a practical sampling technique was modified. Two groups made up the sample, one of which was the case group, containing 80 people with BD diagnoses. The ISG diagnostic criteria for BD were used to make the diagnosis, and the control group was made up of 80 healthy individuals who were matched to the case group in terms of age, gender, as well as body mass index (BMI).

RESULTS

Participants must be at least 18 years old to be eligible for inclusion in the present study, and 2) participants must be employed. 1) Individuals who were deaf or severely disabled were not allowed to participate in this study; 2) Patients with rheumatological diseases such as rheumatoid arthritis or diabetes; 3) Patients taking antidepressants; 4) Patients receiving treatment for any neurological or psychological conditions; 5) Patients with chronic medical conditions; 4) A woman who is pregnant or six months postpartum.

The researcher used an examination, a direct interview, and a questionnaire to get the data. Part I: Sociodemographic factors comprised age in years, gender, employment, residence, educational attainment, marital status, and smoking status. The questionnaire was divided into four sections. Part II: Medical history and examination, including height in meters, weight in kilos, psychological stress or anxiety, and history of chronic disease. Adults with a BMI of less than 18.5 are categorized based on their height and weight. Underweight, Normal Weight (18.5–24.9), Overweight (25.0–29.9), and Obesity (> 30.0).

The generalized anxiety disorder 2-item (GAD-2) score, a quick and simple first screening instrument for anxiety and stress disorder, was used to assess psychological stress or anxiety. Patients having a total score of three or above are deemed to have an anxiety disorder. The test includes two questions using a score ranging from 0 to 3.

Table 1. Demographic and clinical features.

Characteristic		Behcet patients	Control	Total	P-value
		N (%)	**N (%)**	**N (%)**	
Gender	Male	53 (66.3)	44 (55.0)	97 (60.6)	0.145
	Female	27 (33.8)	36 (45.0)	63 (39.4)	
Age (years)	<30	19 (23.8)	25 (31.3)	44 (27.5)	0.516
	31-40	28 (35.0)	27 (33.8)	55 (34.4)	
	41-50	23 (28.8)	16 (20.0)	39 (24.4)	
	>50	10 (12.5)	12 (15.0)	22 (13.8)	
Marital state	Single	20 (25.0)	24 (30.0)	44 (27.5)	0.670
	Married	54 (67.5)	52 (65.0)	106 (66.3)	
	Unmarried	6 (7.5)	4 (5.0)	10 (6.3)	
Education	Illiterate	5 (6.3)	7 (8.8)	12 (7.5)	0.328
	Primary	26 (32.5)	18 (22.5)	44 (27.5)	
	Secondary	26 (32.5)	23 (28.8)	49 (30.0)	
	College	23 (28.8)	32 (40.0)	55 (34.4)	
Smoking	Current	22 (27.5)	22 (27.5)	44 (27.5)	0.089
	Ex-smoker	7 (8.8)	1 (1.3)	8 (5.0)	

	Never	51 (63.8)	57 (71.3)	108 (67.5)	
Body mass index	Underweight	0 (0.0)	0 (0.0)	0 (0.0)	0.067
	Normal weight	36 (45.0)	37 (46.3)	73 (45.6)	
	Overweight	21 (26.3)	31 (38.8)	52 (32.5)	
	Obese	23 (28.8)	12 (15.0)	35 (21.9)	
Stress	Yes	21 (26.3)	3 (3.8)	24 (15.0)	**<0.001**
	No	59 (73.8)	77 (96.3)	136 (85.0)	

Table 2. Work types outcomes.

Work type		Behcet patients N (%)	Control N (%)	Total N (%)	P-value
Work	Have paid work	50 (62.5)	50 (62.5)	100 (62.5)	0.100
	Don't have work	30 (37.5)	30 (37.5)	60 (37.5)	
Have paid work (N=100)	Nonmanual	27 (54.0)	32 (64.0)	59 (60.0)	0.508
	Mixed (manual and nonmanual)	12 (24.0)	11 (22.0)	23 (23.0)	
	Manual with no supervisory duties	11 (22.0)	7 (14.0)	18 (17.0)	
Don't have paid work (N=60)	Student	2 (6.7)	3 (10.0)	5 (8.3)	0.406
	Housewife	16 (53.3)	19 (63.3)	35 (58.3)	
	Retired	3 (10.0)	4 (13.3)	7 (11.7)	
	Unable to work due to arthritis	3 (10.0)	0 (0.0)	3 (5.0)	
	Unable to work due to non-arthritis-related health problems	6 (20.0)	4 (13.4)	10 (16.7)	
Change work	**Yes**	**30 (60.0)**	**19 (38.0)**	**49 (49.0)**	**0.016**
	No	**20 (40.0)**	**31 (62.0)**	**51 (51.0)**	

Table 3. Clinical outcomes of 80 Behcet patients.

| Clinical presentation		N (%)
Arthralgia		47 (58.8)
Oral ulceration		30 (37.5)
Ocular manifestation		21 (26.3)
Pustules		19 (23.8)
Genital ulceration		10 (12.5)
Manifestations of the central nervous system		10 (12.5)
Arthritis		11 (13.8)
Headache		10 (12.5)
Abdominal pain		6 (7.5)
Repeated vomiting		4 (5.0)
Erythema		2 (2.5)
Thrombosis		1 (1.25)
Duration of disease	≤5 years	43 (53.9)
	>5 years	37 (46.3)
Disease activity	High activity	29 (36.3)
	Low activity	51 (63.7)
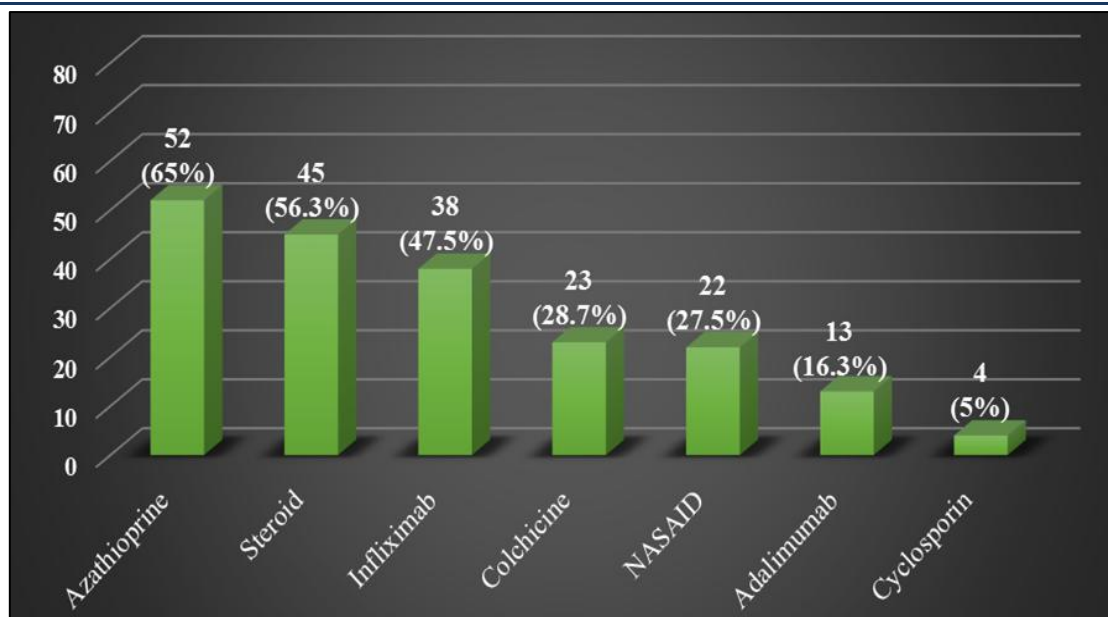
Figure 1. Treatment outcomes of Behçet patients.

Table 4. Evaluation the outcomes of work productivity and activity impairment.

Work productivity and activity impairment.	N	Study groups				P-value
		Behcet patients		Control		
		Mean (±SD)	SE	Mean (±SD)	SE	
Absenteeism (Paid work)	100	21.4 (33.2)	4.69	0	0	<0.001
Presenteeism (Paid work)	100	52 (±28.1)	3.97	12.0 (±21.2)	2.99	<0.001
Daily activity impairment (Paid and not paid work)	160	47.6 (±28.1)	3.14	8.0 (±14.7)	1.64	<0.001

Table 5. Distribution of the extent of work ability index in both patient groups.

Work ability index	Behcet patients	Control	Total	p-value
	N (%)	N (%)	N (%)	
Poor	41 (51.2)	0 (0.0)	41 (25.6)	<0.001
Moderate	27 (33.8)	14 (17.5)	41 (25.6)	
Good	12 (15.0)	65 (81.3)	77 (48.1)	
Excellent	0 (0.0)	1 (1.3)	1 (0.6)	

Table 6. A performing of a work productivity survey into all patients.

Items	Study groups				P-value
	Behcet patients		Control		value
	Mean (±SD)	SE	Mean (±SD)	SE	
Section II: Patients with paid work (N=100)					
Q2: Employment work (days of work missed)	0.9 (±2.3)	0.32	0.1 (±0.5)	0.07	0.015
Q3: Days with productivity reduced by at least half	4.1 (±6.7)	0.94	0.4 (±1.1)	0.155	<0.001
Q4: Degree of interference with work productivity	3.4 (±3.2)	0.45	0.4 (±1.1)	0.155	<0.001
Section III: All patients (N=160)					
Q5: Household work and activities (days of nonpaid work missed)	1.5 (±3.7)	0.41	0.1 (±0.5)	0.05	0.001
Q6: Days with productivity reduced by at least half	7.9 (±9.1)	1.01	1.3 (±3.3)	0.36	<0.001
Q7: Days missed from family, social, or leisure activities	2.9 (±5.5)	0.61	0.1 (±0.5)	0.05	<0.001
Q8: Days with outside help	4.5 (±7.1)	0.79	0.3 (±1.9)	0.21	<0.001
Q9: Degree of interference on [nonpaid] work	4.3 (±3.0)	0.33	0.8 (±1.8)	0.20	<0.001

productivity				

Table 7. Assessment the work productivity and activity impairment of Behcet patients based on socio-demographic and medical aspects.

Characteristic		Absenteeism	Presenteeism	DAI**
		Mean (±SD)	Mean (±SD)	Mean (±SD)
Gender	Male	16.1 (±26.3)	51.9 (±27.1)	50.75 (±29.5)
	Female	26.4 (±31.3)	55.5 (±34.3)	41.4 (±24.6)
P-value		0.307	0.732	0.165
Age (years)	<30	19.4 (±33.9)	45.0 (±30.0)	44.7 (±33.3)
	31-40	15.1 (±23.9)	55.5 (±25.9)	41.7 (±30.7)
	41-50	15.4 (±22.0)	51.4 (±33.9)	56.0 (±20.3)
	>50	29.8 (±36.0)	61.6 (±20.4)	50.0 (±23.5)
P-value		0.698	0.647	0.318
Marital state	Single	27.1 (±34.0)	60.8 (±27.1)	44.5 (±30.6)
	Married	15.8 (±25.1)	51.5 (±28.1)	49.2 (±28.3)
	Unmarried	10.0 (±22.3)	40.0 (±30.8)	43.3 (±18.6)
P-value		0.376	0.363	0.758
Education	Illiterate	0	46.6 (±20.8)	52.0 (±21.6)
	Primary	12.5 (±24.5)	45.8 (±32.0)	50.0 (±28.2)
	Secondary	29.9 (±34.0)	58.3 (±25.8)	56.1 (±20.6)
	College	18.1 (±27.2)	56.1 (±27.4)	34.3 (±33.0)
P-value		0.233	0.609	0.047
Body mass index	Normal	18.3 (±29.9)	51.1 (±27.3)	51.6 (±29.8)
	Overweight	20.2 (±30.1)	58.0 (±30.8)	37.1 (±23.6)
	Obese	15.7 (±20.7)	51.4 (±281)	50.8 (±27.9)
P-value		0.920	0.801	0.138
Disease activity	High	38.6 (±28.6)	70.9 (±18.7)	60.6 (±28.5)
	Low	1.7 (±9.4)	38.2 (±26.1)	40.2 (±25.3)
P-value		<0.001	<0.001	0.001
Disease duration	≤5	6.1 (±22.4)	37.5 (±23.8)	41.63 (±27.6)
	>5	33.1 (±25.6)	71.8 (±20.8)	54.5 (±27.4)
P-value		<0.001	<0.001	0.039
Stress	Yes	60.3 (±26.5)	71.1 (±15.3)	50.0 (±27.0)
	No	8.7 (±16.6)	48.5 (±28.8)	46.7 (±28.7)
P-value		<0.001	0.028	0.656
Change work	Yes	26.8 (±30.8)	61.6 (±26.9)	56.0 (±27.9)
	No	4.7 (±12.1)	39.0 (±24.9)	37.0 (±26.7)
P-value		0.004	0.004	0.021

Table 8. Classification of the Work Ability Index in the Behcet patients based on socio – demographic and medical characteristics.

Characteristic		Work Ability Index			
		Poor N (%)	Moderate N (%)	Good N (%)	Excellent N (%)
Gender	Male	32 (78.0)	15 (55.6)	6 (50.0)	0 (0.0)
	Female	9 (22.0)	12 (44.4)	6 (50.0)	0 (0.0)
P-value		0.069			
Age (years)	<30	7 (17.1)	5 (18.50	7 (58.3)	0 (0.0)
	31-40	14 (34.1)	10 (37.0)	4 (33.3)	0 (0.0)
	41-50	12 (29.3)	10 (37.0)	1 (8.3)	0 (0.0)
	>50	8 (15.9)	2 (7.4)	0 (0.0)	0 (0.0)
P-value		0.039			
Marital state	Single	10 (24.4)	6 (22.2)	4 (33.3)	0 (0.0)

	Married	28 (68.3)	18 (66.7)	8 (66.7)	0 (0.0)
	Unmarried	3 (7.3)	3 (11.1)	0 (0.0)	0 (0.0)
P-value		0.772			
Education	Illiterate	2 (4.9)	2 (7.4)	1 (8.3)	0 (0.0)
	Primary	13 (31.7)	8 (29.6)	5 (41.7)	0 (0.0)
	Secondary	18 (43.9)	8 (29.6)	0 (0.0)	0 (0.0)
	College	8 (19.5)	9 (33.3)	6 (50.0)	0 (0.0)
P-value		0.144			
Body mass index	Normal	20 (48.8)	11 (40.7)	5 (41.7)	0 (0.0)
	Overweight	11 (26.8)	7 (25.9)	3 (25.0)	0 (0.0)
	Obese	10 (24.4)	9 (33.3)	4 (33.3)	0 (0.0)
P-value		0.933			
Disease activity	High	24 (58.5)	4 (14.8)	1 (8.3)	0 (0.0)
	Low	17 (41.5)	23 (85.2)	11 (91.7)	0 (0.0)
P-value		<0.001			
Disease duration	≤5	15 (36.6)	18 (66.7)	10 (83.3)	0 (0.0)
	>5	26 (63.4)	9 (33.3)	2 (16.7)	0 (0.0)
P-value		0.004			
Stress	Yes	13 (31.7)	4 (14.8)	4 (33.3)	Yes
	No	28 (68.3)	23 (85.2)	8 (66.7)	Yes
P-value		0.251			
Change work	Yes	23 (79.3)	6 (37.5)	1 (20.0)	0 (0.0)
	No	6 (20.7)	10 (62.5)	4 (80.0)	0 (0.0)
P-value		0.004			

Table 9. Evaluation of the work productivity survey in Behcet patients according to the socio – demographic.

Characteristic		Q2	Q3	Q4
		Mean (±SD)	Mean (±SD)	Mean (±SD)
Gender	Male	0.8(±2.1)	4.0 (±6.6)	3.4 (±3.2)
	Female	1.4 (±3.3)	4.6 (±7.6)	3.1 (±3.4)
P-value		0.523	0.814	0.774
Age (years)	<30	0.5 (±1.0)	2.0 (±5.0)	3.0 (±3.4)
	31-40	0.7 (±1.7)	6.7 (±8.5)	3.7 (±3.4)
	41-50	2.0 (±3.7)	4.5 (±5.7)	4.3 (±3.1)
	>50	0 (±0.0)	0.1 (±0.4)	1.0 (±2.0)
P-value		0.213	0.109	0.192
Marital state	Single	0.5 (±1.0)	0.5 (±0.7)	3.2 (±3.2)
	Married	1.1 (±2.8)	4.8 (±7.5)	3.1 (±3.2)
	Unmarried	0.6 (±1.3)	8.6 (±5.5)	5.4 (±3.2)
P-value		0.713	0.045	0.363
Education	Illiterate	0 (±0.0)	3.6 (±5.5)	4.3 (±4.0)
	Primary	0.3 (±0.8)	2.2 (±6.1)	2.2 (±2.9)
	Secondary	2.1 (±3.8)	5.7 (±8.1)	3.4 (±3.1)
	College	0.9 (±2.1)	5.0 (±6.5)	4.2 (±3.5)
P-value		0.197	0.507	0.333
Change work	Yes	1.5 (±2.9)	4.8 (±7.2)	3.7 (±3.3)
	No	0.1 (±0.4)	3.1 (±5.8)	2.9 (±3.1)
P-value		0.043	0.383	0.385

Table 10. Distribution of the work productivity survey in Behcet patients according to medical characteristics.

Characteristic		Q2	Q3	Q4
		Mean (±SD)	Mean (±SD)	Mean (±SD)
Body mass index	Normal	0.7 (±1.6)	4.9 (±8.1)	2.9 (±3.2)

	Overweight	1.2 (±3.1)	2.2 (±2.8)	3.6 (±2.9)
	Obese	1.2 (±2.9)	4.1 (±5.8)	4.0 (±3.6)
P-value		0.748	0.554	0.590
Disease activity	High	2.2 (±3.2)	6.4 (±8.2)	4.6 (±3.3)
	Low	0 (±0.0)	2.3 (±4.6)	2.3 (±2.9)
P-value		0.001	0.033	0.013
Disease duration	≤5	0.1 (±0.5)	3.0 (±5.4)	2.5 (±2.8)
	>5	2.0 (±3.2)	5.6 (±7.9)	4.5 (±3.4)
P-value		0.002	0.164	0.027
Stress	Yes	2.2 (±3.1)	3.0 (±5.7)	3.8 (±3.4)
	No	0.7 (±2.1)	4.4 (±6.9)	3.2 (±3.2)
P-value		0.083	0.567	0.627

Table 11. Distribution of the Work Productivity Survey in Behcet patients according to the socio – demographic.

Characteristic		Q5	Q6	Q7	Q8	Q9
		Mean (±SD)	Mean (±SD)	Mean (±SD)	Mean (±SD)	Mean (±SD)
Gender	Male	1.3 (±2)	6.6 (±7)	3.1 (±5)	3.9 (+6)	4.8 (±3)
	Female	1.6 (±5)	6.2 (9)	1.8 (4)	3.1 (4)	3.6 (3)
P-value		0.382	0.874	0.401	0.616	0.182
Age (years)	<30	2.3 (±5)	3.6 (±5)	3.2 (6)	3.7 (±6)	3.1 (3)
	31-40	1.6 (±4)	10 (±10)	2.9 (±6)	5.6 (±8)	4.6 (3)
	41-50	1.3 (±2)	8.6 (±8)	3.7 (±4)	5.6 (±6)	5.0 (2)
	>50	0.4 (±1)	7.6 (±9)	0.6 (±1)	0.5 (±0)	4.6 (±2)
P-value		0.601	0.104	0.508	0.202	0.208
Marital state	Single	2.6 (±5)	3.4 (±4)	2.3 (±4)	4.3 (±6)	3.0 (±2)
	Married	1.3 (±3)	9.1 (±9)	3.1 (±6)	4.8 (±7)	4.7 (±3)
	Unmarried	0.3 (±0)	12 (±12)	3.5 (±3)	3.0 (±3)	5.6 (±2)
P-value		0.279	0.029	0.821	0.834	0.059
Education	Illiterate	0 (0)	5.4 (±6)	2.8 (±2)	1.2 (±1)	2.4 (±3)
	Primary	2.0 (±4)	6.6 (±7)	3.2 (±6)	6.3 (±9)	4.0 (±3)
	Secondary	2.3 (±4)	13 (±10)	3 ± (5)	5.8 (±7)	5.1 (±2)
	College	0.4 (±1)	3.5 (±6)	1.5 (4)	1.7 (3)	4.2 (±3)
P-value		0.227	0.001	0.485	0.069	0.216
Change work	Yes	1.3 (±2)	6.6 (±7)	3.1 (±5)	3.9 (±6)	4.8 (±3)
	No	1.6 (±5)	6.2 (±9)	1.8 (±4)	3.1 (±4)	3.6 (±3)
P-value		0.832	0.874	0.401	0.616	0.182

Table 12. Distribution of the work productivity survey in Behcet patients according to medical characteristics.

Characteristic		Q5	Q6	Q7	Q8	Q9
		Mean (±SD)	Mean (±SD)	Mean (±SD)	Mean (±SD)	Mean (±SD)
Body mass index	Normal	2.2 (±5)	6.1 (±7)	3.6 (±6)	5.6 (±8)	3.7 (±3)
	Overweight	1.3 (±2)	7.8 (±8)	2.2 (±4)	4.1 (±6)	4.4 (±2)
	Obese	0.7 (±1)	10 (±10)	2.4 (±4)	3.1 (±4)	5.2 (±2)
P-value		0.323	0.186	0.568	0.388	0.159
Disease activity	High	3.3 (±5)	11 (±10)	6.1 (±7)	9.3 (±8)	6.3 (±2)
	Low	0.5 (±1)	5.8 (±7)	1.1 (±2)	1.7 (±3)	3.2 (±2)
P-value		0.001	0.006	0.001	0.001	0.001
Disease duration	≤5	1.0 (±3)	5.9 (±8)	2.4 (±4)	3.1 (±5)	3.2 (±2)
	>5	2.1 (±3)	10 (±9)	3.6 (±6)	6.1 (±8)	5.7 (±2)
P-value		0.232	0.040	0.326	0.054	0.001
Stress	Yes	2.8 (±4)	8.8 (±8)	4.3 (±6)	5.8 (±7)	5.1 (±2)
	No	1.1 (±3)	7.6 (±9)	2.4 (±5)	4.0 (±6)	4.1 (±3)
P-value		0.077	0.610	0.188	0.345	0.197

DISCUSSION

Measures of quality of life are employed to assess how a patient's everyday activities are affected by a chronic illness (Salazar-Mejia, C. E. *et al.,* 2018). Patients having BD have been found to have lower overall quality of life levels. Productivity is impacted by Behçet's syndrome, which is most prevalent in young adulthood and the working years. This research was one of several that attempted to evaluate how BD affected an assortment of Iraqi patients' productivity at work. Males made up almost two-thirds of the Behcet patients in the current study. In addition, almost all of the patients were under 40 years old (Sut, N. *et al.,* 2007; Tran-Duy, A. *et al.,* 2015; Tursen, U. *et al.,* 2013). The same results were found in another research conducted in Turkey, where the mean age of the participants was 24.3 (±8.9) years, and 60.4% of them were male. About half of the patients had normal weights according to their BMI. This was in line with another research conducted by Argentina. In the present investigation, the most common symptoms among the patients were ocular signs, mouth ulcers, and arthritis.

Furthermore, at the time of the research, almost one-third of them were actively ill. The most frequent manifestations of BD were musculoskeletal discomfort, which came next. The most frequent manifestations of Behcet patients in an Iraqi investigation were arthralgia, papulopustular lesions, erythema nodosum, headache, and oral and genital ulcers. (Verstappen, S. M. 2015; Wang, L. Y. *et al.,* 2010)

Sixty percent of Behcet patients had previously changed their employment, indicating a substantial difference between them and the control group. A Turkish research found that cyclophosphamide, azathioprine, corticosteroids, and colchicine were the most often utilized medications. The variations in clinical presentation, comorbidities, and patient characteristics may be the cause of the variations in medication usage frequency between studies (Ware, J. E. Jr., and Sherbourne, C. D. 1992). Only 15% of Behçet patients had good workability, and none had exceptional work productivity, according to WAI, which shows that control participants were far more productive at work than Behçet patients. Another research study that included rheumatoid arthritis patients found that 38% of them had low workability, 17% had moderate workability, 36% had good workability, and 9% had exceptional workability.

Poor to moderate WAI was estimated at 47.9%, 33.3%, and 21.1% of people having inflammatory arthritis, osteoarthritis, as well as healthy controls, respectively, according to another study (Yalcin, B. *et al.,* 2013) conducted in Singapore. According to the current study, patients who had been ill for more than five years, had high disease activity, were under stress, or had changed jobs had considerably greater absenteeism, presenteeism, and DAI. According to WAI, patients who had been ill for over five years, had high disease activity, or had changed jobs had a much higher percentage of those with low work productivity.

CONCLUSION

The patients' productivity at work was greatly influenced by BD. Certain signs of reduced job productivity had a significant association with factors such as marital status, educational attainment, psychological stress, length of illness, and disease activity. Furthermore, among Behcet patients, there was a significant correlation between decreased job productivity and work change.

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