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## Evaluation of Patients' Quality Life of Diagnosed with Panic Disorder

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## Makale Tarihiçesi

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## Anahtar Kelimeler

Anxiety,  
Panic Disorder,  
Quality of Life.

**Abstract :** This research was conducted to evaluate the quality of life of patients diagnosed with panic disorder who applied to a public hospital. The data of the descriptive and cross-sectional study were collected between 30 December 2012 and 30 April 2013. SF-36 Quality of Life scale and socio-demographic information form were used to collect data. Kruskal Walls "t" test and Mann Whitney U test were used to evaluate the data, the results were accepted as 95% confidence interval, and significance was accepted as (p <0.05). 53.8% of the patients were male, 44.5% were high school graduates, 55.5% were married, 77.3% had been treated for panic disorder for 1-5 years, 79% had experienced a negative life event before the first attack, 69.2% had experienced a negative life event before the first attack. It was determined that 100,000 of them attempted suicide 1-2 times and 51.3% of them experienced the loss of a mother or father. Patients' Quality of Life scale subscale score averages; physical function 23.674±4.64; physical role difficulty 5.37±1.57; Pain 5.29±2.12; general health 10.58±3.61; energy 10.15±2.45; social function 6.29±1.63; emotional role difficulty 3.66±1.08; mental health was determined as 14.11±3.39. As a result of the study, it was determined that factors such as negative life experiences, loss of a parent, having an additional physical or mental illness, and suicide attempt negatively affected the quality of life.

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## Panik Bozukluk Tanısı Konmuş Hastaların Yaşam Kalitelerinin Değerlendirilmesi

## Article Info

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**Öz:** Bu araştırma bir devlet hastanesine başvuran panik bozukluk tanılı hastaların yaşam kalitelerinin değerlendirilmesi amacıyla gerçekleştirilmiştir. Tanımlayıcı ve kesitsel tipte gerçekleştirilen araştırmanın verileri 30 Aralık 2012- 30 Nisan 2013 tarihleri arasında toplanmıştır. Verilerin toplanmasında SF-36 Yaşam kalitesi ölçeği ve sosyo demografik bilgi formu kullanılmıştır. Verilerin değerlendirilmesinde

## Keywords

Anksiyete,  
Panik Bozukluk  
Yaşam Kalitesi

Kruskal Walls "t" testi, Mann Whitney U testi kullanılmış, sonuçlar %95 güven aralığında, anlamlılık  $p < 0,05$  olarak kabul edilmiştir. Hastaların %53.8'inin erkek, %44.5'inin lise mezunu, %55.5'inin evli, %77.3'ünün 1-5 yıl panik bozukluk tedavisi gördüğü, %79'unun ilk atak öncesi olumsuz bir yaşam olayı ile karşılaştığı, %69.2'sinin 1-2 kez intihar girişiminde bulunduğu ve %51.3'ünün anne ya da baba kaybı yaşadığı saptanmıştır. Hastaların Yaşam Kalitesi ölçeği alt boyut puan ortalamaları; fiziksel fonksiyon  $23,674 \pm 4,64$ ; fiziksel rol gücü  $5,37 \pm 1,57$ ; Ağrı  $5.29 \pm 2,12$ ; genel sağlık  $10,58 \pm 3,61$ ; enerji  $10,15 \pm 2,45$ ; sosyal fonksiyon  $6,29 \pm 1,63$ ; emosyonel rol gücü  $3,66 \pm 1,08$ ; mental sağlık  $14,11 \pm 3,39$  olarak belirlenmiştir. Çalışma sonucunda olumsuz yaşam deneyimleri, ebeveyn kaybı, ek bir fiziksel ya da ruhsal hastalığa sahip olma, intihar girişimi gibi faktörlerin yaşam kalitesini olumsuz etkilediği saptanmıştır.

## 1. Introduction

Panic disorder is characterized by recurrent panic attacks that are accompanied by intense physical symptoms, manifested by intense anxiety and fear, and whose onset cannot be predetermined (Çam and Engin, 2014; Gürhan, 2016). Patients usually experience panic attacks unexpectedly for an unclear reason. Attacks may occur only once or in weekly, monthly or yearly periods (Çam and Engin, 2014). During a panic attack, symptoms such as increased heart rate, palpitations, sweating, shaking, difficulty breathing, feeling of suffocation, numbness, tingling, chest tightness, chills or hot flashes, fear of losing control, fear of death are observed (Çam and Engin, 2014; Gürhan, 2016; Öztürk and Uluşahin 2018). In addition to physical symptoms, patients almost always have a fear of death or fear of losing control and going crazy (Öztürk and Uluşahin, 2018). The effect of attacks, which are disturbing for individuals and reduce functionality, usually subsides within 10-15 minutes, but can also last for several hours (Başaran and Sütçü, 2016). It is stated that 70% of the patients have encountered a challenging life event before the first panic attack occurs. However, it has been reported that the likelihood of the disease being seen with a different anxiety disorder or mental disorder is very high (92.2%) (Öztürk and Uluşahin, 2018).

It is known that individuals who enjoy life, are healthy and socially active have a good quality of life (Peel, Barlett, Marshall, 2007). It is stated that the quality of life in panic disorder is lower than in normal individuals (Delia, 2000). The fact that panic disorder is seen together with other mental and physical diseases causes deterioration in quality of life. In addition, it has been reported that the risk of suicide is higher in panic disorder compared to the normal population, 50-60% of patients have depression and 20-40% have alcohol and substance abuse (Saygılı and Karamustafalıoğlu, 2010). As in all other mental illnesses, quality of life in panic disorder is an important component for patients to maintain their mental health. In this study, in addition to evaluating the quality of life of panic disorder patients, answers to the questions of what factors may affect the quality of life were sought. It is thought that the data obtained from the study will guide the clinical practices of nurses caring for patients with panic disorder.

## 2. Materials and Methods

### Type of Research

This descriptive and cross-sectional study was conducted to evaluate the quality of life of patients with panic disorder.

### Population and Sample of the Study

The population of the study consisted of 180 patients diagnosed with F41.0 (Panic disorder) within the scope of ICD-10 (International Classification of Diseases) who applied to a state hospital in northern Turkey. In the study, the sample number was calculated using the known sampling method. Accordingly, 119 panic disorder patients who agreed to participate in the study and who did not have

any problems that would prevent communication constituted the sample of the study.

#### **Data Collection**

The data were collected between December 2012 and April 2013. Patients diagnosed with panic disorder were referred to the researcher by the outpatient clinic secretary after the examination and the data were collected in a separate room in the psychiatry clinic. Before the data were collected, the patients were informed about the study, invited to participate in the study, and their written and verbal consent was obtained by reading the information on the consent form. Data forms were distributed to the patients who agreed to participate in the study and they were asked to fill out the forms under observation. The list of patients with the diagnosis code F41.0 (Panic disorder) in the hospital information system was accessed via the username and password via the information process of the hospital in question after obtaining institutional permission, and the diagnosis of the patients referred to the researcher was confirmed via the hospital information system.

#### **Data Collection Tools**

A socio-demographic information form consisting of 24 questions about the patients' age, gender, marital status, educational status, employment status, panic attacks and losses and SF- 36 Quality of Life Scale were used to collect the data.

#### **Ethics Committee Declaration**

Before starting the study, ethical permission was obtained from the Non-Interventional Research Ethics Committee of a university (date 26/12/2012, number 09) and institutional permission was obtained from the relevant institution.

#### **SF-36 Quality of Life Scale**

SF-36 is one of the most common scales used to measure quality of life and was developed by Rand Coporation in 1992 (Öyekçin, 2012). The Turkish validity and reliability of the scale was performed by Koçyiğit and colleagues (Koçyiğit et al., 1999). It consists of 36 items and 8 sub-dimensions (physical function, social function, role limitations due to physical problems, role limitations due to emotional problems, mental health, energy/vitality, pain and general perception of health). The scale is evaluated considering the last 4 weeks. The subscales assess health between 0 and 100. 0 indicates poor health, while 100 indicates good health.

#### **Statistical Evaluation of Data**

The data obtained from the study were analyzed using SPSS 15.0 (Statistical Package for Social Sciences) package program. Descriptive statistics (number, percentage, mean, standard deviation), Cronbach's alpha coefficient, t test and Mann Whitney U test were used to analyze the data. The results were accepted as 95% confidence interval and significance was accepted as  $p < .05$ .

### **3.Results**

It was found that 53.8% (n=64) of the patients who participated in the study were male, 33.6% (n=40) were in the 46-65 age range, 44.5% (n=53) were high school graduates, 55.5% (n=66) were married, 55.5% (n=66) were not working, and 70.6% (n=84) lived with their families (Table 1)

**Table 1:** Distribution of Demographic Characteristics of Patients (N=119)

Distribution of Demographic Characteristics of Patients (n=119)		N	%
Gender	Woman	55	46,2
	Male	64	53,8
Age	18-25	15	12,6
	26-35	30	25,2
	36-45	34	28,6
	46-65	40	33,6
	Primary School	26	21,8
Education status	Middle School	11	9,2
	High School	53	44,5
	Undergraduate/Graduate	29	24,4
Marital status	Married	66	55,5
	Single	29	24,4
	Widowed/divorced	24	20,2
Employment status	Yes	53	44,5
	No.	66	55,5
People you live with	I live alone	26	21,8
	I live with my family	84	70,6
	I live with my friends	9	7,6

When the sub-dimensions of the quality of life scale of the patients were examined, the mean score of physical function sub-dimension was  $23.67 \pm 4.64$ ; mean score of physical role difficulty sub-dimension was  $5.29 \pm 1.57$ ; mean score of pain sub-dimension was  $5.29 \pm 2.12$ ; mean score of general health sub-dimension was  $10.58 \pm 3.61$ ; energy subscale mean score was  $10.15 \pm 2.45$ ; social function subscale mean score was  $6.29 \pm 1.63$ ; emotional role difficulty subscale mean score was  $3.66 \pm 1.08$ ; and mental health subscale mean score was  $14.11 \pm 3.39$  (Table 2).

**Table 2:** Findings Regarding the Mean Scores of the Quality of Life Scale

Quality of life scale sub-dimensions	Minimum	Maximum	Average	Standard deviation
Physical function	10	29	23,68	4,64
Physical role difficulty	4	8	5,37	1,57
Agri	2	10	5,29	2,12
General health	5	19	10,58	3,61
Energy	5	17	10,15	2,45
Social function	2	10	6,29	1,63
Emotional role difficulties	3	6	3,66	1,08
Mental health	8	23	14,11	3,39

77.3% (n=92) of the patients had been treated for panic disorder for 1-5 years, 45.4% (n=54) had their first attack at home, 50.4% (n=60) had their first attack while resting/sitting, 47.1% (n=56) had an attack duration between 6-10 minutes, 79.0% (n=94) experienced a negative life event before the first attack, 62.8% (n=59) experienced a negative life event 2-10 years before the onset of the illness, 49.6% (n=59) had a panic attack during sleep, 43,7% (n=52) attempted suicide, 69.2% (n=36) attempted suicide 1-2 times, 37.8% (n=45) used alcohol, 51.3% (n=61) experienced loss of parents, 7.6% (n=9) experienced parental separation, 70,6% (n=84) had a mental illness other than panic disorder, 47.6% (n=40) were treated for depression in addition to panic disorder, 52.9% (n=63) had a physical illness other than psychiatry, 57.1% (n=36) had hypertension (Table 3).

**Table 3:** Findings Related to Health/Disease Characteristics of Patients (N=119)

Health/Disease Characteristics of Patients (n=119)		N	%
	1-5 years	92	77,3
How long she has been treated for panic disorder	6-10 years	21	17,6
	11-20 years	6	5,0
	Home	54	45,4
The place where he had his first attack	Workplace	17	14,3
	Vehicle	20	16,8
	Open places	28	23,5
	While eating	9	7,6
	Exercise, housework, sport	16	13,4
When he had his first attack	Resting, sitting, lying down	60	50,4
	Asleep	18	15,1
	When taking liquid food	16	13,4
	Less than 1 minute	26	21,8
First attack duration	1-5 minutes	84	70,6
	6-10 minutes	56	47,1
	11-30 minutes	9	7,6
Are there any negative life events before the first attack?	Yes	94	79
	No.	25	21
	In the last 6 months	26	21,8
How long ago the negative life event occurred	In the last year	84	70,6
	2-10 years	52	62,8
	10 years and above	9	9,6
Whether there is a panic attack during sleep	Yes	59	49,6
	No.	60	50,4
Whether there was a suicide attempt	Yes	52	43,7
	No.	67	56,3
Number of suicide attempts	1-2 times	36	69,2
	3-10 times	16	30,8
Whether he drinks alcohol	Yes	45	37,8
	No.	74	62,2
Whether there is loss of mother or father	Yes	61	51,3
	No.	58	48,7
Whether parents are separated	Yes	9	7,6
	No.	110	92,4
Are there any mental illnesses other than panic disorder?	Yes	84	70,6
	No.	35	29,4
	Depression	40	47,6
Mental illnesses other than panic disorder	Alcohol substance abuse	23	27,4
	Obsessive compulsive disorder	20	23,8
	Bipolar disorder	1	1,2
Are there any physical illnesses other than panic disorder?	Yes	63	52,9
	No.	56	47,1
	Hypertension	36	57,1
Physical illnesses other than panic disorder	Diabetes mellitus	3	4,8
	Goiter	4	6,3
	Other	20	31,7

There was no statistically significant difference between the mean scores of the Quality of Life Scale Physical Role Difficulty, General Health, Energy and Mental Health subscales according to the age of the patients ( $p>0.05$ ). However, a statistically significant difference was found between the Physical Function, Pain, Social Function and Emotional Role Difficulty scale scores according to the age of the patients ( $p<0.05$ ) (Table 4).

**Table 4:** Comparison of the Mean Scores of the Quality of Life Scale with the Age of the Patients

SF-36 Sub-dimension	Age groups	n	Ort.	Std. Deviation	p	Significant difference
Physical function	18-25	15	26,07	3,39	0,001	18-25 with *46-65
	26-35	30	25,17	3,43		
	36-45	34	23,44	5,33		
	46-65	40	21,85	4,58		
Physical role difficulty	18-25	15	26,07	3,39	0,162	-
	26-35	30	25,17	3,43		
	36-45	34	23,44	5,33		
	46-65	40	21,85	4,58		
Agri	18-25	15	3,80	2,21	0,000	18-25 with *46-65
	26-35	30	4,40	1,65		
	36-45	34	5,26	1,83		
	46-65	40	6,53	2,00		
General health	18-25	15	11,67	3,50	0,060	-
	26-35	30	11,03	3,29		
	36-45	34	11,15	3,85		
	46-65	40	9,35	3,46		
Energy	18-25	15	10,53	3,34	0,0638	-
	26-35	30	10,23	1,91		
	36-45	34	10,38	2,50		
	46-65	40	9,75	2,44		
Social function	18-25	15	5,80	1,70	0,012	18-25 with *46-65
	26-35	30	5,77	1,28		
	36-45	34	6,26	1,62		
	46-65	40	6,90	1,69		
Emotional role difficulties	18-25	15	4,13	1,35	0,013	18-25 with *46-65
	26-35	30	3,97	1,22		
	36-45	34	3,53	0,93		
	46-65	40	3,35	0,92		
Mental health	18-25	15	14,80	4,09	0,663	-
	26-35	30	14,63	3,08		
	36-45	34	13,88	3,87		
	46-65	40	13,65	2,90		

Kruskal Walls Test  $p < 0.0$

No statistically significant difference was found between the mean scores of the Quality of Life Scale Physical Role Difficulty, General Health, Energy, Emotional Role Difficulty and Mental Health scale subscales according to the educational status of the patients ( $p>0.05$ ). However, a statistically significant difference was found between the Physical Function, Pain and Social Function scale scores according to the educational status of the patients ( $p<0.05$ ) (Table 5).

**Table 5:** Comparison of the Mean Scores of the Quality of Life Scale with the Educational Status of the Patients

SF-36 Subdimension	Education	n	Ort.	Std. Deviation	P	
Physical function	Primary school	26	20,85	5,15	0,006	
	Middle school	11	24,00	3,82		
	High school	53	24,06	4,63		
	Graduate/undergraduate	29	25,38	3,36		
Physical role difficulty	Primary school	26	4,92	1,35	0,216	-
	Middle school	11	5,09	1,64		
	High school	53	5,47	1,60		
	Graduate/undergraduate	29	5,69	1,65		
Pain	Primary school	26	6,65	1,72	0,000	
	Middle school	11	6,09	2,17		
	High school	53	5,00	2,09		
	Graduate/undergraduate	29	4,28	1,83		
General health	Primary school	26	9,77	3,57	0,128	-
	Middle school	11	11,91	2,66		
	High school	53	10,23	3,77		
	Graduate/undergraduate	29	11,45	3,50		
Energy	Primary school	26	9,92	2,12	0,301	-
	Middle school	11	9,09	2,07		
	High school	53	10,11	2,34		
	Graduate/undergraduate	29	10,83	2,94		
Social function	Primary school	26	6,62	1,55	0,024	
	Middle school	11	7,27	1,35		
	High school	53	6,26	1,60		
	Graduate/undergraduate	29	5,69	1,67		
Emotional role difficulty	Primary school	26	3,38	0,85	0,507	-
	Middle school	11	3,64	1,21		
	High school	53	3,72	1,15		

	Graduate/undergraduate	29	3,79	1,11	
Mental health	Primary school	26	13,92	2,62	
	Middle school	11	12,73	3,17	0,166
	High school	53	13,81	3,26	
	Graduate/undergraduate	29	15,34	4,06	

There was no statistically significant difference between the mean scores of the Quality of Life Scale Energy and Mental Health scale sub-dimensions according to the duration of panic attack treatment ( $p>0.05$ ). However, a statistically significant difference was found between the mean scores of Quality of Life Scale Physical Role Difficulty, Pain, Social Function, General Health, Physical Function, Emotional Role Difficulty scale subscale scores according to the duration of panic attack treatment ( $p<0.05$ ).

#### 4. Discussion

In a study conducted to evaluate the quality of life in panic disorder, it was found that the majority of the patients experienced a negative life event before the first attack, had a parental loss, had another physical or mental illness other than panic disorder, and a significant proportion of the patients had attempted suicide.

Stressful life events associated with the onset of panic disorder include interpersonal conflicts, threats to primary relationships such as separation and loss, and threats to health, including physical illness (Moitra et al., 2011). Events that change patients' lifestyles can be triggers for panic attacks. Some studies have indicated that traumatic life events in childhood or adolescence and early parental separation lead to panic disorder. In addition, it has been reported that the risk of panic disorder increases after physical or sexual abuse during childhood (Örsel, 2011). Deniz reported that 66.7% of patients with panic disorder were exposed to physical neglect, 61.3% to emotional neglect, 46.7% to physical abuse, 22.7% to sexual abuse and 10.7% to incest (Deniz, 2014). When panic disorder is seen together with other psychiatric disorders, depression and anxiety symptoms are exacerbated and suicide attempt rates may increase. The emergence of many different comorbid conditions leads to deterioration in treatment compliance and decreased response to treatment (De Jonge et al., 2016). It has been reported that there is a high comorbidity between anxiety disorders (especially generalized anxiety and panic disorder) and depressive disorders (Thibaut, 2017). It has been reported that the most common mental disorders accompanying panic disorder are anxiety, depression and somatization (Özen et al., 2010). It has been reported that approximately 25-50% of patients with mental disorders attempt suicide at least once in their lifetime and 8-19% die as a result of completed suicide (Latalova, Latalama, Praska, 2014). In a study conducted in our country, suicide attempt and self-harm behavior were determined as 19.8% in patients diagnosed with panic disorder (Bakim et al., 2011). 1% of people who died due to suicide were reported to have panic disorder and panic disorder increased the risk of suicide tenfold. (APA, 2003) When all these are evaluated; we can say that the factors that negatively affect the quality of life in panic disorder are in parallel with the data we obtained from our study.

It was found that the age groups of the patients affected the physical function, pain, social function and emotional role difficulty sub-dimensions of the quality of life scale. Accordingly, it was determined that physical function and emotional role difficulty sub-dimension scores decreased and pain sub-dimension scores increased as the age of the patients increased. In addition, it was found that the social function sub-dimension scores of patients aged 18-25 and 26-45 years were lower than those aged 46-65 years. Anxiety disorder results in loss of functionality and deterioration of quality of life in elderly patients. It has been reported that anxiety disorder in the elderly is associated with many factors such as female gender, having many chronic medical problems, being single or divorced, low education level, stressful life event, physical limitation in daily activities (Gonçalves and Byrne, 2012). In parallel with this, Pinar reported a negative relationship between age and quality of life in her study



(Pinar et al., 2010). It can be said that the results obtained from the study are in parallel with the literature and accordingly, the physical activities of patients diagnosed with panic disorder decrease with age and their quality of life decreases with advancing age. In addition, it was thought that with advancing age, patients may encounter life events such as hormonal changes, losses, and retirement more frequently, so these changes may negatively affect the emotional states of patients.

It was determined that the educational level of the patients affected the physical function, pain and social function sub-dimensions of the quality of life scale. Accordingly, it was determined that as the education level of the patients increased, the mean scores of physical function increased and the mean scores of pain decreased. In addition, it was found that the social function sub-dimension scores of primary and secondary school graduates were higher than those of undergraduate/graduate graduates. Accordingly, it can be said that as the level of education of the patients increases, they are more physically active, they can cope better with pain, but they are more passive socially.

It was determined that the duration of treatment of the patients affected the physical function, physical role difficulty, pain, general health, social function and emotional role difficulty sub-dimensions of the quality of life scale. Accordingly, as the duration of treatment increased, pain and social function sub-dimension scores increased, but physical function, general health and emotional role difficulty scores decreased. In addition, it was determined that the physical role difficulty sub-dimension scores of patients who received treatment for 1-5 years were higher than patients who received treatment for 6-10 and 11-20 years. Accordingly, it can be said that physical functions, general health and emotional states of the patients were negatively affected as the duration of treatment increased, but they were better able to cope with pain and were more social. This may be associated with the fact that patients who receive treatment for a long period of time may experience burnout due to their illness and that their coping skills are not at the desired level. The fact that patients who received treatment for a long time coped better with pain can be explained by the fact that patients may have learned alternatives that may be good for them over time.

## 5. Conclusion

In this study, it was found that the quality of life of panic disorder patients was related with the duration of treatment, age and educational level, and factors that may negatively affect the quality of life such as negative life experiences, loss of a parent, having additional physical or mental illness, and suicide history were frequently observed in these patients. In line with these results, it may be recommended to conduct studies evaluating different dimensions of panic disorder and to make nursing plans to improve patients' quality of life and coping skills.

**Limitation of the study:** The research is limited to the responses given by the patients, and the results cannot be generalized because the study was conducted in only one institution

**Description: Note:** This study was produced from the master's thesis. This study was presented as a poster presentation at the 3rd International 7th National Psychiatric Nursing Congress (Ankara, 1-3 September 2014).

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