# YOĞUN BAKIM HASTALARININ EMOSYONEL DURUMUNUN DEĞERLENDİRİLMESİ

## EVALUATION OF EMOTIONAL EXPERIENCE IN INTENSIVE CARE UNIT (ICU) PATIENTS

Özlem EDİBOĞLU<sup>1</sup>, Pinar ÇİMEN<sup>1</sup>, Dursun TATAR<sup>1</sup>, Cenk KIRAKLI<sup>1</sup>, Ceyda ANAR<sup>2</sup>, Gülru POLAT<sup>2</sup>, Semra BİLAÇEROĞLU<sup>2</sup>, Sacide ÇOBAN<sup>3</sup>

Dr. Suat Seren Göğüs Hastalıkları ve Cerrahisi Eğitim ve Araştırma Hastanesi İzmir, Türkiye <sup>1</sup>Yoğun Bakim Ünitesi, <sup>2</sup>Göğüs Hastalıkları Kliniği, <sup>3</sup>Psikiyatri Polikliniği

**Anahtar sözcükler:** Anksiyete, depresyon, HAD skalası, yoğun bakım **Key words:** Anxiety, depression, HAD scale, intensive care

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#### ÖZET

**Amaç:** Psikolojik problemlere kritik hastalarda sıklıkla rastlanılır. Bu çalışmanın amacı; mekanik ventilasyon gereksinimi sona eren hastaların duygusal deneyimini değerlendirmek ve klinik ve demografik parametreler ile bu deneyim arasındaki ilişkiyi belirlemektir.

Yöntem ve Gereç: Mekanik ventilasyon uygulanmış ve yoğun bakım ünitesinden (YBÜ) taburcu edilebilecek hastalar çalışmaya dahil edildi. Tüm hastalardan demografik veri formu ve hastane anksiyete depresyon (HAD) ölçeğini okuması ve cevaplaması istendi. Zihinsel kapasite, işbirliği veya eğitim düzeyi yeterli olmayan ve psikiyatrik sorunları olan hastalar çalışmaya alınmadı. Sonra, anksiyete ve depresyon puanları hesaplandı ve klinik ve demografik parametreler ile ilişkisi değerlendirildi.

**Bulgular:** Medyan yaş 52 (23-78)olan yirmi iki hasta değerlendirildi. % 31.8 (n: 7) hastada (ortalama skor: 7.27) anksiyete tespit edildi ve% 45.5 (n: 10) hastada (ortalama skor: 7.13) depresyon saptandı. Hastaların anksiyete ve depresyon sıklığı ve demografik özellikleri, yoğun bakım yatış günü ve mekanik ventilasyon süresi arasında anlamlı fark saptanmadı (p > 0.05).

#### SUMMARY

**Aim:** Psycholocigal problems are commonly encountered in critically ill patients. The aim of this study was to evaluate the emotional experience of patients during the period when mechanical ventilation requirement ended and determine the relationship of this experience with clinical and demographic parameters.

**Material and Methods:** Patients who had undergone mechanical ventilation and could be discharged from intensive care unit (ICU) were included in the study. All patients were asked to read and answer the demographic data sheet and hospital anxiety depression (HAD) scale. Patients who could not be able to answer these questionarries due to lack of mental capacity, cooperation or educational level and patients who had psychiatric problems were excluded. Then, anxiety and depression scores were calculated, and the relationship with clinical and demographic parameters were evaluated.

**Results:** Twenty two patients with a median age of 52 (23-78) were evaluated. 31.8 % (n:7) of the patients were determined anxiety (median score: 7.27), and 45.5 % (n: 10) of the patients were determined depression (median score: 7.13). There were no significant differences between the frequency of the anxiety and depression and the demographic features, ICU days, and the duration of mechanical ventilation (p>0.05).

**Sonuç:** Bu çalışmanın verileri YBÜ hastalarında anlamlı anksiyete ve depresyon olduğunu işaret etmiştir. Parametreler ile anksiyete ve depresyon arasında bir ilişki saptanmadı.Kritik hastalarda anksiyete ve depresyon sık görülen psikiyatrik bozukluklar olması sebebiyle akılda tutulmalıdır.

### INTRODUCTION

The need for mechanical ventilation is the main reason of admission to ICU. Although mechanical ventilation is a life saving procedure it can cause physiological and psychological stress for patients. There are many stressful condition, such as lack of motion, communication difficulties, noise, sleepness, and lack of speaking in ICU (1) There are many reports of anxiety and depression in survivors of critical illness and mechanical ventilation (1,2). The psychological disorder can be seen in about 30-60% of hospitalized patients related to their illnesses. Especially, patients who had chronic illnesses and physical symptoms, may be in a condition of social isolation and so that may decrease quality of life, cause poor prognosis, impair morbidity and mortality (4).

In this study, we aimed to evaluate the emotional experiences of patients receiving mechanical ventilatory support, describe anxiety levels (to define anxiety and depression levels) and determine the relationship demoghraphic and clinical parameters.

### MATERIAL AND METHOD

had received Twenty two patients who mechanical ventilation and could be discharged from ICU were included in the study. Patients who could be able to answer given two questionarries due to appropriate of mental capacity, cooperation or educational level and patients who had no psychiatric problems were included. All patients were asked to read and answer the demographic data sheet and HAD scale, a self assesment test of 14 items on a 4 point Likert scale

**Conclusion:** The datas of this study have pointed that ICU patients significantly have anxiety and depression. There was no relationship between the parameters and anxiety and depression. We should keep in mind depression and anxiety are common psychiatric disorders critically ill patients in ICU.

(range 0-3). HAD scale is designed to measure anxiety and depression states (7 items for each subscale) (5). Patients are asked to choose one response from the four given for each interview. They should give an immediate reply and be dissuaded from thinking too long about their answers. The score for each answer is recorded and calculated at the end of the test. Validity and reliability of Turkish version of HAD scale was proved in

1997, has been used in this study (6). Patients whose anxiety subscale over 10 was accepted anxiety state (HAD-A) and depression subscale over 7 was accepted depression state (HAD-D). The relationship patients who accepted anxiety and depression state, and clinical and demographic parameters were evaluated. Statistical analysis was carried out using SPSS (Version 11.0 for Windows) and chi-square test.

### RESULTS

Patients demographic datas are shown in Table 1. Patients had a mean age of 52(23-78)years and 73% were male. According to demographic data sheets, one patient (4.5%) was illiterate, 12 (54.5%) were graduated from primary school, 4 (18.1%) were graduated from secondary school, 2 (9%) were graduated from high school, 3 (13.6%) were graduated from university. 77% of the patients were married, 5 (22%) were single. 41% of the patients were from city, 22% were from town, 37% were from village.

Diagnosis of the patients and the duration of mechanical ventilation day shown in Table 2. 85% of the patients had chronic obstructive pulmonary disease (COPD), 10% of the patients had Adult Respiratory Distress Syndrome (ARDS), 5% of the patients had asthma.

#### - İZMİR GÖĞÜS HASTANESİ DERGİSİ

The patients were separated into three groups according to mechanical ventilation day: The first group included 7 (32%) patients who received mechanical ventilation 1-7 days, second group included 11 (50%) patients who received 7-15 days and third group 4 (18%) patients who received 15-30 days. Anxiety rate was found 31.8% (n=7) and median score: 7.27 (2-17) and depression rate was found

45.5% (n=10) and median score: 7.13 (3-16). Both of anxiety and depression rate were found in 7 (31.8%) patients. There was no relationship between anxiety and depression rate and patients demographic datas such as age, sex, educational state, marital status, living place, income status and diagnosis, length of ICU day, mechanical ventilation day (p>0.05).

	Total	HAD-A	Had-D
Case number	22	7	10
Age (mean)	52.18 (23-78)	52.42 (39-70)	56.5 (39-70)
Gender			
Female	6 (27%)	1 (%4.55)	1 (%4.55)
Male	16 (72.73)	6 (%27.27)	9 (%40.91)
Educational status		·	
Illiterate	1 (4.55%)	0	0
Primary Scholl	16 (72.73%)	16 (%27.27)	9 (40.91%)
High school	2 (9.09%)	0	0
University	3 (13.64%)	1 (%4.55)	1 (%4.55)
Marital status			
Single	5 (22.73%)	2 (%9.09)	2 (%9.09)
Married	17 (77.27%)	5 (%22.73)	8 (%36.36)
Civic place			
City	9 (40.91%)	3 (%13.64)	4 (%18.18)
Town	5 (22.73%)	2 (%9.09)	3 (%13.64)
Village	8 (36.36%)	2 (%9.09)	3 (%13.64)

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	Total	HAD-A	Had-D		
Diagnosis					
COPD	19 (85%)	7 (%31.82)	10 (%45-45)		
ARDS	2 (%10)	0	0		
Asthma	1 (5%)	0	0		
Duration of MV					
1-7 day	7	2	3		
7-15 day	11	3	4		
15-30 day	4	2	3		

### DISCUSSION

In current study, we evaluated twenty-two patients who received mechanical ventilation with respiratory insufficiency in ICU. Demographic datas of the patients were recorded and HAD scale was applied to all patients who received mechanical ventilation and weaned successfully before transferring to the pulmonary department. The mean age of the patients was 52(23-78) and there was no relationship between age and anxiety and depression state. In our study, 73% of the patients were male. There was no relationship between gender, and anxiety and depression state in our patients. Some studies show that older patients (>65) have an increased risk for depression. Female sex, living alone, elderly patients can contribute depression (7). While female gender has higher anxiety scores still some investigators could not find any relationship between age, gender and anxiety and depression scores (8,9).

The prevalance of psychiatric disorder in nonpsychiatric hospital clinics is certainly high (5). In this study, a total of 31.8% patients had anxiety, and 45.5% patients had depression. In literature hospitalized in medical and surgical clinics, anxiety disorder was found 12-44% and depression disorder was found 10-47.2% (10.11). Mechanical ventilation causes anxiety in 70-87% of the patients. It is guitely high because of highly technological and stressful ICU environment that results poor effect on psychological health (12). Patients who had been mechanically ventilated for greater than 2 days remembered pain, anxiety, fear, worry, sleeplessness, being unable to communicate, and loneliness. Worry and fear associated with patients who have trouble in communicating while receiving ventilatory support. Anxiety has been reported in patients receiving ventilatory support for greater than 6 days (1). In our study there was no relationship between mechanical ventilation day and anxiety - depression levels.

HAD scale which is a self report rating scale was firstly described in 1983 by Zigmond and Snaith and translated to different languages (4), it has been widely used more than 25 countries to evaluate anxiety and depression in patients. It is best used not to make diagnosis of psychiatric disorders, but for identifying patients who need further psychiatric evaluation and assistance (13). Original study have suggested two cut-off scores for detecting anxiety and depression that have generally been in most studies, scores of 8-10 equal doubtful cases, and scores of 11 and higher equal valid cases, and scores of 7 and below equal normal cases (4, 13, 14). In literature the cut-off scores were found 3 for anxiety, and 6 for depression (8). Validity and reliability study of Turkish version were done in 1997. Its cutoff scores were found 10 for anxiety and 7 for depression (6). HAD scale is designed to measure anxiety and depression levels for patients hospitalized in different clinical states such as cancer (15), cardiological patient (16), and COPD.

COPD is a chronic systemic debilitating, organic disease that might cause some psychiatric disturbances, especially depression (8). In our study 85% of the patients who received mechanically ventilation diagnosed as COPD. Many COPD patients have transitory mood symptoms during acute respiratory exacerbations that improve spontaneously as their physical status improves. There is no evidence that these time-limited minor depressive symptoms require spesific treatment. However major depression is likely to require antidepressant medication to improve functioning and reduce the risk of chronic depression with its long-term adverse effects on overall disability (17). In our study none of all patients did not require psychiatric treatment.

### CONCLUSION

Although mechanical ventilation is a life saving procedure, it may create physical and physicological stresses for patients.Clinicians should evaluate the ICU patients stressfull experiences and keep in mind that chronic diseases like COPD has a high incidence of anxiety and depression.

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#### Yazışma Adresi:

Dr. Özlem Ediboğlu Dr. Suat Seren Göğüs Hastalıkları ve Cerrahisi Eğitim ve Araştırma Hastanesi İzmir ozlemediboglu@gmail.com