Assesment of anxiety levels in patients with posttraumatic stress disorder

Travma sonrası stres bozukluğu olan hastalarda anksiyete düzeylerinin değerlendirilmesi

Ebru SİNİCİ, Cemil YILDIZ, Servet TUNA   Y, Hüseyin ÖZKAN, Mehmet ALTINMAKAS

Gülhane Millitary Medical Academy Department Of Orthopaedics And Traumatology

Amaç: Çatışma, mayına basma ve taşıt kazası sonucu yaralandıktan sonra travma sonrası stres bozukluğu tanısı konan olgularda durumluk ve sürekli anksiyete düzeyleri araştırıldı.

Çalışma planı: Klinisyen için Yapılandırılmış Klinik Görüşme Formu (DSM III-R) ile travma sonrası stres bozukluğu tanısı konan 98 gaziye (ort. yaş 20; dağılım 18-25) Durumluk ve Sürekli Anksiyete Ölçeği I-II uygulandı ve anksiyete düzeyleri ölçüldü.

Sonuçlar: Eğitim düzeyi ve travma şekli ile yüksek kaygı düzeyine sahip olguların sayısı arasında anlamlı farklılık bulunmadı (p<0.05). Eğitim durumuna ve travma şekline bakılmaksızın yüksek düzeyde sürekli kaygıya sahip olgu sayısı, yüksek düzeyde durumluk kaygıya sahip olgulardan anlamlı derecede fazla bulundu (p<0.05). İlkokul ve lise eğitim düzeyleri arasında sürekli kaygı puanları açısından anlamlı farklılık görüldü (p=0.03).

Çıkarımlar: Yaralılarda, yaşam kalitesini bozan kaygı düzeylerinin saptanması ve tedavisi önemlidir. Tıbbi tedavi yapılırken psikolojik rehabilitasyon da göz önünde bulundurulmalıdır.

Anahtar sözcükler: Anksiyete/psikoloji; savaş hastalıkları/psikoloji; psikiyatrik durumu değerlendirme ölçeği; psikometri; anket; stres bozuklukları, travma sonrası/etyoloji/psikoloji; stres, psikolojik; gazi/psikoloji.

Objectives: The purpose of this study was to measure state and trait anxiety levels of veterans who developed posttraumatic stress disorder following combat or landmine injuries, or vehicle accidents.

Methods: The anxiety levels of 98 veterans (mean age 20 years; range 18 to 25 years) were measured with the use of the State-Trait Anxiety Scale (STAI I-II). Diagnosis of posttraumatic stress disorder was made on the basis of the Structured Clinical Interview for DSM III-R.

Results: The number of patients with high levels of anxiety was not in significant relationship with education level and trauma type (p<0.05). Regardless of education levels and trauma types, the number of patients with high trait anxiety significantly outweighed the number of patients with high state anxiety (p<0.05). Trait anxiety levels differed significantly between primary school and high school graduates (p=0.03).

Conclusion: Veterans should be under close supervision to determine and treat increased anxiety which worsens the quality of life. Special attention should be paid to appropriate psychological rehabilitation throughout the treatment plan.

Key words: Anxiety/psychology; combat disorders/psychology; psychiatric status rating scales; psychometrics; questionnaires; stress disorders, post-traumatic/etiology/psychology; stress, psychological; veterans/psychology.

Post traumatic stress disorder is a kind of anxiety disorder that is characterized with remembering the traumatic event continuously, and keeping away from reminders and the symptoms of aggravated stimulations. Generally a severe traumatic event causes this disorder but PTSD doesn't occur in everyone after these kinds of events. Subjective meaning of the trauma is the compromised reason.

In recent years we usually see the rising frequency of severe traumatic events that may cause PTSD in our country and the world. So the diagnosis and the therapy of the post traumatic psychiatric disorders especially the PTSD have become important. The injuries and post injury psychiatric disorders after the terrorist incidents in southeastern and eastern Turkey drew our attention to PTSD. In past years it was believed that the origin of PTSD was relevant with the intensity of the trauma but recent experimental studies have shown the individuality of the trauma.

It is determined that the symptoms disturbing the life quality are anxiety and intensive stimulation in PTSD. The anxiety levels differ from one to another between PTSD patients. In these patients, personal (biology, personality organization, intelligence, socioeconomic level, sex, age, level of education, past experiences) and environmental factors (type of trauma, intensity, treatment and rehabilitation after trauma) determine the level of anxiety. PTSD may occur in military short fights that threaten life and also in unexpected mine injuries and being trapped in military convoys. Studies on effects of education and of injury on levels of anxiety in the military personnel are limited. In this study effect of type of injury and the education level on the level of anxiety are discussed.

Patients and Methods

98 inpatients in the Department of Orthopedics and Traumatology in GMMA that were between the ages of 18–25 and were diagnosed as PTSD were included in this study. 52 of the patients were injured in armed fighting in east and southeast Anatolia, 28 by stepping on landmine and 18 in traffic accident while going to operation. Firstly, the patients were diagnosed with the help of SCID Interview Form Structured for Physicians, and then STAI-II was applied. Before these tests, the patients were interviewed individually and they were informed about the study and the tests.

Measurements

SCID: this is a kind of clinical interview form that is constructed for diagnosis according to the DSM III R. It is applied by the clinician. It contains introduction questions first and then module axis 1

impairments, seven of which are major. Duration of impairment is investigated by the diagnosis tree.

Situation and Tradition Anxiety Inventory:

It is an inventory that contains 40 components for measuring the anxiety levels of adults. The 2 dimension of the anxiety consist of two different scales. Validity and reliability studies have been made in Turkish people. There is no time restriction in questioning both scales.

State anxiety scale

It is a transient emotional reaction to temporary and different events .This level is high if the patient feels the condition as threat, if not level is low. This measures the anxiety level that the patient is in that moment.

Trait anxiety scale

This is characterized by perceiving the conditions which causes anxiety as dangerous and levels of these emotional reactions rise continuously. Continual anxiety is a personality feature which differs from one to another. Persons with continuous anxiety perceive conditions which causes anxiety, more dangerous. It measures the continuous anxiety according to how patient feels him or herself.

Statistical analysis

Statistical Analysis: The data were compared by using ki square and ANOVA tests. $p < 0.05$ was accepted as the statistically meaningfulness level.

Results

The scores above 42 accepted as high anxiety level in this inventory. We didn't find a significant difference in patients when compared by their education level. Independent from education level, number of the patients with continuous high level anxiety was bigger than the patients with conditional high level anxiety. When STAI I-II scale score average differences according to education level was compared with Tukey test, there was a significant difference between the continuous anxiety scores of patients graduated from primary school and high school.(Table I.)

There was no significant difference in the number of the patients with high level of anxiety, according to their type of trauma. The number of the

Table 1. Education and anxiety

	STATE	ANXİET			TRAIT	ANXİETY **		
	High	Normal	TOTAL	ORT.+SS	High	Normal	TOTAL	ORT.+SS
Primary school	22 (%62.9)	13 (%37.1)	35	42.66 ± 5.64	32 (%91.4)	3 (%8.6)	35	50.37 ± 5.80
Middle school	10 (%41.7)	14 (%58.3)	24	40.96 ± 4.46	23 (%95.8)	1 (%4.2)	24	48.92 ± 5.30
High school	14 (%38.9)	22 (%61.1)	36	39.97 ± 5.49	31 (%86.1)	5 (%13.9)	36	46.83 ± 5.15
University	2 (%66.7)	1 (%33.3)	3	42.00 ± 4.36	3 (%100)	-	3	47.67 ± 3.06
TOTAL*	48 (%48.9)	40 (%41.1)	98		89 (%90.8)	9 (%9.2)	98	

[a] High anxiety level >42   * $X2=28.82$, df=1, p<0.00   **(Average difference [primary school-high school]: 3.54, p=0.03)

patients with high level continuous anxiety was significantly bigger than the patients with conditional high level anxiety independent of trauma type. There was no significant difference between STAI I-II scale scores when compared by ANOVA. (Table II)

Discussion

The injured patients in hospitals feel the anxiety of trauma and disease. They face with the reality of loosing function of their bodies permanently. This may affect the future plans of the patient and they live today only they are anxious about their existence. All their energy focuses on their disease. They may have trouble in planning the future. They want to recover and deny the fact that the disability is permanent. In this study the patients are together and most of them have the same past. So temporarily they accept what they have lived. So we see that the level of conditional anxiety level is lower than continuous anxiety level. In our study independent from education level and the type of trauma, continuous anxiety is more frequent than conditional anxiety. The frequency of the continuous anxiety is an expected result. After discharge from the hospital, loneliness developing by contact with healthy people, indeterminate future, loss of confidence, and denial of new body image may increase continuous anxiety

In our study we found a significant difference between continuous anxiety levels of primary school and high school graduates. Decreasing levels of anxiety with the education level have shown that the education may be helpful in reducing the anxiety level in these patients. Expectation of the life threatening trauma is higher in short fights than traffic accidents or mine wounds. In short fights beyond the physical impairment, the high level of anxiety is expected. But in our study there was no difference between continuous and conditional anxiety levels according to the type of trauma.

Physiological and physical treatments are the mainstays of the treatment and should be supplied together. Personal features and physiological conflicts mostly have role in psychosomatic diseases. The physiological therapies for the patients with physical diseases relieves the symptoms, increases the self confidence and adaptation to the diseases and the therapy.

In this study we have investigated the anxiety levels in veterans who wounded in short fights, traffic accidents and mine stepping in southeastern and eastern TURKEY. We have founded high level continuous anxiety in these independent of trauma type and

Table II: Type of trauma and anxiety

	STATE	ANXİETY			TRAIT	ANXİETY		
	High	Normal	TOTAL	ORT+SS	High	Normal	TOTAL	ORT+SS
Gun fight	25 (%48,1)	27 (%51,9)	52	41.15 ± 5.54	45 (%86,5)	7 (%13,5)	52	48.09 ± 5.84
Landmine injury	15 (%53,6)	13 (%46,4)	28	41.78 ± 5.01	27 (%96,4)	1 (%3,6)	28	50.50 ± 5.25
Vehicle accident	8 (%44,4)	10 (%55,6)	18	40.61 ± 5.44	17 (%94,4)	1 (%5,6)	18	47.28 ± 4.43
TOTAL*	38 (%38,8)	60 (%61,2)	98		89 (%90,8)	9 (%9,2)	98	

[a]High anxiet y level >42   • $X^2=31.04$, df=1, p<0.00

education level. Anxiety is a symptom that demolishes the life quality and the connection between persons. Thus psychological rehabilitation should be applied with the medical therapy.

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