## Original Article

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# Demographic Characteristics of Patients Taking Single and Multiple Medications for Suicidal Purposes and Evaluation by Beck Anxiety Scale

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#### **Abstract**

**Objectives:** Anxiety appears as a normal reaction to life events such as life-threatening events, disappointment, separation from a loved one or environment, and physical illnesses. If the defense mechanisms in people are mentally healthy, they can cope by controlling the feeling of anxiety, but if the individuals are not fully mentally healthy, the feeling of anxiety can become chronic. This may cause undesirable situations in patients.

**Materials and Methods:** Our research; This is a prospective study conducted in Atatürk University Medical Faculty Hospital Emergency Service. The study was conducted in accordance with the descriptive research model that aims to compare patients who took single and multiple drugs for suicide purposes according to their demographic characteristics and the value they received from the beck anxiety scale. Our study was conducted on patients who applied to the emergency department in April (01.04.2019) -May (31.05.2019) in 2019.

**Results:** Our study was conducted on 111 patients in total, 56 of whom were taking multiple drugs, and 55 of whom were taking single drugs. The demographic data of the patients and the values they obtained from the beck anxiety scale were not found to be statistically significant between the patients taking single and multiple drugs.

**Discussion:** Patients with many psychiatric disorders due to organic or psychiatric reasons use drugs and these patients generally use these drugs for suicidal purposes. In our study, we investigated whether there was an underlying cause of single or multiple drug use. In our study, it was investigated whether multiple drug intake was related to a more severe anxious condition. However, in our study, no relationship was found between the amount of medication taken and the depressive state of the patient who committed suicide. In our study, no relationship was found between patients who took single or multiple drugs for suicide and their anxiety levels.

Key words: suicide, beck anxiety, toxicology

#### Özet

Amaç: Kişide, hayatı tehdit eden durumlar, kişide hayal kırıklığı yaratan nedenler, sevilen birinden veya ortamdan ayrılma, fiziksel hastalıklar gibi yaşamsal olaylara normal bir tepki olarak ankisyete oluşabilir. Eğer kişi, savunma mekanizmaları normal yani ruhsal olarak sağlıklı ise anksiyete hissini kontrol altına alarak kaygı ile baş edebilir fakat bireylerin ruhsal sağlığı tam olarak yerinde değilse anksiyete hissi kronikleşebilr. Bu da hastalarda istenmeyen durumların ortaya çıkmasına neden olabilir.

**Gereç ve Yöntem:** Bu araştırma, Atatürk Üniversitesi Tıp Fakültesi Hastanesi Acil Servisinde prospektif olarak yapılmıştır. Araştırma, öz kıyım amaçlı tekil ve çoklu ilaç alan hastaların demografik özelliklerini saptamaya ve Beck Anksiyete ölçeğinden aldıkları değere göre karşılaştırılmayı amaçlayan tanımlayıcı araştırma modeline uygun olarak yapılmıştır. Çalışmamız 01.04.2019-31.05.2019) tarihleri arasında acil servise başvuran hastalar üzerinde yapılmıştır.

**Bulgular:** Çalışmaya, çoklu ilaç alan 56, tekil ilaç alan 55 olmak üzere toplam 111 hasta dahil edilmiştir. Hastaların demografik verileri ile Beck Anksiyete ölçeğinden aldıkları değerler tekil ve çoklu ilaç alan hastalar arasında istatistiksel olarak anlamlı bulunmadı.

Sonuç: Organik veya psikiyatrik nedenlere bağlı olarak birçok psikiyatrik rahatsızlığı bulunan hasta ilaç kullanmaktadır ve bu hastalar genellikle bu ilaçları öz kıyım amaçlı kullanmaktadır. Bizde çalışmamızda tekil veya çoklu ilaç kullanımının altta yatan bir nedeninin olup olmadığını araştırdık. Araştırmamızda çoklu ilaç alımının daha şiddetli bir anksiyöz duruma bağlı olup olmaması araştırılmıştır. Ancak çalışmamızda alınan ilaç miktarı ile intihar eden hastanın depresif durumu arasında bir ilişki bulunamamıştır. Araştırmamız ile intihar amaçlı tekil veya çoklu ilaç alan hastalar ile bu hastaların anksiyete seviyeleri arasında bir ilişki tespit edilemedi.

Anahtar kelimeler: intihar, beck anksiyete, toksikoloji

#### Introduction

Anxiety is separated from other forms of emotion by its unpleasant properties. Anxiety can be briefly defined as dis-

tress. The anxious person may develop physical symptoms such as palpitations, shortness of breath, tachypnea, tremors in the hands and feet, excessive sweating, while psychological symptoms such as distress, excitement, feeling

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or doubt that suddenly a bad event will happen can be seen. The difference between anxiety from fear is that the source of anxiety is mostly unclear. Mild anxiety accelerates the adaptation process to new conditions in people, supporting their spiritual development<sup>1,2</sup>.

Anxiety appears in the person as a normal response to life-threatening events such as causes of frustration in the individual, separation from a loved one or environment or physical illnesses. With anxiety, autonomic and somatic symptoms are seen in individuals at the same time. This is a protective mechanism. In some cases, stimuli that come from the internal world of the individual without any external stimuli can automatically cause the development of anxiety sensations in individuals.

If the people are spiritually healthy, they can deal with the feeling of anxiety by controlling it through defense mechanisms, but if the individuals are not fully spiritually healthy, the feeling of anxiety can become chronic. Anxiety disorders have a higher prevalence in women (30%) than in men (19%)<sup>3</sup>. Anxiety conditions, in which bodily symptoms such as muscle tension, dry mouth, palpitations and tremors usually occur, which reduce the professional function of chronic individuals and cause deterioration in inter-people ties, should be treated pathologically<sup>4</sup>. A high level of anxiety can lead people to unwanted events. In our study, we aimed to compare the demographic data of patients taking multiple medications and the scores they received from the Beck anxiety scale.

#### **Materials and Methods**

#### **Research Design and Ethical Considerations**

Our research is a prospective study conducted in the Emergency Department of Ataturk University Medical Faculty Hospital. This study was conducted on a voluntary basis on patients taking suicidal drugs admitted to Ataturk University Medical Faculty research hospital Emergency Department. The research was conducted in accordance with the descriptive research model aimed at comparing patients taking singular and multiple medications for suicide based on their demographic characteristics and the score they receive from the Beck anxiety scale.

The patients who would participate in the research were given information about the purpose of the research, the method and the time they were asked to spend for the research before starting the research. It was explained to patients that participating in the research did not carry any risk, that the participation was purely voluntary, that they could leave the research at any time. Their permission was received orally and in writing. The working protocol was carried out in accordance with the Helsinki Declaration.

#### The Context of the Study

The research was conducted prospectively at the Emergency Medicine Clinic at Ataturk University Medical Faculty Research Hospital in Erzurum province. Participants who accepted participation in the study were taken to a private room in the emergency room and their treatment was arranged.

Criteria for inclusion in the study:

- Being 18 years of age or older
- · Having taken drugs for suicidal purposes
- Volunteering to participate
- Being literate
- Not being unable to comprehend what is being told

Criteria for Exclusion from the Study:

- Having a chronic disease
- Disorder of vital findings
- Being unable to give consent to the study
- Having injuries in addition to drug use (falls or trauma)
- · Refusing to participate in the study
- Being pregnant
- Being under the age of 18

All our patients were also informed about the objectives of the study, the way it was implemented and the benefits of the results to be obtained. Then, all patients were interviewed face-to-face and the study was first explained and the informed consent form was signed by all accepting patients and those who did not accept were not included in the study.

#### **Data Collection**

Our study was carried out on patients admitted to the emergency department between April 2019 (01.04.2019)-May (31.05.2019). During this time, it was completed on 111 patients who were admitted to the emergency room and agreed to participate in the study. The study forms of the patients who accepted participation in the study were filled out by face-to-face interview method. In the study, patients who used a single drug (such as antibiotic analgesics) were included in the single-drug group of patients. The multiple-drug group, on the other hand, included patients taking drugs from at least 2 different groups. The patient who took antibiotics alone was included in the single-drug group, while the patients who took antibiotics and analgesia together were included in the multiple-drug group.

#### **Data Collection Instruments**

Beck Anxiety scale was applied to all patients who were taken to the study.

#### **Beck Anxiety Scale**

It's a self-evaluating test. It is used to investigate the frequency of anxiety symptoms experienced by individuals. It has been accepted by conducting confidence and validity studies in our country. The test consists of 21 items. For each

item, the participant is asked to score between 0-3. According to the answers given, the severity of anxiety experienced by people is determined<sup>5</sup>.

For the study, patients' age, gender, systolic blood pressure, diastolic blood pressure, pulse, respiratory count, fingertip saturation, fever and Beck anxiety scale score were recorded.

#### **Statistical Analysis:**

The variables were divided into categorical and continuous. Categorical data were shown in number and percentage, compared with the Chi-square test. Whether the continuous variables were distributed normally was calculated by the Kolmogorov-Smirnov test. Continuous variables were shown with average and standard deviation. Normally distributed continuous variables were compared with paired sample T-test, while variables that were not distributed normally were compared with Related simple test. Statistics were made with SPSS 20.0 (SPSS Inc., Chicago, IL, United States) on the Windows operating system and p<0.05 was considered statistically significant.

#### **Results**

Our study was carried out on a total of 111 patients, including 56 patients taking multiple medications and 55 patients taking single medications. The gender distribution of these patients is shown in Table-1. There was no statistically significant difference between groups by gender (p=

Table 1. Drug intake by gender

	Single drug	Multiple drugs	Total
Female	37	39	76
Male	18	17	35
Total	55	56	111

Demographic data of patients by groups are shown in Table 2.

The demographic data of the patients and the values they received from the Beck anxiety scale were not statistically significant.

#### **Discussion**

Anxiety is a useful state of emotion for individuals that also contributes to the development of the ability to adapt to the new environment in which people live for certain periods<sup>6</sup>. However, it is inevitable to define exaggerated responses to internal or external stimulants and any condition that damages the self-integrity of individuals, that affect negatively socially and even impair body physiology as pathological<sup>1,2</sup>. There are some common clinical symptoms of depression and anxiety; emotional (frequent crying dysphoria, irritability) behavioral (poor social skills, decrease in activity and low energy level), bodily (sleep disorders and panic attacks), cognitive (anxiety, helplessness, self-confidence reduction). Situations more specific to depression can be listed as anhedonia, psychomotor retardation, sexual reluctance, decreased SSS alertness, decreased appetite, apathy, reluctance, severe grief and despair. More common conditions in anxiety are increased activity, premature ejaculation, hypervigilance, sense of uncertainty, increased alertness, agitation, fear and tension (86). Anxiety in individuals occurs in the period between encountering danger and ending danger, causing additional autonomic dysfunction in many people<sup>7</sup>. These autonomous changes can be listed as constricted sensation in the stomach, enlargement of pupils, shortness of breath, hypertension, fever, frequent urination, tremors, sweating, palpitations<sup>2</sup>.

The word suicide comes from the Latin word suicidium, which derives from the root "sui caedere", which means that someone kills oneself. A Suicide attempt is defined as dest-

Table 2. Demographic data of patients and Beck Anxiety Scale score

	Parameter	n	Average	<b>Standard Deviation</b>	Minimum	Maximum	p
Single drug	Age	55	29,27	7,60	19	61	- 0,246
Multiple drugs	Age	56	31,55	8,67	20	62	
Single drug	Systolic Blood pressure (mmHg)	55	122,64	11,67	100	150	- 0,950
Multiple drugs	Systolic Blood pressure (mmHg))	56	122,77	10,37	100	140	
Single drug	Diastolic Blood Pressure (mmHg)	55	78,04	9,30	51	90	- 0,918
Multiple drugs	Diastolic Blood Pressure (mmHg)	56	77,86	9,07	51	90	
Single drug	Fingertip saturation (%)	55	95,82	1,17	93	98	- 0,355
Multiple drugs	Fingertip saturation (%)	56	95,59	1,41	93	98	
Single drug	Number of Respirations (min)	55	19,78	1,89	17	24	- 0,330
Multiple drugs	Number of Respirations (min)	56	20,14	1,99	16	24	
Single drug	Pulse(min)	55	97,60	19,29	60	142	- 0,464
Multiple drugs	Pulse(min)	56	100,30	19,45	60	142	
Single drug	Temperature(°C)	55	36,92	0,42	36	38	- 0,749
Multiple drugs	Temperature(°C)	56	36,94	0,38	36	38	
Single drug	Beck Anxiety Scale	55	17,98	3,08	11	25	0,797
Multiple drugs	Beck Anxiety Scale	56	17,82	3,46	11	25	

ructive behavior towards ending a person's own life<sup>8</sup> Suicide behavior is a serious health problem and is one of the major causes of reference in psychiatric emergencies. Many studies have shown that patients who attempt suicide have high levels of anxiety and depression<sup>9,10</sup>. The presence of an accompanying psychiatric disease was found to be the strongest determinant for suicide risk<sup>11</sup>. It has been reported that many patients who have attempted suicide exhibit depressive symptoms and 60% are diagnosed with emotional disorder<sup>12</sup>.

Accordingly, suicidal patients and patients with many psychiatric conditions use medications. Due to organic or psychiatric reasons, many patients use drugs and these patients usually use these drugs for suicidal purposes. In our study, we investigated whether there is an underlying cause of single or multiple drug use. In our research, we thought that multiple drug intake would be due to a more severe anxious condition, but the result of our study did not support this assumption. In our study, no relationship was found between the amount of medication taken and the depressive status of the patient who committed suicide. Patients who commit suicide do not make multiple or single drug selections in suicide and attempt suicide with the drugs they reach most easily by making instant decisions.

#### **Conclusion**

With our research, no relationship was detected between patients taking single or multiple medications for suicide and the anxiety levels of these patients.

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