ORIJINAL ARTICLE / ORİJİNAL MAKALE

## Comparing attitudes towards people with substance use disorders between healthcare professionals and general public

#### Sağlık çalışanları ile toplumun madde kullanım bozukluğu olan kişilere yönelik tutumların karşılaştırılması

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#### Received: 04.03.2022, Accepted: 09.07.2022

#### Abstract

**Objective:** This study was conducted to compare attitudes and to examine the variables related to the attitudes and attitudes of health professionals in a psychiatric hospital and the general public towards individuals who use substances.

**Methods:** The study was carried out as a descriptive cross-sectional study. The sample study included 212 healthcare professionals employed in a psychiatric hospital and 427 individuals representing the general public. The study data were obtained by using the Introductory Information Form, the Attitudes Toward Treatment of Substance Use Disorders Scale, and the Attitudes and Behaviors of the Society Towards Individuals Using the Addictive Substances Scale.

**Results:** In this study, it was determined that marital status, number of children, educational status, and alcohol consumption related to the attitude. The attitudes of healthcare professionals towards addiction treatment were determined to be positive. When the attitudes scores of an average of healthcare professionals (80.23±19.10) and the general public (91.40±17.76) were compared, a statistically significant difference was found according to the T-test results.

**Conclusion:** The results of this study can increase awareness about the level of attitudes of health workers and the general public toward individuals who use substances. By considering the results of this study, educational activities can be planned to reduce negative attitudes. Individuals who do not or rarely use alcohol, individuals with a low level of knowledge, and those with relatives with substance use disorder can be encouraged to participate more in these training activities. It is recommended to review motivations, the working conditions, and the training curriculum of nurses, and in-depth investigation of the variables that cause the public's negative attitude.

Keywords: Attitude, Public Health, Addiction, Substance-Related Disorder, Mental Illnesses

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**Cite This Article:** Aksoy H., Mercan N., Comparing attitudes towards people with substance use disorders between healthcare professionals and general public. Turk J Public Health 2022;20(3):358-374.

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#### Öz

**Amaç:** Bu çalışma, bir psikiyatri hastanesinde sağlık çalışanlarının ve toplumun madde kullanan bireylere karsı tutum ve tutumları ile ilişkili değişkenleri incelemek amacıyla yapıldı.

**Yöntem:** Araştırma tanımlayıcı-kesitsel bir çalışma olarak gerçekleştirilmiştir. Araştırmanın örneklemini bir psikiyatri hastanesinde çalışan 212 sağlık çalışanı ve 427 toplumu temsil eden birey oluşturmaktadır. Araştırmanın verileri "Giriş Bilgi Formu, Madde Kullanım Bozukluklarının Tedavisine Yönelik Tutum Ölçeği ve Toplumun Bağımlılık Yapıcı Madde Kullanan Bireylere Yönelik Tutum ve Davranışları Ölçeği" kullanılarak elde edilmiştir.

**Bulgular:** Çalışmamızda medeni durum, çocuk sayısı, eğitim durumu ve alkol kullanımının tutum ile ilişkili olduğu belirlendi. Sağlık çalışanlarının bağımlılık tedavisine yönelik tutumlarının olumlu olduğu belirlendi. Sağlık profesyonelleri (80.23±19.10) ile toplumun tutum (91.40±17.76) puan ortalamaları karşılaştırıldığında, t-testi sonuçlarına göre istatistiksel olarak anlamlı fark bulunmuştur.

**Sonuç:** Bu çalışmanın sonuçları sağlık çalışanının ve toplumun madde kullanan bireylere karsı tutum düzeyleri hakkında farkındalık artırılabilir. Çalışmamızın sonuçları ele alınarak olumlu tutumların artırılmasına yönelik eğitim faaliyetleri planlanabilir. Alkol kullanmayan ya da nadir kullanan bireyler, bilgi düzeyi düşük bireyler ve madde kullanım bozukluğu olan akrabaları olan bireyler bu eğitim faaliyetlerine daha fazla katılmaları için teşvik edilebilir. Halkın olumsuz tutumuna neden olan değişkenlerin derinlemesi araştırılması ve hemşirelerin motivasyonları, çalışma koşulları ve eğitim müfredatlarının gözden geçirilmesi önerilir.

Anahtar Kelimeler: Tutum, Toplum Sağlığı, Bağımlılık, Madde Kullanım Bozuklukları, Ruhsal Hastalıklar

#### **INTRODUCTION**

Substance abuse is an important social problem all over the world. The prevalence of substance use is increasing day by day, and the age of starting substance use has been decreasing. This leads to substance addiction. The fact that substance abuse is a multidimensional social problem causes an increase in the number of studies and policies on this subject matter. <sup>1,2,3</sup>

Attitude refers to the learned or unlearned positive, negative, cognitive, behavioral, and emotional reaction tendencies in individuals towards a certain object, any situation, a concept, an event, or an institution.<sup>4</sup> Looking at the studies on the attitude of healthcare professionals, it was observed that studies were determining the level of attitude and the variables affecting the level of attitude.<sup>5,6</sup> It was found that healthcare professionals, including those working in the psychiatric department, generally had negative, non-empathetic, prejudiced, and discriminatory attitudes towards individuals with substance use disorder.<sup>5</sup> It was determined that negative attitudes towards individuals with substance use disorder reduced motivation of healthcare the professionals to treat, made it difficult to communicate with patients, and prevented their contribution to

patient care from reaching the expected level.<sup>5</sup> It was found in the studies that society displayed negative attitudes. In these studies, it was determined that individuals with substance use disorder, who noticed the negative attitude, developed and internalized negative feelings towards themselves, tried to be marginal by alienating themselves, and continued to use the substance. For these reasons, the initiation and continuation of the treatment administered to the individuals with substance use disorder were adversely affected, and it became impossible for them to benefit from health services sufficiently.<sup>7,8</sup>

addition to the individual factors, In negative attitudes of society and healthcare professionals towards addicted individuals are very important in the treatment of addiction. It is observed that minimizing or preventing these negative attitudes and behaviors plays a positive role in the treatment of substance addiction. Accordingly, there is an increase in the number of studies on the variables affecting attitudes toward individuals with substance use disorder. Attitudes of society, healthcare professionals, and university students towards individuals with substance use disorder have been examined mostly on a single sample.<sup>9,10,11</sup> On the other hand, it was determined that the literature included one study, which examined the attitudes of healthcare professionals working in psychiatric hospitals together with the society's attitudes and compared the two samples.<sup>12</sup> This study was conducted by comparing attitudes and examining the variables related to the attitudes and attitudes of health professionals in a psychiatric hospital and the general public towards individuals who use substances.

#### **METHODS**

## Type of the Study

The study was conducted in a descriptive cross-sectional type to examine the attitudes.

## Study Population and Sample Selection

This study included two groups consisting of healthcare professionals working in a psychiatric hospital and the general public. This study's aim was to reach all healthcare professionals, and a sample calculation was made to test the representativeness of the sample population. The population of the group formed by the healthcare professionals consisted of 460 healthcare professionals working as Mental Health and Diseases Specialist (46 Physician, 247 Nurse, 35 Psychologist, 26 Social workers, 83 Assistant Doctor, 13 Health Officer, and 10 Midwife) in the psychiatry departments at a Hospital of Mental Disorders and Neurology in Istanbul. The minimum sample size that could represent the population was calculated using the sample calculation formula (n=Nt<sup>2</sup>pg /  $d^{2}(N-1) + t^{2}pq$ ) for the known population, and it was determined as a minimum of 210 participants with a 95% confidence interval for a 5% sampling error and 50% probability of respondents responding. The size of the sample in this group was 212 in this study. Individuals who did not volunteer and had a history of substance addiction were not included.

The population of the group of public consisted of individuals living in Istanbul. According to the address-based population registration system of the Turkish Statistical Institute for the year 2020, the population of Istanbul was determined as 15,462,452.<sup>13</sup>

When calculated with the above formula, the sample size of this group was determined as a minimum of 384. The criteria for inclusion in the group general public included residing in Istanbul, being between 18-65, speaking Turkish, being literate, and volunteering. Healthcare professionals and individuals with a history of substance addiction were not included. Face-to-face contact was made with the individuals who shopped at five different shopping centers determined by the lottery method, where the principal researcher lived. The criteria for participation in the study were explained to the individuals who volunteered for the conduct of the study. They were asked to share the link of the data collection form with the relatives who met these criteria from the WhatsApp application. The data collection process ended when it reached 427 participants using the snowball sampling method.

## Data Collection

The surveys were applied on the web between 10.02.2021-10.05.2021.

## Data Collection Tools

To collect the data of the study, the healthcare professionals' group was administered the Sociodemographic Form for Healthcare Professionals, Attitudes Toward Treatment of -Substance Use Disorders Scale, and Attitudes and Behaviors of the Society Towards Individuals Using Addictive Substances Scale. The group general public was administered the Sociodemographic Form for General Public and the Attitudes and Behaviors of the Society Towards Individuals Using Addictive Substances Scale.

## Sociodemographic Form for Healthcare Professionals

The researchers prepared the sociodemographic form by reviewing the literature and taking expert opinions. This form contained 18 items.

## Sociodemographic Form for Non-Health Professionals

The researchers prepared the sociodemographic form by reviewing the literature and taking expert opinions. This form contained 13 items.

## Attitudes Toward Treatment of Substance Use Disorders (ATTOSUD) Scale

Isik and Simsek<sup>14</sup> developed this scale to measure the attitudes of psychiatric healthcare professionals towards addiction treatment. This scale consists of 11 items. The items on the scale are scored between 0 and 5 points. Items 1, 2, 4, 6, 9, and 10 are reversely coded. The scores to be obtained from the scale range between 0 and 55. An increase in the total score on the scale means that one has a more negative attitude. In the validity and reliability study of the scale, Cronbach's Alpha coefficient was calculated as 0.77.<sup>14</sup> In the present study, the Cronbach's Alpha coefficient of the scale was found as 0.82.

## Attitudes and Behaviors of the Society Towards Individuals Using Addictive Substances (ABSTIUAS) Scale

This scale was developed by Kayli et al. <sup>15</sup> to determine the attitudes and behaviors of society towards individuals using addictive substances. This scale consists of 27 items. The items on the scale are scored between 1 and 5 points. Items 7, 11, 12, 15, 19, and 20 are reversely coded. The score to be obtained from the scale ranges between 27 and 135. An increase in the total score on the scale means exhibiting a more negative attitude towards individuals with substance use disorder. In the validity and reliability study of the scale, the Cronbach's Alpha coefficient was calculated as 0.92.<sup>15</sup> In the present study, the Cronbach's Alpha coefficient of the scale was found to be 90.

#### Data Analysis

The data obtained in the study were analyzed using SPSS (Statistical Package for Social Sciences) for Windows 22.0 package software. Mean, standard deviation, median lowest, highest, frequency and ratio values were used in the descriptive statistics of the data. The distribution of the variables was determined according to Kolmogorov-Smirnov, coefficients of variance, kurtosis and skewness values, and histogram graphs. T-test, and One Way ANOVA test were applied to data with normal distribution, and Kruskal-Wallis test and Mann Whitney U tests were applied to data that did not fit a normal distribution. After deciding on the homogeneous distribution of variances according to the results of the Levene test, the Tukey and Games Howell tests were performed. The findings were evaluated at the 95% confidence interval and 5% significance level.

#### RESULTS

The mean age of healthcare professionals was  $34.08 \pm 8.51$ ; 65.1% were female, and 46.2% were married. The mean age of the general public was  $34.42\pm11.69$ ; 53.6% were female, and 52.2% were married (Table 1).

		Healthcare Pr (n=2)		General Public (n=427)		
Variables		Mean	Sd	Mean	Sd	
Age		34.08 ±	8.51	34.42 ± 11.69		
		n	%	n	%	
Condor	Female	138	65.1	229	53.6	
Gender	Male	74	34.9	198	46.4	
	Single	107	50.5	177	41.5	
Marital Status	Married	98	46.2	223	52.2	
	Separated	7	3.3	27	6.3	
	None	134	63.2	211	49.4	
Number of	1 child	25	11.8	75	17.6	
Children	2 children	49	23.1	101	23.6	
	3 children	4	1.9	40	9.4	

**Table 1.** Socio-Demographic Characteristics of the Participants

Table: 1 Continuation		n	%	n	%	
	Elementary	-	-	31	7.3	
	Degree					
	Secondary	-	-	28	6.6	
	Degree					
	High school	8	3.8	123	28.8	
Education	Degree	0	510	120	2010	
Level	Bachelor's	9	4.2	89	20.8	
	Degree	)	1.2	07	20.0	
	Undergraduate	100	47.2	129	30.2	
	Degree	100	47.2	129	50.2	
	Postgraduate	80	37.7	27	6.3	
	PhD	15	7.1	-	-	
	Never	55	25.9	158	37.0	
	Several times a	59	27.8	118	27.6	
Frequency	year	57	27.0	110		
of Alcohol	Once a month	49	23.2	52	12.2	
	Once a week	31	14.6	52	12.2	
Consumption	Almost every	5	2.4	10	2.3	
	other day.	5	2.4	10	2.3	
	I have quit	13	6.1	37	8.7	
Presence of	None	138	65.1	317	74.2	
An Individual	Family, Relative	36	17	37	8.7	
with						
Substance Use	Eniond					
Disorder in	Friend,	38	17.9	73	17.1	
the Immediate	Neighbor					
Environment						

## Variables affecting the attitudes of health professionals towards individuals who use substances;

Among the healthcare professionals, a statistically significant difference was found between the mean scores of ABSTIUAS scales in terms of education level ( $x^2 = 23.332$ ;  $p=\le0.001$ , F=3.503; p= 0.009). As a result of the post hoc test of the ABSTIUAS scale, it was determined that the difference stemmed from the individuals with high school and doctorate *Turk J Public Health 2022;20(3)* 

degrees. A statistically significant difference was found based on the mean scores of the ABSTIUAS scale in terms of alcohol consumption among healthcare professionals (F=1.924; p=0.092, F=4.402; P=0.01). As a result of the post hoc test, it was determined that this difference stemmed from the scores obtained by the individuals who consumed alcohol every day (p<0.05). A statistically significant difference was found between the healthcare professionals with substance

use disorder in the immediate environment (F=5.020; p=0.007). As a result of the post hoc test, it was observed that was due to the

group stating that there was no individual with substance use disorder in the immediate environment (Table 2).

		Healthcare Professionals (n=212)				General (n=42	
		AT	TOSUD	ABSTI	UAS	ABSTIUAS	
	Variables	Mean	SD	Mean	SD	Mean	SD
Gender	Female	104.37	8.39	105.37	15.41	206.82	17.75
dender	Male	110.47	10.63	108.61	24.48	222.30	17.78
		Z*=-0.	691	Z=-0.36	8	Z=-1.2	293
		p= 0.49		p=0.71		p=0.196	
	Single <sup>a</sup>	21.62	8.30	80.66	18.85	196	19.1
Marital Status	Married <sup>b</sup>	22.44	10.27	80/20	19.73	227.93	16.1
	Separated <sup>c</sup>	16.0	5.41	73.85	19.10	216.94	19.0
		F**=1.	650	F=0.415	5	x <sup>2***</sup> =6	.623
		p=0.1	.95	<b>p=0.66</b> 1	L	p=0.036 b>a	
	None <sup>a</sup>	21.94	9.11	80.32	19.08	88.67	18.43
Number of Children	1 child <sup>b</sup>	18.24	5.81	73.12	17.05	93.93	17.56
	2 children <sup>c</sup>	22.46	9.93	83.53	18.80	94.43	17-10
	3 children <sup>d</sup>	32	14.76	81	30.75	93.43	14.14
		F=3.0	46	F = 1.66	0	F=3.3	73
		p=0.030		p=0.177		p=0.018	
		d>a, b, c				b, c, c	l>a
	Elementary Degree <sup>a</sup>	-	-	-	-	100.23	7.3
	Secondary Degree <sup>b</sup>	-	-	-	-	92.36	6.6
Education	High school Degree <sup>c</sup>	135.38	12.44	95.62	6.2	93.03	28.8
Level	Bachelor's Degree <sup>d</sup>	173.39	7.27	87.77	10.1	92.51	20.8
	Undergraduate Degree <sup>e</sup>	110.38	9.94	81.96	1.8	89.07	30.2
	Postgraduate <sup>f</sup>	100.47	6.92	77.25	1.9	80.37	6.3
	PhD <sup>g</sup>	57.30	7.95	71.40	3.1	-	-
		x <sup>2</sup> =23	.332	F=3.503	3	F=4.532	
		p≤0.0	001	p= 0.00	9	p≤0.0	001
		d>e, f, g	e>g	c>g		a, b, c, c	l, e>f

Table: 2 Contin	nuation	Mean	SD	Ме	an	SD	Mean	SD
	Never <sup>a</sup>	22.29	10.20	84.	25	18.08	96.97	16.3
Frequency of Alcohol	Several times a year <sup>b</sup>	23.47	10.46	85.	.69	21/36	88.39	18.4
	Once a month <sup>c</sup>	22.51	8.24	77.	55	15.68	87.10	16.6
Consumption	Once a week $^{d}$	17.51	5.55	71.	25	16.16	88.42	17.9
	Almost every other day. <sup>e</sup>	20-80	1.78	61.	20	3.19	88.70	21.6
	I have quit <sup>f</sup>	20-38	9.23	77.	15	23.59	88.22	16.3
			F=1.924		F=4.402		F=5.218	
		p=0.092		p=0.01			p≤0.001	
				a, b, c, d, f >e		a>b, c, d, e, f		
Presence of	None <sup>a</sup>	22.69	9.68	83	18	.93	94.43	16.19
An Individual with Substance	Family, Relative <sup>b</sup>	20.58	7.88	72.44	16	.17	85.68	20.27
Use Disorder in the Immediate Environment	Friend, Neighbor <sup>c</sup>	19.81	8.49	77.50	20	.28	81.15	18.60
		F=1.852		]	F=5.020		F=20.402	
		p=0.160		p=0.007		7	p≤0.001	
					a>b, c		a>b, c	

\*Z= Mann-Whitney U; \*\* F= One-Way Anova; \*\*\*x<sup>2</sup>=Kruskall Wallis H

## Variables affecting the attitudes of healthcare professionals towards the treatment of substance addiction;

A statistically significant difference was found in the mean score of the ATTOSUD scale according to the number of children in healthcare professionals (F=3.046; p=0.030). As a result of the post hoc test, it was determined that this difference was due to the group with 3 children. Among the healthcare professionals, a statistically significant difference was found between the mean scores of ATTOSUD scales in terms of education level  $(x2 = 23.332; p = \le 0.001, F = 3.503; p = 0.009)$ . In the difference analysis of the ATTOSUD scale, statistically, significant differences were found between associate degree and undergraduate degree (U=189, Z=-2.87, p=0.004), between associate degree and master's degree (U=90,

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Z=-3.68, p= $\leq$ 0.001), between associate degree and doctorate (U=8.5, Z=-3.53, p $\leq$ 0.001), and between undergraduate and doctorate (U=377, Z=-3.09, p=0.002) (Table 2).

## Variables that affect the attitude of the general public;

A statistically significant difference was found between the mean score of the ABSTIUAS scale according to the marital status of the general public ( $x^2$ =6.623; p=0.036). It was determined that the difference in scores between the groups was due to the married and single participants (U=16772, Z=-2.58, p=0.010). A statistically significant difference was found between the number of children in the general public and the total score of the ABSTIUAS scale (F=3.373; p=0.018). As a result of the post hoc test, it was determined that this difference was due to the group that

had no children. A statistically significant difference was found based on the mean score of the ABSTIUAS scale according to the education level of the general public (F=4.532;  $p \le 0.001$ ). As a result of the post hoc test, it was determined that the difference stemmed from the group with graduate degrees. A statistically significant difference was found among the general public in terms of alcohol consumption (F=5.218;  $p \le 0.001$ ). As a result of the post hoc test, it was determined that this difference was due to the scores obtained by individuals who had never consumed alcohol. A statistically significant difference was found between the general public with substance use disorder in the immediate environment (F=20.402; p≤0.001). (F=20.402; p≤0.001). As a result of the post hoc test, it was observed that this difference was due to the group stating that there was no individual with substance use disorder in the immediate environment (Table 2).

In Table 3, variables related to the occupational characteristics of health professionals are given. A statistically significant difference was found between the occupational status of healthcare professionals and the mean score of the scale (F=5.226; p $\leq$ 0.001, F=6.183; p $\leq$ 0.001). According to Post hoc test results of the ATTOSUD scale, it was determined that

this difference was between the occupational groups with the most positive attitudes (psychologist, specialist physician, social worker) and the occupational groups (resident doctor, nurse, health officer, midwife) with more negative attitudes compared to the others. According to the Post hoc test results of the ABSTIUAS scale, this difference was between the occupational groups with the most positive attitude (specialist physician, social worker, psychologist) and occupational groups with more negative attitudes compared to the others (nurse, midwife, health officer). A statistically significant difference was found between the duration of occupation and the total score of the ATTOSUD scale (F=6.369;  $p \le 0.001$ ). According to the results of the post hoc test, it was determined that this difference was due to the participants who had been working between 6-10 years. A statistically significant difference was found between the department where healthcare professionals were employed and the mean scores of ABSTIUAS and ATTOSUD scales (F=2.731; p = 0.014, F=7.469; p≤0.001). According to the post hoc test results, it was determined that this difference in both scales was caused by the professionals who had been working in the AMATEM/CEMATEM departments (Table 3).

occupational characteristics of healthcare professionals							
Healthcare Pro	fessionals			ATTOSU	JD	ABSTIU	AS
Variables		n	%	Mean	SD	Mean	SD
	Mental Health and						
	Diseases Specialist	14	6.6	14.07	4.96	62.28	11.18
Occupational	Physician <sup>a</sup>						
	Nurse <sup>b</sup>	122	57.5	23.44	10.06	83.46	18.45
Status	Psychologist <sup>c</sup>	15	7.1	14.06	3.03	70.53	18.75
Status	Social Worker <sup>d</sup>	10	4.7	17.60	5.3	62.80	8.89
	Assistant Doctor <sup>e</sup>	39	18.4	23.74	6.15	81.53	18.31
	Health Officer <sup>f</sup>	7	3.3	21; 28	4.42	94.14	21.44
	Midwife <sup>g</sup>	5	2.4	21.40	4.38	85.60	19.10
				F*=5	.226	F=6.	183
				p≤0.	.001	p≤0.	.001
				e, b, f, g	<b>;&gt;c, a, d</b>	b, g, f>	a, d, c
	1 year - 5 years <sup>a</sup>	90	42.5	24.40	8.45	81.41	17.23
Duration of	6 - 10 years <sup>b</sup>	29	13.6	15.65	6.55	71.20	19.19
Working in	11 - 20 years <sup>c</sup>	59	27.8	20.42	8.74	82.30	21.38
the Profession	21 - 30 Years <sup>d</sup>	26	12.3	23.76	11.57	80.46	19.01
	30 years and above <sup>e</sup>	8	3.8	19.12	9.83	83.50	16.42
				F=6.	369	F=1.	973
				nco	001	p=0.	100
				-	p≤0.001 a, c, d, e>b		100
	AMATEM/CEMATEM <sup>a</sup>	62	29.2	16.62		74.96.	14.81
	Adult Psychosis	02	2).2	10.02	0.70	74. 70.	14.01
	Department <sup>b</sup>	71	33.5	24.28	9.40	81.64	17.55
	Child Adolescent						
	Psychiatry Department <sup>c</sup>	15	7.1	17.53	9 / 49	75.93	21.92
Department	Neurosis Department <sup>d</sup>	8	3.7	22.12	8.69	98.62	30.60
	Forensic Psychiatry	22	10.4	26.95	7.76	80.68	18.70
	Department <sup>e</sup>	22	10.4	20.95	/./0	00.00	10.70
	Emergency Psychiatry <sup>f</sup>	19	9.0	24.78	9.95	81.31	23.47
	Outpatient Clinic <sup>g</sup>	15	7.1	24/46	8.49	87.66	20.35
				F=7.	469	F=2.	731
				p≤0.	0.014		
					b, c, d,	e, f, g>a	

**Table 3.** Analysis of the relationship of the ATTOSUD and ABSTIUAS scales with the occupational characteristics of healthcare professionals

\*F= One-Way Anova

Looking at the evaluation of total scores obtained by healthcare professionals on the ATTOSUD scale (min:5-max:50), the mean was determined as  $28.82 \pm 9.23$  (Table 4).

	Healthcare	Professionals	General Public
Variables	ATTOSUD	ABSTIUAS	ABSTIUAS
Mean Score	21.82	80.19	91.40
<b>Standard Deviation</b>	9.23	18.51	17.760
Minimum	5	37	36
Maximum	50	131	132
Cronbach's Alpha	0.822	0.934	0.909

Table 4. Assessment of ATTOSUD	and ABSTIUAS Scale Total Scores

When the comparison of the ABSTIUAS scale with healthcare professionals and the general public was examined, a statistically significant difference was found according to the T-test results (p<0.05). The mean of the attitude scores of healthcare professionals towards individuals with substance use disorder (min:31-max:131; mean:80.23  $\pm$  19.10) was below the mean of the attitude score of the general public (min:36-max:102; mean:91.40  $\pm$  17.76). Healthcare professionals had more positive attitudes compared to non-healthcare professionals (Table 5).

**Table 5.** Comparison of Mean ABSTIUAS Scale Scores of Healthcare Professionals and GeneralPublic

	n	Mean	SS	t*	р
Healthcare Professionals	212	80.23	19.10		
General Public	427	91.40	17.76	0.335	≤0.001

\*t= t-test

#### DISCUSSION

This study was conducted to examine the attitudes of and the affecting variables of the attitudes of healthcare professionals and the general public towards individuals with substance use disorder.

In this study, it was found that the age and gender of healthcare professionals and the general public did not affect the attitudes towards individuals with substance use disorder and addiction treatment. It was determined in the literature that the age and gender of the healthcare professionals <sup>12,16</sup>

and the general public <sup>9,11,15</sup> did not affect the attitude.

Looking at the education levels of healthcare professionals and the general public in this study, it was observed that the attitude changed positively as the education level increased. In a study, in which alcohol and substance addicts and their relatives were included, it was found that the higher the education level, the more positive the evaluations of individuals with substance use disorder.<sup>17</sup> Similarly, in a study involving 2857 participants, it was found that those with higher education had fewer

negative opinions compared to the others.<sup>18</sup> The results of this study were found to be similar to the results of this study. It is known that the development of a positive attitude is in parallel with the level of knowledge, and it is thought that as the level of education increases, it becomes easier to reach accurate information on this subject matter.

When we look at the attitudes towards individuals with substance use disorder. it was found in this study that healthcare professionals who consumed alcohol a few times a year and healthcare professionals who had never consumed alcohol had negative attitudes. The development of negative attitudes can be explained by the fact that individuals with substance use disorder are considered to lack willpower or have a moral weakness. It can be argued that the cultural and religious characteristics of individuals who rarely or never consumed alcohol affected their attitudes in this study. In support of this study results, it was determined in a study conducted in Australia that nurses who consumed alcohol once or more frequently in a week found more effective solutions to the problems of addicted individuals, and their motivation levels were higher towards working with addicted individuals.<sup>19</sup> Similarly, it was found in a study conducted with university students who consumed alcohol had lower negative attitudes towards individuals with substance use disorder compared to individuals who did not.<sup>20</sup> The results of the study by Yilmaz and Kayli are parallel to the results of this study.<sup>9</sup> In this study, it was observed that the attitudes of healthcare professionals and the general public, who had individuals with substance use disorder in their immediate environment. were more pessimistic. It is thought that the Turk J Public Health 2022;20(3)

negative attitude is caused by the adverse effects of the events experienced. Unlike the findings of this study, there are studies supporting that participants, who do not have individuals with substance use disorder in their immediate environment, create more social distance due to negative attitudes.<sup>12, 20</sup> This difference can be explained by cultural reasons due to the different countries where the studies are conducted.

In this study, it was determined that resident physicians and nurses had more negative attitudes toward addiction treatment compared to the others. It was found that the nurses, midwives, and health officer participants had the most negative attitude in the last three runs, in terms of the most negative attitudes toward individuals with substance use disorder; and it was known that the midwives and health officer participants in this study had received authorization for nursing. It is thought that this result is related to the fact that they feel less motivated, and inadequate and receive limited education on addiction in undergraduate education. Some studies support this idea <sup>12, 21,22</sup>. Many studies have demonstrated that nurses have more negative attitudes towards individuals with substance use disorder<sup>15,23</sup>. Similarly, in the study conducted by Pilge and Arabaci<sup>21</sup>, it was determined that emergency room nurses maintained a social distance from individuals with substance use disorder and had a tendency toward negative attitudes. In another study, it was found that nurses were generally willing to make observations in diagnosing substance use disorder; however, they were unwilling during the treatment phase<sup>22</sup>.

In this study, it was determined that healthcare professionals, who had worked between 6-10 years, had the most positive attitude toward addiction treatment. It was determined that the working year did not affect the attitude towards individuals with substance use disorder; however, the participants, who had worked for 6-10 years, were the group that displayed the most positive attitude towards addiction treatment. Gilchrist et al.<sup>6</sup> reported that participants, who had worked in the profession for less than 10 years, had more positive attitudes and opinions toward individuals with substance use disorder compared to the other groups. A study shows there was no relationship between the duration of working in the profession and the attitudes towards individuals with substance use disorder<sup>24</sup>, similar to this study; and there have been studies demonstrating that the attitude increases negatively as age progresses and professional experience increases<sup>23</sup>, unlike this study. Looking at the findings of this study, it can be assumed that the reason why attitudes of healthcare professionals, who had been working in the hospital where the study was conducted for 1-5 years, were more negative compared to those with a working period of 6-10 years was that the contracted employees could not ask to be appointed. They had to work in a psychiatric hospital. Even though healthcare professionals, who had worked for 6-10 years, had the right to ask to be appointed, they continued to work at the hospital voluntarily; and this supports our opinion.

It was determined that healthcare professionals working in AMATEM/ CEMATEM departments had more positive attitudes towards individuals with substance

disorder and addiction treatment use compared to the healthcare professionals working in other departments. In a study by Gilchrist et al.<sup>6</sup>, it was observed that healthcare professionals working in addiction services reported significantly more respect and developed positive attitudes towards individuals with substance use disorder compared to the employees working in primary care and general psychiatry. Another study revealed that healthcare professionals, who worked more frequently or were in contact with individuals with substance use disorder, developed more positive attitudes.<sup>15</sup> It was observed that the study findings supported the results of this study. This result can be interpreted as the increase in the level of knowledge, skills, and empathy as a result of the experiences of the employees working in addiction services.

In this study, the attitude level of healthcare professionals towards addiction treatment was evaluated over the total score of the ATTOSUD scale. As a result of this study, it was determined that the total mean score obtained by the healthcare professionals from the ATTOSUD scale was 21.82 ±9.23. Isik and Simsek<sup>14</sup>, who conducted the validity and reliability study of the ATTOSUD scale, determined that the total mean score obtained from the scale was 36.26. They stated that the total score in the evaluation of the score from the scale higher than the mean revealed that healthcare professionals had a negative attitude towards addiction treatment. Considering this evaluation, the fact that the total score achieved in this study was below the mean indicated a more positive attitude towards addiction treatment. The attitude levels of healthcare professionals

towards individuals with substance use disorder were evaluated based on the total score of the ABSTIUAS scale. As a result of this study, the total mean score obtained from the ABSTIUAS scale was 80.19 ± 18.51. In the validity and reliability study of the ABSTIUAS scale, it was determined that the highest and lowest scores to be obtained from the scale were 135 and 27, respectively; and it was stated that an increase in the total score from the scale meant exhibiting a more negative attitude towards individuals with substance use disorder<sup>15</sup>. In the evaluation of the score obtained from the scale in this study, the fact that the total score was above the mean indicated that healthcare professionals had negative attitudes towards individuals with substance use disorder. It can be argued that the negative attitude towards individuals with substance use disorder was because more than half of the participants were nurses, and the nursing profession had a negative attitude towards individuals with substance use disorder. Similar to this study finding, a study shows that the attitudes of healthcare professionals are generally negative.<sup>15</sup> In a study was determined that the attitude was generally negative. These negative attitudes negatively affected treatment continuity and the feelings of patients regarding empowerment.<sup>5</sup> Healthcare professionals have less respect, motivation, and satisfaction when working with this patient group.<sup>6</sup>

In this study, the attitude levels of the general public towards substance use disorder were evaluated based on the total score of the ABSTIUAS scale. As a result of this study, the total mean score obtained from the ABSTIUAS scale was  $91.40. \pm 17.76$ . Looking at the evaluation of this scale, this study findings

demonstrated that the participants had negative attitudes towards individuals with substance use disorder. It can be assumed that this result stemmed from the fact that the society lacked sufficient knowledge about substance abuse, cultural and religious reasons, and negative experiences. There is a study supporting the findings of this study.<sup>9</sup> The negative attitudes of the general public are known to make it difficult for individuals with substance use disorder to get satisfaction from their lives, to adapt to treatment, and cause them to be unhappy. At the same time, it was reported that when individuals with substance use disorder felt a negative attitude, the risk of exhibiting abnormal behavior increased in addition to the impairment of their harmonv.<sup>7,8</sup>

In this study, it was observed that healthcare professionals had more positive attitudes compared to non-healthcare professionals. This result may have emerged with the effect of the training received by healthcare professionals. In many studies, it has been determined that the education provided to healthcare professionals about substance use disorder increases the level of positive attitude.<sup>21,25</sup> Therefore, it can be predicted that the judgmental attitude of healthcare professionals may decrease in their clinical observations, and they will be able to empathize more easily with individuals with substance use disorder in their interviews. In addition, it can be argued that being in direct contact with the patient will contribute to a positive attitude towards individuals with substance use disorder. As a result of the literature review, it was seen that there was only one study similar to the sample of this study. In that study conducted in Germany,

the attitudes of the society, healthcare professionals, and individuals diagnosed with substance use disorder and in remission were examined. As a result, it was determined that society had the most negative attitude.<sup>12</sup>

#### CONCLUSION

As a result of this study, it was observed that there were many variables affecting the attitude toward individuals with substance use disorder. Based on this study results, awareness can be increased, and training activities can be planned to reduce negative attitudes. Individuals who consume alcohol a few times a year and who do not consume alcohol, individuals with a low level of knowledge, and individuals, who have relatives with substance use disorder can be encouraged to participate more in these training activities. It is recommended to review the working conditions and training curriculum of nurses. The determination of negative attitudes towards individuals with substance use disorder supports the literature, and the fact that two different groups were evaluated in the same study contributes to the literature.

# Limitations and Generalizability of the Study

The limitations of this study were that it was conducted only with professionals working in a psychiatric hospital, and the results obtained were self-reports provided by the participants. Due to the data collection on a web-based basis, individuals in society without Internet access could not be reached. In addition, not questioning other substances used other than alcohol use is another limitation of the study. This study's results should be interpreted carefully when generalizing to a larger population. The lack of sufficient studies on this subject matter made it difficult to discuss the results of this study.

## ACKNOWLEDGMENT

**Conflict of Interest**: Authors have no conflict of interest.

**Financial Support:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

**Data Availability:** The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

**Ethical Declaration:** Before data collection, permission was obtained from the ethics committee of a university in Istanbul and the hospital where the study was conducted. Data were collected online via Google forms between 8th February and 8th April 2021.

Author Contrubition: Concept: all author, Study design: all author, Literature search: all author, Data collection: HA, Data Analysis: HA, Study supervision: NM, Manuscript writing: all author, Financing and equipment: all author, Critical review: all author.

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