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Tobacco, alcohol, illegal drug and substance use, sociodemographic variables and psychological distress symptoms in individuals aged 50-65

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Abstract

Aim: The aim of the study is to evaluate the relationship between tobacco, alcohol, illegal drug and substance use, demographic variables and symptoms of psychological distress in individuals aged 50-65 living in the city center of Erzrurum, and to create a risk profile based on these variables.

Materials and Methods: The data of the study were collected through survey forms. Participants filled out the sociodemographic-clinical data form, Fagerström Nicotine Dependency Test (FNDT), Symptom Checklist 90-Revised (SCL90-R).

Results: Three hundred twelve participants, 154 women and 158 men, were included in the study. 43.3% of the participants were smoking, 10.3% were using alcohol, and 3.8% were using illegal drugs and substances. The SCL90-R subscale scores and overall symptom severity were significantly higher in smokers and alcohol users compared to non-users, except for somatization. Moderate significant positive correlations were found between the FNDT scale score and the SCL90-R scale scores. It was found that male gender increased tobacco use by approximately 10.7 times (OR:10.7, 95% CI [5.721, 20.113]), a one-unit increase in paranoia increased it by 3.4 times (OR:3.4, 95% CI [2.373, 4.963]), while a one-unit increase in age decreased it by 0.9 times (OR:0.9, 95% CI [0.900, 0.976]).

Conclusion: It has been observed that tobacco and alcohol use in early old age is closely related to symptoms of psychological distress.It can be said that preventive interventions for the psychological health of the community may be important in combating tobacco and alcohol use.

Introduction

Although heart diseases, cancer and stroke are among the leading causes of death today, the main causes of death are changing lifestyle behaviors. Tobacco use is the leading cause of death (18%). This is followed by malnutrition and lack of physical activity (15%) and alcohol use (4%) [1]. Tobacco, substance and alcohol related disorders are defined under the heading Substance Related Disorders and Addictive Disorders in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders [2]. It has been reported that the prevalence of smoking is significantly higher in those with lifelong mental disorders (such as anxiety, depression, psychotic disorder, mania / hypomania, alcohol abuse / addiction and substance abuse / addiction) compared to those who have not received a diagnosis, while smoking cessation rates are

significantly lower [3]. The literature indicates that individuals with psychiatric disorders suffer disproportionately from tobacco-related diseases and deaths due to high smoking rates and low success in quitting [3, 4]. It has been reported that tobacco use not only causes medical diseases, but also exacerbates existing chronic diseases [4]. Smoking is an independent risk factor that leads to an increase in mortality in the elderly population [5]. Substance use (including alcohol) is a public health problem that is increasingly prevalent both globally and in our country [6]. Alcohol is the third leading risk factor contributing to the global disease burden. It is also the substance that most often leads to addiction among the elderly [7]. Psychiatric disorders and substance addiction are often seen together in young people and older adults. The prevalence of many medical conditions increases with age and can be adversely affected by concurrent substance use [8].

Old age is defined as the irreversible loss of an individual's physical and mental abilities; it is described as an interac-

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tion period that includes many changes biopsychosocially and contains different powers [9]. The World Health Organization (WHO) defines those aged 65 and over as "elderly" and those aged 85 and over as "very elderly" [10]. In a study conducted by Bures (1997), the age range of '55-64' was classified as early old age or the entrance to old age, '65-74' as the old age period, and '75 and over' as the senility period [11]. The elderly population is increasing day by day, both in our country and in the world [7]. With the advancement of age, cognitive and physical decline, loss of health, and other period-specific problems and losses occur [8-10]. It is also known that individuals with mental disorders have a higher burden of disease and mortality rate compared to the general population [12]. The use of tobacco, alcohol, and substances in old age, and the accompaniment of psychiatric disorders, can potentially lead to negative outcomes in terms of diagnosis, clinical course, treatment process, chronicity, and loss of functionality for both disorders. The coexistence of many chronic diseases in elderly individuals, the use of multiple medications, and changes in kidney and liver functions [7] can significantly increase the harmful effects of tobacco, alcohol, and substance use, and can make the problem much more complex. Therefore, a more objective assessment of people's tobacco, alcohol and substance use and potential risk factors (such as sociodemographic variables and signs of psychological distress) in the pre-old age period, as well as earlier detection and treatment of those who need psychiatric support, can prevent negative health consequences that may occur in old age. It has been observed that most studies in the literature focus on tobacco and substance use among adolescents and adults, but there is insufficient literature examining tobacco, alcohol, and substance use in the period of entering old age. Considering that the prevention of tobacco, alcohol, illegal drug and substance use improves both mental and physical health outcomes, it is important to identify the common etiological conditions underlying each of these reasons to contribute to treatment.

The aim of this study is to evaluate the relationship between tobacco, alcohol, illegal drug and substance use, demographic variables, and signs of psychological distress among individuals aged 50-65 living in the city center of Erzurum. Additionally, it aims to create a potential risk profile for tobacco and alcohol use based on these variables. Revealing the risk profile of individuals in early old age can provide early detection and treatment of mental and physical problems that may arise due to tobacco and alcohol-substance use in old age, and can help develop strategies to reduce the associated disease and mortality rates.

Materials and Methods

In this study, cross-sectional scanning pattern, one of the quantitative research methods, was used. The study included individuals aged 50-65 living in the city center of Erzurum. The study was approved by the Ethics Committee of Atatürk University (B.30.2.ATA.0.01.00/733). The data of the study were collected through survey forms. The participants filled out a sociodemographic-clinical data form, Fagerström Test for Nicotine Dependence, and Psy-

chological Symptom Screening Test. The inclusion criteria for the participants were determined as living in Erzurum, being between the ages of 50-65, being literate, not having a physical and/or mental disability that would prevent them from completing the tests, and voluntarily participating and giving written consent to the study. Participants who had a major psychiatric disorder and were using psychotropic drugs according to the sociodemographic-clinical data form filled out by the participants, and participants who did not meet the above-mentioned inclusion criteria were not included in the study.

Working group

In the study, criterion sampling was used among purposive sampling methods. In this type of sampling, the sample that carries a set of criteria determined in advance is taken as the basis. The criteria that the researcher has determined to explain the situations he/she examines can be used for this type of sample. In criterion sampling, individuals planned to be included in the study are determined according to certain criteria [13, 14]. The criterion or criteria used can be created by the researcher, or a previously prepared criterion list can be used [15]. Considering the criteria that are taken as the basis in the formation of the sample (living in Erzurum, being in the age range of 50-65, being literate, not having a physical and/or mental disability that will prevent the completion of the tests), it shows that the sample type is designed according to the criterion sampling. Between July 2023 and October 2023, 312 adult individuals who filled out the scales and met the inclusion criteria formed the sample of the study based on these criteria.

Sociodemographic-clinical data form

It includes variables such as gender, age, monthly income, family type, education level, suicide attempt, presence of mental illness, use of psychotropic drugs, history of mental illness in the family, tobacco use, alcohol consumption, use of sedatives/hypnotics and illegal drug use (for tobacco and alcohol product use, use for more than 1 day in the last 30 days, for illegal drug and substance use, having used substances in the last three months), quantities (number of cigarettes smoked per day), reasons for tobacco, alcohol, illegal drug and substance use.

Fagerström Nicotine Dependency Test

This is a self-report scale developed to assess the level of physical addiction to cigarettes. It consists of six questions, providing binary and four-point Likert type measurements ranging from 0-1 and 0-3 [16]. Each question is scored according to the selected answer. It is scored between 0-10. The Turkish validity and reliability of the test were conducted by Uysal and colleagues in 2004, and the Cronbach's alpha coefficient was found to be 0.56 [17]. The test has been found to be moderately reliable and it has been concluded that it can be used as a measurement method in smoking cessation clinics to assess nicotine addiction. FNDT is widely used in smoking cessation clinics [17, 18].

Symptom Checklist 90-Revised

Psychological distress symptoms were assessed using the nine separate symptom dimensions and general symptom level of the Symptom Checklist 90-Revised (SCL90-R). The SCL90-R is a psychiatric screening tool based on self-report that allows individuals to evaluate themselves, developed by Derogatis [19]. The scale consists of 90 items. It is composed of a total of 10 subscales including Obsessive-Compulsive, Somatization, Interpersonal Sensitivity, Depression, Anxiety, Anger and Hostility, Phobic Anxiety, Paranoid, Psychoticism, and Additional Items. The scale is of the five-point Likert type. The Turkish validity and reliability studies of the scale were conducted by Dağ [20]. The Cronbach's alpha value of the scale was found to be 0.97.

Statistical analysis

The analyses were performed with IBM Social Sciences Statistics Package Program (SPSS) version 22 statistical analysis program. Before starting the analyses, a normality analysis was performed and it was checked whether the skewness and kurtosis values of all variables were between -2 and +2. These values indicate that the assumption of normality is met [21]. Frequency analysis was performed to obtain descriptive information about the variables of the study. The data were presented as mean, standard deviation, minimum, maximum, percentage, and number. In comparisons between two independent groups, the t-test was used in independent samples because the condition of normal distribution was met. Comparisons between categorical variables in 2x2 were made using the Pearson Chi-square test, Chi-square Yates test, and Fisher's Exact test. For comparisons larger than 2x2 between categorical variables, the Pearson Chi-square test and Fisher-Freeman-Halton test were used. In the comparison of two quantitative variables, the Pearson correlation test was used as the condition of normal distribution was met. Risk factors for tobacco use were evaluated with logistic regression analysis (Backward Conditional Model). The level of statistical significance was taken as p<0.05.

Results

The study included a total of 312 people, 154 of whom were women and 158 were men, with an average age of 58.08 years. The analysis revealed that 43.3% of the participants smoked, 10.3% used alcohol, and 3.8% used illegal drugs and substances. All of the 12 people who used illegal drugs and substances and the 32 people who used alcohol were men. These participants were also among the participants who smoked. The sociodemographic characteristics of the sample and groups are shown in Table 1.

The average duration of smoking among the participants was 30.91 (SD=11.37) years. The most common reasons for starting smoking were the influence of friends, social environment, and family (77%), and the most common reason for continuing to smoke was to cope with stress (49.6%). The average duration of alcohol use among the participants was 17.50 (SD=4.39) years. All participants who used alcohol stated that the reason for starting alcohol was the influence of friends, social environment,

and family. They most commonly continued to use alcohol to cope with stress (n=28, 87.5%). Of the participants who reported using illegal drugs and substances, three reported using psychoactive drugs, six reported using methamphetamine, and two reported using multiple substances. The characteristics of tobacco, alcohol, illegal drug, and substance use of the participants are shown in Table 2.

The average age of participants who smoke was 55.79 (SD= 6.64), and the body mass index (BMI) was 27.34 (SD= 4.61). The average age of participants who consume alcohol was 51.25 (SD=1.95), and the BMI was 27.45 (SD= 1.96). The total FNDT score for women was 4.52±2.97, and for men, it was 5.20±2.22, with no significant difference found between them (p=.269). Participants who smoke and consume alcohol had significantly higher SCL90-R subscale scores and overall symptom severity, excluding somatization, compared to those who do not. The comparison of age, BMI, and SCL90-R scale scores of participants who do and do not smoke or consume alcohol is shown in Table 3.

A slight negative correlation was found between the age of the participants and their scores on interpersonal sensitivity (r:-.143, p:.011) and paranoia (r:-.159, p:.005). A moderate negative correlation was detected between hostility (r:-.275, p<.001) and nicotine addiction severity (r:-.394, p<.001). Significant and positive moderate correlations were found between the total FNDT scale score of the participants and the SCL90-R subscale scores and overall symptom severity, excluding somatization (p<.001) (Table 4).

Risk factors for tobacco use among the participants were evaluated with logistic regression analysis (Backward Conditional Model). In the model, tobacco use was the dependent variable; age, gender, income level, education level, and six subscale scores of SCL90-R were used as independent variables. Anxiety, depression, and interpersonal sensitivity were not included in the model due to multicollinearity. In this evaluation, income level (p=.496), education level (p=.854), somatization (p=.329), obsessive-compulsive (p=.449), hostility (p=.815), phobic anxiety (p=.299), and psychosis (p=.969) were not identified as risk factors for tobacco use (p>.05). Tobacco use was increased approximately 10.7 times by male gender (OR: 10.7, 95% CI [5.721, 20.113]), and 3.4 times by a unit increase in paranoia (OR: 3.4, 95% CI [2.373, 4.963]), while it was decreased 0.9 times by a unit increase in age (OR: 0.9, 95% CI [0.900, 0.976]) (Table 5).

Discussion

This study investigated the prevalence rates of tobacco, alcohol, illegal drug and substance use in individuals in early old age, and the complex relationship between tobacco and alcohol use and potential risk factors (sociodemographic variables and symptoms of psychological distress).

In our study, it was determined that 43.3% of individuals in the age range of 50-65 smoked. It was found that the frequency of smoking was much higher in men (68.4% of men) compared to women (17.5% of women). In our study, male gender was determinant for tobacco use. In a study

Table 1. Sociodemographic characteristics of the sample and groups.

		All participants	Smoking group	Non-smoking group	χ^2	p	Drinking group	Non-drinking group	χ^2	p
		n:312(100%)	n:135(100%)	n:177(100%)			n:32(10.3%)	n=280(89.7%)		
Gender	Female	154(49.4%)	27(17.5%)	127(82.5%)	**82.059**	**<0.001**	0(0%)	154(100%)	**32.589**	**<0.001**
	Male	158(50.6%)	108(68.4%)	50(31.6%)			32(20.3%)	126(79.7%)		
Marital Status	Single	1(.3%)	0(0%)	1(100%)	1.003	0.817	0(0%)	1(100%)	**29.675**	**<0.001**
	Married	244(78.2%)	104(42.6)	140(57.4%)			12(4.9%)	232(95.1%)		
	Divorced/separated	67(21.5%)	31(46.3%)	36(53.7%)			20(29.9%)	47(70.1%)		
Family type	Nuclear	226(72.4%)	94(41.6%)	132(58.4%)	**22.449**	**<0.001**	16(7.1%)	210(92.9)	**92.535**	**<0.001**
	Extended	62(19.9%)	20(32.3%)	42(67.7%)			0(0%)	62(100%)		
	Broken	24(7.7%)	21(87.5%)	3(12.5%)			16(66.7%)	8(33.3%)		
Education	Primary	186(59.6%)	60(32.3%)	126(67.7%)	**29.904**	**<0.001**	8(4.3%)	178(95.7%)	**32.595**	**<0.001**
	High school	97(31.1%)	64(66%)	33(34%)			24(24.7%)	73(75.3%)		
	University	29(9.3%)	11(37.9%)	18(62.1%)			0(0%)	29(100%)		
Job	Unemployed	154(49.4%)	37(24%)	117(76%)	**62.017**	**<0.001**	8(5.2%)	146(94.8)	**42.573**	**<0.001**
	Pprivate workplace	48(15.4%)	39(81.3%)	9(18.8%)			12(25%)	36(75%)		
	Public	34(10.9%)	24(70.6%)	10(29.4%)			12(35.3%)	22(64.7%)		
	Retired	76(24.4%)	35(46.1%)	41(53.9%)			0(0%)	76(100%)		
Income	No income	114(36.5%)	26(22.8%)	88(77.2%)	**32.260**	**<0.001**	8(7%)	106(93%)	5.960	0.114
	0-10000 YTL	73(23.4%)	36(49.3%)	37(50.7%)			8(11%)	65(89%)		
	10000-20000 YTL	107(34.3%)	63(58.9%)	44(41.1%)			16(15%)	91(85%)		
	20000 YTL and above	18(5.8%)	10(55.6%)	8(44.4%)			0(0%)	18(100%)		
Illegal drug and substance use	Yes	12(3.8%)	12(100%)	0(0%)	**14.047**	**<0.001**	12(100%)	0(0%)	**99.295**	**<0.001**
	No	300(96.2%)	123(41%)	177(59%)			20(6.7%)	280(93.3%)		
Suicide attempt	Yes	20(6.4%)	20(100%)	0(0%)	**25.603**	**<0.001**	16(80%)	4(20%)	**104.980**	**<0.001**
	No	292(93.6%)	115(39.4%)	177(60.6%)			16(5.5%)	276(94.5%)		
Psychiatric Illness in Family	Yes	34(10.9%)	18(52.9%)	16(47.1%)	1.046	0.307	4(11.8%)	30(88.2%)	.000	0.994
	No	278(89.1%)	117(42.1%)	161(57.9%)			28(10.1%)	250(89.9%)		
Chronic Illness	Yes	149(47.8%)	34(22.8%)	115(77.2%)	**48.592**	**<0.001**	0(0%)	149(100%)	**30.497**	**<0.001**
	No	163(52.2%)	101(62%)	62(38%)			32(19.6%)	131(80.4%)		
Sports	Yes	54(17.3%)	18(33.3%)	36(66.7%)	2.160	0.142	4(7.4%)	50(92.6%)	.262	0.608
	No	258(82.7%)	117(45.3%)	141(54.7%)			28(10.9%)	230(89.1%)		

p<.05: Statistical significance level; n:sample size; χ^2 : chi-square test.

conducted in 25 provinces in our country in 2016, where 8045 people in the age range of 15-64 were included, it was determined that the frequency of smoking was much higher in men (41.5%) compared to women (13.1%). In the same study, it was found that lifetime tobacco use was 55.5% and tobacco use in the last month was 30.7% in the age range of 45-64 [22]. In our research, the most common reasons for starting smoking were friends, social environment and family, and the reasons for continuing smoking were identified as coping with stress and pleasure and excitement. Research reveals that nearly 750,000 children and young people start smoking every year in our country. The most important factors in starting to smoke have been determined as; imitation, taking the smoking behavior of adults as an example, and perceiving smoking as a kind of growth indicator [23]. In our study, the average smoking duration was 31 years and the frequency of smoking

was 17 pcs/day. The level of nicotine addiction showed a negative relationship with age. In a study conducted with individuals who applied to a smoking cessation outpatient clinic in our country, the average smoking duration was found to be 23 years, the frequency of smoking was found to be 24 pcs/day, and a positive relationship was found between the depence level of nicotine and age [24]. It is worth noting that the studies conducted were with the general population, not with participants in the 50-65 age range, as in our sample. In addition, as studies have shown, tobacco is used more widely in participants over the age of 25 and its use decreases with age [22, 25]. In our study, it was determined that those with low income levels and unemployed people have a lower smoking rate. While increasing the income level reduces cigarette consumption in developed countries, it increases it in our country. It has been reported that a 1-unit increase in the

Table 2. Characteristics of tobacco, alcohol, illegal drug and substance use.

Nicotine use	Current use	135(n)-%43.3
Smoking duration (years)	Min 18-max 55, mean 30.91±11.37	
Number of cigarettes smoked per day (piece)	Min 1-max 40, mean 17.10±8.14	
Reason for starting smoking	Influence of friends, social circle and family	104(n)-77%
	Curiosity	31(n)-23%
Reason for continuing smoking	Coping with stress	67(n)- 49.6%
	Influence of friends, social circle and family	12(n)-8.9%
	Pleasure and excitement	56(n)-41.5%
Nicotine addiction level	Very little (0-2 point)	22(n)-16.3%
	Little (3-4 point)	25(n)-18.5%
	Middle (5 point)	25(n)-18.5%
	High (6-7 point)	37(n)-27.4%
	Very high (8-10 point)	26(n)-19.3%
Alcohol use	Current use	32(n)-10.3%
Duration of alcohol use (years)	Min 10-max 20, mean 17.50±4.39	
Frequency of alcohol use	Several times a year	8(n)-25%
	Several times a month	15(n)-46.9%
	1-2 days a week	7(n)-21.8%
	Every day	2(n)-6.3%
Reason for starting alcohol	Influence of friends, social circle and family	32(n)-100%
Reason for continuing to drink alcohol	Coping with stress	28(n)- 87.5%
	Influence of friends, social circle and family	4(n)-12.5%
Illegal drug and substance use	Current use	12(n)-3.8%
Prevalence of substance	Psychoactive drug use	3(n)-25%
	Methamphetamine	6(n)-50%
	Marijuana	1(n)-8.3%
	Multiple substance use (psychoactive drug, methamphetamine, marijuana, bonzai, etc.)	2(n)-16.7%
Duration of illegal drug and substance use (years)	Min 2-max 18, mean 12.64±3.86	
Reason for starting illegal drug and substance use	Coping with stress	4(n)-33.3%
	Influence of friends, social circle and family	8(n)-66.7%
Reason for continuing illegal drug and substance use	Coping with stress	2(n)-16.7%
	Influence of friends, social circle and family	10(n)-83.3%

unemployed population reduces cigarette consumption by 0.492157 units, the decrease in cigarette consumption is in line with theoretical expectations and supports the result that income growth increases cigarette consumption [23]. Our results support the literature.

In our study, it was found that 10.3% of individuals aged between 50-65 use alcohol, 3.8% use illegal drugs and substances, and all of the 12 participants using illegal drugs and substances and 32 participants using alcohol were male. In a population study conducted in our country in 2016, lifetime alcohol use was found to be 28.3%, and alcohol use in the last month was 10.1%. In the same study, it was determined that 8.1% of the participants aged between 45-64 used alcohol in the last month [22]. In 2013, the Substance Abuse and Mental Health Services Administration reported that the number of individuals aged between 50-64 using illegal substances increased from 2.7% in 2002 to 6% in 2013 [26, 27]. In our country, between 2012-2013, a study was conducted with 11,247 substance-using patients (4,586 patients in 2012, 6,661 patients in 2013) included from 22 addiction treatment centers. It was reported that the majority of the patients were male and 6.8% of the patients were participants over the age of 40 [28]. In a population study conducted by Ilhan and colleagues, it was found that 10.5% of the participants used illegal drugs, the prevalence of lifetime substance use was 2.8%, and although lifetime substance use was lower (2.3%) in the 45-64 age range, illegal drug use was higher than other age groups [22]. It is stated in the literature that health problems accompanying aging and increasing fragility direct individuals to alcohol and substances, the most important part of substance use in the elderly population is constituted by alcohol and prescription drugs, and male gender is a risk factor for alcohol use, female gender is a risk factor for prescription drug use [7, 22, 26]. Although it is difficult to compare our study with other studies due to method and population differences, it is seen that most of the results overlap.

Table 3. Comparison of age, BMI and SCL-90-R scale scores of participants with and without smoking, and with and without alcohol use.

	All participants	Smoking group	Non-smoking group	t	p	Drinking group	Non-drinking group	t	p
	Mean±SD	Mean±SD	Mean±SD			Mean±SD	Mean±SD		
Age	58.08±7.61	55.79±6.64	59.82±7.86	-4.901	**<0.001**	51.25±1.95	58.86±7.63	**-13.308**	**<0.001**
BMI	28.54±4.78	27.34±4.61	29.45±4.71	-3.960	**<0.001**	27.45±1.96	28.67±4.99	**-2.660**	**0.009**
Somatization	1.35±.77	1.34±.77	1.34±.77	-.025	0.980	1.53±.53	1.32±.79	1.965	0.055
Obsessive-Compulsive	1.24±.66	1.40±.64	1.10±.64	4.124	**<0.001**	1.73±.29	1.18±.66	**8.406**	**<0.001**
Interpersonal Sensitivity	1.31±.90	1.61±.98	1.08±.78	5.166	**<0.001**	2.76±.40	1.14±.79	**18.824**	**<0.001**
Depression	1.40±.87	1.71±1.00	1.15±.68	5.473	**<0.001**	2.66±.63	1.25±.77	**9.883**	**<0.001**
Anxiety	.99±.76	1.26±.86	.79±.60	5.729	**<0.001**	2.19±.44	.86±.67	**10.933**	**<0.001**
Hostility	1.19±1.03	1.70±.81	1.22±.64	8.296	**<0.001**	3.27±.50	.95±.78	**23.086**	**<0.001**
Phobic Anxiety	.73±.71	.89±.74	.61±.67	3.421	**0.001**	1.62±.40	.63±.66	**8.206**	**<0.001**
Paranoid Ideation	1.40±.93	1.91±.97	1.01±.68	9.096	**<0.001**	2.77±.40	1.25±.84	**17.336**	**<0.001**
Psychoticism	.81±.69	1.08±.81	.61±.51	5.925	**<0.001**	1.90±.58	.69±.59	**10.949**	**<0.001**
Global Severity Index	1.18±.67	1.44±.76	.98±.52	6.110	**<0.001**	2.28±.28	1.06±.59	**19.858**	**<0.001**

p<.05: Statistical significance level; BMI: Body Mass Index; Mean± SD: Mean± standard deviation; t:Independent Samples t-test.

Table 4. Correlation of participants' age, BMI, FNDT, and SCL-90-R subscale scores.

Pearson Correlation	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	1	.101	.097	-.055	-.143	-.072	-.078	-.275	.035	-.159	.074	-.099	-.394
		.074	.088	.332	**.011***	.203	.167	**.000***	.535	**.005****	.194	.081	**.000***
2. BMI		1	.188	.086	.070	.067	.045	-.049	.107	-.048	.086	.074	-.044
			.001	.130	.221	.237	.432	.388	.059	.394	.128	.192	.609
3. Soma			1	.598	.529	.594	.660	.345	.553	.395	.545	.683	.074
				.000*	**.000***	**.000***	**.000***	**.000***	**.000***	**.000***	**.000***	**.000***	.394
4. OC				1	0.670	.719	.673	.483	.615	.609	.697	.787	.318
					.000*	**.000***	**.000***	**.000***	**.000***	**.000***	**.000***	**.000***	**.000***
5. IS					1	.841	.815	.711	.734	.728	.817	.905	.413
						.000*	**.000***	**.000***	**.000***	**.000***	**.000***	**.000***	**.000***
6. Depr						1	.836	.646	.737	.697	.827	.914	.339
							.000*	**.000***	**.000***	**.000***	**.000***	**.000***	**.000***
7. Anx							1	.697	.806	.663	.842	.920	.415
								.000*	**.000***	**.000***	**.000***	**.000***	**.000***
8. Host								1	.521	.710	.681	.782	.514
									.000*	**.000***	**.000***	**.000***	**.000***
9. PA									1	.537	.774	.816	.335
										.000*	**.000***	**.000***	**.000***
10. PI										1	.738	.811	.312
											.000*	**.000***	**.000***
11.Psyc											1	.916	.389
												.000*	**.000***
12. GSI												1	.418
													.000*
13. FNDT													1

p<.05=*, p<.01**, p<.001***; BMI: Body Mass Index; Soma: Somatization; OC: Obsessive-Compulsive; IS: Interpersonal Sensitivity; Depr: Depression; Anx: Anxiety; Host: Hostility; PA: Phobic Anxiety; PI: Paranoid Ideation; Psyc: Psychoticism; GSI: Global Severity Index; FNDT:Fagerström Nicotine Dependency Test total score; SCL-90-R: Symptom Checklist 90-Revised.

In our study, it was observed that participants who use alcohol have significantly higher levels of psychological distress symptoms (obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia, psy-

Table 5. Risk Factors for Tobacco Use - Logistic Regression Bacward Conditional Model.

Risk factors		B	S.E.	p	Exp(B)	95% C.I.for EXP(B)	
						Lower	Upper
Step 1[a]	Age	-.081	.026	.002	.922	.876	.970
	Gender(1)	1.981	.481	.000	7.251	2.824	18.619
	Income			.496			
	Income(1)	.803	.534	.133	2.233	.784	6.365
	Income(2)	.581	.520	.264	1.788	.645	4.958
	Income(3)	.373	.787	.636	1.452	.311	6.785
	Education			.854			
	Education(1)	-.230	.412	.576	.794	.354	1.782
	Education(2)	-.071	.575	.902	.932	.302	2.875
	Somatization	-.304	.311	.329	.738	.401	1.358
	Obsessive-Compulsive	-.271	.358	.449	.763	.378	1.539
	Hostility	.059	.253	.815	1.061	.646	1.742
	Phobic Anxiety	.387	.372	.299	1.472	.710	3.053
	Paranoid Ideation	1.354	.304	.000	3.873	2.133	7.031
	Psychoticism	.021	.540	.969	1.021	.354	2.943
	Constant	1.471	1.539	.339	4.354		
Step 8[a]	Age	-.065	.021	**.002**	.937	.900	.976
	Gender(1)	2.373	.321	**.000**	10.727	5.721	20.113
	Paranoid Ideation	1.233	.188	**.000**	3.431	2.373	4.963
	Constant	.422	1.242	.734	1.525		

p<0.05:Statistical significance level.

chosis) and general symptom severity compared to those who do not use alcohol. It has been shown that the SCL-90-R scores of patients who are addicted to alcohol are higher than the general population [29]. It has been reported that patients with alcohol use disorder who stay away from alcohol exhibit lower levels of psychological distress symptoms compared to patients who repeat alcohol use [30]. Focusing on psychological distress symptoms in alcohol use disorder will contribute to reducing both relapse and morbidity and mortality in the long term after treatment.

In our study, it was found that smokers had significantly higher levels of psychological distress symptoms (obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia, psychosis) and overall symptom severity compared to non-smokers. A significant and positive relationship was detected between psychological distress symptoms (obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia, psychosis) and the severity of nicotine addiction. Furthermore, it was determined that paranoia is a predictor for tobacco use and a one-unit increase in paranoia increases the likelihood of smoking by 3.4 times. The literature indicates that individuals with mental health problems use tobacco approximately two to three times more than those without, and about one-third of smokers report mental health problems [31]. The causal link between smoking and mental health has not yet been fully understood. There are studies in the literature reporting that tobacco use could be a causal risk factor for the development of mental problems [32], as well as studies reporting that mental problems could lead to tobacco use [3, 33]. In a recent study involving individuals with mental disor-

ders, it was found that the majority of participants smoked to reduce stress and control psychiatric symptoms [12]. The literature also suggests that quitting smoking is associated with an improvement in mental health symptoms compared to smoking [34]. In a study, it was found that the likelihood of those diagnosed with any psychiatric disorder currently smoking was 3.23 times higher than those without a diagnosis, and the likelihood of those with a psychiatric diagnosis quitting smoking was found to be 25% lower [3]. In a large sample representing the adult population in Germany, which included 11,937 participants, it was reported that current smokers were more likely to report symptoms of anxiety, depression, and general psychological distress compared to those who never smoked [31]. In a study conducted with a sample of adolescent twins (N = 3,787 pairs; average age = 16.16 years), it was found that smokers were significantly more likely to experience paranoia compared to non-smokers, and smoking predicted significantly higher scores of paranoia compared to not smoking [35].

This study has some limitations. The first can be considered the use of self-report scales in our research. Even though the data was collected anonymously, participants may have been hesitant to disclose information related to addiction. Secondly, the cross-sectional nature of our research does not provide sufficient answers in terms of causality. However, the results indicate a strong relationship between tobacco and alcohol use and demographic variables and symptoms of psychological distress, even if they do not determine causality. The absence of a psychiatric examination can also be considered as one of the limitations of this study. The findings can only be generalized to samples aged between 50-65 or to the pre-elderly

population. Therefore, it is thought that future studies would be beneficial if conducted with more heterogeneous groups in terms of age distribution and with larger participation.

Despite its limitations, this study has several strong features. First, the inclusion of individuals aged 50-65 in the study. Second, the evaluation of demographic variables and symptoms of psychological distress, which are potential risk factors for tobacco and alcohol use. Third, our research has demonstrated the relationship between tobacco and alcohol use and demographic variables and symptoms of psychological distress. Our study has provided significant evidence to the related literature by identifying the etiological conditions underlying each of tobacco and alcohol use in the 50-65 age range. Furthermore, our study results have the potential to contribute to the increase in self-awareness related to tobacco and alcohol use in individuals in the early elderly period.

Conclusion

To summarize, it seems that tobacco and alcohol use are also closely related to the symptoms of psychological distress during the entry into old age. Although our study's findings may not be sufficient to provide information about the direction of the relationship, it can be said that preventive interventions for the psychological health of the community could be important in combating tobacco and alcohol use. Looking more specifically at predictive relationships, it appears that paranoid thought, one of the symptoms of psychological distress, is a risk factor for tobacco use in the sample of this study. Considering the scale items, it is striking that items related to rejection, mistrust, and interpersonal problems are mostly present in paranoid thought. It can be thought that individuals experiencing these difficulties may be using tobacco to cope, which could make them prone to addiction.

Ethical approval

This research received ethical approval from the Ethics Committee of the Atatürk University School of Medicine (Approval Code: B.30.2.ATA.0.01.00/733).

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