ORIGINAL RESEARCH ORİJİNAL ARAŞTIRMA

Investigation of the Loneliness Perceptions and Psychological Dependence on Smoking in Elderly Individuals Living in Nursing Homes: Descriptive and Relationship Seeking Study

Huzurevinde Yaşayan Yaşlı Bireylerin Yalnızlık Algıları ile Sigaraya Psikolojik Bağımlılık Durumlarının İncelenmesi: Tanımlayıcı ve İlişki Arayıcı Çalışma

Sevinç YILDIRIMª, Yeliz ÇULHAᵇ, Funda BÜYÜKYILMAZᵇ, Emine ERGİNᶜ

ªPrivate Nursing, İstanbul, Türkiye
ᵇİstanbul University-Cerrahpaşa Florence Nightingale Faculty of Nursing, Department of Fundamental of Nursing, İstanbul, Türkiye
ᶜUniversity of Health Sciences Hamidiye Faculty of Health Sciences, Department of Midwifery, İstanbul, Türkiye

ABSTRACT Objective: In the study, it was aimed to determine the relationship between the loneliness perceptions of elderly people living in nursing homes and their psychological dependence on smoking. **Material and Methods:** A descriptive and relationship seeking study design was used. The study was conducted with 116 elderly individuals (residents) living in a nursing home in İstanbul between October 2022-December 2022. Research data were collected using a "Descriptive Information Form" the "Loneliness Scale for the Elderly" and the "Test to Assess Psychological Dependence on Smoking (TAPDS)". **Results:** The mean age of the elderly individuals was 68.54±8.84 years, 83.6% were male, and 92.2% were single. Their mean score was 12.85±4.79 on the total loneliness scale and 53.91±10.83 on the TAPDS. It was concluded that the mean loneliness and psychological dependence on smoking scores of the elderly individuals were at moderate levels. A positive significant relationship was determined between loneliness and psychological dependence on smoking (p<0.05). It was found that the variables of elderly individuals' status of seeing family members, relatives, or friends, having visitors and the duration of stay in the nursing home affected the level of loneliness and that the number of cigarettes smoked a day was effective in psychological dependence on smoking (p<0.05). **Conclusion:** In the study, it is recommended that elderly individuals be directed to social activities that will help them take an active role in life so that their loneliness perceptions and psychological dependence on smoking can be reduced.

Keywords: Nursing home; smoking; loneliness; aging

ÖZET Amaç: Araştırmada, huzurevinde yaşayan yaşlı bireylerin yalnızlık algıları ile sigaraya psikolojik bağımlılık durumları arasındaki ilişkinin belirlenmesi amaçlandı. **Gereç ve Yöntemler:** Tanımlayıcı ve ilişki arayıcı türdeki araştırma, Ekim 2022-Aralık 2022 tarihleri arasında İstanbul ilinde bir huzurevinde yaşayan 116 yaşlı birey (sakin) ile gerçekleştirildi. Araştırma verileri, "Tanıtıcı Bilgi Formu", "Yaşlılar İçin Yalnızlık Ölçeği" ve "Sigaranın Psikolojik Bağımlılığını Değerlendirme Ölçeği" kullanılarak toplandı. **Bulgular:** Yaşlı bireylerin yaş ortalamasının 68,54±8,84 yıl, %83,6'sının erkek ve %92,2'sinin bekâr olduğu saptandı. Bireylerin Yalnızlık Ölçeği toplam puan ortalamasının 12,85±4,79, Sigaranın Psikolojik Bağımlılığını Değerlendirme Ölçeği toplam puan ortalamasının ise 53,91±10,83 olduğu belirlendi. Yaşlı bireylerin yalnızlık ve sigaraya psikolojik bağımlılık puan ortalamalarının orta düzeyde olduğu belirlendi. Yalnızlık ve sigaraya psikolojik bağımlılık arasında pozitif yönde anlamlı ilişki belirlendi (p<0,05). Yaşlı bireylerin aile, akraba ya da arkadaş ile görüşme durumu ve ziyaretçinin gelmesi, kurumda geçirilen süre değişkenlerinin yalnızlık düzeyi; günlük tüketilen sigara sayısının ise sigaraya psikolojik bağımlılık üzerinde etkili olduğu görüldü (p<0,05). **Sonuç:** Araştırmada, yaşlı bireylerin yalnızlık algılarının ve sigaraya olan psikolojik bağımlılıklarının azaltılabilmesi için hayatın içinde aktif rol almalarını sağlayan sosyal aktivitelere yönlendirilmeleri önerilir.

Anahtar Kelimeler: Bakım evleri; sigara içme; yalnızlık; yaşlanma

Correspondence: Sevinç YILDIRIM
Private Nursing, İstanbul, Türkiye
E-mail: sevinc-yldrm@hotmail.com

Peer review under responsibility of Turkiye Klinikleri Journal of Nursing Sciences.

Nowadays, health services provided in parallel with the developing and changing technology have made considerable progress, life expectancy has increased, and the population of elderly individuals is expanding globally, including in our country.[1-3] The increasing elderly population brings on problems in many areas, such as nutrition, shelter, self-care, meeting household needs, access to health services, personal communication, and socialization, which are individuals' basic needs.[2,4,5]

Nursing homes are seen as a requirement of modern society, where elderly people can continue their daily lives, all their needs are met, their care practices are sustained, and the family environment they are accustomed to is maintained. The growing elderly population rate is increasing the number of elderly people moving to nursing homes.[1,6]

Loneliness is a distressing negative emotion resulting from the discrepancy between what the person desires and what he/she has achieved.[7] It is known that the biological, psychological, and social changes and losses experienced during old age pave the way for the individual's loneliness. The fact that elderly individuals who used to take an active role in life and were productive are left in the background after their retirement and cannot fulfill their old roles by changing from a producer to a consumerleads them to loneliness.[1,4,5,7,8] Trybusińska and Saracen, found that the level of loneliness felt as people get older increasedafter the age of 76.[9] According to the World Health Organization, the level of loneliness is above average in those staying in long-term nursing establishments.[10]

It is known that there are 1.3 billion smokers globally, and this figure is estimated to reach 1.7 billion in 2025. Of the Organization for Economic Co-Operation and Development countries, Türkiye ranks the highest in terms of daily smoking rates (28%). According to the "World Health Organization Global Tobacco Use Trends 2000-2025" report, the frequency of smoking constantly increases over the age of 45, and the rate of smoking is high in men between the ages of 45-54 and women between the ages of 55-64.[11,12] Smoking, which is a critical health hazard for all age groups, is a more serious problem in terms of morbidity and mortality in elderly individuals.[13,14] Of the people aged ≥65, approximately 12% in Europe and 9% in America continue to smoke. The rate of smokers in Türkiye is 15.2% in 65-74 age group and 5.9% in those aged ≥75.[15,16]

Smoking in individuals is a multifactorial phenomenon. In addition to the pharmacological role of chemical elements positively reinforcing smoking, it also has a psychosocial dimension. Feelings during smoking, such as happiness and joy, spending time with others, activity, feeling of self-confidence, and seeing it as a social status, play an active role in cigarette addiction. Also, it has been emphasized that loneliness prevents quitting smoking and that emotional problems play an important role.[7,17] It has also been stated that smoking can even be a "friend" in situations of loneliness and reduce anxiety.[6]

Individuals who lack social connections and feel lonely have less control over their impulses and are less likely to engage in health-promoting behaviors and they are more likely to engage in harmful behaviors that endanger their health, such as excessive use of cigarettes, alcohol, and overeating.[7,18,19] In a study conducted by Choi and DiNitto with elderly individuals, a significant relationship was detected between smoking and high social isolation.[14] Cohen-Mansfield, in a study with elderly individuals, found that elderly people who smoked constantly tended to be lonelier.[20] Ribeiro et al. found that elderly individuals who were lonely had a higher prevalence of smoking and that loneliness was strongly associated with it.[7]

There are studies in the literature on the relationship between loneliness and smoking in elderly people.[7,14,18-20] In this study, it was aimed to determine the relationship between loneliness perceptions and psychological dependence on smoking in elderly people living in nursing homes.

Research Questions

■ What are the loneliness perceptions of elderly people staying in care organizations and the level of their psychological dependence on smoking?

■ Is there a relationship between the loneliness perception of people staying in care organizations and their psychological dependence on smoking?

What are the individual variables that affect the loneliness perceptions of individuals elderly people staying in care organizations and the level of their psychological dependence on smoking?

■ MATERIAL AND METHODS

STUDY DESIGN

A descriptive and relationship seeking study design was employed.

STUDY POPULATION AND SAMPLE

The study was conducted in a nursing home with 430 elderly individuals in İstanbul province. The population of the research consisted of 275 elderly people who lived in the nursing home and smoked. No sample selection procedure was conducted; it was decided to include the entire population in the study by using the complete count sampling method. The sample of the study consisted of 116 elderly individuals who were in the institution between October 2022-December 2022, met the research inclusion criteria, and agreed to participate in the research. According to the sample analysis with a known population, when the smoking frequency was taken as 64%, it was seen that at least 113 people should be included in the study with an accuracy of 80% and a margin of error of 5%.

INCLUSION CRITERIA

Individuals who were willing to join the study, smoked, had been staying in the institution for at least one month, and did not have a psychiatric diagnosis were taken to the study sample.

DATA COLLECTION INSTRUMENTS

The instruments were a "Personal Data Form", "The Loneliness Scale for the Elderly (LSE)" and the "Test to Assess Psychological Dependence on Smoking (TAPDS)".

Personal Data Form: The researcher designed this questionnaire following a review of the literature to collect descriptive information about the elderly individuals included in the research sample, considering factors that may affect loneliness and evaluation of psychological dependence on smoking.[6,7] The form included items about individuals living in the nursing home, such as age, gender, educational status, marital status, length of stay in the institution, alcohol and cigarette use, family status, and having visitors.

LSE: Gierveld and Kamphuls created this tool to assess individuals' feelings of loneliness, and Tilburg and Gierveld revised it.[21,22] Akgül and Yeşilyaprak performed its Turkish validity and reliability. Cronbach's alpha of the scale was 0.79 for emotional loneliness, 0.81 for social loneliness, and 0.85 for the total scale. This instrument has a three-point Likert evaluation system, has 11 questions, and two subscales. Six items of the scale (2, 3, 5, 6, 9, and 10), which are used to assess emotional loneliness, are negative. Five (1, 4, 7, 8, and 11) are positive and are used to assess social loneliness. The total loneliness score is obtained by summing the dimension scores. Five of the items are scored in reverse. Positive items (1, 4, 7, 8, 11) are scored with the following options: yes (0 points), possible (1 point), and no (2 points), while negative items are scored in reverse (yes: 2; possible: 1; no: 0). Scores on the scale vary from 0 to 22.[23] Cronbach's α value obtained in the present study was 0.77.

TAPDS: Ponciano-Rodríguez et al. developed this scale to evaluate individuals' psychological dependence on smoking.[24] Bardakci et al. performed its Turkish reliability and validity analysis. Cronbach's alpha value was found to be 0.93. The scale has a three-point Likert-type scoring structure, 25 items, and four subscales. The score that can be obtained from the scale varies from 25 to 75. High scores on the scale show high levels of psychological dependence on smoking. A score from 25 to 41 is considered mild dependence, 42-58 moderate dependence, and 59-75 severe dependence.[17] Cronbach's α value obtained in the present study was determined as 0.93.

DATA COLLECTION PROCEDURES

The research data were collected between October 2022-December 2022 by the principal researcher (who has a PhD in nursing principles, 17 years of clinical experience, and 9 years of experience working in a nursing home). It was aimed to reach the en-

tire sample by using the complete count sampling method. Research data were collected through face-to-face individual interviews taking approximately 15 minutes from elderly people who met the research inclusion criteria and volunteered to participate in the study, at their convenience and in their rooms. Data collection process was carried out by the responsible researcher (who had a doctorate in the field of nursing principles and 17 years of clinical experience and had worked in a nursing home for 9 years) by following the measures to protect the health of elderly individuals living in the nursing home, at times when elderly individuals were convenient, in their rooms, and face to face. Each interview lasted approximately 15 minutes.

DATA ANALYSIS

Data were analyzed using SPSS 22 statistical software for Windows (SPSS, Chicago, IL, USA). Frequency, percentage, mean, standard deviation, minimum, and maximum values were calculated to present descriptive statistics for categorical and continuous variables. Shapiro-Wilks, skewness, and kurtosis values were used to determine the suitability of the data for normal distribution. The Pearson correlation coefficient was used to examine the relationship between two normally distributed quantitative variables. A simple regression analysis was performed. Significance was set at $p<0.05$. Kurtosis and skewness test results are shown in Table 1.

ETHICS

The principles of the Declaration of Helsinki were followed in the study. To conduct the research, the approval of the İstanbul University Cerrahpaşa Social and Human Sciences Research Ethics Committee (date: October 4, 2022; no: 2022/304) and the institutional approval of the Darülaceze Presidency (a charitable institution that provides accommodation for the elderly) were obtained. Individuals staying in the nursing institution were informed about the purpose of the research, that the information received would not be used for purposes other than the stated ones, and that the principle of confidentiality would be followed. After that, verbal and written consent of individuals volunteering to participate in the research was obtained.

RESULTS

According to the elderly individuals' descriptive characteristics, the mean age was 68.54±8.84 years, the majority (83.6%) was male, 73.3% were primary school graduates, and 92.2% were single. It was determined that the spouses of three married elderly couples also lived in the nursing home and that the spouses of three individuals lived at home with their children. Also, 86.2% of elderly individuals had a chronic disease, 84.5% constantly used medication related to it, 94% did not use alcohol, 85.3% had a family, relatives, or friends, 62.9% saw their family members, relatives, or friends, and 73.3% had visitors. It was determined that the average duration of smoking was 37.39±15.02 year, the average number of cigarettes smoked per day was 20.69±12.42, and that the average length of stay in the institution was 50.17±62.04 months (Table 1).

FINDINGS ABOUT THE DISTRIBUTION OF SCORES ON THE LSE AND THE TAPDS

Participants' mean score was 12.85±4.79 on the total LSE, 8.19±3.51 on the emotional loneliness subscale, and 4.66±2.83 on the social loneliness subscale (Table 2). The mean score of elderly individuals on the TAPDS was 53.91±10.83 on the total scale, 18.38±4.20 on the emotional modulator, 16.04±4.37 on the image/self-rewarding, 11.53±3.11 on the indifference, and 7.96±1.94 on the social acceptance subscale.

FINDINGS ON DESCRIPTIVE CHARACTERISTICS AFFECTING THE LONELINESS AND PSYCHOLOGICAL DEPENDENCE LEVELS OF OLDER INDIVIDUALS

A statistically noteworthy variance was observed between the variables of marital status, having a family, relatives, or friends, seeing them, and having visitors and the mean social loneliness subscale score, and between the variables of seeing the family members, relatives, and friends and having visitors and the mean LSE total score ($p<0.05$). Accordingly, the levels of social loneliness and general loneliness were lower in elderly people who were married, had relatives or friends, were in contact with them, and had regular visitors (Table 3).

TABLE 1: Elderly individuals' descriptive characteristics (n=116).					
Characteristics		**n**	**%**	**Skewness**	**Kurtosis**
Age (year)					
X̄±SD=68.54±8.84 Minimum-Maximum=42-91				0.262	0.255
Gender	Female	19	16.4	1.841	1.413
	Male	97	83.6		
Education	Primary education	85	73.3		
	High school	24	20.7	1.625	1.617
	University	7	6		
Marital status	Married	9	7.8	3.429	9.928
	Single	107	92.2		
Chronic diseases	Yes	100	86.2	2.128	2.571
	No	16	13.8		
Regular medication use	Yes	98	84.5	1.930	1.754
	No	18	15.5		
Alcohol use	Yes	7	6	3.741	12.207
	No	109	94		
Status of having a family, relatives or friends	Yes	99	85.3	2.025	2.138
	No	17	14.7		
Status of seeing the family members, relatives or friends	Yes	73	62.9	0.542	1.736
	No	43	37.1		
Status of having visitors	Yes	85	73.3	1.052	0.909
	No	31	26.7		
Duration of smoking (year)					
X̄±SD=37.39±15.02 Minimum-Maximum=1-66.67				0.643	0.066
Number of cigarettes smoked a day (pieces)					
X̄±SD=20.69±12.42 Minimum-Maximum=1-80				0.225	0.446
Length of stay in the institution (months)					
X̄±SD=50.17±62.04 Minimum-Maximum=1-288				2.102	4.407

SD: Standard deviation.

TABLE 2: Distribution of the elderly individuals' mean scores on the LSE and TAPDS.				
LSE	**X̄**	**SD**	**Minimum**	**Maximum**
Emotional loneliness	8.19	3.51	0	12
Social loneliness	4.66	2.83	0	10
Total score*	12.85	4.79	0	22
TAPDS	**X̄**	**SD**	**Minimum**	**Maximum**
Emotional modulator	18.38	4.20	9	24
Image/self-rewarding	16.04	4.37	8	24
Indifference	11.53	3.11	4	15
Socialacceptance	7.96	1.94	4	12
TAPDS total score*	53.91	10.83	26	75
* r=0.259, p=0.005				

*p<0.05 statistically significant; TAPDS: Test to Assess Psychological Dependence on Smoking; LSE: Loneliness Scale For the Elderly; SD: Standard deviation.

A noteworthy association was detected between the duration of the elderly individuals' stay in the institution and emotional loneliness subscale score, between the number of cigarettes smoked a day and how long the person stayed in the establishment and the mean social loneliness score, and between how long the person stayed in the establishment and the mean LSE total score (p<0.05) (Table 4). In addition, a noteworthy association was detected between the number of cigarettes smoked daily by elderly indi-

TABLE 3: Distribution of mean scale scores according to individual characteristics of elderly individuals.

Characteristics		Loneliness Scale for the Elderly			TAPDS				
		Emotional loneliness	Social loneliness	Total score	Emotional modulator	Image/self-rewarding	Indifference	Social acceptance	Total TAPDS score
Gender	Female	8.58±2.74	3.47±2.70	12.05±4.45	19.59±3.42	15.68±3.86	11.47±2.99	7.68±1.95	54.42±9.52
	Male	8.11±3.66	4.90±2.81	13.01±4.86	18.14±4.31	16.11±4.47	11.55±3.14	8.01±1.95	53.81±11.11
	t; p	0.526; 0.051	2.03; 0.857	0.796; 0.339	1.368; 0.109	0.390; 0.697	0.093; 0.926	0.668; 0.505	0.222;0.824
Education	Primary education	8.04±3.61	4.71±2.87	12.74±4.81	18.28±4.43	15.69±4.37	11.64±3.28	7.79±1.86	53.40±11.10
	High school	8.42±3.37	3.96±2.49	12.38±4.92	18.63±3.52	16.32±3.97	11.00±2.59	8.46±2.06	55.00±9.59
	University	9.29±2.98	6.57±2.94	15.86±3.34	18.71±3.82	17.29±5.59	12.14±2.67	8.29±2.43	56.43±12.48
	f; p	0.468; 0.627	2.400; 0.095	1.533; 0.220	0.085; 0.919	1.036; 0.358	0.530; 0.590	1.228; 0.297	0.401;0.671
Marital status	Single	8.10±3.62	4.84±2.84	12.94±4.94	18.38±4.04	16.03±4.28	11.68±3.08	7.93±1.89	54.03±10.44
	Married	8.88±1.13	2.38±1.85	11.25±1.91	18.88±6.24	16.75±5.75	9.75±3.20	8.38±2.72	53.75±16.11
	t; p	0.598; 0.551	**2.416; 0.017**	0.962; 0.338	0.319; 0.750	0.449; 0.654	0.348; 0.091	0.616; 0.539	0.070; 0.945
Chronic diseases	No	7.38±3.65	5.56±3.01	12.94±5.14	17.31±3.75	15.44±4.10	10.81±3.52	7.69±2.21	51.25±9.45
	Yes	8.32±3.49	4.52±2.79	12.84±4.76	18.55±4.25	16.14±4.42	11.65±3.04	8.00±1.90	54.34±11.02
	t; p	0.999; 0.320	1.373; 0.173	0.075; 0.940	1.097; 0.275	0.596; 0.552	1.002; 0.319	0.597; 0.552	-1.06;0.291
Regular medication use	No	8.44±3.79	5.39±2.68	13.83±5.24	17.78±3.84	15.11±4.10	11.17±3.19	7.50±2.04	51.56±9.51
	Yes	8.14±3.48	4.53±2.85	12.67±4.71	18.49±4.27	16.21±4.41	11.60±3.10	8.04±1.92	54.35±11.04
	t; p	0.333; 0.739	1.184;0.239	0.944; 0.347	0.660;0.510	0.985; 0.327	0.545; 0.587	1.088; 0.279	-1.01;0.317
Status of having a family, relatives, or friends	No	7.53±3.78	6.94±1.75	14.47±4.13	16.76±4.42	17.06±3.73	11.71±3.41	7.94±1.60	53.47±9.57
	Yes	8.30±3.47	4.27±2.80	12.58±4.86	18.66±4.11	15.87±4.46	11.51±3.07	7.96±2.00	53.99±11.07
	t; p	0.838; 0.404	**3.793; <0.001**	1.515; 0.132	1.733; 0.086	1.39; 0.301	0.245; 0.807	0.036; 0.971	0.182;0.856
Status of seeing the family members, relatives, or friends	No	8.86±3.37	5.95±2.46	14.81±3.45	17.88±4.08	16.16±4.18	11.86±3.22	7.95±1.79	53.86±10.18
	Yes	7.79±3.56	3.90±2.78	11.70±5.11	18.67±4.26	15.97±4.50	11.34±3.04	7.96±2.04	53.95±11.27
	t; p	1.589; 0.115	**4.004; <0.001**	**3.550; 0.001**	0.976; 0.331	0.226; 0.822	0.867; 0.388	0.014; 0.988	0.041;0.968
Status of having visitors	No	8.87±3.32	6.45±1.98	15.32±3.38	17.84±4.20	16.32±4.53	11.23±3.57	8.00±1.93	53.39±11.33
	Yes	7.92±3.578	3.98±2.82	11.89±4.92	18.62±4.21	15.96±4.35	11.67±2.95	7.94±1.97	54.19±10.74
	t; p	1.292; 0.199	**4.490; <0.001**	**3.575; 0.001**	0.883; 0.379	0.388; 0.699	0.672; 0.503	0.145; 0.885	-0.351;0.726

TAPDS: Test to Assess Psychological Dependence on Smoking.

TABLE 4: The relationship between descriptive characteristics of elderly individuals and the mean scale scores.

Characteristics		Loneliness Scale for the Elderly			TAPDS				
		Emotional loneliness	Social loneliness	Total score	Emotional modulator	Image/self-rewarding	Indifference	Social acceptance	Total TAPDS score
Age (year)	r value	0.040	0.047	0.057	-0.123	-0.108	0.063	0.0173	-0.105
	p value	0.669	0.621	0.545	0.191	0.249	0.502	0.064	0.266
Duration of smoking (year)	r value	0.007	0.156	0.097	0.036	0.025	0.210	0.044	0.092
	p value	0.944	0.095	0.301	0.701	0.791	**0.023**	0.638	0.325
Number of cigarettes smoked daily (pieces/packages)	r value	-0.119	0.275	0.076	0.053	0.263	0.225	0.164	0.221
	p value	0.205	**0.003**	0.420	0.570	**0.004**	**0.015**	0.079	**0.017**
Length of stay in the institution (months)	r value	-0.258	-0.253	-0.339	0.016	0.069	0.075	-0.066	-0.055
	p value	**0.005**	**0.006**	**<0.001**	0.864	0.459	0.422	0.484	0.557

TAPDS: Test to Assess Psychological Dependence on Smoking.

viduals and the mean image/self-rewarding subscale score, between the monthly and daily cigarette use and the mean indifference subscale score, and the number of cigarettes smoked daily and the mean TAPDS total score (p<0.05) Total LSE and TAPDS scores yielded a weak and highly significant positive relationship (p<0.01) (Table 4).

DISCUSSION

People are social beings who interact with others and the environment to feel a sense of belonging and establish and maintain long-term interpersonal bonds.[7] Some changes emerging with old age, such as decreasing physical activity, lost social relationships, health problems, low income, and the environment, form risk factors for loneliness. While people of all ages can feel lonely, the rate is higher in young adults and elderly individuals (>75 years old).[25]

As a result of this research, it was determined that the loneliness levels and the psychological dependence levels on smoking in older individuals staying in care establishments were at moderate levels. Elderly individuals' mean scores on the total LSE and TAPDS yielded a weak and highly significant positive relationship (p<0.05). Therefore, it can be said that as the level of loneliness increases, smoking due to psychological dependence also increases. It was determined that 37% of hospitalized patients in a study by Just et al., 39.6% of the elderly in a study by Trybusińska and Saracen, and 56% of elderly people in a study by Drageset et al. experienced loneliness.[9,25,26] Ribeiro et al. found that the prevalence of smoking among elderly individuals was 10.4%.[7] A meta-analysis study showed that social isolation was associated with a high risk of mortality (26%) and that this risk was the same as the one caused by the use of fifteen cigarettes daily and an alcohol use disorder.[27] In a study by Cohen-Mansfield with elderly individuals, it was found that elderly people who regularly smoked tended to be lonelier.[20] Choi and DiNitto found a significant relationship between the smoking habits of older adults who did not have one to talk to and those who did.[14]

It was determined that the individual variables that affected the loneliness perception of elderly people were marital status; having a family, relatives, or friends; contact with the family, relatives, or friends; the number of cigarettes smoked a day; and duration of stay in the institution and that the individual variables that influenced the psychological dependence on smoking were duration of smoking and the

number of cigarettes smoked a day. It was observed that variables, such as marital status, status of having a family, relatives, or friends, and status of seeing the family members, relatives, or friends, impacted social loneliness scores (p<0.05). Accordingly, it was determined that the social loneliness and general loneliness levels of the elderly who were married, had relatives or friends, met with them, and had regular visitors were lower (Table 3). An individual's social connections are associated with positive effects such as self-esteem and happiness and are seen as a protective factor for loneliness.[7,28] Loss of a spouse, living away from family, lack of social network, and need for care are risk factors for loneliness.[27] Drageset et al. stated that marital status and loneliness had a noteworthy association.[26]

Significant relationships were determined between how long the elderly people stayed in the care establishment and the mean emotional loneliness score, between the number of cigarettes smoked a day and how long they stayed in the care establishment and the mean social loneliness score, and between how long they stayed in the care establishment and the mean LSE total score (p<0.05) (Table 4). Accordingly, it was found that older individuals felt less lonely as their stay in the institution increased. According to this result, it can be thought that individuals staying in the institution do not feel lonely as their stay gets longer because they make friends, establish social relationships, and participate in social activities. In addition, significant relationships were determined between the number of cigarettes smoked a day by elderly individuals and the mean score on the image/self-rewarding subscale, between year and daily cigarette use and the mean score on the indifference subscale, and between the number of cigarettes smoked a day and the mean TAPDS total score (p<0.05) (Table 4). These results showed that the level of psychological dependence on smoking in older individuals increased as the number of cigarettes they smoked increased.

Chiew et al. found that individuals who smoked had less social interaction.[29] In a meta-analysis, reported an association between loneliness and tobacco use in half of the analyzed studies.[30] In a study con-

ducted with elderly individuals in Brazil, it was found that elderly individuals who "often or always" felt lonely had a higher prevalence of smoking.[7]

LIMITATIONS

Data about loneliness perceptions and psychological dependence on smoking are limited to the sample included in this study. This suggests that the research results can only be generalized to this group.

CONCLUSION

In conclusion, the mean scores of elderly individuals staying in the care institution on the LSE and TAPDS were at moderate levels. In addition, variables that had an impact on loneliness and psychological dependence on smoking and that needed to be taken into consideration in the care of individuals (such as seeing family members, relatives, or friends, having visitors, how long they stayed in the establishment, and the count of cigarettes smoked a day) were determined.

Nurses working in nursing homes must reduce feelings of loneliness by planning social events in the institution and ensuring the participation of elderly individuals in the activities. In addition, it may be recommended to inform elderly individuals living in nursing homes about the psychological dependence on smoking and to implement approaches to coping with dependence.

REFERENCES

1. Artan T, Irmak HI. Huzurevindeki yaşlıların huzurevinde yaşlanmaya ilişkin bakış açılarının değerlendirilmesi: İstanbul Bahçelievler, Zeytinburnu ve Sultangazi huzurevi örneği [Evaluation of the perspective of aging in nursing home of elderly living in nursing homes: sample of İstanbul Bahçelievler, Zeytinburnu and Sultangazi nursing home]. Toplum ve Sosyal Hizmet. 2018;29(2):51-70. [Link]

2. Çataloğlu S. Yaşlılık, değer ve teknoloji [Old age, value and technology]. Uluslararası İnsan Çalışmaları Dergisi. 2018;1(1):25-33. [Crossref]

3. Wilson MA, Kurrle SE, Wilson I. Understanding Australian medical student attitudes towards older people. Australas J Ageing. 2018;37(2):93-8. [Crossref] [PubMed]

4. Ağar A. Yaşlılarda ortaya çıkan psikolojik değişiklikler [Psychological changes in the elderly]. Geriatrik Bilimler Dergisi. 2020;3(2):75-80. [Crossref]

5. Akbaş E, Taşdemir Yiğitoğlu G, Çunkuş N. Yaşlılıkta sosyal izolasyon ve yalnızlık [Social isolation and loneliness in elderly]. Uluslararası Toplum Araştırmaları Dergisi. 2020;15(26):4540-62. [Crossref]

6. Yong B, Lin R, Xiao H. Factors associated with nursing home adjustment in older adults: a systematic review. Int J Nurs Stud. 2021;113:103790. [Crossref] [PubMed]

7. Ribeiro TCS, Barros MBA, Lima MG. Smoking and loneliness in older adults: a population-based study in Campinas, São Paulo State, Brazil. Cad Saude Publica. 2022;38(3):e00093621. [Crossref] [PubMed]

8. Doğan S, Başer M. Yaşlılarda yalnızlık: bir saha araştırması [Loneliness in the elderly: a field study]. Journal of Health Sciences and Management. 2021;1:1-10. [Link]

9. Trybusińska D, Saracen A. Loneliness in the context of quality of life of nursing home residents. Open Med (Wars). 2019;14:354-61. [Crossref] [PubMed] [PMC]

10. World Health Organization. Advocacy Brief: Social Isolation and Loneliness Among Older People. Decade of Healthy Ageing. Geneva: World Health Organization; 2021. [Link]

11. World Health Organization. WHO Global Report on Trends in Prevalence of Tobacco use 2000-2025. 3rd ed. Geneva: WHO; 2019. [Link]

12. Türkiye Halk Sağlığı ve Kronik Hastalıklar Enstitüsü (TÜSEB-TÜHKE) (İnternet). Dünya tütünsüz günü 31 Mayıs 2021. p.1-9. (Erişim tarihi: 25.05.2023). [Link]

13. Abdullah AS, Simon JL. Health promotion in older adults: evidence-based smoking cessation programs for use in primary care settings. Geriatrics. 2006;61(3):30-4. [PubMed]

14. Choi NG, DiNitto DM. Role of new diagnosis, social isolation, and depression in older adults' smoking cessation. Gerontologist. 2015;55(5):793-801. [Crossref] [PubMed]

15. Bayiz H. Yaşlılık ve sigara. Ertürk A, Bahadır A, Koşar F, editörler. Yaşlılık ve Solunum Hastalıkları. İstanbul: Türkiye Solunum Araştırmaları Derneği; 2018. p.133-6. [Link]

16. Türkiye İstatistik Kurumu [İnternet]. [Erişim tarihi: 1 Haziran 2023]. Türkiye Sağlık Araştırması, 2022. Erişim linki: [Link]

17. Bardakci M, Oztora S, Dagdeviren HN. The reliability and validity analysis of the Turkish version of the test to assess the psychological dependence on smoking. Eurasian Journal of Family Medicine. 2021;10(2):100-6. [Crossref]

18. Hawkley LC, Cacioppo JT. Loneliness and pathways to disease. Brain Behav Immun. 2003;17 Suppl 1:S98-105. [Crossref] [PubMed]

19. Hu X, Wang Y, Huang J, Zheng R. Cigarette affordability and cigarette consumption among adult and elderly chinese smokers: evidence from a longitudinal study. Int J Environ Res Public Health. 2019;16(23):4832. [Crossref] [PubMed] [PMC]

20. Cohen-Mansfield J. Predictors of smoking cessation in old-old age. Nicotine Tob Res. 2016;18(7):1675-9. [Crossref] [PubMed] [PMC]

21. De Jong Gierveld J, Kamphuls F. The development of a Rasch-type loneliness-scale. Applied Psychological Measurement. 1985;9(3):289-99. [Crossref]

22. de Jong Gierveld J, van Tilburg T. Living arrangements of older adults in the Netherlands and Italy: coresidence values and behaviour and their consequences for loneliness. J Cross Cult Gerontol. 1999;14(1):1-24. [Crossref] [PubMed]

23. Akgül H, Yeşilyaprak B. Yaşlılar için yalnızlık ölçeği"nin Türk kültürüne uyarlaması: geçerlilik ve güvenirlik çalışması [Adaption of loneliness scale for elderly into Turkish culture: Validity and reliability study]. Yaşlı Sorunları Araştırma Dergisi. 2015;8(1):34-45. [Link]

24. Ponciano-Rodríguez G, Valerio-Martínez R, Pliego-Rosas C, Córdova-Alcaráz A. Development and evaluation of a new self-rating test to asess the psychological dependence on smoking (TAPDS). J Addict Med Ther. 2015;3(2):1016-26. [Link]

25. Just SA, Seethaler M, Sarpeah R, Waßmuth N, Bermpohl F, Brandl EJ. Loneliness in elderly inpatients. The Psychiatric Quarterly. 2022;93:1017-30. [Crossref] [PubMed] [PMC]

26. Drageset J, Kirkevold M, Espehaug B. Loneliness and social support among nursing home residents without cognitive impairment: a questionnaire survey. Int J Nurs Stud. 2011;48(5):611-9. [Crossref] [PubMed]

27. Freedman A, Nicolle J. Social isolation and loneliness: the new geriatric giants: approach for primary care. Can Fam Physician. 2020;66(3):176-82. [PubMed] [PMC]

28. Zhao X, Zhang D, Wu M, Yang Y, Xie H, Li Y, et al. Loneliness and depression symptoms among the elderly in nursing homes: a moderated mediation model of resilience and social support. Psychiatry Res. 2018;268:143-51. [Crossref] [PubMed]

29. Chiew M, Weber MF, Egger S, Sitas F. A cross-sectional exploration of smoking status and social interaction in a large population-based Australian cohort. Soc Sci Med. 2012;75(1):77-86. [Crossref] [PubMed]

30. Dyal SR, Valente TW. A systematic review of loneliness and smoking: small effects, big implications. Subst Use Misuse. 2015;50(13):1697-716. [Crossref] [PubMed] [PMC]