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Evaluation of depression, self-esteem and hopelessness in patients admitted to psychiatry outpatient clinic in geriatric population during COVID-19 outbreak

Sevler Yildiz¹, Asli Kazgan², Osman Kurt³, Kerim Ugur¹¹Erzincan Binali Yıldırım University, Faculty of Medicine, Department of Psychiatry, Erzincan, Turkey²Siverek State Hospital, Department of Psychiatry, Sanliurfa, Turkey³Firat University, Faculty of Medicine, Department of Public Health, Elazig, Turkey⁴Turgut Ozal University, Faculty of Medicine, Department of Psychiatry, Malatya, Turkey

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Abstract

Infection control measures taken to ensure social isolation during the COVID-19 pandemic process seem to negatively affect the mental health of elderly individuals. In this study, it is aimed to examine the effects of pandemic on the mental health of the elderly. 150 patients over the age of 65 who were admitted to the psychiatry outpatient clinic for the first time during the pandemic period were included in the study. Socio demographic data form, Geriatric Depression Scale (GDS), Beck Hopelessness Scale (BHS), Rosenberg Self Esteem Scale (RSE) were applied to all cases after the psychiatric interview conducted by us. In the geriatric population, it was observed that there was a significant negative correlation between BHS and RSE ($r = -0.241$ $p = 0.003$), and a positive significant relationship between BHS and GDS ($r = 0.478$ $p < 0.001$). There was no significant correlation between RSE and GHS ($r = -0.042$ $p = 0.614$). During the COVID-19 pandemic, it is understood that the hope level and self-esteem of the geriatric population are low, and their mood is depressive. Among the measures to be taken during infection control, we think that elderly people should be given psychosocial support, and thus a healthier environment can be offered to these individuals in terms of physical and mental aspects.

Keywords: COVID-19, geriatrics, depression, self-esteem, hopelessness

Introduction

The World Health Organization (WHO) defined the age of sixty as the transition age to the elderly part of the population in 1980 [1]. In addition, the recent novel coronavirus disease (COVID-19) infection was declared as a pandemic by WHO in 2020. For this reason, most countries have taken some measures to slow the spread of the infection. In some countries, even quarantine and exit restrictions have been applied and these measures are still continuing [2, 3].

Although COVID-19 infection affects people of all ages, it is known that elderly individuals have a higher risk of infection due to their relatively weak immune systems and accompanying chronic disease [4]. In addition, it is observed that this disease is more severe in the geriatric population, secondary infection and respiratory failure develop more frequently, and therefore, intensive care treatment is required more [5].

During the COVID-19 pandemic, many countries took measures in the form of curfews and quarantine in order to protect the elderly from infection. In addition, the geriatric population was visited less frequently by their relatives, worrying about carrying coronavirus infection. Such infection control measures appear to physically protect the elderly, but they also seem to isolate elderly people by making it difficult for them to perform basic daily activities such as shopping and health care. It is observed that both the disease process and the disease prevention measures cause the elderly individuals to experience mental difficulties [3, 6].

It was observed that depression, generalized anxiety disorder, alcohol and substance use disorders increased in the whole population during the pandemic [7]. In studies conducted before the pandemic, it has been shown that social isolation in the elderly has a negative effect on mental health, may cause anxiety, depression and cognitive impairment, and therefore it is an important risk factor on mortality [8]. Although depression is less common in older ages compared to young people, it is known that it progresses more seriously and may result in suicide [9].

Self-esteem is the ability to value and make correct evaluations

*Corresponding Author: Sevler Yildiz, Erzincan Binali Yıldırım University, Faculty of Medicine, Department of Psychiatry, Erzincan, Turkey
E-mail: dr_sevler@hotmail.com

about oneself [10]. It has been shown that physical and psychological diseases affect self-esteem [11]. It is known that hopeless individuals with impaired mental health, decreased self-esteem are at risk for depression [12]. We thought that self-esteem and hopelessness may increase in elderly individuals due to reasons such as staying at home during the pandemic period and loneliness.

In our literature reviews, we could not find studies evaluating depression, self-esteem and hopelessness in patients over 65 years of age during the COVID-19 pandemic process. With this study, we aimed to raise awareness about the neglected mental aspect of elderly individuals and to emphasize that psychosocial measures should come to the fore in terms of elderly patients in the pandemic. Our hypothesis is that depressive symptoms will be seen in elderly individuals during the pandemic period, the level of hopelessness will increase and self-esteem will decrease.

Materials and Methods

The local ethics committee approval was obtained from İnönü University, School of Medicine (Malatya, Turkey). The present study was conducted in compliance with the ethical standards prescribed in the Declaration of Helsinki, 1983 revision. During the pandemic period, the curfew restrictions in our country included individual the age over 65, so those who had not applied to the psychiatry outpatient clinic before, and who applied to the psychiatry outpatient clinic for the first time during the pandemic period, were included in the study. Our sample group consisted of people over 65 years old. 180 people were included in the study, since at least 126 patients should be taken with 95% confidence interval and 80% power in the power analysis performed based on Ozben's [13] study. Those who were unable to answer the questions asked in the study, who had neurological diseases (dementia and serobrovascular disease history), hearing and speech impairments were not included. 13 participants did not accept to participate in the study later, and 17 were excluded from the study because they filled out the scales incompletely. Our working group consists of 80 women and 70 men, a total of 150 people. Informed consent forms were signed by all participants. Interviews were conducted in the psychiatry outpatient clinic, with a duration of at least 30 minutes structured according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) [14]. Anxiety disorders, depressive disorders and other diagnoses that the participants received were determined according to DSM-5. Written consent forms were obtained from all cases before the evaluation. Socio demographic data form, Geriatric Depression Scale (GDS), Beck Hopelessness Scale (BHS), Rosenberg Self Esteem Scale (RSE) were applied to all participants.

Sociodemographic and clinical data form

A socio demographic and clinical data form prepared by us will be used in accordance with the clinical experience and information obtained from the sources screened in the cases and in consideration of the aims of the study. This form, is a semi-structured form that includes socio demographic information such as age, gender, marital status, educational status, profession, place of residence, economic status, family structure, and clinical data such as duration of the physical diseases (metabolic, chronic etc.), presence of psychosocial stressors at the onset of the disease.

Geriatric depression scale (GDS)

It was developed by Yesavage et al. and a validity and reliability study was conducted. It consists of 30 easy-to-answer questions based on self-report, aimed at the elderly. Each response in favor of depression is worth one point, and the other answers are worth zero points. The validity and reliability of the scale has been evaluated and found to be valid in those living in the community, those who receive psychiatric and medical treatment, those who live in inpatient and nursing homes, and those with dementia (Cronbach alpha = 0.82). It is a self-report scale and consists of 30 items and questions are asked to be answered in a yes / no format. Total score refers to depression score. The data of the study were collected by researchers by using a descriptive form prepared by research, and Geriatrics Depression Scale (GDS) tested validity and reliability by Ertan et al. in Turkey. In our study, the Cronbach alpha value was found to be 0.80 [15, 16].

Beck hopelessness scale (BHS)

The scale aiming to measure the future expectations and pessimism level of the individual consists of 20 items. For a feasible individual, statements are marked as true and inapplicable ones are marked as false. A Turkish validity and reliability study was conducted by Durak et al. In our study, the Cronbach alpha value was found to be 0.88 [17, 18].

Rosenberg self esteem scale (RSE)

This scale, developed by Rosenberg, is used in many studies to determine the self-esteem levels of individuals [19]. The scale, which consists of 12 multiple-choice sub-categories, includes 63 items, but today only 10-question belie esteem subscale is used. As a result, the score received is categorized as high (0-1 points), medium (2-4 points) and high (5-6 points). In other words, the higher the score, the lower the self-esteem and vice versa. A Turkish validity and reliability study was conducted (Cronbach = 0.71). In our study, the Cronbach alpha value was found to be 0.69 [20].

Statistical analysis

The analyzes were evaluated in the SPSS (Statistical Package for Social Sciences; SPSS Inc., Chicago, IL) 22 package program. Descriptive data in the study were shown as n,% values in categorical data, and mean $\pm$ standard deviation, median, interquartile range (25-75 percentile values) in continuous data. The suitability of continuous variables to normal distribution was evaluated with the Kolmogorov-Smirnov Test. The Mann-Whitney U test was used for the comparison of variables that did not conform to normal distribution between the two groups, and the Kruskal Wallis test was used for the comparison between more than two groups. Spearman correlation test was used to examine the relationship between continuous variables. At the same time, multiple linear regression analysis was performed to find the predictive power of RSE and GDS scores on BHS. The statistical significance level in the analyzes was accepted as $p < 0.05$.

Results

One hundred and fifty patients with a mean age of 73.4 ± 6.6 (min

= 65-max = 92) were included in the study. 53.3% of these are women and 46.7% are men. The marital status of 10.7% of the patients is single, 47.3% is married and 42% is widow / divorced. It was observed that the participants were mostly at the upper level of primary school (41.3%) and most of them lived in cities (48%). It was observed that the economic status of 42.7% of the patients was low, 46% was medium and 11.3% was high, and the highest rate was unemployed (Table 1).

It was observed that 74.7% of the patients had an organic comorbid disease, and 74.7% of them used medication continuously. A psychiatric diagnosis of 42% of the patients was found to be anxiety disorder, 32% of depressive disorder and 26% of the other. It was determined that 23.3% of the patients had a history of psychiatric treatment in their family, 36.7% smoked, 40% were diagnosed with COVID-19, and 58.3% of them were inpatient.

Table 1. Sociodemographic characteristics of the participants

		Number	%
Age, Median (IQR)		71 (68-78)	
Gender	Female	80	53.3
	Male	70	46.7
Marital status	Single	16	10.7
	Married	71	47.3
	Widowed/Divorced	63	42.0
Educational status	Below primary school	47	31.3
	Primary school	41	27.3
	Above primary school	62	41.3
Residential area	Village	28	18.7
	District	50	33.3
	City	72	48.0
Economic status	Low	64	42.7
	Medium	69	46.0
	High	17	11.3
Profession	Housewife	28	18.7
	Retired	48	32.0
	Working Class	12	8.0
	Unemployed	62	41.3
An organic disease	Yes	112	74.7
	No	38	25.3
Continuously used medicine	Yes	112	74.7
	No	38	25.3
Psychiatric diagnosis	Anxiety	63	42.0
	Depressed	48	32.0
	Other	39	26.0
Family history of psychiatric treatment	Yes	35	23.3
	No	115	76.7
Smoking cigarettes	Yes	55	36.7
	No	95	63.3
Are you diagnosed with COVID?	Yes	60	40.0
	No	90	60.0
If diagnosed with COVID, was he / she received inpatient treatment?	Yes	35	58.3
	No	25	41.7
Has anyone lost a relative due to COVID?	Yes	69	46.0
	No	81	54.0
Degree	1 st degree	34	49.3
	2 nd degree	35	50.7
Fear of getting infected with COVID	Yes	126	84.0
	No	24	16.0
Affected by the curfew	Positive	18	12.0
	Negative	111	74.0
	Neutral	21	14.0

*Descriptive statistics were used

Table 2. Comparison of scale scores according to various parameters

		BHS		RSE		GDS	
		Median (IQR)	p	Median (IQR)	p	Median (IQR)	p
Gender	Female	14 (11-16)	0.694	1.33 (0.875-2)	0.728	17 (14-20)	0.447
	Male	14 (11-16)		1.415 (0.75-2.33)		17 (15-21)	
Marital status	Single	14 (11-14.5)	0.502	1.75 (1-2.5)	0.653	16 (14.5-19.5)	0.131
	Married	14 (10-16)		1.33 (0.75-2)		17 (12-20)	
	Widowed/Divorced	14 (12-16)		1.33 (0.75-2.33)		18 (15-21)	
Educational status	Below primary school	14 (11-16)	0.688	1.56 (0.75-2.5)	0.874	16 (14-17) ^a	<0.001
	Primary school	15 (11-16)		1.33 (1.25-1.92)		20 (17-21) ^b	
	Above primary school	14 (10-16)		1.33 (0.75-2.08)		17 (12-21) ^{a,b}	
Residential area	Village	14 (11-16)	0.337	1.29 (0.75-1.915)	0.505	15.5 (12.5-19) ^a	0.014
	District	14 (11-17)		1.33 (1.25-2.33)		20 (16-21) ^b	
	City	14 (9.5-16)		1.5 (0.75-2.04)		16.5 (14-19) ^a	
Economic status	Low	14 (11-17)	0.364	1.57 (1.25-2.19)	0.071	18 (16-22) ^a	0.001
	Medium	14 (10-15)		1.25 (0.75-2.08)		16 (12-19) ^b	
	High	13 (12-15)		1.25 (0.75-1.83)		16 (14-18) ^b	
Profession	Housewife	14 (11.5-15.5)	0.577	1.79 (0.75-2.5)	0.269	16 (12-17.5) ^a	0.017
	Retired	13.5 (10-16)		1.53 (0.75-2.19)		17 (15-19) ^{a,b}	
	Working Class	15.5 (12-16.5)		2.125 (1.25-2.58)		15.5 (14.5-18) ^{a,b}	
	Unemployed	14 (10-16)		1.33 (0.75-1.83)		18.5 (15-22) ^b	
An organic disease	Yes	14 (11-16)	0.883	1.56 (0.875-2.33)	0.116	17 (14-20)	0.801
	No	13 (11-17)		1.25 (0.75-1.75)		17 (14-21)	
Continuously used medicine	Yes	14 (10.5-16)	0.859	1.56 (0.875-2.33)	0.134	17 (14-20)	0.540
	No	13.5 (11-17)		1.25 (0.75-1.75)		17 (14-21)	
Psychiatric diagnosis	Anxiety	14 (10-15) ^a	<0.001	1.5 (0.75-2.5)	0.298	18 (15-20) ^a	0.015
	Depressed	15 (14-17) ^b		1.33 (1.25-1.875)		18 (14.5-21.5) ^a	
	Other	12 (8-15) ^a		1.25 (0.5-2.33)		16 (12-19) ^b	
Family history of psychiatric treatment	Yes	14 (12-16)	0.668	1.56 (0.75-2.5)	0.753	16 (13-18)	0.018
	No	14 (11-16)		1.33 (0.75-2.08)		18 (15-21)	
Smoking cigarettes	Yes	14 (11-16)	0.538	1.33 (0.75-2)	0.454	16 (14-18)	0.023
	No	14 (10-16)		1.33 (0.75-2.3)		18 (14-21)	
Are you diagnosed with COVID?	Yes	12.5 (10-15)	0.101	1.33 (1.25-2.04)	0.194	18 (15-20.5)	0.048
	No	14 (11-16)		1.33 (0.75-2.33)		16.5 (14-20)	
If diagnosed with COVID, was he / she received inpatient treatment?	Yes	12 (10-15)	0.063	1.56 (1.25-2.5)	0.167	18 (15-20)	0.383
	No	15 (11-17)		1.33 (1.25-1.56)		19 (15-21)	
Has anyone lost a relative due to COVID?	Yes	14 (12-16)	0.036	1.56 (1.25-2.5)	0.004	17 (14-21)	0.351
	No	12 (10-16)		1.33 (0.75-1.83)		17 (14-20)	
Degree	1st degree	14 (11-16)	0.498	1.58 (1.25-2.5)	0.751	16 (14-20)	0.009
	2nd degree	15 (14-16)		1.56 (1.25-2.5)		18 (17-22)	
Fear of getting infected with COVID	Yes	14 (11-16)	0.246	1.33 (0.75-2.33)	0.382	17 (14-20)	0.436
	No	12 (10.5-16)		1.33 (0.75-1.75)		17.5 (15-21)	
Affected by the curfew	Positive	13 (10-15) ^{a,b}	0.008	1.79 (1.25-2.5) ^a	<0.001	16 (15-20)	0.095
	Negative	14 (12-16) ^a		1.5 (1.25-2.33) ^a		17 (14-21)	
	Neutral	11 (6-16) ^b		0.75 (0.5-1.25) ^b		16 (9-18)	

Mann Whitney U test was used for variables with two categories and Kruskal Wallis analysis for more than two categories

GDS: Geriatric depression scale

BHS:Beck Hopelessness Scale

RSE:Rosenberg Self Esteem Scale

The statistical significance level in the analyzes was accepted as p <0.05

46% of the patients lost at least one relative due to COVID-19 and 49.3% of them are first-degree relatives. While 84% of the patients feared COVID-19, 74% stated that they were negatively affected by the curfew (Table 2).

A significant difference was found in terms of GDS scores according to education level ($p < 0.001$). It has been observed that this difference is only due to the difference between the primary school group and the below primary school group. Accordingly, the median GDS of the primary school group was found to be significantly higher than the median GDS of the six primary school group.

There was a significant difference in GDS scores between residential areas ($p = 0.014$). It was determined that this difference was caused by the difference between the group living in the village and the group living in the district, the group living in the city and the group living in the district. The GDS score of the group living in the district was found to be significantly higher than the scores of both groups (district > village = city). A significant difference was found between the economic status in terms of GDS score ($p = 0.001$). It was determined that this difference was caused by the difference between the group with low economic status and the other two groups. The GDS scores of those with low economic level were found to be significantly higher than the other two groups (low > medium = high). A significant difference was found between occupational groups in terms of GDS scores ($p = 0.017$). It has been observed that this difference is only between housewives and the unemployed (unemployed > housewife).

A significant difference was found between psychiatric diagnoses in terms of BHS ($p < 0.001$). It was determined that this difference was caused by the difference between the depressive disorder group and the other two groups (depressive disorder > anxiety disorder = other). Likewise, a significant difference was observed between psychiatric diagnoses in terms of GDS score ($p = 0.015$).

The GDS score of those who received psychiatric treatment in the

family was significantly higher than the score of those who did not ($p = 0.018$), and the GDS score of smokers ($p = 0.023$).

It was found that those who were diagnosed with COVID-19 were significantly higher than those who did not have a GDS score ($p = 0.048$). The BHS score ($p = 0.036$) and RSE score ($p = 0.004$) of those who lost their relatives due to COVID-19 were found to be significantly higher than those of those who did not lose their relatives. Among those who have lost their relatives, the GDS score of the second degree relatives was found to be significantly higher than the score of the first degree ($p = 0.009$).

It was observed that there was a significant difference in terms of BHS score according to the status of being affected by the curfew ($p = 0.008$). It has been determined that this difference is due to the difference between those who are negatively affected and those who are not affected at all (negative > neutral). Likewise, it was determined that there is a significant difference in terms of RSE according to the situation of being affected by the curfew ($p < 0.001$). It was observed that this difference was due to the difference between those who were not affected at all and those who were affected positively and negatively (positive = negative > neutral) (Table 2).

According to the correlation analysis, it was seen that there was a significant negative relationship between BHS and RSE ($r = -0.241$ $p = 0.003$), and a positive significant relationship between BHS and GDS ($r = 0.478$ $p < 0.001$) (Figure 1). No significant correlation was found between GHS ($r = -0.042$ $p = 0.614$). (Table 3, Figure 1)

In the multiple linear regression analysis, when the BHS dependent, RSE and GDS were determined as independent variables, the percentage of RSE and GDS explaining BHS was found to be 27.7% ($R^2 = 0.277$). It was found that a one-unit change in RSE caused a 0.221 decrease in BHS ($p = 0.002$) and a one-unit change in GDS caused an increase of 0.468 units ($p < 0.001$).

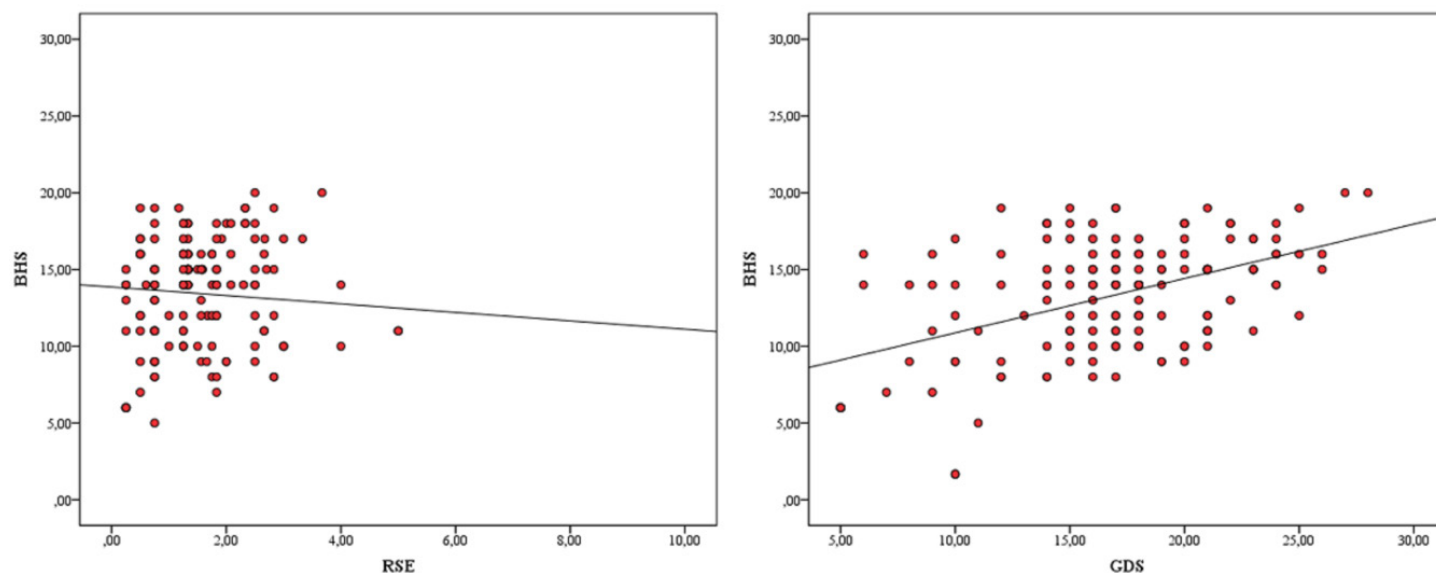


Figure 1. Correlation between BHS, RSE and GDS scales

Table 3. Predictive status of RSE and GDS scales on BHS score

	B	Standard Error	t	p
RSE	-.221	.080	-3.150	0.002
GDS	.468	.052	6.672	<0.000

Multiple linear regression analysis was performed. p <0.05 significance was accepted

Discussion

The most important result obtained in our study; depressive mood is dominant in the geriatric population during the pandemic process, and the patients' hopelessness is high and self-esteem is low. This situation suggests that it may reduce the functionality of the person and negatively affect the quality of life. Elderly individuals, who constitute the risk group of the COVID-19 virus, are stigmatized in the society. Individuals who feel stigmatized; With the traumatic effect of this situation, they think that they do not belong to the community they are affiliated with, and they show signs of fear and anxiety, feeling pessimism, helplessness, loneliness, unhappiness, guilt with the withdrawal behaviors brought about by loneliness [21]. 40% of the geriatric patients in the study had depressive disorder. Depression and anxiety disorders often accompany each other [22] similarly, approximately half of the patients had anxiety and related disorders. Ettman et al. showed that depression increased 3 times in elderly people during the pandemic period [23]. In a cross-sectional study in which 103 participants over 60 years of age were included during the pandemic, depressive symptoms were observed in 81.6% of the participants and anxiety symptoms in 84.5% [24].

Approximately 66% of people over the age of 65 have been shown to suffer from at least one chronic medical condition [25]. In our study, this rate was found to be 75%. These diseases such as hypertension, diabetes mellitus, cardiovascular system and respiratory system diseases, which are highly prevalent in the elderly population, pose a high risk for COVID-19. In addition, physiological changes which are seen in the nature of old age and weaknesses in the immune system are a risk factor for serious infections [26]. Case fatality rates for COVID-19 were reported as 4.5% for people over 60 years old and 13.4% for people over 80 years old [27]. The fear of COVID-19 has been exacerbated by the media's often unclear, exaggerated or sensationalized news, and has turned into a rippling anxiety epidemic [28]. Coping with these emotions in the process of social isolation is very difficult for older individuals and can lead to depression and anxiety disorders in individuals.

Approximately half of the patients in the study had COVID-19 infection, and regardless of this, 84% stated that they were afraid of contracting corona virus infection. In another study, it was stated that the fear of getting the virus and the fear of death in the elderly population was of alarming size [29] Brook et al. 74% of the patients supporting their studies [30] stated that they were adversely affected by the curfews. Staying at home of the elderly during this period results in an increase in loneliness. The inability to provide the contact they need with their loved ones because they are at risk and the loss of family members cause a lack of emotional needs in elderly individuals. The inability of individuals to come together on special occasions such as holidays reflects the

discomfort of elderly individuals not being able to go out.

In the study, nearly half of the patients lost at least one first degree or second degree relative during the pandemic period. According to the correlation analysis, it was seen that there was a significant negative relationship between BHS and RSE, and a positive significant relationship between BHS and GDS. The relationship between the variables in the correlation analysis showed that there was a similar causal relationship between the variables in the regression analysis results. We found that those who lost their relatives due to COVID-19 have lower self-esteem and less hope than those who have not lost their relatives. In addition, patients diagnosed with COVID-19 had higher depression scores than those who were not diagnosed. The loss of a loved one can affect elderly patients more profoundly and exacerbate their sense of loneliness. Feeling of loneliness is a risk factor for senile depression. There is a significant difference between the elderly who feel lonely and those who do not feel alone in terms of depression [31]. Loss of co-relatives, economic losses, social isolation and limitation of the social environment cause limitations in personal relationships during the pandemic process; therefore, the increased fear of death and a sense of loneliness in elderly individuals cause depression symptoms. Along with all these, self-esteem may decrease in cases of mental and physical illness [32] and decreased self-esteem brings along hopelessness [33]. In the study, as the self-esteem of the elderly decreased, their hope levels decreased. As a result of the outcomes of the pandemic, elderly individuals' feeling of being excluded from the society may have increased their inadequacy thoughts and fear of death due to the disease. This situation, together with problems in accessing health services, may cause the elderly individuals to have no hope for the future [34].

Social and economic weakening of the individual also increases the incidence of psychological disorders [35]. It was found in the study that as the economic level decreased, depression scores also increased significantly. Studies have determined that the increase in education level positively affects depression, and it has been found that depression scores significantly increase as the income level decreases [36].

The strengths of our study are the high sample size. In addition, since our study group consisted of the group without a previous history of psychiatric treatment,

It has become easier to make interpretations among the elders, and it can be easily said that the pandemic affects the elderly mentally negatively.

The limitations of the study; Only elderly people who applied to the psychiatry outpatient clinic were included in the study. However, we estimate that there are many elderly people who are not aware of their mental illness, perhaps because they live alone, with a group that cannot come to hospitals due to COVID-19 or other

reasons. In addition, the absence of a control group in our study and the inability to establish a cause-effect relationship because it is a cross-sectional study are other limitations.

Conclusion

In the study, we found that the self-esteem of the elderly decreased, they were more depressed and hopeless. In the pandemic, the increase in the time spent by the elderly at home, the obligatory distances with other individuals, the effect of stigmatization, and the frightening death figures bring along some mental health problems. As a result of the health and social policies of countries, it is inevitable to find solutions to the mental problems of elderly people who are waiting in isolation at home [37]. Strengthening the psychological resilience of the elderly and giving priority to these individuals in crisis interventions will contribute to reducing the harm of the epidemic on these individuals [38].

During the COVID-19 pandemic, we observed that the elderly population decreased their self-esteem, they became more depressed and hopeless. Since our study group consists of a group with no previous history of psychiatric treatment, it can be easily said that the pandemic adversely affects the elderly mentally. Considering these conditions, especially the elderly population should be given psychosocial support during the epidemic period we are in.

Conflict of interests

The authors declare that they have no competing interests.

Financial Disclosure

All authors declare no financial support.

Ethical approval

Ethics committee approval was received for this study from the Ethical Committee of İnönü University (Approval Date-Number: 2020/181).

Informed Consent

Verbal informed consent was obtained from the patients and written informed consent was obtained from the parents or legal guardians of the patients who participated in this study.

References

- World health organization. Health of the elderly, Geneva; 1989.
- Han E, Tan MMJ, Turk E, et al. Lessons learnt from easing COVID-19 restrictions: an analysis of countries and regions in Asia Pacific and Europe. *Lancet*. 2020 7;396:1525-34.
- Aki OE. Covid-19 Pandemic and the mental health of elderly. *Tr J Ger*. 2020;23.
- Santesmasses D, Castro JP, Zenin AA, et al. COVID-19 is an emergent disease of aging. *Aging Cell*. 2020 19:e13230.
- Liu Y, Mao B, Liang S, et al. Association between age and clinical characteristics and outcomes of COVID-19. *Eur Respir J*. 2020;55.
- Lloyd-Sherlock P, Kalache A, McKee M, et al. WHO must prioritise the needs of older people in its response to the COVID-19 pandemic. *BMJ*. 2020;31:368.
- Charles NE, Strong SJ, Burns LC, et al. Increased mood disorder symptoms, perceived stress, and alcohol use among college students during the COVID-19 pandemic. *Psychiatry Res*. 2020;113706.
- Friedler B, Crapser J, McCullough L. One is the deadliest number: the detrimental effects of social isolation on cerebrovascular diseases and cognition. *Acta Neuropathol*. 2015;129:493-509.
- Yip PS, Cheung YT, Chau PH, et al. The impact of epidemic outbreak: The case of severe acute respiratory syndrome (SARS) and suicide among older adults in Hong Kong. *Crisis*. 2010;31:86-92.
- Kernis MH. Measuring self-esteem in context: The importance of stability of self-esteem in psychological functioning. *J Pers*. 2005;73:1569-605.
- Ayaz S. Body image and self-esteem in patients with stoma: review. *J Med Sci*. 2008;28:154-9.
- Brown SL, Vinokur AD. The interplay among risk factors for suicidal ideation and suicide: The role of depression, poor health, and loved ones' messages of support and criticism. *Am J Community Psychol*. 2003;32:131-41.
- Ozben S. Hopelessness of elderly. *Buca Faculty of Education Medical*. 2008;23:136-51.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders, (Fifth Edition; DSM-V). Washington, DC: Author; 2013.
- Yesavage JA, Brink TL, Rose TI, et al. Development and validation of a geriatric depression screening scale: a preliminary report. *J Psychiatr Res*. 1983;17:37-49.
- Ertan T, Eker E, Sar V. Validity and reliability of the Geriatric Depression Scale in the Turkish elderly population. *Noro Psikiyatr Ars*. 1997;34:62-71.
- Hagger MS, Orbell S. A meta-analytic review of the common-sense model of illness representations. *Psychol Health*. 2003;18:141-84.
- Durak A, Palabıyıkoglu R. Beck umutsuzluk ölçeğinin geçerlilik çalışması. *Kriz Dergisi*. 1994;2:311-19.
- Rosenberg M. Society and the adolescent self-image. Princeton University Press; 1965.
- Çuhadaroglu F. Self-esteem in adolescents. Unpublished thesis. Hacettepe University Faculty of Medicine, Psychiatry Department, Ankara, Turkey; 1986.
- Başterzi AD, Cesur E, Güvenç R. Covid-19 ve Damgalama. *Türkiye Psikiyatri Derneği*. 2020;1-3.
- Akiskal HS. Mood disorders: clinical features. In: Sadock BJ and Sadock VA (eds) Kaplan and Sadock's Comprehensive Textbook of Psychiatry. 7. Baskı, Philadelphia: Lippincott Williams & Wilkins. 2005;1611-52.
- Ettman CK, Abdalla SM, Cohen GH, et al. Prevalence of depression symptoms in US adults before and during the COVID-19 pandemic. *JAMA*. 2020;3.
- Parlapani E, Holeva V, Nikopoulou VA, et al. Intolerance of uncertainty and loneliness in older adults during the COVID-19 pandemic. *Frontiers in Psychiatry*. 2020;11:842.
- Clark A, Jit M, Warren-Gash C, et al. Global, regional, and national estimates of the population at increased risk of severe COVID-19 due to underlying health conditions in 2020: a modelling study. *Lancet Glob Health*. 2020;8:1003-17.
- Yang J, Zheng Y, Gou X, et al. Prevalence of comorbidities and its effects in coronavirus disease 2019 patients: A systematic review and meta-analysis. *Int J Infect Dis*. 2020;94:91-5.
- Verity R, Okell LC, Dorigatti I, et al. Estimates of the severity of coronavirus disease 2019: A model-based analysis. *Lancet Infect Dis*. 2020;20:669-77.
- Shigemura J, Ursano RJ, Morganstein JC, et al. Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: mental health consequences and target populations. *Psychiatry Clin Neurosci*. 2020;74:281-2.
- Girdhar R, Srivastava V, Sethi S. Managing mental health issues among elderly during COVID-19 pandemic. *JGCR*. 2020;7:29-32.
- Brooks SK, Webster RK, Smith LE, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020;395:912-20.
- Bekhet AK, Zauszniewski JA. Mental health of elders in retirement communities: Is loneliness a key factor? *Archives of psychiatric nursing*. 2012;26:214-24.
- Kong F, Zhao J, You X. Self-esteem as mediator and moderator of the relationship between social support and subjective wellbeing among Chinese University students. *Social Indicator Research*. 2013;112:151-61.
- Liu ST, Wu X, Wang N, et al. Serial multiple mediation of demoralization and depression in the relationship between hopelessness and suicidal ideation. *Psychooncology*. 2020;29:1321-8.

34. Dhama K, Patel SK, Kumar R, et al. Geriatric population during COVID-19 pandemic: problems, considerations, exigencies and beyond Head Title: Geriatrics during COVID-19 pandemic. *Frontiers in public health*. 2020;8:56.
35. Şahin M, Yalçın M. Huzur evinde veya kendi evinde yaşayan bireylerde depresyon sıklıklarının karşılaştırılması. *Türk Geriatri Dergisi*. 2003;6:10-3.
36. .Kaya M, Aslan D, Acar Vaizoğlu S et al. Determination Quality of Life Elderly and Related Factors in A District of Ankara, Turkey. *Türk Geriatri Derg*. 2008;11:12-7.
37. Armitage R, Nellums L. Covid-19 and the consequences of isolating the elderly. *Lancet Public Health*. 2020;5:256.
38. Meng H, Xu Y, Dai J, et al. Analyze the psychological impact of COVID-19 among the elderly population in China and make corresponding suggestions. *Psychiatry Res*. 2020;289:112983.