

Examination of Pandemic Awareness, Death Anxiety, and Spiritual Well-Being in Elderly Individuals

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Abstract

This study aimed to examine the relationships between the variables of pandemic awareness, death anxiety, and spiritual well-being and reveal whether the participants' perceptions of pandemic awareness, death anxiety, and spiritual well-being differed according to various sociodemographic characteristics. The study population is comprised of individuals aged 65 years and over in Edirne, Turkey. The data obtained from 449 people in the study were analyzed using various statistical methods. According to the results of the regression analysis performed in the study, the increase in the participants' pandemic awareness was found to reduce their death anxiety and increase their spiritual well-being statistically. Moreover, the increase in the participants' death anxiety statistically reduced their spiritual well-being.

Keywords

pandemic awareness, death anxiety, spiritual well-being, 65 years and over, Turkey

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Introduction

The COVID-19 pandemic, which has affected the whole world, has led to public health concerns, changes in people's behaviors, and psychological distress. The pandemic has affected people's behaviors, emotions, and cognitions, causing various reactions related to the awareness of the disease (Alsukah et al., 2020). People have been aware and tried to seek and understand information about COVID-19 to be conscious of the symptoms, hazards, and prevention of the disease (Mukhlis et al., 2022). Having a high level of awareness of the recommended preventive health behaviors has appeared as the basic measure against the spread of COVID-19 in society (Teo et al., 2021).

The concept of awareness examined in the study, is stated as a sum of thoughts, opinions, and propositions created and controlled as a possible correct response to objective reality (Arpaci et al., 2022; Kim & Nam, 2015). Awareness is defined as an intentional relationship between an organism and the item or situation in which it needs to be aware of (Tiaprapong et al., 2021). On the other hand, awareness of a disease is a condition indicating that the individual has noticed a disease threat through various symptoms and information. It indicates the individual's factual and empirical awareness and consequently signifies the individual's knowledge about the disease (Hopman & Rijken, 2015). COVID-19 awareness shows that the individual has knowledge about the coronavirus and protection against the virus and makes an effort to follow preventive measures (Wadood et al., 2020). In other words, COVID-19 awareness is the extent to which people are aware of the severity, impacts, prevention strategies and meaning of the spread of COVID-19 (Landa-Blanco et al., 2021). COVID-19 awareness enables individuals to perceive COVID-19 as a dangerous disease, requiring individuals to take measures against the disease. At this point, however, individuals need to have knowledge about the disease etiology, virus transmission, and preventive measures to prevent COVID-19 (Mukhlis et al., 2022).

Death anxiety another variable examined in the study, refers to the constant and abnormal phobia of death or dying. Death anxiety is the feeling of fear, anxiety or extreme anxiety experienced while thinking about the process of death or detachment from life and what happens after death (Mansori et al., 2017). It is a psychological condition that can emerge consciously or unconsciously as a defense mechanism when individuals feel threatened by death for any reason (Kesebir, 2014). According to Lehto and Stein (2009), death anxiety has a multidimensional structure that can differ in line with sociocultural life formations. Accordingly, some of the focused dimensions of death anxiety are fear of death and grave, fear of post-death procedures, fear of catching a fatal disease (Abdel-Khalek, 2004), fear of uncertainty, fear of suffering, fear of loneliness and fear of disappearing (Conte et al., 1982). Relying on the fact that death cases have been common among elderly individuals during the pandemic, COVID-19 is likely to affect individuals' death anxiety. On the other hand, it is expressed that some factors such as personal characteristics, psychopathology and cultural characteristics may also affect death anxiety toward the virus (Kavaklı et al., 2020; Özer et al., 2021).

Spirituality refers to the form of existence and experience, which emerges with the awareness of a dimension exceeding the limits of human consciousness characterized by certain definable values related to self, others, nature, and life. In other words, spirituality is characterized as ensuring that life is meaningful, interconnectedness, belief in the superiority of life and the sanctity of life (Riley et al., 1998). Spiritual well-being is the essence of human health and forms the physical, psychological, and social dimensions of the human. Spiritual well-being is described by characteristics such as stability in life, peace, a sense of close relationship with the self, God, society and the environment, and the meaning and purpose of life (Mansori et al., 2017). Moberg (2002) asserts that spiritual well-being consists of a horizontal (existential) dimension that refers to the meaning of life, a sense of peace and life satisfaction, and a vertical (religious) dimension that refers to the sense of well-being about God or higher power (Moberg, 2002). Spiritual well-being is mentioned to be a powerful predictor of individuals' ability to cope with difficulties effectively (Kamya, 2000). The spiritual well-being of the individual is a sense of satisfaction originating from the inner self of the person and directly associated with quality of life (Phenwan et al., 2019). Spirituality shows the cognitive and behavioral efforts to find and maintain meaning, purpose, and connection when difficulties are faced (Clark & Hunter, 2019).

The COVID-19 pandemic is a public health problem that has induced fear and anxiety in people since the beginning, regardless of people's awareness levels (Alsukah et al., 2020). The more severe course of the disease in elderly individuals, especially at the beginning of the pandemic, and the higher mortality rate in this group have resulted in the further development of feelings such as fear, anxiety, and phobia in elderly individuals. This situation negatively has affected the well-being of people. In this study, the relationships between the variables of pandemic awareness, death anxiety and spiritual well-being in elderly individuals are examined. The lack of studies in the literature that deal with these three variables together in the elderly sample shows the importance of this study.

Methods

The Study Type

The design of this study is a descriptive research.

Aim and Hypotheses

This study aims to examine the relationships between the variables of pandemic awareness, death anxiety, and spiritual well-being in individuals aged 65 years and over. Another aim of the study is to reveal whether the participants' perceptions of pandemic awareness, death anxiety, and spiritual well-being differ according to various sociodemographic characteristics (age, gender, educational level, etc.). The research hypotheses created in line with the purposes of the study are as follows:

- **Hypothesis 1:** Participants' perceptions of pandemic awareness have a statistically significant effect on death anxiety and spiritual well-being.
- **Hypothesis 2:** Participants' perceptions of death anxiety have a statistically significant effect on spiritual well-being.
- **Hypothesis 3:** Participants' perceptions of pandemic awareness, death anxiety, and spiritual well-being differ according to various sociodemographic characteristics (age, gender, educational level, etc.).

Sampling

The study population is comprised of individuals aged 65 years and over in Edirne, Turkey. According to the data from the Turkish Statistical Institute, the population of Edirne aged 65 years and over was 65.034 in 2021 (TSI, 2022). In the study, the sample volume was determined by the non-clustered, single-stage random possibility sampling method based on the ratio of the main population (Collins, 1986). In the study, the sample size was calculated as 378 people at an acceptable error level of 5%, 95% confidence interval, and the probability of the event occurrence within the main population was taken as 50%. Considering the possibility that there would be missing values in the questionnaires, more questionnaires were applied, and data were obtained from 449 people in the study.

Data Collection Method

The data were collected through a questionnaire via face to face by the researchers between February 1 and April 8, 2022. The data were collected in parks, bazaars, markets, streets etc. in the city center of Edirne. The inclusion criteria in the study was that the participants were 65 years of age or older. The exclusion criteria was the individuals who were under 65 years old and who refused to give voluntary consent.

Data Collection Tools

In the study, the "Pandemic Awareness Scale (PAS)" developed by Arpaci et al. (2022) was used to measure the participants' pandemic awareness. The scale consists of nine items and one subscale. The participants' statements are rated on a 5-point Likert-type response scale ranging from 1 = strongly disagree to 5 = strongly agree. The total score ranges from 9 to 45, and a higher score reflects a higher level of awareness of pandemic outbreaks. The sample questions related to the scale are "Pandemic viruses cannot harm my family and me", "I avoid visiting crowded places during the pandemic". The reliability analysis applied to the pandemic awareness scale showed that the total Cronbach's Alpha reliability coefficient of the scale was 0.862. In the study carried out by Arpaci et al. (2022), the reliability coefficient of the pandemic awareness scale was 0.894.

The “Death Anxiety Scale” was developed by [Sarıkaya and Baloğlu \(2016\)](#). The scale consists of 20 items and 3 subscales (ambiguity of death, exposure to death, and agony of death). The measurements are scored on a 5-point Likert scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = always). The total score of the scale ranges between 20 and 100. High scores from the scale suggest a high perception of death anxiety. The sample questions related to the scale are “The uncertainty of death worries me”, “Seeing those crying behind a deceased person worries me”. The result of the reliability analysis applied to the death anxiety scale indicated that the total Cronbach’s Alpha reliability coefficient of the scale was 0.958. In the study carried out by [Sarıkaya and Baloğlu \(2016\)](#), the reliability coefficient of the death anxiety scale was 0.95.

The “Spirituality Index of Well-Being” was developed by [Daaleman and Frey \(2004\)](#), and its Turkish validity and reliability study was performed by [Serbest \(2018\)](#). The scale consists of 12 items and 2 subscales (self-efficacy and life plan). The participants’ statements are rated on a 5-point Likert-type response scale ranging from 1 = “strongly agree” to 5 = “strongly disagree”. The total score of the scale ranges between 12 and 60. The sample questions related to the scale are “There is not much I can do to help myself”, “I am far from understanding the meaning of life”. As a result of the reliability analysis applied to the spiritual well-being scale, the scale’s total Cronbach’s Alpha reliability coefficient was found to be .894. In the study carried out by [Serbest \(2018\)](#), the reliability coefficient of the scale was .858.

Data Analysis

All statistical analyses were carried out using Statistical Package for The Social Science v22.0. Descriptive analyses (means, standard deviation, etc.) and reliability analysis were conducted for data analysis. In the study, correlation and regression analyses were implemented to test the relationships between variables. Furthermore, the compatibility of the scales with the normality assumption was also tested, and the skewness and kurtosis coefficients were examined. In cases when the skewness and kurtosis coefficients are between -1.5 and $+1.5$, the data set is considered to have a normal distribution ([Tabachnick & Fidell, 2013](#)). As a result of the analyses, the data were found to be suitable for normal distribution. Therefore, among parametric tests, the independent samples t-test was conducted for two independent groups, and the one-way analysis of variance was performed for more than two independent groups to reveal whether the participants’ pandemic awareness, death anxiety, and spiritual well-being levels differed according to their sociodemographic characteristics. When a difference was observed between the groups in the analysis of variance, the LSD test, one of the post hoc tests, was carried out to determine which group or groups the difference originated from. The level of significance was set at .05 and .01.

Ethical Considerations

For the study, ethical permission was obtained from Trakya University Non-Interventional Scientific Research Ethics Committee (Date: 14.02.2022, Decision No: 03/19). Potential participants were given a document outlining that participation was voluntary and collected data would be used solely for scientific purposes. Voluntary consent of the participants was obtained in the study, and the Declaration of Helsinki was complied with.

Results

Table 1 presents the descriptive characteristics of the participants. Accordingly, of the participants, 57.7% are male, 82.9% are married, 62.6% are between the ages of 65–69, and 71% are elementary school graduates. Of the participants, 87.1% stated that they did not work, and 30.3% stated their monthly income as 4001 TL and above. According to the participants' statements, 34.7% went to a health institution 3–5 times a year, 59.9% had a chronic disease, 68.6% used drugs regularly, and 67.3% had not been infected with COVID-19 before.

When the basic statistics related to the research variables in Table 2 are reviewed, the mean rate given by the participants to the pandemic awareness scale is $4.03 \pm .71$, the mean rate given to the death anxiety scale is 2.69 ± 1.06 , and the mean rate given to the spiritual well-being scale is $3.31 \pm .80$. The intervals for the scales were calculated using the $n-1/n$ (4/5) formula, and the interval width was found to be .80. Items in these scales are interpreted based on the intervals as 4.20–5.00 (strongly agree/always), 3.40–4.19 (agree/often), 2.60–3.39 (undecided/sometimes), 1.80–2.59 (disagree/rarely), 1.00–1.79 (strongly disagree/never). Considering the Likert ratings of the scales, it can be asserted that the participants' pandemic awareness is high, their spiritual well-being is above the average level, and their death anxiety levels are moderate. According to the results of the correlation analysis in the study, there was a negative and very weak correlation between pandemic awareness and death anxiety ($r = -.125$; $p < .01$), and a positive and weak correlation between pandemic awareness and spiritual well-being ($r = .266$; $p < .01$). There was a negative and weak correlation between death anxiety and spiritual well-being ($r = -.359$; $p < .01$).

In Table 3, a simple regression analysis was carried out to test the research hypotheses (H_1 , H_2). Statistical estimations regarding the regression model established to reveal the effect of pandemic awareness on death anxiety indicate that the model is significant and usable ($F = 7.151$; $p < .05$). Pandemic awareness explains 1.6% of the total variance in death anxiety. When the t-test results related to the significance of the regression coefficient in the regression model are reviewed, the increase in the participants' pandemic awareness statistically reduces their death anxiety ($t = -2.674$; $p < .05$). According to the results of the regression analysis investigating the effect of pandemic awareness on spiritual well-being, pandemic awareness explains 7.1% of the total variance in spiritual well-being. According to the analysis results, the increase in

Table I. Descriptive characteristics of the participants.

Variables	N	%
Gender		
Female	190	42.3
Male	259	57.7
Marital status		
Married	372	82.9
Single	77	17.1
Age (years)		
65–69	281	62.6
70≥	168	37.4
Educational level		
Elementary school	319	71.0
High school and above	130	29.0
Monthly income level		
≤2000 TL	68	15.1
2001–3000 TL	119	26.5
3001–4000 TL	126	28.1
4001 TL≥	136	30.3
Work status		
Yes	58	12.9
No	391	87.1
Frequency of going to a health institution (in a year)		
≤2	164	36.6
3–5	156	34.7
6≥	129	28.7
Having any chronic disease		
Yes	269	59.9
No	180	40.1
Regular drug use		
Yes	308	68.6
No	141	31.4
Previously infected with COVID-19		
Yes	147	32.7
No	302	67.3

the participants' pandemic awareness statistically increases their spiritual well-being ($t = 5.829$; $p < .001$). These results show that the first hypothesis (H_1) of this study is confirmed.

According to the results of the regression analysis investigating the effect of death anxiety on spiritual well-being, death anxiety explains 12.9% of the total variance in spiritual well-being. According to the analysis results, the increase in the participants'

Table 2. Descriptive statistics and intercorrelations between the research variables.

Variables	Mean	SD	Pandemic awareness	Death anxiety	Spiritual well-being
Pandemic awareness	4.03	0.71	1		
Death anxiety	2.69	1.06	-.125**	1	
Spiritual well-being	3.31	0.80	.266**	-.359**	1

SD, standard deviation.

** $p < .01$.

Table 3. Results of the regression analysis.

Dependent variable	Independent variable	B	Std. error	β	t	p
Death anxiety	(Constant)	1.937	.286		6.779	<.001
	Pandemic awareness	-.187	.070	-.125	-2.674	.008
		R = .125	R ² = .016	F = 7.151		p = .008
Spiritual well-being	(Constant)	2.108	.210		10.053	<.001
	Pandemic awareness	.299	.051	.266	5.829	<.001
		R = .266	R ² = .071	F = 33.978		p < .001
Spiritual well-being	(Constant)	4.041	.096		41.945	<.001
	Death anxiety	-.271	.033	-.359	-8.144	<.001
		R = .359	R ² = .129	F = 66.325		p < .001

death anxiety reduces their spiritual well-being statistically ($t = -8.144$; $p < .001$). These results show that the second hypothesis (H_2) of this study is confirmed.

Table 4 presents the comparison results of the participants' scores related to pandemic awareness, death anxiety, and spiritual well-being according to various variables such as gender, age, educational status, and marital status. In Table 4, it is seen that the participants' scores on the pandemic awareness scale differ statistically significantly according to marital status ($t = -2.796$; $p = .005$) and monthly income level ($F = 4.731$; $p = .003$). Accordingly, the pandemic awareness of married individuals and individuals with higher monthly income is higher. When the participants' death anxiety scores were evaluated, it was revealed that there were statistically significant differences according to the variables of age ($t = -1.971$; $p = .049$), gender ($t = 2.943$; $p = .003$), educational level ($t = 2.658$; $p = .008$), having any chronic disease ($t = 2.807$; $p = .005$), previous

Table 4. Comparison of the results regarding three scales according to various variables.

Variables	Pandemic awareness		Death anxiety		Spiritual well-being	
	Mean	SD	Mean	SD	Mean	SD
Age (years)	4.08	0.69	2.61	1.05	3.35	0.77
	3.95	0.74	2.82	1.07	3.24	0.84
	t = 1.757; p = .080					
Gender	4.09	0.69	2.86	1.00	3.29	0.77
	3.99	0.73	2.56	1.08	3.33	0.82
	t = 1.393; p = .164					
Marital status	3.83	0.86	2.88	1.07	3.09	0.77
	4.07	0.67	2.65	1.06	3.36	0.80
	t = -2.796; p = .005					
Educational level	3.99	0.71	2.77	1.06	3.21	0.80
	4.12	0.73	2.48	1.04	3.57	0.75
	t = -1.691; p = .092					

(continued)

Table 4. (continued)

Variables	Pandemic awareness		Death anxiety		Spiritual well-being	
	Mean	SD	Mean	SD	Mean	SD
Having any chronic disease						
Yes	4.05	0.73	2.80	1.05	3.28	0.81
No	4.00	0.69	2.52	1.06	3.35	0.78
	t = 0.715; p = .475		t = 2.807; p = .005		t = -0.868; p = .386	
Previously infected with COVID-19						
Yes	4.05	0.66	2.88	1.05	3.31	0.79
No	4.02	0.74	2.60	1.06	3.31	0.81
	t = 0.429; p = .668		t = 2.639; p = .009		t = -0.105; p = .917	
Frequency of going to a health institution (in a year)						
≤2 ¹	3.98	0.78	2.35	1.06	3.39	0.83
3–5 ²	4.03	0.65	2.74	0.99	3.32	0.76
6≥ ³	4.10	0.71	3.06	1.02	3.21	0.80
	F = 0.972; p = .379		F = 17.728; p < .001		F = 1.923; p = .147	
			–2; –3; 2–3			
Monthly income level						
≤2000 TL ¹	3.85	0.70	2.67	1.02	3.33	0.73
2001–3000 TL ²	3.98	0.70	2.90	0.99	3.11	0.74
3001–4000 TL ³	3.99	0.78	2.63	1.10	3.33	0.79
4001 TL≥ ⁴	4.21	0.64	2.57	1.08	3.47	0.86
	F = 4.731; p = .003		F = 2.315; p = .075		F = 4.434; p = 0.004	
	–4; 2–4; 3–4				2–3; 2–4	

infection with COVID-19 ($t = 2.639$; $p = .009$), and frequency of going to a health institution ($F = 17.728$; $p < .001$). According to these results, the death anxiety levels of the participants aged 70 years and over, female, elementary school graduates, individuals with any chronic disease, individuals who were previously infected with COVID-19 and individuals who go to a health institution more frequently are higher. Finally, when the scores that the participants received from the spiritual well-being scale were evaluated, a statistically significant difference was identified according to marital status ($t = -2.656$; $p = .008$), educational level ($t = -4.504$; $p < .001$), and monthly income level ($F = 4.434$; $p = .004$). Accordingly, the spiritual well-being levels of married individuals, individuals with higher education levels, and individuals with higher monthly income levels are higher. In the study, no statistically significant difference was observed between the scale scores according to the variables of work status and regular drug use. In line with these results, hypothesis H_3 was partially confirmed.

Discussion

This study aimed to examine the relationships between the variables of pandemic awareness, death anxiety, and spiritual well-being in individuals aged 65 years and over and reveal whether the participants' perceptions of pandemic awareness, death anxiety, and spiritual well-being differed according to various sociodemographic characteristics. The absence of studies in the literature addressing these three variables together in the elderly sample is the main starting point of this study.

As a result of the analyses in the study, the participants' pandemic awareness was found to be high. In their study, Sizer et al. (2020) observed a good level of general pandemic awareness among participants. In the study conducted by Alsukah et al. (2020) in Saudi Arabia, participants' COVID-19 awareness was found to be at high levels. Similar results were obtained from the studies by Lin et al. (2020), Gokdemir et al. (2020), and Kef (2021). In their study conducted in Pakistan, Rehman et al. (2021) found that the public generally had positive attitudes and proactive practices against the COVID-19 outbreak, but their knowledge on this subject was inadequate. Knowledge and awareness of the disease are significant parameters for adopting protective measures that minimize the risk of exposure to the disease (Tripathi et al., 2020). Therefore, it is extremely important to deliver services such as health promotion programs and health education to increase individuals' awareness of the disease.

In the study, the participants' death anxiety levels were moderate. In the studies by Özer et al. (2021) and Bidgol et al. (2020), the participants experienced moderate levels of death anxiety. Likewise, in the studies by Kavaklı et al. (2020) and Akyol Guner et al. (2021), the participants experienced moderate levels of death anxiety during the COVID-19 pandemic. Higher mortality rates caused by the COVID-19 pandemic among elderly individuals are assumed to lead to an increase in individuals' death anxiety levels. Finally, the spiritual well-being of the participants was above the average level. The studies by Durmuş and Öztürk (2022) and Soon Yi and Jeong In (2013)

revealed that the participants had spiritual well-being above the average level. In the studies by [Young-Sook and Chung-Nam \(2003\)](#) and [Chabok et al. \(2017\)](#), a moderate score of spiritual well-being was determined. These results indicate that the COVID-19 pandemic affects the spiritual well-being of elderly individuals, even if slightly.

In the study, a negative and very weak correlation was found between pandemic awareness and death anxiety, and the increase in the participants' pandemic awareness was found to reduce their death anxiety statistically. In their study, [Gokdemir et al. \(2020\)](#) revealed a negative correlation between the attitude toward COVID-19 and death anxiety, and less death anxiety was observed to result in a more positive attitude toward COVID-19. COVID-19 awareness is a condition that indicates the existence of protective measures taken by people against the disease. The reason why people who are more aware of protective measures experience less death anxiety against the disease can be explained by their more conscious behaviors about the disease, its course and its effects on the human body ([Kurtuluş & Düşünceli, 2021](#)).

In this study, a positive and weak correlation was identified between pandemic awareness and spiritual well-being, and spiritual well-being increased as pandemic awareness increased. In a study by [Özkan et al. \(2022\)](#), a positive correlation was revealed between the participants' knowledge level scores regarding COVID-19 disease and their mental well-being scores. In the study conducted by [Park et al. \(2021\)](#), it was concluded that the level of knowledge about COVID-19 disease and resilience had an important effect on psychosocial well-being. According to these results, pandemic awareness is seen to have a significant effect on individuals' well-being.

In the study, a negative and weak correlation was determined between death anxiety and spiritual well-being, and the increase in death anxiety was found to reduce spiritual well-being statistically. [Solaimanizadeh et al. \(2020\)](#) found a significant negative correlation between spiritual well-being and death anxiety in their study on elderly individuals. Similarly, [Soon Yi and Jeong In \(2013\)](#) observed a negative correlation between death anxiety and spiritual well-being in their study on elderly individuals. In their study, [Bidgol et al. \(2020\)](#) revealed that participants with mental well-being experienced less death anxiety. Similar results were obtained in the studies by [Hashim et al. \(2021\)](#), [Sharma et al. \(2019\)](#), [Shirkavand et al. \(2018\)](#), [Mansori et al. \(2017\)](#), [Ghadampour and Moshrefi \(2017\)](#), [Moetamedi et al. \(2015\)](#), [Young-Sook and Chung-Nam \(2003\)](#). Thus, a negative correlation was identified between spiritual well-being and death anxiety.

The study elicited that the participants' pandemic awareness scores differed according to marital status and monthly income level, and the pandemic awareness of married individuals and individuals with higher monthly income level was higher. In the study conducted by [Al-Hanawi et al. \(2020\)](#) in Saudi Arabia, COVID-19 knowledge was found to increase with income. In their study, [Labban et al. \(2020\)](#) concluded that income level was an important factor in the increase of COVID-19 awareness and knowledge level. In the study conducted by [Ertaş et al. \(2021\)](#) in Turkish society, it was revealed that COVID-19 knowledge differed according to income level, and individuals with higher incomes had more knowledge about COVID-19. In their

study conducted in Malaysia, [Chai et al. \(2022\)](#) also found a significant difference between COVID-19 knowledge and monthly household income and observed that participants with less monthly household incomes had lower levels of COVID-19 knowledge. Likewise, [Uzuntarla and Ceyhan \(2020\)](#) determined a difference between the level of knowledge about COVID-19 and monthly income and found that individuals with a higher monthly income had higher levels of knowledge. In their study, [Ertaş et al. \(2021\)](#) revealed that attitudes toward COVID-19 differed according to marital status, and married people had higher attitudes toward COVID-19. These results indicate the need for informative activities to increase the COVID-19 awareness of the participants who are not married and have low incomes.

In this study, the death anxiety scores of elderly individuals differed according to gender, and female experienced higher levels of death anxiety than male. In his study, [Doğan \(2021\)](#) determined that female's levels of death anxiety were statistically significantly higher than those of men. In their study on elderly individuals in Iran, [Dadfar et al. \(2016\)](#) found that the total death anxiety scores of elderly females were significantly higher than those of male. Similarly, [Keskin et al. \(2018\)](#), [Say Şahin and Örnek Büken \(2020\)](#), [Hashim et al. \(2021\)](#), and [Sharma et al. \(2019\)](#) also determined a significant difference in death anxiety levels according to gender and revealed that females experienced higher levels of death anxiety. Considering female's roles in the family and that they are more emotional and their disease status may differ, it is expected that their levels of death anxiety will be higher. In the study, a significant difference was found in death anxiety scores according to age and educational level, and it was revealed that the death anxiety scores of the participants who were older and had lower education levels were higher. As in our study results, [Kalaoglu Öztürk \(2010\)](#), [Bastani et al. \(2016\)](#), and [Akyol Guner et al. \(2021\)](#) revealed that elderly individuals with lower education levels had higher death anxiety scores. In their study, [Bastani et al. \(2016\)](#) observed that death anxiety differed according to age, and elderly participants at higher ages (70–75) had higher death anxiety scores. In their study on elderly individuals, [Say Şahin and Örnek Büken \(2020\)](#) determined that older individuals (85 years and older) had lower death anxiety scores. This result is thought to arise from the fact that older individuals are closer to death, and the pandemic causes higher rates of death in elderly individuals. Finally, in the study, death anxiety was found to differ according to having any chronic disease, previous infection with COVID-19, and the frequency of going to a health institution. According to these results, the death anxiety of the participants with chronic diseases, individuals who were previously infected with COVID-19 and individuals who go to a health institution more frequently is higher. In their study, [Hashim et al. \(2021\)](#) and [Akyol Guner et al. \(2021\)](#) found that elderly individuals with chronic diseases experienced higher levels of death anxiety. Since chronic diseases threaten the lives of people and COVID-19 has created uncertainties, high levels of death anxiety are expected in these groups.

Finally, it was revealed that the scores obtained by the participants from the spiritual well-being differed according to marital status, educational level, and monthly income level, and the spiritual well-being of individuals who were married, individuals with

high education levels, and individuals with higher monthly incomes was at higher levels. In their study, [Tasan and Citlik Saritas \(2022\)](#) found that participants who were married and whose incomes were equal to their expenses exhibited a higher spiritual tendency. In their study on elderly individuals, [So Nam and Sang Bok \(2013\)](#) revealed that individuals with good economic status had higher levels of spiritual well-being. Likewise, in their study, [Gürsu and Ay \(2018\)](#) observed that spiritual well-being varied according to income status, and individuals with higher income status had more spiritual well-being. In their study, [Sadrollahi and Khalili \(2015\)](#) determined that spiritual well-being differed according to marital status and income, and the spiritual well-being of married people and elderly people with good incomes was also at high levels. In the study conducted by [Chabok et al. \(2017\)](#) on Iranian elderly individuals, it was revealed that spiritual well-being differed according to marital status and educational level, and the spiritual well-being levels of married individuals and individuals with higher educational levels were higher.

Conclusion

In the study, it was concluded that the pandemic awareness of elderly individuals, who were in the most important risk group during the COVID-19 pandemic, had significant effects on the perception of death anxiety and spiritual well-being and that the increase in pandemic awareness reduced death anxiety and increased spiritual well-being. It is of extreme importance to raise public awareness of the disease to decrease the rapid spread of COVID-19 and its adverse effects on health ([Sarker et al., 2021](#)). Accordingly, it is believed that it is quite important for health personnel or health politicians to provide the necessary information about the pandemic to raise the awareness of elderly individuals about the disease. However, attention should be paid to ensuring that the information to be provided is clear, understandable, and transparent and does not contain incorrect information. Moreover, to minimize the mental problems caused by the pandemic, it is highly important to provide services such as psychological support, counseling and spiritual support to elderly individuals. At this point, the active role of social workers/psychologists in the disease process can contribute to enhancing individuals' well-being.

Limitations

Since this study was conducted only on individuals aged 65 years and over living in Edirne province of Turkey, the study results cannot be generalized to all individuals aged 65 years and over living in Turkey. Furthermore, because the study included the participants who voluntarily took part in the survey, it was considered that the participants evaluated the questions of the scales subjectively.

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