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Research Article

THE RELATIONSHIP BETWEEN HUMOR STYLE AND DEATH ANXIETY OF PALLIATIVE CARE PATIENTS

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Abstract: *This descriptive and relational study was conducted to examine the relationship between palliative care patients' humor styles and death anxiety. The study sample consisted of 282 palliative care patients treated in the palliative care clinics of a training and research hospital between January 2021 and August 2021. Personal Information Form, Humor Styles Questionnaire, Thorson-Powell Death Anxiety Scale, and Palliative Performance Scale were used as data collection instruments. Data analysis was performed using mean, standard deviation, and percentile, Kolmogorov-Smirnov Goodness-of-Fit Test, Significance test of the difference between two means, ANOVA, Post-hoc test, Pearson's Correlation test, and regression analysis. It was found that the mean age of the patients was 49.58±9.56 and 52.1% were hospitalized in the palliative care clinic for 5-10 days. It was determined that the most frequently used humor style by the patients was "Affiliative Humor" (31.7%), and the least used humor style was "Aggressive Humor" (19.5%). The Humor Styles Questionnaire subscale scores of the patients were determined as 31.05±7.11, self-enhancing humor 28.34 ± 6.94, aggressive humor 26.85±7.37, self-defeating humor 23.50± 6.21. The death anxiety scale mean scores of the patients were found to be 81.62±9.12. In addition, a low negative correlation was found between affiliative humor ($r=-0.298$; $p<0.05$) and self-enhancing humor ($r=-0.318$; $p<0.05$) and death anxiety. A moderate positive correlation was found between aggressive humor ($r=0.450$; $p<0.05$) and self-defeating humor ($r=0.427$; $p<0.05$) and death anxiety. The result of the study revealed that humor is an important variable associated with death anxiety and the way humor is used by patients differs in death anxiety.*

Keywords: *Palliative Care, Patient, Humor Style, Death Anxiety.*

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1. Introduction

Scientific and medical developments in recent years have made it possible to prevent or treat many diseases and have been effective in prolonging the human lifespan [1–3]. With the prolongation of human life, an increase has been observed in chronic diseases and diseases such as cancer, and this has revealed the concept of palliative care [2, 4]. In cases where medical treatment is not possible, ensuring the comfort of the patient and maintaining the quality of life constitute the main goal of palliative care [2, 4]. In this context, palliative care is specialized medical care for patients who have to live with a serious illness, with the aim of reducing symptoms, increasing the quality of life, and minimizing stress [2, 5].

In situations where life is under threat and diseases are severe, people often experience a life-related crisis [5, 6]. Being a palliative care patient, which is one of the situations that cause a life crisis, reminds the patient that the risk of death is higher [1, 2]. The end of life and the fact that one day you will leave everything you have causes anxiety. Death anxiety is an emotion experienced most of the time, and terminal illnesses may cause this anxiety to increase [4, 7]. Death anxiety is a feeling that

exists from birth, continues throughout life, lies at the root of all fears, develops after the awareness that people will no longer exist, that they can lose themselves and the world, and that they can become nothing [6, 7]. Due to human nature, it may be difficult to maintain the same mood all the time and to keep calm. This situation causes the person to experience anxiety and the person tends to some actions to get rid of this troublesome process. One of these actions is the use of humor [8, 9]. The Association for Applied and Therapeutic Humor (2004) defines humor as any attempt to promote health and well-being through playfully exploring, expressing, or affirming the strangeness or inappropriateness of life situations. At the same time, it is stated that humor can be used as a complementary treatment of diseases to provide physical, emotional, cognitive, social, or spiritual healing or coping [10, 11]. It is stated in the literature that humor is accepted by the health care team and has positive psychological and physiological results for patient care [8, 12, 13]. In addition, it is stated that humor in clinical settings is mostly patient-centered and occurs spontaneously [10, 12]. Studies have found that the use of humor in patient care facilitates coping with anxiety experienced during illness or hospitalization and creates a positive atmosphere between the patient and the caregiver [13, 14]. Humor reduces anxiety by replacing the stress situation with more positive emotions rather than a threat [11, 15].

There are four different styles of humor used in daily life, which are harmonious or incompatible and determined by the individual's in-person or interpersonal character. These styles also express the differences in the use of humor [8, 13]. Two of these humor styles are positive-healthy humor in terms of psychological well-being (self-enhancing, affiliative humor) and the other two are negative-unhealthy humor (aggressive humor and self-defeating humor) [15, 16]. Self-enhancing humor is the style in which people use humor in a tolerant and harmless way to contribute to themselves. Affiliative humor is the situation in which individuals can use humor in an accepting and tolerant manner in order to contribute to their relations with others and to improve their social relations [10, 16]. Aggressive humor is the situation in which individuals can use humor to contribute to themselves, to the detriment of others, and at the expense of their harm. Self-defeating humor, on the other hand, is the situation in which the individual uses humor to his detriment and harms himself in order to contribute to his relations with others and to improve his social relations [9, 15].

Humor has many physical, emotional, social, and cognitive benefits. Humor acts as a tool that reduces the emotional load in the environment in situations that cause anxiety such as death [10, 14]. Although it was stated in the literature review that patients' use of humor is a healthy method for coping with problems, it is noteworthy that there is not enough research examining the relationship with death anxiety [7, 17]. For this reason, the study was conducted to examine the relationship between palliative care patients' humor styles and death anxiety. The research questions are as below:

1. What is the humor style of palliative care patients?
2. What are the death anxiety levels of palliative care patients?
3. Is there a relationship between socio-demographic characteristics of palliative care patients, humor style, and death anxiety?
4. Is there a relationship between palliative care patients' humor styles and death anxiety?
5. Does humor affect death anxiety?

2. Materials and Methods

2.1. Objective and Type of the Study

This study was conducted in descriptive and relational type to examine the relationship between palliative care patients' humor styles and death anxiety.

2.2. Population and Sample of the Study

The research population consisted of palliative care patients treated in the palliative care clinics of a training and research hospital between January 2021 and August 2021. A total of 1170 patients were admitted to the hospital during the study period. The sample consisted of 282 patients who accepted to participate in the study and met the inclusion criteria. Power analysis was used to calculate the sample size. With the calculation made with G power software, the power of the research was 95%, the alpha value was 0.05, and the effect level was considered moderate.

2.3. Inclusion Criteria

All patients who were 18 years of age or older, conscious, had no mental illness, had a palliative performance score of 40% and above, and agreed to participate in the study were included. In determining the lower limit of the palliative performance score of the patients be included in the study, level of %40 which includes the criteria of being conscious and has normal or decreased nutrition, being able to perform self-care with a great deal of assistance, being "unable to perform most of the activities" and having "disseminated disease" in terms of activity and diagnosis, and being "usually in bed" in terms of mobility has been taken as the basis of the lower limit. Patients below this level were not included in the study because they could get very tired during the interview due to the inadequacy of their functional capacity, and healthy data might not be collected due to variable consciousness levels [3, 6]. The ambulation, activity performance, and conscious level of the patients were observed by the researcher while the level of self-care and oral intake asked the patients. To observe these characteristics of the patients, patients who are hospitalized in palliative care for more than 24 hours were included in the study.

2.4. Collection of the Data

The patients participating in the study were informed about the research and it was explained that the data would not be shared with third parties. The answers to the questionnaires were collected by face-to-face interview technique, following the mask, hygiene, and social distance rules. Before starting the questionnaire, the patients were informed about the purpose of the study and the questionnaire, and their verbal consent was obtained. The application of the data collection forms took approximately 10-15 minutes. Data were collected from the patients between 11:00-14:00 a.m. because there wasn't any specific treatment or any other intervention for the patients and they were able to answer the researcher's questions.

2.5. Data Collection Instruments

Personal Information Form, Humor Styles Questionnaire (HSQ), Thorson-Powell Death Anxiety Scale (TPDAS), and Palliative Performance Scale (PPS) were used as data collection instruments.

2.6. Personal Information Form

In the form created by the researchers by scanning the literature, there are a total of 8 questions consisting of the sociodemographic characteristics of the patient and information about the disease [1, 4, 7].

Humor Styles Questionnaire (HSQ)

HSQ is a self-assessment scale developed by Martin et al. (2003) to measure four different dimensions related to individual differences in daily use of humor and consists of 32 items. There are four subscales in the scale, two of which are compatible and two are incompatible, aiming to measure four different humor styles. These subscales were named Affiliative, Self-enhancing, Aggressive, and Self-defeating humor. Each of the subscales using a seven-point Likert-type rating ranging from "Totally Disagree" to "Totally Agree" consists of 8 items each and there are 11 items scored in the opposite direction. Thus, the lowest and highest scores that can be obtained from each subscale vary between 7 and 56. The high scores obtained from the subscales indicate the frequency of use of the relevant humor style. In the adaptation study of the scale into Turkish, the Cronbach alpha internal consistency

coefficients obtained for each subscale were calculated as Affiliative Humor 0.74, Self-enhancing Humor 0.78, Aggressive Humor 0.69, and Self-defeating Humor 0.67 [18, 19]. In this study, Cronbach's alpha was found to be Affiliative Humor 0.76, Self-enhancing Humor 0.80, Aggressive Humor 0.71, and Self-defeating Humor 0.70.

Thorson-Powell Death Anxiety Scale (TPDAS)

The Turkish validity and reliability study of the scale developed by Thorson and Powell (1992) was carried out by Karaca and Yıldız (2001), and the Cronbach Alpha coefficient was found to be 0.84. The scale, which consists of 25 items, is a five-point Likert type. While 17 items of the Death Anxiety Scale have a positive sentence structure (1, 2, 3, 5, 6, 7, 8, 9, 12, 14, 15, 16, 18, 19, 20, 22, 24th items) the other 8 items have a negative sentence structure (items 4, 10, 11, 13, 17, 21, 23, 25th items). For the scale to determine the death anxiety level, the lowest 0 and the highest 100 points can be obtained, and a high score indicates a high level of anxiety. However, death anxiety is not expected to be zero. On the contrary, very low death anxiety scores also indicate death anxiety [20, 21]. The Cronbach's alpha value determined for this study is 0.79.

Palliative Performance Scale

The Palliative Performance Scale (PPS), developed by Anderson et al. in 1996, enables the evaluation of the patient's mobility status, activity and disease signs, self-care, nutrition, and consciousness level. The rating level starts from 0% and reaches 100% in increments of 10%. After starting from the mobility status on the far left and finding the most appropriate percentile for the patient in the evaluation, the most appropriate percentile PPS score is assigned to the patient by evaluating the performance areas in the other columns [3, 6]. The lower limit of the PPS score of the patients to be included in our study was determined to be at least 40% so that individuals would not get tired during the interview and not be affected by their level of consciousness.

2.7. Analysis and Evaluation of the Data

Data analysis was performed using SPSS 25.0 software. Mean, standard deviation, and percentage were used to describe the socio-demographic characteristics of the participants. Kolmogorov-Smirnov Test was used for the normality analysis of the data. Significance tests of the difference between the two means, ANOVA, and Post-hoc Tukey's HSD analysis were used. In addition, Pearson's Correlation test and regression analysis were used to determine the relationship between the two scales.

2.8. Ethical Aspect of the Study

Ethics committee approval (İnönü University Ethical Committee, date: 03.11.2020; number: 2020-35/3) and institutional permission from the relevant hospital (13.11.2020/20-352) were obtained in order to conduct the research. After the patients participating in the study were informed about the study, their verbal consent was obtained, and the study was conducted in accordance with the Declaration of Helsinki.

2.9. Limitations of the Study

The results of this study are valid only for the patients participating in the study and cannot be generalized to all palliative care patients.

3. Results

The mean age of the patients was 49.58±9.56, 41.9% were in the 48-52 age group, 53.2% were female, 56.7% had a moderate economic status, 55.7% were married, 48.2% were secondary school graduates, 35.5% were cancer, 62.4% had a disease duration of 5-9 years and 52.1% were hospitalized in the palliative care clinic for 5-10 days (Table 1). No statistically significant difference was found between the HSQ Affiliative and Self-enhancing sub-dimensions and the variables. A statistically significant difference was found between the HSQ Self-defeating sub-dimension and gender and disease diagnosis. It was determined that there was a statistically significant difference between the HSQ

Aggressive sub-dimension and gender, disease diagnosis, and disease duration. A statistically significant difference was found between the death anxiety scale mean score and age group, gender, marital status, and disease diagnosis.

Table 1. Comparison of the participants' Death Anxiety, Humor Styles sub-dimension, and total scores according to the information about sociodemographics

Variables	n	%	Affiliative	Self-Enhancing	Self-Defeating	Aggressive	Death Anxiety
Age Group							
38-42	68	24.1	31.51±2.37	27.30±3.42	20.02±2.90	26.78±2.88	76.22±1.03[d]
43-47	96	34.0	30.70±2.25	28.19±3.60	24.26±1.11	25.05±2.71	80.59±1.46[d]
48-52	118	41.9	31.95±2.04	28.61±3.00	23.40±1.54	26.24±2.35	84.30±1.75[c]
p[a]			0.072	0.128	0.705	0.931	0.023
Gender							
Female	132	46.8	30.10±3.00	27.20±2.77	26.29±1.88	29.52±2.46	83.05±1.92
Male	150	53.2	31.99±2.16	29.63±2.35	20.15±1.63	24.43±2.90	77.60±1.17
p[b]			0.364	0.056	0.030	0.040	0.034
Economic Level							
Poor	63	22.3	29.36±3.19	28.15±2.10	22.00±1.08	26.31±1.55	80.00±2.11
Middle	160	56.7	30.17±2.00	27.08±3.91	23.94±1.35	26.06±1.36	80.15±1.00
Good	59	30.0	32.50±2.36	27.31±3.35	23.18±1.11	26.52±1.09	80.30±1.38
p[a]			0.623	0.980	0.071	0.199	0.080
Marital status							
Single	157	55.7	32.14±3.16	29.52±2.43	23.28±1.03	27.14±1.73	84.33±1.25
Married	125	44.3	30.23±2.60	27.36±2.04	23.96±1.65	25.38±1.05	76.90±1.42
p[b]			0.122	0.500	0.062	0.545	0.032
Education Level							
Primary	68	24.1	30.18±3.80	28.10±1.12	24.17±1.00	27.06±1.70	79.90±1.00
Secondary	136	48.2	31.07±2.32	28.91±1.34	22.35±1.28	24.14±2.10	80.05±1.36
University	78	27.7	32.90±2.16	28.00±2.39	21.61±1.42	25.02±2.33	80.12±1.24
p[a]			0.130	0.106	0.167	0.081	0.144
Diagnosis							
Cancer	100	35.5	29.16±2.10	27.62±2.08	29.44±1.53[c]	30.30±2.14[c]	85.19±1.70[c]
CKD	70	24.8	30.35±2.17	28.19±3.15	23.50±1.61[d]	22.15±2.09[d]	82.21±1.16[d]
CHF	52	18.4	28.60±2.33	28.05±2.66	19.31±1.74[d]	26.40±2.15[d]	78.05±2.20[d]
Stroke	60	21.3	31.47±2.46	29.94±2.13	23.12±1.32[d]	26.55±1.00[d]	78.38±1.42[d]
p[a]			0.187	0.235	0.023	0.030	0.015
Disease Duration							
1-4 years	106	37.6	29.33±2.10	26.62±2.02	23.00±1.25	22.09±2.34	79.14±2.49
5-9 years	176	62.4	32.06±2.13	29.60±2.73	23.15±1.19	30.10±2.50	80.70±1.84
p[b]			0.408	0.711	0.070	0.013	0.058
Hospitalization duration in the palliative care clinic							
1-5 days	135	47.9	30.56±5.47	28.06±5.22	24.50±1.69	26.50±2.55	80.06±2.14
5-10 days	147	52.1	32.66±4.96	27.94±4.85	22.36±1.56	27.79±2.06	80.78±1.90
p[b]			-0.890	0.140	0.004	0.802	0.350

[a] Variance analysis (ANOVA), [b] Independent samples t-test, $p<0.05$, [c] Group with the difference in Post-hoc Tukey's HSD test, [d] Group with no difference in Post-hoc Tukey's HSD test CKD: Chronic Kidney Disease, CHF: Chronic Heart Failure

It was determined that the most frequently used humor style of the patients was "Affiliative Humor" (31.7%), and the least used humor style was "Aggressive Humor" (19.5%). The patients' Humor Styles Scale mean scores were affiliative humor 31.05±7.11, self-enhancing humor 28.34±6.94, aggressive humor 26.85±7.37, self-defeating humor 23.50± 6.21. The death anxiety scale mean scores of the patients were found to be 81.62±9.12 (Table 2).

Table 2. The patients' Humor Styles' sub-dimensions and their mean scores from the death anxiety scale

Scales	n	%	X̄±SD	Min-Max
Humor Styles Questionnaire (HSQ)				
Affiliative humor sub-dimension	89	31.7	31.05±7.11	9-54
Self-enhancing humor sub-dimension	77	27.3	28.34±6.94	8-48
Aggressive humor sub-dimension	61	21.6	26.85±7.37	7-46
Self-defeating humor sub-dimension	55	19.5	23.50±6.21	7-40
Scales	**X̄±SD**		**Min-Max**	
Death Anxiety Scale Total	81.62±9.12		65-95	

The relationship between affiliative humor style and self-enhancing humor style was moderate, positive, and statistically significant (r=0.487; p<0.05). The relationship between affiliative humor style and aggressive humor style was negative, but no significant relationship was found (r=-0.019; (p<0.05). The relationship between affiliative humor style and self-defeating humor style was low, positive, and statistically significant (r=0.155; p<0.05). The relationship between self-enhancing humor style and aggressive humor style was negative, low and no statistically significant relationship was found (r=-0.025; p<0.05). The relationship between self-enhancing humor style and self-defeating humor style was positive, moderate, and statistically significant (r=0.490; p<0.05). The relationship between aggressive humor style and self-defeating humor is positive, low, and statistically significant (r=0.241; p<0.05). In addition, a low negative correlation was found between affiliative humor (r=-0.298; p<0.05) and self-enhancing humor (r=-0.318; p<0.05) and death anxiety. A moderate positive correlation was found between aggressive humor (r=0.450; p<0.05) and self-defeating humor (r=0.427; p<0.05) and death anxiety (Table 3).

Table 3. Correlation Analysis Results of Humor Style Questionnaire (HSQ) sub-dimensions and Death Anxiety Scale

Variables		1	2	3	4	5
1. Affiliative Humor	r	1				
	p					
2. Self-enhancing Humor	r	0.487	1			
	p	0.021*	-			
3. Aggressive Humor	r	-0.019	-0.025	1		
	p	0.105	0.318	-		
4. Self-defeating Humor	r	0.155	0.490	0.241	1	
	p	0.029*	0.031*	0.013*		
5. Death Anxiety	r	-0.298	-0.318	0.450	0.427	1
	p	0.040*	0.016*	0.025*	0.019*	

r: Pearson correlation; *p<0.05

According to Table 4, self-enhancing, affiliative, aggressive and self-defeating humor styles have a significant relationship with death anxiety (R = 0.47). These variables explain 22% of the variance in death anxiety. According to the results of the regression analysis, all the variables of self-enhancing humor (β = 0.16), affiliative humor (β = 0.33), aggressive humor (β = -0.17), and self-defeating humor (β = -0.16) are significant predictors of death anxiety (Table 4).

Table 4. Multiple Linear Regression Analysis Results for the Prediction of Death Anxiety

Variable	B	Sh	β	t	*p*
Constant	78.26	0.21		5.96	p<0.001
Self-enhancing humor	0.09	0.04	0.16	2.31	0.025
Affiliative humor	0.17	0.03	0.33	4.79	p<0.001
Aggressive humor	-0.08	0.03	-0.17	-2.37	0.021
Self-defeating humor	-0.07	0.03	0.16	2.03	0.046

$F = 15.39$, $p < 0.05$; $R = 0.47$, $R^2 = 0.22$

4. Discussion

It is known that humor is the ability to see the positive side of events and situations instead of being serious all the time, and it is one of the effective and healthy methods that provide a different perspective in coping with the difficult experiences of life. In this study, it was seen that the most used humor style by the patients was the affiliative humor style, and the patients used compatible-positive (affiliative and self-enhancing) humor styles more than incompatible-negative (aggressive and self-defeating) humor styles. Studies have shown that patients use affiliative humor more [8, 22]. It is stated that individuals who have compatible-positive humor styles, which include affiliative humor and self-enhancing humor styles, use humor in an accepting way to contribute to themselves and others in order to contribute to their relations with others and improve their social relations in a tolerant and harmless way [9, 12]. Kuiper (2020) stated that affiliative humor, which is one of the compatible - positive humor styles, has a negative relationship with self-actualization and stress [18]. They state that humor positively affects physical health, creates a positive mood in individuals, contributes significantly to mental health, and is an effective method for coping with the negative effects of anxiety [12, 23].

In this study, it was found that there was a significant difference between gender and disease diagnosis, HSQ self-defeating sub-dimension, and aggressive sub-dimension, and death anxiety ($p<0.05$). Women's death anxiety was high, men's self-defeating and aggressive sub-dimension mean scores were high. In some studies, it is stated that men have more aggressive humor, but there is no difference between affiliative and self-enhancing humor, which has positive humor features [10, 24]. However, on the contrary, there are studies stating that men have a more affiliative humor style [11, 25]. According to these results, it can be stated that there is no difference in the use of humor by both genders in terms of using affiliative humor and self-enhancing humor, which are more supportable and acceptable with the influence of social life and culture. The reason why especially male students have an aggressive humor style may be due to the way men are brought up in our society and their aggressive behavior being accepted as normal. In addition, the emergence of different results can be explained by the opinions that the sense of humor differs from society to society and that it arises from difficulties in measuring humor [14, 18]. It was determined that there was a statistically significant difference between the HSQ aggressive sub-dimension and gender, disease diagnosis, and disease duration. A statistically significant difference was found between the death anxiety scale mean score and age group, gender, marital status, and disease diagnosis ($p>0.05$). In the literature, it is stated that women, married, diagnosed with cancer, and elderly individuals have high death anxiety [3, 6]. It is known that cancer is a difficult disease that affects the patient both physically and emotionally. Despite important biomedical advances, cancer is still synonymous with death, pain, and suffering [2, 5]. It is thought that the lack of cancer treatment and the troublesome chemotherapy process increase death anxiety and cause an aggressive humor style. It suggests that the reason for the high death anxiety of women and married people may be related to their greater family and home-related responsibilities. As age increases, people think that they are closer to the end of life and believe that they have more things to do [2, 17].

As a result of the analyzes made to understand the relationship between humor styles, the relationship between affiliative humor and self-enhancing humor was found to be positive and statistically significant (r=0.424, p<.01). Affiliative humor, which is one of the compatible humor styles, includes joking and having fun without harming oneself and others, and a humorous point of view and having fun is the basis of self-enhancing humor [20, 26]. Therefore, a significant relationship was found between the two. Although the relationship between affiliative humor and aggressive humor is not statistically significant, it is negative (r=-0.052; p>.01). The relationship between affiliative humor and self-defeating humor was positive and statistically significant (r=0.21; p<.01). Self-defeating humor, which involves entertaining others by sacrificing oneself, was found to have a significant relationship since it aims to make others laugh even if it is mocking oneself [16, 19]. A negative correlation was found between self-enhancing humor style and aggressive humor style, although it was not statistically significant (r=-0.049; p>.01). The relationship between self-enhancing humor and self-defeating humor is positive and statistically significant (r=0.305; p<.01). Self-defeating humor style was found to be related to self-enhancing humor style because it is a humor style that makes self-sacrifice to make others laugh. Finally, the relationship between aggressive and self-defeating humor is positive and statistically significant (r=0.235; p<.01). A significant relationship was found between aggressive humor and self-defeating humor styles because they are unhealthy and contain ridicule and humiliation [23, 25]. These results support the hypothesis that compatible humor styles may be related within themselves, and incompatible humor styles may be related within themselves [9, 14, 18]. In addition, the same results added to the literature that self-defeating humor style is seen together with compatible humor styles (self-enhancing humor and affiliative humor).

In this study, it was determined that affiliative and self-enhancing humor style decreased death anxiety, while self-defeating and aggressive humor style increased death anxiety. Studies have examined the relationship between humor styles and anxiety, and it has been reported that there are negative relationships between compatible humor styles and anxiety [7, 15]. As a matter of fact, the results of the regression analysis also confirm this finding. Regression analysis results showed that all humor styles were significant predictors of death anxiety. While self-enhancing and affiliative humor styles were found as positive predictors of death anxiety, aggressive and self-defeating humor styles were found as negative predictors. The findings of this study are also in line with the findings of studies stating that individuals who have a high level of humor and use humor constructively have lower levels of anxiety [23, 26, 27]. The findings show that patients with healthy and compatible humor styles, affiliative humor, and self-enhancing humor styles, also have less death anxiety, as well as tend to incompatible humor styles less. The fact that people who use humor in a non-aggressive and tolerant way to facilitate interpersonal relations and reduce tensions, and who enjoy laughing with others and making them laugh, have less anxiety in the face of death anxiety also meets the theoretical expectations [26, 27].

5. Conclusion and Recommendations

As a result, the significant relationships between humor styles and death anxiety revealed that humor is an important variable associated with death anxiety and that humor differs in death anxiety according to whether the patient's use of humor is positive or negative. In addition, it was determined that patients with more aggressive and self-defeating humor styles, which are incompatible and unhealthy humor styles, had more death anxiety. Patients' awareness of this issue can be increased and their ability to use humor as a coping strategy against death anxiety can be improved. Considering that there is a negative relationship between aggressive humor style and affiliative humor, the use of aggressive humor at excessive levels should be avoided. We recommend health professionals consider the patients' humor styles while they plan interventions to decrease the level of death anxiety. We also recommend adding humor styles and death anxiety to the nursing curricula and in-clinic educations. We

recommend further studies to isolate the effect of humor styles on death anxiety in larger populations and various cultural groups.

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Ethical Statement

This study was approved by the Non-invasive Ethical Committee of İnönü University (Date: 03.11.2020, Number: 2020-35/3).

Conflict of Interest

The authors declare that they have no conflict of interest.

Authors' Contributions

The authors declare that their contribution to the work is equal.

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