

Assessment of death anxiety among medical and surgery clinics patients of a teaching hospital

Sevilay Hintistan,¹ Dilek Cilingir,² Hilal Pekmezci³

Abstract

Objective: To determine the level of death anxiety among inpatients in Medical and Surgery clinics.

Methods: The cross-sectional study was conducted at the Medical and Surgery clinics of the University Hospital of Trabzon, Turkey, from June 15 to October 15, 2014. Data was gathered using a questionnaire and Death Anxiety Scale was applied.

Results: There were 170 subjects in the study. Mean death anxiety score was 7.82 ± 2.73 among Medical patients, while it was 8.09 ± 2.73 for surgical patients. Those who stayed at Medical Clinic showed statistically significant differences between death anxiety and gender, patients' profession, the type of patient room, and patients' previous surgeries ($p < 0.05$ each). Patients who stayed at Surgery Clinic showed statistically significant differences between death anxiety and age, marital status, having visitors, frequency of thoughts about death and sharing thoughts of death with others ($p < 0.05$ each).

Conclusion: Death anxiety was higher among patients who stayed at the Surgery Clinic than those at the Medical Clinic.

Keywords: Anxiety, Death, Disease, Hospital, Inpatients. (JPMA 66: 823; 2016)

Introduction

Death is recognised as an inevitable part of life, and many people tend to avoid thinking or talking about it out of fear and the finality of their existence on this earth. Death is also associated with a certain fatalism and feeling of helplessness.^{1,2} Diagnosis of an acute/chronic disease and hospitalisation due to the disease may arouse many different feelings for patients. Not only does a hospital stay have many possible outcomes, but patients may experience many different levels of pain, and their body may undergo some changes in function and appearance. They may also face many challenges related to personal dignity and their body's response to the illness and the treatments. All of these factors may contribute to a patient's anxieties. One of these concerns is the fear of death and dying.^{2,3}

Patients' anxieties about death and dying often manifest as fear, concern and tension,⁴ all of which affect the lives of most patients.^{5,6} Anxieties increase when patients encounter the many unknowns of what their diagnosis and treatments will bring, inevitably reminding them of their mortality.^{2,3} Unfortunately, patients' heightened anxiety levels may adversely affect

their abilities to cope effectively with their disease.^{7,8} Because most people associate death and dying with disease, pain, and grief,⁹ patients may feel more vulnerable and unable to cope when facing the stress of hospitalisation.^{7,8} In particular, when a patient receives a serious diagnosis of cancer or must undergo dialysis or surgery, their anxiety levels will likely increase.^{9,10} Indeed, literature has documented that the fear of death is higher among cancer patients than it is for psychiatric patients.⁹⁻¹³ A study identified a positive correlation between fear of death and anxiety, depression, obsession, and neuroticism.¹⁴

Although hospitals are places where patients go to regain health, but many deaths also occur there. Thus, patients' thoughts and anxieties will certainly reflect on this. Also, they may intend to vary treatments to prolong their lives. But these treatments may also become unbearable due to their side effects. In addition, certain treatment modalities such as surgery, radiotherapy and chemotherapy, may cause a great deal of pain.¹⁰ Therefore, nursing approaches for patients facing serious illness should have certain goals including reducing the psychological pain concerning thoughts of death, increasing the quality of life through compliance with the medical team's recommendations, managing the symptoms of anxiety and depression, preventing loneliness and isolation, helping cope with pain and other symptoms, achieving active participation of the patients in their treatment, and supporting and strengthening patients' hopes for the

.....
^{1,2}Karadeniz Technical University Health Sciences Faculty, Nursing Department, Trabzon, ³Recep Tayyip Erdogan University Health Services Vocational High School, Nursing and Care Services / Elderly Care, Rize, Turkey.

Correspondence: Sevilay Hintistan. Email: sevilayhindistan@gmail.com

future. In order for nurses to offer patients optimal psycho-social support, they need to know and understand patients' fears, thoughts, and opinions related to hospitalisation, disease and death.³

Over the years, there has been a considerable amount of psychological research focussed on death anxiety.^{1-3,8,12} However, little attention has been given to clinical aspects of this problem. Evaluation of the Medical and Surgery inpatient's death anxiety are important in determining the effect of treatment, and deciding the clinical course.

The current study was planned to identify the death anxiety among the inpatients at Medical and Surgery clinics.

Subjects and Methods

The cross-sectional study was conducted from June 15 to October 15, 2014 at the University Hospital of Trabzon, which is regional and public hospital in Trabzon Province in Northeastern Turkey. On average, 800 patients receive their treatment each year in the Medical and Surgery Clinics of the hospital. Patient rooms in these clinics had single, double and triple capacity as well as multiple-occupancy rooms.

The sample size determined according to the power analysis was 78, but to avoid possible loss of data, it was increased by nearly 10% over the calculated sample size.^{15,16}

The study was approved by the Karadeniz Technical University Faculty of Internal Medicine Ethics Council of Trabzon, and the institutional review board.

Those included were receiving inpatient treatment at Medical and Surgery clinics, were aged ≥ 18 years, were able to communicate, mentally competent, had robust perception and reaction abilities, had no known psychiatric or neurological disorders, showed voluntary agreement to participate in the study. Those who used psychiatric drugs, were not able to communicate, or did not volunteer to participate in the study were excluded.

Data was collected using a questionnaire that was developed after a review of the current literature,^{1,3,5,6,8,9,11-14,17} and had 25 questions. Besides, the Death Anxiety Scale (DAS)¹⁸ was also used.

The DAS is a 15-item scale with yes/no answers and measures fears and anxieties about one's own death and death risk. The first nine items are scored with 1 for "yes" and 0 for "no" answers, while the other six items are

scored with 1 for "no" and 0 for "yes" answers. Correct answers are given one point while wrong answers are not calculated. The lowest score to be obtained from the scale is 0 and the highest score is 15. The total score demonstrates the death anxiety score. If the score is high, then so is the patient's death anxiety. The Turkish adaptation, reliability, and validity tests of the DAS were performed in 2008.⁹ The test-retest reliability of the scale was found to be 0.79, and reliability measured with the Kurder-Richardson formula was 0.75. These findings were similar to those of 0.83 and 0.76 found in the original study.¹⁸

All analyses were done using SPSS 17. Data was evaluated using Mann Whitney U test, Kruskal Wallis test, Independent Sample t test, and the percentage, mean, standard deviation, minimum-maximum range were calculated.

Results

There were 170 subjects in the study with 85(50%) each in Medical and Surgery clinics. Among Medical inpatients, 37(43.5%) were aged 40-59; 47(55.3%) were females; 35(41.2%) were housewives; 42(49.4%) were literate/primary education; 57(67.1%) were married; 65(76.5%) stayed in double-rooms; 73(85.9%) had visitors during their stay; 46(54.1%) had not undergone any previous surgeries; 43(25.3%) described death as "fate"; 48(56.5%) thought of death "from time to time"; 63(74.1%) shared their thoughts about death with others; and 70(82.4%) had experienced a previous loss or grief. In Surgery clinic, 37(43.5%) were aged 40-59; 46(54.1%) were males; 41(48.2%) were literate/primary education; 62(72.9%) were married; 25(29.4%) were self-employed; 48(56.5%) stayed in double-rooms; 75(88.2%) had visitors during their stay; 47(55.3%) had not undergone any previous surgeries; 47(27.6%) described death as "fate"; 44(51.8%) thought of death "from time to time"; 59(69.4%) shared their thoughts about death with others; and 67(78.8%) had experienced a previous loss or grief (Table-1).

Results for Medical inpatients showed statistically significant differences between the mean scores of DAS and being female ($p=0.007$), being housewives ($p=0.007$), stay in the triple and multiple rooms ($p=0.007$) and previous surgeries ($p=0.031$). Results for Surgery inpatients showed statistically significant differences between DAS scores and 40-59 age ($p=0.008$), being married ($p=0.011$), having no visitors ($p=0.019$), frequent thoughts of death ($p=0.042$) and having shared thoughts of death ($p=0.015$). In addition, the mean score on DAS of Medical inpatients was 7.82 ± 2.73 , while for Surgery

Table-1: Characteristics of Inpatients at Medical and Surgery Clinics (n=170).

Characteristics	The Medical Clinic (n=85)		The Surgery Clinic (n=85)	
	n	%	n	%
Age (Year)				
18-39	29	34.1	37	43.5
40-59	37	43.5	37	43.5
≥ 60	19	22.4	11	13.0
Gender				
Female	47	55.3	39	45.9
Male	38	44.7	46	54.1
Educational Status				
Illiterate	7	8.2	5	5.9
Literate/primary education	42	49.4	41	48.2
High school	23	27.1	22	25.9
University	13	15.3	17	20.0
Marital Status				
Married	57	67.1	62	72.9
Single (spouse deceased, divorced)	28	32.9	23	27.1
Profession				
Housewives	35	41.2	24	28.2
Civil servants	18	21.2	21	24.8
Self employed	14	16.4	25	29.4
Retired	18	21.2	15	17.6
Type of Patient Room				
Single room	7	8.2	5	5.9
Double room	65	76.5	48	56.5
Triple and multiple occupancy room	13	15.3	32	37.6
Visitors				
Yes	73	85.9	75	88.2
No	12	14.1	10	11.8
Previous Surgeries				
Yes	39	45.9	38	44.7
No	46	54.1	47	55.3
Description of Death*				
Fate	43	25.3	47	27.6
Absolute end	25	14.7	22	12.9
A terrible event	7	4.1	11	6.5
Start of a new life	5	2.9	10	5.9
Disturbance	5	2.9	4	2.4
Nothingness	5	2.9	4	2.4
Frequency of Thoughts About Death				
Often	24	28.2	24	28.2
From time to time	48	56.5	44	51.8
Never	13	15.3	17	20.0
Sharing Thoughts of Death				
Yes	63	74.1	59	69.4
No	22	25.9	26	30.6
Experienced Previous Loss or Grief				
Yes	Yes	82.4	67	78.8
No	No	17.6	18	21.2

*Because more than one answer was given, n increased.

Table-2: Mean Scores of the Death Anxiety Scale of Inpatients according to certain characteristics (n=170).

Characteristics	The Medical Clinic (n=85)			The Surgery Clinic (n=85)		
	n(%)	X ± SD	p	n(%)	X ± SD	p
Age (Year)						
18-39	29(34.1)	7.20 ±2.07	KW=1.254	37(43.5)	7.16±2.46	KW=9.635 0.008*
40-59	37(43.5)	8.43±3.37	0.534	37(43.5)	9.16±2.86	
60 ≥	19(22.4)	7.57± 2.00		11(12.9)	7.63±1.91	
Gender						
Female	47(55.3)	8.53±2.87	t=2.758	39(45.9)	8.48±2.29	t=1.253 0.214
Male	38(44.7)	6.94±2.30	0.007*	46(54.1)	7.76±3.04	
Educational Status						
Illiterate	7(8.2)	9.14±2.11	KW=7.242	5(5.9)	8.80±1.92	KW=5.394 0.145
Literate /primary education	42(49.4)	8.19±2.69	0.065	41(48.2)	8.80±2.49	
High school	23(27.1)	7.30±2.49		22(25.9)	7.50±2.82	
University	13(15.3)	6.84±3.28		17(20.0)	6.94±2.98	
Marital Status						
Married	57(67.1)	7.82±2.75	U=777.00	62(72.9)	8.58±2.39	U=460.00 0.011*
Single	28(32.9)	7.82±2.73	0.843	23(27.1)	6.78±3.17	
Profession						
Housewives	35(41.2)	9.02±2.88	KW=12.025	24(28.2)	8.95±2.49	KW=2.498 0.476
Civil servant	18(21.2)	7.16±2.79	0.007*	21(24.7)	7.71±1.94	
Self employed	14(16.5)	7.42±2.40		25(29.4)	7.72±3.60	
Retired	18(21.2)	6.44±1.58		15(17.6)	7.86±2.23	
Type of Patient Room						
Single room	7(8.2)	5.85±2.79	KW=10.059	5(5.9)	7.40±3.57	KW=3.263 0.196
Double room	65(76.5)	7.69±2.64	0.007*	48(56.5)	7.70±2.60	
Triple and multiple room	13(15.3)	9.53±2.36		32(37.6)	8.78±2.74	
Visitors						
Yes	73(85.9)	7.63±2.71	U=297.00	75(88.2)	7.88±2.78	U=205.50 0.019*
No	12(14.1)	9.00±2.66	0.073	10(11.8)	9.70±1.63	
Previous Surgeries						
Yes	39(45.9)	8.53±3.17	t=2.204	38(44.7)	7.81±3.17	t= -0.816 0.417
No	46(54.1)	7.21±2.14	0.031*	47(55.3)	8.31±2.32	
Frequency of Thoughts of Death						
Often	24(28.2)	8.66±3.37	KW=1.465	24(28.2)	9.45±3.00	KW=6.353 0.042*
From time to time	48(56.5)	7.56±2.52	0.481	44(51.8)	7.63±2.37	
Never	13(15.3)	7.23±1.87		17(20.0)	7.35±2.66	
Shared Thoughts of Death						
Yes	63(74.1)	7.97±2.91	U=505.50	59(69.4)	8.67±2.48	U=516.00 0.015*
No	22(25.9)	7.13±1.55	0.058	26(30.6)	6.76±2.84	
Experienced Previous Loss or Grief						
Yes	70(82.4)	8.20±2.85	U=458.50	67(78.8)	8.19±3.01	U=516.00 0.343
No	15(17.6)	6.72±2.05	0.439	18(21.2)	7.72±8.09	
Death Anxiety Scale		7.82±2.73 (Min=3, Max=15)			09±2.73 (Min=3, Max=15)	

*Significant.

inpatients it was 8.09±2.73 (Table-2).

Discussion

The result of the study showed the death anxiety level to be moderate among the inpatients at the Medical and Surgery clinics, with Surgery inpatients showing a higher death

anxiety. When patients first learn they have an acute or chronic disease, they often react with anxiety and fear.¹³ They fear the unknown, the hospital environment and process associated with their diagnosis, and their efforts to deal with these things might increase and magnify patients' fears and anxieties about death.² Most of the patients at the Medical

clinic had a chronic disease and had lived with the diagnosis and had hospital experience for a long time in a study.⁷ A study with epilepsy patients, who were regularly seen at the Neurology Clinic, reported that 30.4% of the patients experienced a moderate level of death anxiety.¹⁹

Surgical intervention is an experience which may threaten the patient both physiologically and psychologically and may lead to psychological trauma.^{7,13} Studies have reported that patients who receive surgical interventions experience anxiety, dependency, helplessness, and feelings of anger more intensely.⁷ This is likely due to surgical operations being associated with death.⁹ One study found the mean anxiety and depression scores of the patients who stayed at Surgery clinics significantly higher than those staying at Medical clinics.⁷

In our study, patients at both clinics described death as "fate" and the "absolute end". There is a definite relationship between death anxiety and the meaning a person attributes to death.²⁰ In a study similar to ours, 25.9% participants recognised death as "fate".¹ Viewing death as an "absolute end" is perceived as a powerful threat to existence, and it may increase death anxiety. Adherence to a religious belief or believing in life-after-death may be factors which reduce death anxiety; yet, for some people their religious faith may promote the idea of punishment after death for one's sins or transgressions on earth, and this may indeed increase death anxiety.^{1,20} A study reported that people who believe that death has various meanings often professed a higher level of satisfaction with life and a stronger religious faith.²¹

For most people, the inevitability of death impacts their lives in many ways. Thoughts of death are not necessarily always negative, but can contribute to the productivity of a person's life. In our study more than half of the inpatients in the Medical and the Surgery clinics thought of death "from time to time". Yet there are individuals who are unable to accept the finiteness of human life and will not broach the topic of death. These attitudes may be indicative of a psychological issue which may have been overlooked.⁵ At the same time, an exaggerated, excessive, pathological preoccupation with death may also negatively affect the psychological well-being of patients. Therefore, in order to be of optimal assistance to patients during their illness, medical professionals need to understand a patient's physical and psychological health. This would include the patient's attitudes and opinions concerning death. In other words, there needs to be collaboration between medical staff and patients which would work towards optimising patients' ability to adapt to their disease and to tolerate their treatments. This could be accomplished by developing a trusting relationship

between medical professionals and patients.^{17,22}

Our study determined that the death anxiety level of the inpatients at the Surgery clinic who thought of death "often" was significantly higher than for patients who "never" or only "from time to time" thought of death. One study found a significant correlation between death anxiety and thoughts of death.¹² Another study determined that as the frequency of thoughts of death increased, so did death anxiety scores, and a statistically considerable difference existed between the groups.¹³

Patients at both Medical and Surgery clinics shared thoughts of death with others. Yet death anxiety was significantly higher among those who stayed at the Surgery clinic and shared thoughts of death with others than for those who did not do so. Since surgical intervention may bring about an awareness concerning patients' attitudes towards death and their possible confrontation with it, their death anxiety may be higher. Our study found that the death anxiety of patients who stayed in triple and multiple-occupancy patient rooms at the Medical clinic was significantly higher than for those staying in single or double patient rooms. Witnessing pain and death in others with chronic medical diseases paints a vivid picture for patients that death is painful, and disease and death are intimately connected.^{8,21}

Most of the studies on death anxiety and gender have demonstrated that women experience a higher level of death anxiety than men.^{1,23} Our study also determined that the death anxiety of female patients (many of whom were housewives) at the Medical clinic was higher. We are of the opinion that the reason why housewives presented higher death anxiety might be correlated with their lower income level, high dependency, and lack of economic power. These women also were at higher risk for experiencing negative and stressful events, including physical and psycho-social violence.

We also found that death anxiety of patients who had gone through a previous surgery at the Medical clinic was higher than those who had not experienced this. Negative feelings which fuel death anxiety may arise from a patient's fears of losing their independence and becoming dependent upon others. They may also fear possible complications related to a surgical intervention. Consequently, their emotional reactions may produce anxiety, depression, and a fear of death.⁷

The death anxiety of Surgery clinic patients who were between 40 and 59 years of age was significantly higher than for other age groups. Although older individuals are said to feel much closer to death, but there is no agreement on how age differences affect death anxiety.¹ One study suggested that death anxiety was higher among the elderly,²³ whereas another one argued that individuals in their mid-70s

experienced less fear of death than those in their late 60s.²⁴

Our study also found that the married Surgery clinic patients had a higher death anxiety level than single patients. Similarly, a study found that the death anxiety of the married patients was higher.¹³ Marriage brings responsibility for children and spouses, and the idea that loved ones are left behind after death may lead to anxiety among those who are married.¹

Our study also found that patients at the Surgery clinic who did not receive any visitors experienced more anxiety than those who had visitors. Visiting patients is an important traditional Turkish custom and is a way of showing respect to those who are ill. Visitors hope to ease patients' loneliness and prevent possible psychological problems such as anxiety and depression.¹ A study reported that there was a significant correlation between death distress and living alone and that poor social support increased death anxiety.²

There are limitations to this study as it was conducted in only one city in Turkey. Thus the results may not be generalised. More studies with larger sample sizes are needed. We are of the opinion, however, that the study will prove to be a valuable resource to relevant studies in the future because of the information it provides about death anxiety in Medical and Surgery clinics.

Conclusions

Patients at the Surgery clinic presented higher death anxiety than those at the Medical clinic. The death anxiety level of the inpatients at the Medical clinic was affected by gender, profession, type of patient room and previous surgeries, whereas death anxiety of the Surgery clinic patients was affected by age, marital status, patient visits, frequency of thoughts about death, and sharing thoughts of death. We recommend that more detailed clinical studies be conducted in terms of different characteristics of death anxiety among patients. We also strongly suggest that healthcare workers be trained about death anxiety so that patients' well-being may be brought to the highest levels possible.

Disclosures: None.

Conflict of Interest: None.

Funding: None.

References

1. Top FU, Sarac A, Yasar G. Depression, death anxiety and daily life functioning in the elderly living in nursing home. *Clin Psychiatry J* 2010; 13: 14-22.
2. Chibnall JT, Videen SD, Duckro PN, Miller DK. Psychosocial-spiritual correlates of death distress in patients with life-threatening medical conditions. *Palliative Med* 2002; 16: 331-8.
3. Dunn KS, Otten C, Stephens E. Nursing experience and the care of dying patients. *Oncol Nurs Forum* 2005; 32: 97-104.
4. Januzzi, JL, Stern TA, Pasternak RC, De Sanctis RW. The influence of anxiety and depression on outcomes of patients with coronary artery disease. *Arch Intern Med* 2000; 160: 1913-21.
5. Lehto RH, Stein KF. Death anxiety: An analysis of an evolving concept. *Res Theory Nurs Pract* 2009; 23: 23-41.
6. Stein JH, Cropanzano R. Death awareness and organizational behavior. *J Organ Behav* 2011; 32: 1189-93.
7. Kayahan M, Sertbas G. The relationship between anxiety-depression level and manners overcoming stress in hospitalized patients at clinics internal and surgical. *Anatolian J Psychiatry* 2007; 8: 113-20.
8. Behl M, Sun Y, Agaba El, Martinez M, Servilla KS, Raj DS, et al. Death during hospitalization in patients on chronic hemodialysis. *Hemodial Int* 2010; 14: S14-21.
9. Akka F, Kose A. Adaptation of Death Anxiety Scale (DAS): Validity and Reliability Studies. *Clin Psychiatry J* 2008; 11: 7-16.
10. Cherlin E, Fried T, Prigerson HG, Schulman-Green D, Johnson-Hurzeler R, Bradley EH. Communication between physicians and family caregivers about care at the end of life: when do discussions occur and what is said? *J Palliat Med* 2005; 8: 1176-85.
11. Fortner BV, Neimiyaer RA. Death anxiety in older adults: A Quantitative Review. *Death Stud* 1999; 23: 387-411.
12. Ozturk Z, Karakus G, Tamam L. Death anxiety in elderly cases. *Anatolian J Psychiatry* 2011; 12: 37-43.
13. Erdogdu, MY, Ozkan M. The Relationships between Death Anxiety with Dispositional Symptoms and Socio-Demographic Variables of Individuals from Different Religions. *Inonu University Faculty Med J* 2007; 14: 171-9.
14. Abdel-Khalek AM, Lester D. Death obsession in Kuwait and American college students. *Death Stud* 2003; 27: 541-3.
15. Ekiz D. Scientific research methods. 2nd ed. Ankara: Ani; 2009, 20-55.
16. Sönmez V, Alacapinar FG. Illustrated scientific research methods. 2nd ed. Ankara: Ani; 2013, 57-92.
17. Sliter MT, Sinclair RR, Yuan Z, Mohr CD. Don't Fear the Reaper: Trait death anxiety, mortality salience, and occupational health. *J Appl Psychol* 2014; 99: 759-69.
18. Templer DI. The construction and validation of death anxiety scale. *J General Psychol* 1970; 82: 165-77.
19. Otoom S, Al-Jishi A, Montgomery A, Ghwanmeh M, Atoum A. Death anxiety in patients with epilepsy. *Seizure* 2007; 16: 142-6.
20. Roff LL, Butkeviciene R, Klemmack DL. Death anxiety and religiosity among Lithuanian health and social service professionals. *Death Stud* 2002; 26: 731-42.
21. Neimeyer RA, Wittkowski J, Moser RP. Psychological research on death attitudes: An overview and evaluation. *Death Stud* 2004; 28: 309-40.
22. Grant AM, Wade-Benzoni KA. The hot and cool of death awareness at work: Mortality cues, aging, and self-protective and prosocial motivations. *Acad Manage Rev* 2009; 34:600-22.
23. Suhail K, Arkam S. Correlates of death anxiety in Pakistan. *Death Stud* 2002; 26: 39-50.
24. Wink P, Scott J. Does religiousness buffer against the fear of death and dying in late adulthood? Findings from a longitudinal study. *J Gerontol B Psychol Sci Soc Sci* 2005; 60:207-14.