

Death Anxiety and Psychological Resilience in Nursing Students: A Cross-Sectional and Correlational Study

Hemşirelik Öğrencilerinde Ölüm Anksiyetesi ve Psikolojik Dayanıklılık: Kesitsel ve Korelasyonel Bir Çalışma

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ABSTRACT

This research explored the association between nursing students' levels of death anxiety and psychological resilience.

This study has a descriptive, cross-sectional, and correlational design. The research sample comprised 729 students enrolled in the nursing department at the Faculty of Health Sciences of a university situated in Türkiye. The "Descriptive Information Form", the "Abdel-Khalek Death Anxiety Scale", and the "Adult Psychological Resilience Scale" were used as data collection tools in the study.

The psychological resilience levels of the students had significant positive correlations with their age and class year. There was a negative relationship between death anxiety and psychological resilience.

It was concluded that if the psychological resilience of nursing students increases, their anxiety about death will decrease. Nursing students should be informed and supported by their educators about how to cope with the death anxiety they experience while working with terminal patients in clinical internships, what methods to use, and the ways they can use to strengthen their coping with the condition of patients with death anxiety.

Keywords: Nursing students, Death anxiety, Psychological resilience

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ÖZ

Bu araştırmada hemşirelik bölümü öğrencilerinin ölüm anksiyetesi düzeyleri ile psikolojik sağlamlıkları arasındaki ilişki incelenmiştir.

Bu çalışma tanımlayıcı, kesitsel ve korelasyonel bir tasarıma sahiptir. Araştırmanın örneklemini Türkiye’de yer alan bir üniversitenin sağlık bilimleri fakültesi hemşirelik bölümünde öğrenim gören 729 öğrenci oluşturmaktadır. Çalışmada veri toplama aracı olarak “Tanıtıcı Bilgi Formu”, “Abdel-Khalek Ölüm Anksiyetesi Ölçeği” ve “Yetişkin Psikolojik Sağlamlık Ölçeği” kullanılmıştır.

Öğrencilerin psikolojik dayanıklılık düzeyleri ile yaşları ve sınıfları arasında pozitif yönde anlamlı bir ilişki bulunmuştur. Ölüm anksiyetesi ile psikolojik dayanıklılık arasında negatif bir ilişki bulunmuştur.

Hemşirelik öğrencilerinin psikolojik dayanıklılıklarının artması durumunda ölüme ilişkin kaygılarının azalacağı sonucuna varılmıştır. Hemşirelik öğrencileri klinik stajlarda terminal dönemdeki hastalarla çalışırken yaşadıkları ölüm anksiyetesi ile nasıl baş edecekleri, hangi yöntemleri kullanacakları ve ölüm anksiyetesi olan hastaların durumu ile baş etmelerini güçlendirmek için kullanabilecekleri yollar konusunda eğitimcileri tarafından bilgilendirilmeli ve desteklenmelidir.

Anahtar Sözcükler: Hemşirelik öğrencileri, Ölüm anksiyetesi, Psikolojik dayanıklılık

INTRODUCTION

Nursing is an applied health discipline that includes theoretical knowledge and skills. Nursing, which is expected to fulfill functions in the shaping of the healthcare system, is a dynamic process that makes care plans in light of the mental, social, physical, and emotional healthcare needs of the person in every segment of society, puts these plans into practice, and systematically evaluates the implemented care plan (Biol, 2004; Güngörmüş, Okanlı, Kocabeyoğlu, 2015).

As part of their duty to provide continuous care, nurses must accompany terminally ill patients during their final days, attend to their needs, and witness their passing (Yakar, Batbaş, Pirinççi, 2021; Karadeniz, Özdemir, Serin, 2023). With this vital role, nurses play a significant part in alleviating the fear of death for both the dying person and their family, supporting them in preparing for, accepting, and experiencing a peaceful passing. Throughout this process, nurses not only engage with patients and their families as part of their professional responsibilities but also navigate their own emotions and thoughts about death on a personal level (Cimete, 2002; Mok and Chiu, 2004). Moreover, death anxiety (DA) is shaped not only by nurses’ encounters in end-of-life care but also by their diverse personal life experiences.

Coping with death is also an emotional and traumatizing experience for nurses, even though they are distinguished from other people based on their education and experience. The fear of death, which never loses its relevance for human beings, inevitably affects human life. This fear is one that arises from the feeling of uncertainty caused by material and spiritual loss in people, rather than death itself (Kandemir, 2020). However, the thought of death, when it emerges in an excessive and extremely pathologic manner, may have negative effects on human psychology. When the equilibrium and coherence in one’s attitudes and behaviors towards DA are disrupted, the individual’s anxiety level rises, making it more challenging for them to adapt to their surroundings (Karakuş, Öztürk, Tamam, 2012).

The psychological impact of the pandemic has been pervasive, with students being among the most affected demographic (Li, Wang, Xue, Zhao, Zhu, 2020; Qiu et al., 2020; Ho, Chee, Ho, 2020). As the future of healthcare, nursing students may experience stress, uncertainty, and exposure to disease risks during the pandemic, all of which can have an impact on their psychological resilience (PR) (Cheng et al., 2021; Ho et al., 2020; Kaplan & Doğan, 2023). PR refers to a person’s capacity to manage stress, their ability to adapt during crises, and their emotional strength in challenging situations. Resilience is a psychological resource (memory structure) that can influence coping. However, coping is not a resource but a behaviour. Increased resilience improves coping capacity. Having these resources is very important for individuals.

Research indicates that nursing students with greater PR are better equipped to cope with anxiety and fear of death. A higher level of PR may help nursing students use their problem-solving skills more effectively in the face of crises and manage the negative emotions they experience more successfully. It is necessary to determine the attitudes of future nurses, who will take part in the healthcare team in the future, toward the concept of death and increase their awareness. Furthermore, fostering positive attitudes toward death and enhancing their PR through coping strategies applicable to both their personal and professional lives can contribute to improved professional performance (Selçuk and Avcı, 2015).

MATERIAL and METHODS

This study used a descriptive, cross-sectional, and correlational design to investigate the relationship between nursing students’ nursing students’ DA levels and PR.

This study was conducted between December 1, 2022, and May 1, 2023, with a target population consisting of all nursing students (1st to 4th year) at Zonguldak Bülent Ecevit University, Faculty of Health Sciences (N=805). The study included 729 students who participated voluntarily, with no particular sampling technique used. As a result, 90.5% of the total population was reached. The study data were gathered from

students who voluntarily participated in their classrooms. Each participant individually read, filled out, and marked the data collection instruments, which consisted of a socio-demographic information form and a scale form. On average, completing the forms took around 5 to 10 minutes per participant.

Inclusion criteria

(1) Being a nursing student, (2) Having no communication barriers, (3) Voluntarily consenting to take part in the study.

Exclusion criteria

(1) Having communication barriers, (2) Declining to take part in the study.

Data Collection Tools

A “Descriptive Information Form”, the “Abdel-Khalek Death Anxiety Scale”, and the “Adult Psychological Resilience Scale” were used as data collection tools in the study.

Descriptive Information Form

This form, which was prepared by the researchers, included nine questions about the sociodemographic characteristics of the participants such as their age, gender, and class year, as well as their experiences with death.

Abdel-Khalek Death Anxiety Scale

The scale was originally developed in Arabic by Abdel-Khalek in 1987 and later revised in 2004. Aydoğan et al. carried out a validity and reliability assessment of the scale in 2015. It comprises 20 items structured on a five-point Likert scale, categorized into five distinct factors. The scale’s total score varies between 20 and 100, where higher scores reflect increased levels of DA (Aydoğan et al., 2015). In this study, the scale’s Cronbach’s alpha coefficient was calculated as 0.94.

Adult Psychological Resilience Scale

Arslan (2015) adapted the Child and Adolescent Resilience Scale to create an adult version, where higher scores reflect greater resilience. The scale consists of four subscales. It exhibited high reliability, with a Cronbach’s alpha internal consistency coefficient of 0.94 and a test-retest reliability coefficient of 0.85 (Arslan, 2015). The Cronbach’s alpha coefficient of the scale in this study was calculated as 0.97.

Data Analysis

After the data were coded by the researchers, IBM SPSS Statistics 25 was used for analysis. Descriptive statistics were employed to examine the data. To explore the relationships between the scale scores and the participants’ descriptive characteristics, the Mann-Whitney U test, Kruskal-Wallis test, and Spearman correlation analysis were conducted. The Bonferroni correction was applied to identify the sources of significant differences in multiple comparisons. The reliability of the scales used in the study was assessed through Cronbach’s alpha internal consistency coefficient. A 95% confidence interval and a p-value below 0.05 were considered when interpreting the results.

Ethics Statement

Before initiating the study, ethical approval was obtained from the Clinical Studies Ethics Committee of Zonguldak Bülent Ecevit University (Date/Number: 29.11.2022/243222, Protocol No: 449). This study was conducted in accordance with the ethical principles stated in the Declaration of Helsinki. Participation was completely voluntary, and individuals were informed of their right to exit the study at any point. Moreover, they were guaranteed that their personal information would remain confidential and that the collected data would be used solely for academic research purposes.

RESULTS

The study sample comprised 729 nursing students. The demographic characteristics of the participants, along with their responses to the items on the Descriptive Information Form, are detailed in Table 1.

Table 2 presents the mean scores of the participants on the Abdel-Khalek DA Scale, along with the relationships between these scores and demographic characteristics. No meaningful relationship was observed between the participants’ ages and their DA levels. However, female participants exhibited significantly higher levels of fear triggered by death-related visual stimuli compared to male participants. Moreover, in the dimension of fear related to situations that remind one of death, third-year students displayed significantly higher anxiety levels compared to second-year students, and similarly, fourth-year students also had significantly higher anxiety levels than second-year students. Regarding the fear of the event of dying, first year students demonstrated significantly higher anxiety levels compared to second year students. Participants who had encountered the death of someone close to them displayed significantly elevated anxiety levels in the areas of fear of situations associated with death, fear of postmortem events, and fear of the process of dying, as well as in their overall anxiety scores. Conversely, those who had not encountered death around them had significantly higher scores in the fear triggered by death-related visual stimuli dimension. Participants who had witnessed a case resulting in death demonstrated significantly higher anxiety levels across all dimensions and in total scale scores, except for the fear provoked by visual stimuli related to death. While providing care to terminally ill patients was not significantly linked to participants’ DA levels, those with such experience tended to have higher scores. Participants who had received training in caring for terminally ill patients exhibited significantly lower anxiety levels in the dimensions of fear of physical and psychological pain associated with death and fear of postmortem events. Additionally, individuals who struggled with stress management had significantly higher anxiety levels across all dimensions and in total scores, except for the fear of visual stimuli related to death, where their scores were significantly lower. Lastly, those who had undergone training in coping methods were found to have significantly higher DA levels.

Table 1. Socio-Demographic Characteristics of Nursing Students (n=729)

		Min-Max	Mean±SD
Age		18-26	20.79±1.58
		n	(%)
Gender	Men	228	31.3
	Women	501	68.7
Grade	1 st Class	170	23.3
	2 nd Class	163	22.4
	3 rd Class	230	31.6
	4 th Class	166	22.8
Have you lost a loved one before?	Yes	519	44.3
	No	210	28.8
Have you encountered a case that resulted in death in the hospital before?	Yes	323	44.3
	No	406	55.7
Can you care for a dying patient?	Yes	531	72.8
	No	198	27.2
During your nursing education, did you receive care training for the dying patient?	Yes	346	47.5
	No	383	52.5
Do you have trouble coping when faced with difficulties or problems?	Yes	442	60.6
	No	287	39.4
Have you received training on coping methods?	Yes	328	45.0
	No	401	55.0

Table 2. The Average Score of Nursing Students from the Abdel-Khalek DA Scale and Its Relationship with Demographic Characteristics

	Fear provoked by visual stimuli related to death (F1)	Fear of physical and psychological pain related to death (F2)	Fear of other situations reminding death (F3)	Fear of postmortem events (F4)	Fear from the act of dying (F5)	Total score
	r/p	r/p	r/p	r/p	r/p	r/p
Age*	-0.048/0.198	-0.025/0.493	0.066/0.077	0.036/0.335	-0.009/0.804	-0.004/0.925
	X±SD	X±SD	X±SD	X±SD	X±SD	X±SD
Gender						
Male	18.95±3.90	14.15±5.02	6.85±3.01	7.81±3.00	7.28±1.60	55.02±11.77
Female	19.40±4.30	14.77±4.92	6.91±2.97	7.80±2.90	7.43±2.03	56.34±12.31
p**	0.022	0.197	0.495	0.952	0.928	0.355
Grade						
1 st Class	19.50±3.91	14.81±4.92	6.92±2.99	7.70±3.09	7.60±1.84	56.54±11.19
2 nd Class	18.84±4.18	14.55±4.63	6.25±2.59	7.43±2.73	7.17±1.94	54.27±12.00
3 rd Class	19.66±4.25	14.42±5.16	6.88±2.54	7.96±2.81	7.36±1.64	56.31±11.38
4 th Class	18.88±4.32	14.58±5.04	7.49±3.71	8.06±3.09	7.39±2.25	56.42±14.07
p***	0.105	0.693	0.011	0.218	0.041	0.100
Have you lost a loved one before?						
Yes	19.07±4.08	14.82±4.93	7.25±3.07	8.15±2.93	7.53±2.09	56.85±12.52
No	19.73±4.40	13.98±4.97	5.99±2.54	6.94±2.75	7.01±1.31	53.67±10.88
p**	0.038	0.057	0.000	0.000	0.006	0.008

Table 2. Cont.

	X±SD	X±SD	X±SD	X±SD	X±SD	X±SD
Have you encountered a case that resulted in death in the hospital before?						
Yes	19.05±3.86	15.29±4.47	7.96±3.13	8.54±2.80	7.43±2.19	57.73±12.50
No	19.43±4.42	14.01±5.25	6.49±2.80	7.22±2.90	7.34±1.65	54.51±11.68
p**	0.058	0.000	0.000	0.000	0.783	0.001
Can you care for a dying patient?						
Yes	19.47±3.91	14.57±5.02	6.80±2.83	7.96±2.92	7.41±1.74	56.06±11.56
No	18.69±4.79	14.61±4.80	7.13±3.34	7.84±2.95	7.32±2.30	55.61±13.62
p**	0.275	0.773	0.353	0.764	0.069	0.256
Did you receive care training for the dying patient?						
Yes	19.62±3.71	14.16±5.15	6.94±3.39	7.62±3.07	7.45±2.00	55.81±12.83
No	18.94±4.54	14.96±4.75	6.84±2.56	7.97±2.79	7.32±1.82	56.04±11.51
p**	0.345	0.044	0.315	0.023	0.578	0.151
Do you have trouble coping when faced with difficulties or problems?						
Yes	18.93±4.14	15.50±5.04	7.40±3.17	8.31±2.88	7.65±2.05	57.81±12.87
No	19.77±4.20	13.16±4.47	6.11±2.47	7.03±2.84	6.97±1.59	53.05±10.32
p**	0.001	0.000	0.000	0.000	0.000	0.000
Have you received training on coping methods?						
Yes	19.42±4.18	15.38±4.73	7.47±3.45	8.41±2.97	7.63±1.97	58.34±12.70
No	19.13±4.18	13.92±5.04	6.41±2.43	7.31±2.80	7.18±1.83	53.97±11.31
p**	0.231	0.000	0.000	0.000	0.006	0.000

*Spearman correlation, **Man Whitney U test, ***Kruskal Wallis test, p<0.05.

Table 3 displays the average scores on the Adult PR Scale for the participants, along with the relationships between these scores and demographic factors. An upward correlation was identified between participants' ages and their PR levels. Additionally, a significant association was observed between the participants' PR levels and their academic years. Post hoc analysis indicated that the notable difference in overall PR scores and dimension-specific scores occurred between the 1st-year and 3rd-year students. The 3rd-year students demonstrated significantly higher PR scores across all dimensions and in total. Moreover, the participants who were 4th-year students had significantly higher overall PR scores and higher scores in the cultural and contextual resources and familial resources dimensions compared to those who were 1st year students. Furthermore, the participants who were 3rd-year students had significantly higher individual resources dimension, cultural resources dimension, familial resources dimension, and total scale scores than those who were 4th-year students. The participants who had not experienced death around them were found to have higher PR levels. It was also observed that the participants who had encountered a case that resulted in death in the hospital had significantly higher individual resources dimension scores. It was determined that the participants who had provided care to a dying patient had significantly higher scores in the cultural and contextual resources dimension. No meaningful correlation was observed between participants' PR levels and their experience of training in terminal patient care, difficulties in coping with stress, or education in coping strategies.

Table 4 presents the findings on the relationship between DA and PR. The analysis revealed a negative correlation between these two variables. Participants' scores on the Adult PR Scale showed a significant negative association with their total scores on the Abdel-Khalek DA Scale, as well as with all its subscales-except for the subscale measuring fear triggered by visual stimuli related to death.

The regression analysis model conducted to examine the effect of psychological resilience on death anxiety was found to be statistically significant. Psychological resilience accounted for 7.1% of the variance in death anxiety levels ($R^2 = 0.071$). Psychological resilience was a negative and significant predictor of death anxiety ($\beta = -0.27$, $p < 0.001$), indicating that as levels of psychological resilience increase, levels of death anxiety decrease. These findings suggest that psychological resilience may serve as a protective factor against fear of death in individuals.

DISCUSSION

This study examined the relationship between the PR and DA levels of nursing students.

The findings of this study indicated that female participants had higher DA scores than male participants, particularly in response to visual stimuli related to death. Earlier studies have also indicated that female nursing students often experience a higher fear of death compared to male students (Hasheesh,

Table 3. The Average Score of the Participants from the PR Scale and Its Relationship with Their Demographic Characteristics

	Relational resources (A1)	Individual resources (A2)	Cultural and contextual resources (A3)	Familial resources (A4)	PR
	r/p	r/p	r/p	r/p	r/p
Age*	0.100/0.007	0.093/0.012	0.082/0.026	0.090/0.015	0.097/0.009
	X±SD	X±SD	X±SD	X±SD	X±SD
Gender					
Male	21.68±7.33	22.38±6.75	18.35±5.59	19.54±5.89	81.55±23.78
Female	21.63±7.16	22.20±6.64	18.35±5.61	19.36±5.70	81.55±23.78
p**	0.831	0.750	0.468	0.412	0.595
Grade					
1 st Class	20.01±8.22	20.63±7.54	17.00±6.23	17.89±6.45	75.54±27.38
2 nd Class	20.53±7.54	21.22±7.03	17.82±6.04	18.70±6.19	78.28±25.62
3 rd Class	23.27±6.26	23.93±5.78	19.78±4.81	20.66±5.18	87.66±20.49
4 th Class	22.18±6.47	22.63±5.97	18.69±5.07	19.96±4.86	83.47±20.88
p***	0.000	0.000	0.000	0.000	0.000
Death experience					
Yes	21.15±7.39	21.80±6.87	18.07±5.76	19.10±5.92	80.13±24.71
No	22.88±6.60	23.39±6.03	19.38±5.09	20.20±5.28	85.86±21.54
p**	0.04	0.006	0.010	0.025	0.005
Encountered a case that resulted in death					
Yes	21.11±7.54	21.72±6.88	19.26±4.52	20.09±4.02	71.85±26.61
No	19.50±9.15	16.84±7.49	18.22±5.78	19.03±6.01	83.13±23.12
p**	0.157	0.043	0.543	0.180	0.129
Care for a dying patient?					
Yes	21.87±6.87	22.54±6.33	18.81±5.35	19.64±5.48	82.87±22.58
No	21.04±8.04	21.49±7.47	17.47±6.13	18.83±6.43	78.84±27.17
p**	0.659	0.454	0.020	0.498	0.387
Receive care training for the dying patient?					
Yes	22.11±7.02	22.69±6.51	18.65±5.54	19.72±5.54	83.19±23.35
No	21.23±7.36	21.87±6.81	18.26±5.66	19.14±5.95	80.51±24.46
p**	0.109	0.107	0.280	0.221	0.146
You have trouble coping when faced with difficulties or problems?					
Yes	21.61±7.32	22.30±6.77	18.53±5.75	19.48±5.87	81.94±24.44
No	21.71±7.05	22.19±6.54	18.31±5.38	19.32±5.60	81.54±23.25
p**	0.960	0.583	0.261	0.470	0.573
Received training on coping methods?					
Yes	21.20±7.46	21.86±6.96	18.00±5.83	19.14±6.03	80.21±25.16
No	22.01±6.98	22.58±6.42	18.81±5.39	19.64±5.53	83.06±22.89
p**	0.172	0.237	0.093	0.491	0.315

*Spearman correlation, ** Man Whitney U test, *** Kruskal Wallis test, p<0.05.

Table 4. Relationship Between DA Scale and PR Scale

	Abdel-Khalek DA Scale		F1		F2		F3		F4		F5	
	r	p	r	p	r	p	r	p	r	p	r	P
PR	-0.266	0.000	-0.019	0.603	-0.244	0.000	-0.257	0.000	-0.268	0.000	-0.198	0.000
A1	-0.263	0.000	-0.015	0.683	-0.246	0.000	-0.251	0.000	-0.263	0.000	-0.207	0.000
A2	-0.258	0.000	-0.016	0.669	-0.235	0.000	-0.254	0.000	-0.266	0.000	-0.191	0.000
A3	-0.249	0.000	-0.009	0.806	-0.242	0.000	-0.243	0.000	-0.253	0.000	-0.167	0.000
A4	-0.233	0.000	-0.034	0.359	-0.201	0.000	-0.226	0.000	-0.229	0.000	-0.183	0.000

Spearman correlation

Table 5. Regression Analysis Predicting Death Anxiety from Psychological Resilience

Predictor	β^1 (%95 CI)	SE B	β^2	t	p
Constant	66.948 (63.915 - 69.981)	1.55	-	43.34	< 0.001
Psychological Resilience	-0.135 (-0.17 - -0.099)	0.02	-0.27	-7.43	< 0.001

Dependent variable: Death Anxiety. $R^2 = 0.071$, Adjusted $R^2 = 0.069$, $F(1, 727) = 55.15$, $p < 0.001$, 1: Non-standardised Coefficient; 2: Standardised Coefficient; Durbin-Watson=2,18.

Abo Zeid, El-Said, Alhujaili et al., 2013; Sharour et al., 2017; Şahin, Demirkıran, Adana, 2016). Among these studies, Sharour et al. (2017) conducted research with 100 nursing students and similarly found that female students exhibited higher levels of DA than male students. These findings are consistent with the results of this study. It is suggested that women may experience DA more intensely due to their greater physical and psychological sensitivity compared to men.

It was determined that in the fear of other situations reminding death dimension. the anxiety levels of the participants who were second year students were significantly greater than those of the participants who were third year students. Meanwhile, fourth-year students exhibited significantly higher anxiety levels compared to second year students. In the fear of the event of dying dimension. the anxiety levels of the participants who were 1st-year students were found to be significantly higher than those of the participants who were second year students. Mondragón-Sánchez et al. (2015) examined the fear of death among nursing students at various academic levels. Their findings indicated that the fear of death was lower compared to overall DA levels (Mondragón-Sánchez, Cordero, Espinoza, Landeros-Olvera, 2015). Their findings were in contrast to the results of this study. It is thought that the DA levels of the participants of this study increased as they went further in their education. since they had not been given adequate care training for the dying patient in the course curriculum, and they had not frequently encountered death cases in the clinic.

In this study, the anxiety levels of the participants who had experienced death around them and those who had encountered any event that resulted in death in the hospital were found to be significantly higher than others in terms of their total scores and their scores in all dimensions of the Abdel-Khalek DA Scale, except for the fear provoked by visual stimuli related to death dimension. Earlier studies have emphasized

that nurses providing care for terminally ill patients frequently encounter emotions such as anxiety, inadequacy, helplessness, anger, distress, and guilt. These nurses tend to prefer working in areas without terminally ill patients due to their fear of being ineffective and unsuccessful in providing care to these individuals (İnci and Öz, 2012; Menekli and Fadiloğlu, 2014; Şahin et al., 2016). Özer et al. (2015) conducted a study to determine the attitudes of nursing students toward death, and they stated that nursing students experienced feelings of anger, anxiety, grief, helplessness, hopelessness, anxiety, and inadequacy while providing care to a dying individual (Özer, Yıldırım, Bölüktaş, 2015). Previous studies have also shown high levels of anxiety in these populations. and their results were in parallel with ours.

This study found that participants who had received training in the care of terminally ill patients exhibited significantly lower levels of DA, particularly in relation to fears of physical and psychological pain associated with death, as well as concerns about postmortem events. A previous study by Jafari et al. (2015) indicated that training in terminal patient care significantly enhanced nursing students' positive attitudes toward death. Similarly, Ballesteros et al. (2014) assessed the impact of palliative care education on nursing students and highlighted that such training helped them overcome their fear of death and develop greater empathy for patients. In a qualitative study involving twelve nursing students with prior experience in patient deaths during clinical training, Edo-Gual et al. (2018) emphasized that death is a natural part of life and that individuals should acknowledge the inevitability of mortality. In the study conducted by İnci and Öz (2009) to evaluate the effect of a training program about death on the DA levels, death-related depression levels, and death-related attitudes of nurses who provided care for terminal patients, the DA and death-related depression levels of the nurses at the end of the training decreased to a statistically significant

extent. It was observed that nurses who described death as a form of separation experienced distinct emotional responses. the end of life. the beginning of a new life, or extinction had significantly lower death-related anxiety and depression scores after the training program (İnci and Öz, 2009). According to different studies in the relevant literature, it is seen that providing nurses with training about death and dying patients in their nursing education is effective in developing a positive perspective in them toward death and reducing their DA levels. Accordingly, the findings of this study aligned with the existing literature.

This study found that participants who struggled with stress management exhibited significantly higher levels of DA across all dimensions of the Abdel-Khalek DA Scale and in their total scores, except for the dimension related to fear triggered by visual stimuli associated with death. In research conducted by Smith-Han et al. (2016) examining the emotions nursing students experienced upon encountering death for the first time, one participant recounted witnessing the death of a physically fit young male patient who was only a year older than himself. This experience profoundly affected him, posed a psychological challenge, and caused him to withdraw inwardly. Similarly, a qualitative study by Dong et al. (2016), involving 15 doctors and 22 nurses, revealed that many participants faced difficulties in working with terminally ill patients and expressed the need for additional training. The study suggested that healthcare professionals often struggle to develop adequate coping mechanisms when confronted with death-related challenges (Dong et al., 2016). It is believed that implementing training programs that provide support and enhance PR could positively influence the DA levels of healthcare workers.

This study identified a positive correlation between participants' age and their levels of PR. Additionally, a significant relationship was found between PR and the participants' academic year. In research conducted by Şahin and Buzlu (2017) examining factors influencing the PR of nursing students, it was determined that the resilience levels of fourth-year students were notably higher. 3rd-year students, and students who had good communication and relationships with the people around them was higher than those who have medium-level relationship skills. Öz et al. (2012) investigated the relationship between DA and resilience levels among nursing students and found that fourth-year students exhibited significantly higher PR levels compared to first-year students. The findings suggest that nursing students' PR tends to increase as they progress through their academic years. This result aligns with existing literature on the subject.

It was determined in our study the DA and PR levels of the participants were negatively related. İnci et al. (2009) found no significant relationship between DA and PR, but DA levels were higher in those who had encountered death than those who had not. Nursing students may also be more experienced in terms of death based on training programs about providing care for a dying patient during their education and cases of death to be encountered in the clinic. Additionally, it is thought that nursing students need activities and training programs

that will keep their PR levels high to overcome this issue more easily when they encounter a death, which is a difficult concept to deal with.

Limitations

DA may be an implicit experience and individuals may also experience denial of death. DA of individuals may also be affected by different variables. These experiences were not questioned in this study. Future studies can be elaborated by taking these into consideration.

CONCLUSION

It was determined in our study the DA and PR levels of the participants were negatively related. Nurses provide psychosocial care to individuals and their families during the grieving process by considering the patient and their family as a whole. Therefore, it is crucial to design educational programs that help nurses recognize and reflect on their feelings and thoughts regarding the concept of death. Nursing students should be informed and supported by their educators about how to cope with the DA they experience while working with terminal patients in clinical internships, what methods to use, and the ways of empowering patients with DA to cope with this situation. It was determined that the participants of this study who had difficulty in coping with stress had significantly higher DA levels. Nursing students should receive in-service training in supporting the family during the postmortem grieving process, increasing the quality of care, and motivation. Additionally, students with low PR levels need to be psychologically empowered, receive psychological support, and learn and practice effective coping methods to prevent them from having difficulties in patient care. Various programs and training opportunities should be organized in health and higher education institutions.

Recommendations

Future research should consider a mixed-methods approach for a more thorough exploration of death-related experiences among nursing students.

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