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ATTITUDE OF MEDICAL AND NURSING STUDENTS IN APPROACHING DEATH AND DYING PATIENTS ATTITUDE OF STUDENTS IN APRPROACHING DYING PATIENTS

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Abstract

Objective: The process of dying of a patient is a difficult period accompanied by physical and mental problems and is challenging not only for the patient himself/herself and his/her relatives, but also for the health care team. The aim of the current study was to investigate the attitudes of medical and nursing students towards death and terminally ill patients. A descriptive, cross-sectional design was used.

Methodology: A total of 826 students participated in the study. In the collection of the data, a personal information form and "Approach to Death and Dying Patients Attitude Scale (ADDPAS)" were used.

Results: Of the participating students, 55% are in the age group of 21-23 years old; 59% are females and 40.9% are fourth-year students. Of the participating students, 64.3% have received education about how to approach the terminally ill patient; however, 75.9% do not see themselves competent enough in this regard. The students' ADDPAS total score means were found to be varying significantly depending on age group, gender, grade level, their state of applying medical treatment to the terminally ill patient and of experiencing a dilemma in this application ($p<0.05$).

Conclusion: It can be suggested that students' communication skills and avoidant attitudes related to approaching the terminally ill patient should be investigated and their coping behaviours should be supported.

Key words: end-of-life care, ADDPAS, attitude, death, medicine-nursing students.

Introduction

Human beings who are in close interaction with death have developed attitudes towards death by considering the concept of death [1]. The concept of death that develops in the minds of people has determined their behaviours and lifestyles in many areas such as religious, philosophical, ethical and legal. The effect of the thought of death on human life is inevitable, but excessive, extreme, pathological thought of death can negatively affect human psychology. As individuals lose balance and harmony in attitudes developed against death, anxiety level of individual increases and adaptation to environment becomes more difficult [2-5]. Death is the biggest phenomenon of loss that people have to face during their lives, and in this respect, it is accepted as a powerful and symbolic example of all losses. The diagnosis of fatal disease is a crisis situation which is intertwined with complex emotional reactions such as fear, anxiety and

anger in the part of patients and their relatives. The process of dying of a patient is a difficult period accompanied by physical and mental problems. This period is not only challenging for the patient and his/her relatives, but also for the health care team. Many studies have shown that individuals with an incurable disease that are highly likely to end up with death feel to be left alone during the dying process, are neglected and ignored by attending physicians and health care professionals who deal with them [2,6,7].

While health care professionals care for the dying patient, they also experience anxiety, denial, anger, depression and helplessness. They are afraid of being inadequate in the care of the patient, consider themselves unsuccessful and may experience guilt. Providing care for dying patients brings with it many different stressors [6,8]. In addition, health professionals experience certain communication difficulties when confronting dying patients, often have a technical and superficial relationship with them, spend less and less time with them and do not know how to communicate details such as the diagnosis and course of the disease to the patient. In addition, they avoid talking to patients' relatives about their condition and possible treatment options, and try not to meet them in hospital corridors and clinical wards [5,6].

It is very important that health professionals are able to cope professionally with the difficulties they face in providing treatment, care and counselling to dying patients and their relatives. It is of great importance that health professionals recognize their own feelings in the face of death, gain the ability to communicate effectively, and provide psychosocial support to patients and their families. Therefore health professionals need to have well-structured vocational training and appropriate professional experience of death [2,9-11]. Today, when the education given in medical faculties and nursing departments is examined, it is seen that technological developments in medical sciences and new scientific knowledge are conveyed to students. However, the primary goal of education should be to teach students to establish more humane relationships with their patients and to protect their patients 'and their relatives' privacy, to

ensure respect to them and to contribute to their efforts for a quality life, even during the dying process [7,12]. Thus, it is thought that students who are aware of death anxiety may recognize the situation of the dying patient and improve the quality of treatment and care offered to this patient.

In the current study, by using the Approach to Death and Dying Patients Attitude Scale (ADDPAS) developed by Kavas and Öztuna [13], the attitudes of the students attending Muğla Sıtkı Koçman University Faculty of Medicine (MSKÜTF) and the Department of Nursing in the Faculty of Health Sciences in Muğla Sıtkı Koçman University (MSKÜSBFHB) towards death and avoidance of the dying patient were explored.

Methodology

Sample and data collection procedures

The current study was planned as cross-sectional and descriptive. The study was conducted in MSKÜTF and MSKÜSBFHB between December 2018 - January 2019. The population of the study consisted of 174 medical (MS) and 771 nursing (NS), totally 945 students who applied in the hospital and agreed to participate in the research. In the research, the sample selection was not made and the entire universe was tried to be reached. The sample of the study consisted of a total of 826 students from 148 MS and 678 NS schools from the medical faculty that agreed to participate in the research.

Data collection tools

As the data collection tool, a questionnaire form consisting of a personal information form and "Approach to Death and Dying Patients Attitude Scale" (ADDPAS) was used. In the personal information form, there are items to elicit some demographic features of the participants.

ADDPAS was developed by Kavas and & Öztuna [13] and consists of 20 items. The scale was developed in order to determine the extent of communication difficulties (CD) and avoidant attitudes (AA) of medical students when approaching death and dying patients, and

its psychometric properties were examined in detail. ADDPAS, whose validity and reliability were evaluated on medical students, has a two-dimensional structure; these dimensions were named as “AA” and “CD”. There are 20 items in the scale that measure students’ level of avoiding death and dying patients and reveal their difficulties in communicating with the dying patient’s relatives. The scale items were designed in the four-point Likert scale ranging from “strongly agree (1 point)”, “agree (2 points)”, “disagree (3 points)” to “strongly disagree (4 points)”. High scores taken from these dimensions indicate that the avoidant attitude and communication difficulties are high [13]. In the original scale, the Crohnbach alpha coefficient was found to be 0.70 while in the current study, the Crohnbach alpha coefficient was calculated to be 0.80.

Statistical analysis

The data collected in the current study were analyzed by using SPSS (Statistical Package for Social Sciences) for Windows 24.0 program package. For the data collected about the demographic features of the participants, frequencies, percentages and means were calculated and then interpreted. In the evaluation of the students’ attitudes towards dying patients, Croncbach alpha coefficient, independent samples t-test, dependent samples t-test, Mann Mann-Whitney-U test, one-way variance analysis (ANOVA) and Kruskall-Wallis variance analysis were used. For the data showing a normal distribution, parametric tests were used while for the data not showing a normal distribution, non-parametric tests were used. For the groups for which difference was revealed by Kruskall-Wallis variance analysis, Benforroni adjusted Mann-Whitney-U test was used. For the groups for which difference was found in the variance analysis, analysis was conducted with LSD multiple comparison [14].

Ethics

In order to conduct the research, the written permission from the Scientific Research and Publication Ethics Committee of MSKU (Protocol No. 170023 dated 24.01.2018 and Decision

no: 4) and from the institution where the research was conducted was obtained. By informing the students to participate in the study, their oral consent was gained.

Results

Descriptive characteristics of the participating students and their comparison in terms of their similarities are given in Table 1. As can be seen in Table 1, 75.68% of the MS are 24 years old or older (mean age $\bar{X}$=24.18±0.94), 60.81% are males, 39.19% are fourth-year students, 26.35% have experienced the death of a first-degree relative, 64.86% do not find themselves competent enough in approaching death, 60.14% live in cities, all of them have received training on approaching death, 58.11% have given a medical treatment to a dying patient, 77.7% think that it is necessary to offer a medical treatment to a dying patient, 70.95% experience a dilemma in relation to giving a medical treatment to a dying person and 64.19% have positive views on the application of euthanasia in our country. Of the participating NS, 62.24% are in the age group of 21-23 years old, (mean age $\bar{X}$=22.34±1.61), 63.27% are females, 41.3% are fourth-year students, 11.95% have experienced the death of a first-degree relative, 78.32% do not find themselves competent enough in approaching death, 50.36% live in cities, 56.49% have received training on approaching death, 41.15% have been involved in a medical treatment to a dying patient, 70.21% think that it is necessary to offer a medical treatment to a dying patient, 90.12% experience a dilemma in relation to giving a medical treatment to a dying patient and 49.26% have positive views on the application of euthanasia in our country **(Table 1).**

Table 1: Descriptive characteristics of the medicine and nursing students

Descriptive characteristics		**Faculty of Medicine (n=148)**		**Department of Nursing (n=678)**	
		n	**%**	**n**	**%**
Age (year)	18-20	-	-	75	11.06
	21-23	36	24.32	422	62.24
	24 and older	112	75.68	181	26.70

	$\bar{X}$=22.678±1.674				
Gender	Female	58	39.19	429	63.27
	Male	90	60.81	249	36.73
Grade level	2	-	-	204	30.09
	3	-	-	194	28.61
	4	58	39.19	280	41.30
	5	50	33.78	-	-
	6	40	27.03	-	-
Having the experience of the death of a first-degree relative	Yes	39	26.35	81	11.95
	No	109	73.65	597	88.05
Finding competent enough in approaching death	Yes	52	35.14	147	21.68
	No	96	64.86	531	78.32
Place of residence	Village	4	2.70	66	7.99
	Small town	9	6.08	22	2.66
	District	46	31.08	322	38.98
	City	89	60.14	416	50.36
Having taken training about how to approach death	Yes	148	100	383	56.49
	No	0	0	295	43.51
Having been involved in a treatment to a dying patient	Yes	86	58.11	281	41.45
	No	62	41.89	397	58.55
Finding it suitable to give a treatment to a dying patient	Suitable	115	77.70	476	70.21
	Not suitable	33	22.30	202	29.79
Experiencing a dilemma in giving a treatment to a dying patient	Yes	43	29.05	67	9.88
	No	105	70.95	611	90.12
Should euthanasia be allowed in our country?	Yes	95	64.19	334	49.26
	No	53	35.81	344	50.74

The MS' mean scores taken from the CD and AA sub-dimensions were found to be not varying significantly depending on the age group of the students ($p>0.05$). The NS' mean scores taken from the CD and AA sub-dimensions of the scale were found to be varying significantly depending on the age group ($p<0.05$).

The MS' mean scores taken from the CD and AA sub-dimensions were found to be not varying significantly depending on the gender of the students ($p>0.05$); on the other hand, the NS' mean scores taken from the CD and AA sub-dimensions were found to be varying significantly

depending on the gender of the students. All of the participating MS were found to have taken training on how to approach a dying patient. The NS' mean scores taken from the CD and AA sub-dimensions of the scale were found to be varying significantly depending on their having had training on how to approach a dying patient ($p<0.05$). While the MS' mean scores taken from the CD and AA sub-dimensions were not found to be varying significantly depending on whether having been involved in a medical treatment to a dying patient ($p>0.05$), the NS' mean scores taken from the CD and AA sub-dimensions were found to be varying significantly depending on whether having been involved in a medical treatment to a dying patient ($p<0.05$). While the mean score of the MS taken from the CD sub-dimension was found to be not varying significantly depending on whether they think that a medical treatment should be given to a dying patient ($p>0.05$), their mean score taken from the AA sub-dimension was found to be varying significantly ($p<0.05$). While the mean score of the NS taken from the CD sub-dimension was found to be varying significantly depending on whether they think that a medical treatment should be given to a dying patient ($p<0.05$), their mean score taken from the AA sub-dimension was found not to be varying significantly ($p>0.05$).

The mean scores of the MS taken from the CD and AA sub-dimensions were found to be not varying significantly depending on whether they experience a dilemma in terms of giving a treatment to a dying patient ($p>0.05$), while the mean scores of the NS taken from the CD and AA sub-dimensions were found to be varying significantly depending on whether they experience a dilemma in terms of giving a treatment to a dying patient ($p<0.05$). While the mean scores of the MS taken from the CD and AA sub-dimensions were found to be not varying significantly depending on their thinking that euthanasia should be allowed in our country ($p>0.05$), the mean scores of the NS taken from the CD and AA sub-dimensions were found to be varying significantly depending on their thinking that euthanasia should be allowed in our country ($p<0.05$) **(Table 2).**

Table 2: Comparison of the Medicine and Nursing Students' Total Mean Scores from the CD and AA sub-dimensions according to Descriptive Characteristics
*: No comparison was made as all the medicine students said "Yes".

Descriptive Characteristics		Medicine Students (n=148)		Nursing Students (n=678)	
		CD X̄±SD	AA X̄±SD	CD X̄±SD	AA X̄±SD
Age (year)	18-20	-	-	22.00±2.66	26.24±4.98
	21-23	23.00±2.57	28.44±4.01	24.46±3.12	29.85±5.28
	24 and over	23.14±2.94	28.06±4.30	25.17±2.04	31.69±3.90
	F	0.068	0.221	33.992	32.802
	p	0.795	0.639	**0.000**	**0.000**
Gender	Female	23.82±2.28	27.84±3.69	24.72±2.77	30.55±4.95
	Male	23.28±3.16	28.35±4.54	23.77±3.16	28.89±5.30
	t	-0.859	-0.716	4.077	4.100
	p	0.339	0.475	**0.000**	**0.000**
Grade level	2	-	-	22.38±2.31	26.61±4.27
	3	-	-	24.55±3.29	30.25±5.31
	4	23.31±2.55	28.48±4.83	25.71±2.26	32.15±4.27
	5	22.78±3.09	27.66±4.39	-	-
	6	23.22±2.98	28.30±2.91	-	-
	F	0.506	0.537	96.512	86.222
	p	0.604	0.586	**0.000**	**0.000**
Having the experience of the death of a first-degree relative	Yes	22.10±3.13	26.89±4.44	22.33±3.52	27.27±4.87
	No	23.46±2.67	28.60±4.07	24.65±2.76	30.30±5.07
	t	-2.613	-2.192	-6.856	-5.077
	p	**0.010**	**0.030**	**0.000**	**0.000**
Finding competent enough in approaching death	Yes	23.16±2.75	28.38±4.36	23.75±2.61	28.43±4.22
	No	22.94±3.17	27.45±3.76	25.53±3.20	32.74±5.52
	t	0.083	0.892	-1.828	-1.538
	p	0.691	0.249	**0.000**	**0.000**
Place of residence	Village	23.00±3.16	27.00±2.16	22.58±3.04	27.96±3.81
	Small town	22.88±3.75	27.88±7.00	22.30±1.75	27.07±4.60
	District	22.89±2.88	27.58±4.08	25.06±3.27	31.56±5.94
	City	23.24±2.77	28.52±4.04	24.22±2.46	29.07±4.19
	F	0.175	0.614	16.058	17.917
	p	0.913	0.607	**0.000**	**0.000**
Having taken training about how to approach death	Yes	*	*	25.90±2.13	32.59±4.02
	No			22.40±2.69	26.50±4.34
	t			18.888	18.845
	p			**0.000**	**0.000**
Having been involved in a treatment to a dying patient	Yes	23.00±3.03	27.75±3.96	24.48±2.29	30.25±3.56
	No	23.25±2.60	28.70±4.54	24.30±3.35	29.72±6.01
	t	-0.541	-1.358	0.739	1.333
	p	0.589	0.177	0.460	0.183
Finding it suitable to give a treatment to a dying patient	Suitable	23.02±3.09	28.38±5.02	22.75±2.25	26.51±4.46
	Not suitable	21.95±2.65	26.19±2.78	20.91±2.60	25.08±5.58
	t	1.446	1.911	2.365	0.906
	p	0.294	0.455	**0.022**	0.369
Experiencing a dilemma in giving a treatment to a dying patient	Yes	23.04±2.55	28.48±5.17	22.14±2.23	26.73±2.23
	No	23.11±2.98	27.97±3.81	24.64±2.92	30.34±5.06
	t	-0.122	0.666	-6.777	-5.563
	p	0.920	0.722	**0.000**	**0.000**
Should euthanasia be allowed in our country?	Yes	23.10±2.87	27.88±4.34	24.07±2.23	28.94±3.87
	No	23.15±2.85	28.67±4.03	24.72±3.52	31.00±5.99
	t	-0.098	-1.078	-2.864	-5.269
	p	0.759	0.540	**0.004**	**0.000**

The comparison of all the participating students' mean scores from ADDPAS and the CD and AA sub-dimensions with the descriptive characteristics of the students is given in **Table 3.** In this regard, it was found that the students' mean scores from ADDPAS and the CD and AA sub-dimensions vary significantly depending on the age group of the students ($p<0.05$). LSD test revealed that this difference stemmed from the students in the age group of 24 years old or older. It was also found that the students' mean scores from ADDPAS and the CD and AA sub-dimensions vary significantly depending on the gender of the students ($p<0.05$). The mean scores of the students taken from ADDPAS and the CD and AA sub-dimensions were found to be varying significantly depending on the grade level of the students ($p<0.05$). In the current study, it was found that the participating students' mean scores taken from ADDPAS and the CD and AA sub-dimensions vary significantly depending on their having experienced a death of a first-degree relative ($p<0.05$). The students' mean scores taken from ADDPAS and the CD and AA sub-dimensions were found to be varying significantly depending on their finding themselves competent in approaching a dying patient ($p<0.05$). While the students' mean scores taken from ADDPAS and the AA sub-dimension were found to be varying significantly depending on the place of residence ($p<0.05$), their mean score taken from the CD sub-dimension was found to be not varying significantly depending on the place of residence ($p>0.05$).

The participating students' mean scores taken from ADDPAS and the CD and AA sub-dimensions were found to be varying significantly depending on their having had training on how to approach a dying patient ($p<0.05$). The mean scores of the students taken from ADDPAS and the CD and AA sub-dimension were found to be varying significantly depending on whether they think that a medical treatment should be given to a dying patient ($p<0.05$). The mean scores of the students taken from ADDPAS and the CD and AA sub-dimensions were found to be varying significantly depending on whether they experience a dilemma in terms of

giving a treatment to a dying patient (p<0.05). The mean scores of the students taken from ADDPAS and the CD and AA sub-dimensions were found to be varying significantly depending on their thinking that euthanasia should be allowed in our country (p<0.05). The mean score of the participating students taken from ADDPAS and the CD and AA sub-dimensions were found to be varying significantly depending on the department attended (p<0.05) **(Table 3).**

Table 3: Comparison of the Medicine and Nursing Students' Total Mean Scores from ADDPAS and the CD and AA sub-dimensions according to Descriptive Characteristics (n=826)

Descriptive characteristics	**Communication difficulty**		**Avoidant attitude**		**ADDPAS**	
	X̄±SD	**Significance**	**X̄±SD**	**Significance**	**X̄±SD**	**Significance**
Age (year)						
18-20	22.00±2.66	F=22.685	26.24±4.98	F=20.680	48.24±6.61	F=4.502
21-23	24.34±3.10	**p=0.001**	29.74±5.20	**p=0.001**	54.09±7.75	**p=0.000**
24 and over	24.39±2.62		30.30±4.42		54.70±6.42	
Gender						
Female	24.50±2.79	t=4.091	30.23±4.89	t=4.200	54.73±0.32	t=4.507
Male	23.64±3.16	**p=0.001**	28.75±5.11	**p=0.001**	52.40±0.47	**p=0.000**
Grade level						
2	22.38±2.31		26.61±4.27		49.00±5.58	
3	24.55±3.29	F=42.069	30.25±5.31	F=39.889	54.81±8.01	F=49.222
4	25.30±2.48	**p=0.001**	31.52±4.58	**p=0.001**	56.82±6.68	**p=0.000**
5	22.78±3.09		27.66±4.39		50.44±6.28	
6	23.22±2.98		28.30±2.91		51.52±4.62	
Having the experience of the death of a first-degree relative						
Yes	22.25±3.38	t=-7.801	27.15±4.72	t=-5.942	49.40±7.25	t=-7.197
No	24.47±2.78	**p=0.000**	30.04±4.97	**p=0.001**	54.52±7.18	**p=0.000**
Finding competent enough in approaching death						
Yes	23.76±2.63	t=-2.117	30.01±4.64	t=1.251	53.77±6.43	t=0.001
No	24.27±3.07	**p=0.035**	29.50±5.15	p=0.211	53.77±7.70	**p=0.001**
Place of residence						

Village	22.60±3.03		27.90±3.72		50.51±5.30	
Small town	22.54±2.68	F=13.360	27.40±5.56	F=15.122	49.95±7.52	F=16.361
District	24.75±3.30	**p=0.001**	30.99±5.87	**p=0.001**	55.75±8.59	**p=0.000**
City	24.01±2.56		28.95±4.16		52.96±5.99	
Having taken training about how to approach death						
Yes	25.12±2.66	t=4.091	31.35±4.53	t=4.200	54.73±7.20	t=4.507
No	22.40±2.69	**p=0.001**	26.50±4.34	**p=0.001**	52.40±7.50	**p=0.000**
Having been involved in a treatment to a dying patient						
Yes	24.13±2.55	t=-0.164	29.67±3.80	t=-0.240	53.80±5.63	t=0.097
No	24.16±3.27	p=0.870	29.58±5.84	p=0.810	53.75±8.58	p=0.923
Finding it suitable to give a treatment to a dying patient						
Suitable	22.93±2.82	t=2.458	27.75±4.90	t=2.102	50.69±7.00	t=2.532
Not suitable	21.57±2.64	**p=0.015**	25.78±3.98	**p=0.037**	47.36±5.11	**p=0.012**
Experiencing a dilemma in giving a treatment to a dying patient						
Yes	22.50±2.39	t=-6.473	27.41±5.02	t=-5.067	49.91±6.41	t=-6.046
No	24.42±2.97	**p=0.000**	30.00±4.97	**p=0.000**	54.43±7.40	**p=0.000**
Should euthanasia be allowed in our country?						
Yes	23.85±2.42	t=-3.152	28.71±4.00	t=-5.704	52.56±5.75	t=-5.139
No	24.51±3.47	**p=0.002**	30.68±5.81	**p=0.000**	55.20±8.72	**p=0.000**
Department						
Medicine	23.10±2.85	t=-4.758	28.15±4.22	t=-3.953	51.26±6.00	t=-4.611
Nursing	24.38±2.95	**p=0.000**	29.94±5.14	**p=0.000**	54.32±7.57	**p=0.000**

The participating students' total mean score taken from ADDPAS is 52.27±7.40, total mean score taken from the CD sub-dimension is 23.47±3.08 and total mean score taken from the AA sub-dimension is 28.79±4.98. The medical students' total mean score taken from ADDPAS is 51.26±6.00, total mean score taken from the CD sub-dimension is 23.10±2.85 and total mean score taken from AA is 28.15±4.22. The nursing students' total mean score taken from ADDPAS

is 54.32±7.57, total mean score taken from the CD sub-dimension is 24.38±2.95 and total mean score taken from the AA sub-dimension is 29.94±5.14 (Table 4).

Table 4: The students' total mean scores from ADDPAS and the CD and AA sub-dimensions

Variable	Medicine			Nursing			Total		
	Min.	Max.	X̄±SD	Min.	Max.	X̄±SD	Min.	Max.	X̄±SD
ADDPAS	34	66	51.26±6.00	25	60	54.32±7.57	25	69	52.27±7.40
CD	16	31	23.10±2.85	12	34	24.38±2.95	12	34	23.47±3.08
AA	18	40	28.15±4.22	12	39	29.94±5.14	12	40	28.79±4.98

Discussion

The current study investigated the CD and AA attitudes of the MS and NS from Muğla Sıtkı Koçman University towards the concept of death and dying patient and his/her relatives within clinical applications. Avoidant attitude of health professionals harms the professional relationship with the patient / patient's relatives and leads to the objectification of the patient. Similarly, it is impossible to conduct a healthy treatment and care process by ignoring the essential components such as "trust", "mutual respect" and "openness" [5,15].

In the current study, the students' total mean scores from ADDPAS 52.27 ± 7.40 and the CD 23.47 ± 3.08 and AA 28.79 ± 4.98 sub-dimensions are medium. However, according to the results of the study, it can be said that when the students encounter death and dying patients in clinical practices, they experience CD and AA while giving treatment and care to such patients. The MS' total mean score from ADDPAS 51.26±6.00 was found to be lower than that of the NS 54.32±7.57. This might be because the NS need to be in interaction with patients during their treatment and care longer than the MS.

All the mean scores of the students in the age group of 18-20 years old were found to be significantly lower than those of the students in the age groups of 21-23 years old and 24 years old or older. That is, with the increasing age, CD with the patient and his/her relatives and AA with death and a dying patient increase. In a study by Köse, Karaaslan, & Akbal [6], the death

anxiety of the students in the 23-32 age group was found to be high. Chung, Cha, Cho [16] and Çakar [17] reported that death anxiety increases in individuals as age increases. These findings reported in the literature concur with the findings of the current study.

The students' total mean scores from ADDPAS were found to be varying significantly depending on gender. Moreover, the female students' total mean score from the scale was found to be higher than that of the male students. This might be because the female students show greater empathy, are more emotional; thus, they can show more CD and AA in their interactions with the patient and his/her relatives. Engin et al. found that female students had more negative attitudes towards death than male students [18]. In some studies, female students' death anxiety was found to be higher than that of male students [9,19]. In another study, the ADDPAS total mean score of female students was reported to be significantly higher than that of male students. However, in terms of avoidance levels, it is stated that there is no difference between men and women [5]. Bilge et al. investigated whether the nursing students' death anxiety and death attitude vary significantly depending on gender and found that death anxiety is higher among the male students [4]. These findings reported in the literature support the findings of the current study.

Medical education lasts 6 years and nursing education lasts 4 years. MS receive clinical practice training in their 4^{th}, 5^{th}, 6^{th} years while NS in their 2^{nd}, 3^{rd}, 4^{th} years in the hospital. This process also includes the treatment and care of patients. In the current study, while the MS' mean scores taken from the CD and AA sub-dimensions were found to be not varying significantly depending on grade level, the NS' mean scores taken from the CD and AA sub-dimensions were found to be varying significantly depending on grade level. All the students' total mean scores taken from ADDPAS and the CD and AA sub-dimensions were found to be varying significantly depending on grade level. LSD test revealed that this difference stemmed from the fourth-year students. Moreover, the total mean scores of the fourth-year students taken from

ADDPAS and the CD and AA sub-dimensions were found to be higher than those of the students in the other grade levels **[Table 3].** In a study conducted, the education given in the medical faculty is interpreted as having no reducing effect on the tendency of the students to "die and avoid the fatal patient" [5]. In a study by Nienaber & Goedereis, it was reported that there was no significant difference between the death anxiety levels of graduate students and undergraduate students [20]. These findings reported in the literature are similar to the ones reported in the current study in relation to the MS but in the current study, the NS' mean scores were found to be changing significantly depending on grade level. In a study by Cooper & Barnett with NS, they found that care-giving role to an end-of-life patient was a source of anxiety [21]. They found that this anxiety was not due to personal fears of death, but to feelings of inadequacy and helplessness arising from not knowing what to do and what to say to the patient. This is thought to be related to the course contents and length of hospital stay of the health professional candidates. On the other hand, it can be related to the individual experiences of the students associated with their ages and grade level.

In the current study, it was determined that all of the MS had training on how to approach a dying patient. On the other hand, the total mean scores of the NS having had training on how to approach a dying patient taken from the CD and AA sub-dimensions were found to be significantly higher than those of the students not having had such training. In this regard, in a study by Göçmen-Baykara et al., the participating students stated that death was theoretically covered in some courses and that this was not enough [22]. As stated by Wass, little and inadequate training about death does not fully enable students to cope with their worries, fight the crisis effectively and develop empathy [23]. Sharma et al. reported that the students in the nursing department were less afraid of death and damage to their bodies after death than the students studying in other departments [24]. A higher mean score found for the NS' attitudes towards death may indicate that they have consciousness of the concept of death and dying

patient yet they should be supported to cope with the concept of death. In the current study, the MS and NS' mean scores taken from the AA sub-dimension were found to be varying significantly depending on their finding themselves competent in approaching a dying patient. Sherman et al. stated that nurses should not only have the knowledge and skills to provide end-of-life quality care, but they should also develop the required attitudes and behaviours [25]. In a systematic evaluation made by Peters et al., it was emphasized that death education to be given to nurses is important for lifelong development and reduces death anxiety [26]. It was stated that death education is effective in terms of accepting life with death. Rappaport & Witzke found that more than half of MS did not feel adequately equipped to approach dying patients when graduating from the faculty, and that most of them welcomed the idea of receiving training on this during their clinical internship years [27]. Ross, Fraser & Kutner found that 20-hour multidisciplinary theoretical and applied palliative care training at the University of Maryland School of Medicine increased students' perception of competence in pain control and end-of-life care [28]. In the hospital, where students spend most of their time, they unwittingly observe other health care professional and take them as role models. Wear emphasizes that most MS believe that approach to dying patients can only be learned through clinical experience [29]. Kelly & Nisker found that after the loss of their patients, the lack of any faculty members to talk about their experiences resulted in the students' perceiving the emotional dimension of this experience as inappropriate in the professional context and the withdrawal behaviour as appropriate [30]. The attitudes of the health care team against death positively or negatively but inevitably influence students' self-confidence about their ability to care for dying patients [31]. When faculty members are not competent in approaching death and dying patients, they do not know how to deal with emotions such as failure, meaninglessness, sadness, mourning and fear to be experienced in the case of loss of a patient and as a result they cannot determine how to respond to the needs of dying patients and their

families for compassion, sharing and adequate life quality. Thus, for such people, it seems to be quite normal to restore to avoidant attitudes [32].

The mean scores of the NS having been involved in a medical treatment to a dying patient taken from the CD and AA sub-dimensions were found to be higher than those of the NS not having been involved in a medical treatment to a dying person while the mean scores of the MS having been involved in a medical treatment to a dying person were found to be lower than those of the students not having been involved yet the differences between the groups were not statistically significant. This result shows that the students who have been involved in a medical treatment to a dying patient experience CD and have AA in relation to death and the dying patient. In a study by Köse, Karaaslan & Akbal, it was determined that the students with experience of death have higher anxiety about death [6]. Şahin, Demirkıran & Adana, state that NS who have faced death and a dying patient in any period of their lives feel more anxious about death [19]. In a study conducted by Ratanawongsa, Teherani & Hauer, it was reported that MS who care for a dying patient are more likely to develop attachment, empathy and advocacy in their relationship with the patient [31]. In addition, the death of the patient who has been treated causes students to fear being inadequate in the care of the patient. This causes them to see themselves as unsuccessful and to feel guilty and increases their anxiety about death [6]. In the current study, NS' mean scores taken from the CD and AA sub-dimensions were found to be varying significantly depending on the state of experiencing a dilemma in terms of giving a treatment to a dying patient; yet, the MS' mean scores did not vary significantly depending on the state of experiencing a dilemma. In this regard, it can be argued that the students experiencing a dilemma in terms of giving a treatment to a dying patient have higher avoidant attitudes towards death.

It was found that the mean scores of the NS taken from ADDPAS and the CD and AA sub-dimensions are higher than the MS and the difference between the groups was statistically

significant. Thus, it can be said that the NS have higher avoidant attitudes and anxiety about death. Engin et al. reported that the negative attitudes of the NS towards death are higher than those of the MS [18]. In the same study, the NS' level of anxiety about death was also found to be higher. These findings reported in the literature seem to support the findings of the current study. Nursing is a profession that requires one-to-one interaction with the patient, observing the patient, spending relatively more time with the patient and finding solutions to the problems of the patient and his/her relatives [33]. For these reasons, it is thought that nursing students' anxiety levels are high.

Conclusion

The results of the current study are important in terms of showing that the professional education given in MSKÜTF and MSKÜSBFHB does not have a strong attitude-changing effect on the approach of students to the concept of death, dying patients and their relatives. The "AA" levels of students vary very little in the vocational education process. Considering the table as a whole, students should be supported not only theoretically, but also using interactive education methods, clinical practices, case studies, and role models specific to the subject of "approach to death and fatal patient".

Researches should be done in a qualitative research type in order to determine the anxiety and attitudes of the students in more detail. Students' coping mechanisms should be determined in line with their anxiety, personal beliefs and attitudes about death, and students should be taught effective coping methods.

Death is part of life. According to the results of the current study, as students encounter death and dying patients in clinical practices, the communication difficulties and avoidant attitude levels that they experience while providing care for such patients should be determined and they should be supported to develop their coping skills.

Conflict of interest

The authors declare no conflict of interest

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