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Relationship between Death Anxiety and Communication Apprehension with the Dying

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Abstract

This is a descriptive study to analyze the relationship between death anxiety and communication apprehension with the dying. The data were collected from the 150 nursing students in Korea from May 10 to May 31, 2015. The mean score for death anxiety was 3.36±0.33. Death anxiety in relation to the general characteristics showed a significant difference according to grade and religion. The mean of communication apprehension with the dying was 3.28±0.32. Communication apprehension with the dying showed a significant difference according to religion. The relation between death anxiety and communication apprehension with the dying showed positive correlation (r=.54, p=.000). It has important implications in that this study forms proper attitudes toward palliative care; and provides basic data for development of program for nurses.

Keywords*: Nursing, death, anxiety, communication*

1. Introduction

As interest in the quality of death as well as the quality of life increases, awareness of people on palliative care is increasing. Palliative care refers to the provision of holistic care for patients who suffer from an incurable disease and for their families so that they can accept death comfortably as a part of life and live the remainder of their life as comfortably as possible and with dignity. Palliative care does not prolong meaningless pain or shorten the patient's life, but relieves the symptoms of the patient and his or her family caused by physical, emotional, spiritual, and social stress, and supports them [1]. The basic principle of palliative care is to uphold the patient's dignity. It is jointly performed by a multidisciplinary team of experts in various fields and considers the patient and his or her family a unit of care [2]. In taking care of patients with a disease that limits their life, a nurse who is always next to the patient and who responds to his or her demands for 24 hours is one of the most important members of the palliative care team.

Hospice nurses who provide palliative care have been reported to be under more work-related stress than nurses working in a general work environment, because the former, besides performing the basic duties of a nurse, take care of patients facing death. Nurses who take care of terminally ill patients experience loss of will and burnout while they watch their patients foreboding death and preparing to be separated from his or her family and society complaining of death anxiety, fear, and severe pain. In previous studies, the higher the death anxiety of a nurse was, the higher his or her terminal care stress was, and the lower the degree of his or her communication with his or her patient and the patient's family was [3]. Therefore, to lower nurses' terminal care stress and enhance their communication with their patients and their patients' families, they must be able to

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overcome their death anxiety. However, many studies have indicated that nurses have never received professional education on palliative care and have difficulties in dealing with death [4].

Nurses taking care of terminally ill patients might think of their own mortality, which causes negative attitudes, such as death denial and death anxiety [5]. Death anxiety is a psychological process that causes negative feelings on death and the dying process, such as anxiety, disgust, rejection, denial, *etc*. When nurses are able to overcome death anxiety, they can exhibit positive attitudes in providing care and are able to communicate effectively with dying patients [6]. Communication skill is the most fundamental approach of hospice service. Effective communication improves understanding among patients and families; it enhances the therapeutic relationship; and it helps in accurately assessing the service being provided. Moreover, it improves understanding on treatment and the patient's quality of life [7]. Therefore, in order to provide high quality palliative care, nursing students and nurses must be equipped with skills to overcome death anxiety and comfortably communicate with terminally ill patients.

Previous studies on nursing students discussed spiritual well-being and attitude toward death [8], attitude toward death and the meaning of life [9], knowledge of hospice and attitude toward death [10], *etc*. There are no known studies on nursing students' experiences with death anxiety and communication apprehension with the dying. Therefore, this study attempted to foster the proper attitude toward death among nursing students and to provide basic data for improving the quality of palliative care for patients by identifying the relationship between nursing students' death anxiety and their apprehension over communicating with the dying.

2. Methods

2.1. Sample

The study subjects were 150 students enrolled in the Department of Nursing at K University in Korea. A survey was conducted targeting freshman to senior students who wanted to participate in the study. Before the survey was conducted, the participants were briefed on the study purpose and methods, consistent with research ethics, and they were notified that the results of the survey would kept confidential and that they could drop out of the survey at any time. The principal investigator collected the completed questionnaires. Excluding nine questionnaires that were incompletely answered, 141 questionnaires were included in the analysis.

2.2. Measurement

2.2.1. Death Anxiety: To measure death anxiety, 15 questions with a 5-point scale, whose reliability and validity were verified for Korea after they were translated into Korean by Ko *et al*. [11], were used from the Death Anxiety Scale (DAS) developed by Templer [12]. This instrument consists of four sub-domains (pure death anxiety, denial of death thinking, awareness of the shortness of time, and fear of matters related to death), and when the score is higher, the level of death anxiety is higher. Cronbach's α was 0.83 upon development, and 0.85 in this study.

2.2.2. Communication Apprehension with the Dying: To measure communication apprehension with the dying, the Communication Apprehension with the Dying (CA-dying) scale developed by Hayslip [13] was employed. This instrument consists of a total of 30 questions with a 5-point Likert scale. The higher the score, the higher is the level of communication apprehension with the dying. The validity of instrument translation has been verified through a back translation process by a

foreigner who is fluent in English and a nursing professor who is both fluent in English and Korean. Cronbach's α was 0.86 upon development, and 0.85 in this study.

2.3. Data Collection Method

The survey was conducted from May 10 to 31, 2015 using an anonymous self-report questionnaire. In observance of research ethics, the study purpose and methods were explained to the nursing students who voluntarily agreed to participate in the study. They were notified that the responses to the questions would be processed anonymously, and that they could drop out of the study at any time. A structured questionnaire was distributed to them, which they were asked to fill out individually. The principal investigator collected the completed questionnaires at the site and stored them at the research office.

2.4. Data Analysis

The survey data were analyzed using the SPSS/WIN 18.0 program. The general characteristics of the subjects were analyzed using descriptive statistics. For the degree of the respondents' death anxiety and apprehension over communicating with the dying, the maximum, minimum, mean, and standard deviation were calculated. The respondents' death anxiety and apprehension over communicating with the dying depending on their general characteristics were analyzed using a t-test and ANOVA. The correlation between their death anxiety and apprehension over communicating with the dying was analyzed using Pearson's correlation coefficient.

3. Results

3.1. General Characteristics of Subjects

The mean age of the subjects was 21.5 years; the minimum was 19 years; and the maximum was 31 years. In terms of gender, females accounted for 74.5% (105 persons) and males 25.5% (36 persons). In terms of grade level, the number of freshmen was 21.3% (30 persons); sophomores were 23.4% (33 persons); juniors were 29.8% (42 persons); and seniors were 25.5% (36 persons). In terms of religious affiliation, 74 persons belonged to a religion (52.5%), while 67 persons did not have a religion (47.5%). The subjects' economic statuses were as follows: high, 7.8% (11 persons), middle, 73.8% (104 persons); and low, 18.4% (26 persons). With regard to health status, 42 persons ranked high (29.8%), 95 persons ranked in the middle (67.4%), and 4 persons ranked low (2.8%) (Table 1).

Table1. The General Characteristics of Subjects (N=141)

Variables	Category	n (%)
Gender	Male	36(25.5)
	Female	105(74.5)
Grade	1st	30(21.3)
	2nd	33(23.4)
	3rd	42(29.8)
	4th	36(25.5)
Religion	Have	74(52.5)
	None	67(47.5)
Economic status	High	11(7.8)
	Middle	104(73.8)
	Low	26(18.4)
Health status	High	42(29.8)
	Middle	95(67.4)
	Low	4(2.8)

3.2. Levels of Death Anxiety and Communication Apprehension with the Dying

The degree of the death anxiety was 3.36±0.33 points out of 5 points. In the sub-dimensions, the degree of the pure death anxiety was 3.34±0.43 points; denial of death thinking, 3.38±0.87 points; awareness of the shortness of the patient's time, 3.74±0.89 points; and fear of matters related to death, 3.25±0.46 points. The degree of the apprehension over communicating with the dying was 3.28±0.32 points out of 5 points (Table 2).

3.3. Levels of Death Anxiety and Communication Apprehension with the Dying According to General Characteristics

Table 2. Death Anxiety and Communication Apprehension with the Dying (N=141)

Variables	Min.	Max.	M±SD
Death anxiety	2.5	4.4	3.36±0.33
Pure death anxiety	2.1	4.3	3.34±0.43
Denial of death thinking	1.5	5.0	3.38±0.87
Awareness of shortness of time	1.5	5.0	3.74±0.89
Fear of matters related to death	2.0	4.8	3.25±0.46
Communication apprehension with the dying	2.5	4.2	3.28±0.32

In relation to the respondents' general characteristics, the degree of their death anxiety significantly differed depending on their year level and religion. The degree of the death anxiety was statistically significantly lower in the group of students in the higher year

levels (p = 0.042) and in the group with a religion (p = 0.000). The degree of apprehension over communicating with the dying significantly differed depending on whether or not the respondent had a religion. The degree of apprehension over communicating with the dying was statistically significantly lower in the group with a religion (p = 0.000) (Table 3).

Table 3. Death Anxiety and Communication Apprehension with the Dying to General Characteristics (N=141)

Variables	Death Anxiety		Communication Apprehension with the Dying	
	M±SD	t or F(p)	M±SD	t or F(p)
Gender				
Male	3.42±0.36	.214	3.34±0.35	.195
Female	3.34±0.32		3.26±0.30	
Grade				
1st	3.46±0.34	.042	3.34±0.28	.639
2nd	3.34±0.29		3.30±0.30	
3rd	3.42±0.30		3.25±0.33	
4th	3.24±0.37		3.25±0.35	
Religion				
Have	3.20±0.30	.000	3.16±0.28	.000
None	3.51±0.29		3.39±0.31	
Economic status				
High	3.35±0.30	.066	3.27±0.25	.770
Middle	3.37±0.35		3.30±0.33	
Low	3.34±0.28		3.21±0.28	
Health status				
High	3.32±0.36	.151	3.29±0.33	.088
Middle	3.39±0.31		3.29±0.31	
Low	3.11±0.35		2.93±0.33	

3.4. Correlation between Death Anxiety and Communication Apprehension with the Dying

The degree of death anxiety of the nursing students was significantly correlated with the degree of their apprehension over communicating with the dying. The two variables showed a positive correlation (r = 0.54 and p = 0.000), in which the higher the death anxiety was, the higher the apprehension over communicating with the dying was (Table 4). Especially among the sub-dimensions of death anxiety, pure death anxiety (r = 0.34 and p = 0.000), awareness of the shortness of the patient's time(r = 0.33 and p = 0.000), and fear of matters related to death(r = 0.45 and p = 0.000) showed a statistically significant correlation with the apprehension over communicating with the dying.

4. Discussion

This study intended to form proper attitudes toward palliative care among nursing students and to provide basic data for the vitalization of the palliative care business by investigating the levels of death anxiety and communication apprehension with the dying, and identifying the correlation between the two variables.

In this study, the level of death anxiety was 3.36±0.33. The score was higher than 2.59 points produced by a study targeting hospice volunteers [14], and 3.22 points produced by a study targeting nurses at a cancer ward [15]. In the sub-domains, awareness of the shortness of time was the highest, 3.74±0.89, followed by pure death anxiety, denial of death thinking, and fear of matters related to death. The results indicate that nursing students feel more anxiety toward death than nurses who take care of cancer patients and hospice volunteers who witness patients' deaths by their side. Death anxiety refers to negative feelings on matters related to death [16].

Table 4. Correlations among the Variables (N=141)

Variables	Death anxiety				
	Total	Pure death anxiety	Denial of death thinking	Awareness of shortness of time	Fear of matters related to death
	r(*p*)	r(*p*)	r(*p*)	r(*p*)	r(*p*)
Death Anxiety	1				
Pure death anxiety		1			
Denial of death thinking			1		
Awareness of shortness of time				1	
Fear of matters related to death					1
Communication apprehension with the dying	.54(.000)	.34(.000)	.08(.324)	.33(.000)	.45(.000)

Nobody can avoid or overcome death. Thus, all humans have death-related anxiety. Nurses who meet patients facing death are liable to have a higher degree of death anxiety than ordinary persons. Death anxiety occurs when people connect death with painful biological agony, and consequently, cannot recognize that death is a valuable end to their existence. Death anxiety is a state of mind without the courage to confront death. However, if a nurse accepts death as a part of life and has a positive attitude toward it, his or her death anxiety becomes lower [17]. Death anxiety may affect the treatment and nursing not only of terminally ill patients but also of their families [18]. Therefore, an educational course that can positivize attitudes toward death must be added to the curriculum for future nurses.

The death anxiety according to general characteristics showed significant differences depending on grade and religion. In the study on nursing students' spiritual well-being and attitude toward death, the higher the grade level, students were statistically significantly more positive on death matters [19]. Whereas, in the study of knowledge on hospice among nursing students, grade level revealed no significant difference [3]. Religion is a meaningful factor on death anxiety, and a previous study also reported lower death anxiety in persons with a religion [20]. Moreover, based on the study showing that as the level of spirituality is higher, death anxiety is lower [15], it can be inferred that death anxiety is closely associated with religious belief. Therefore, when education on palliative care is given to nursing students, a program that can enhance their levels of religious belief and spirituality should be actively provided to reduce the death anxiety of nursing students or nurses.

In the sub-domains related to death anxiety, the sub-domain with the highest score was awareness of the shortness of time (3.74±0.89). In the study targeting nurses who take care of cancer patients, denial of death thinking had the highest score. The awareness of the shortness of time is a factor related to fear with time, time awareness, *etc*. [21]. In our opinion, the reason this domain had the highest score was that among nursing students

who are younger than nurses directly taking care of terminally ill patients, awareness of the shortness of time might have been felt more deeply than denial of death thinking.

In this study, communication apprehension with the dying was 3.28±0.32, which was higher than ordinary scores. The score was higher than that of the study targeting nurses working at a general ward in the U.S., which reported the mean total score of 107.68±13.97 out of 150 [22]. Terminally ill patients confronted by death easily get hurt because they communicate with people around them, experiencing distorted awareness, narrow-minded thinking, various negative feelings, and unreasonable and non-realistic expectations. If patients are repeatedly hurt, they may respond to people around them defensively, passive-aggressively, or aggressively [23]. However, they have a strong desire to be accepted as they are, thus communication through sincere meetings is one of the most fundamental approaches in nursing terminally ill patients.

Communication apprehension with the dying based on general characteristics showed a statistically significant difference, depending on religion. Direct comparison might be impossible, because there is no study targeting nursing students, but it means having a religion may affect anxiety reduction when nursing students communicate with the dying. Later, studies targeting nursing students of various universities should be conducted to further investigate the relationship between religion and communication with the dying.

In this study, death anxiety had a positive correlation with communication apprehension with the dying, which was similar to the results of previous studies. Deffner and Bell [24] reported that there was a correlation between the level of the nurse's death anxiety and the degree of the nurse's ability to converse on the imminence of death with patients or their families. Additionally, Robinson [22] emphasized that persistent training on effective communication skills could decrease the level of the nurse's death anxiety, and, at the same time, it had a positive effect on increasing comfort when discussing death with patients. Therefore, when education on palliative care is given to nursing students in the future, courses from which they can learn communication skills in dealing with terminally ill patients should be added.

In conclusion, this study is significant in reviewing the curriculum of nursing education in the future after investigating the association between death anxiety and communication apprehension of the dying among nursing students. However, this study was performed on students from one university, and, therefore, further studies must be conducted to target more students from different universities.

5. Conclusion

This study attempted to provide the basic data needed for the development of an intervention program that can relieve the death anxiety of nurses by identifying the relationship between the death anxiety of nursing students and their apprehension over communicating with the dying. The degree of death anxiety was 3.36±0.33 points out of 5 points; and in the sub-dimensions, awareness of the shortness of time of the patient was the highest, followed by denial of death thinking, pure death anxiety, and fear of matters related to death. The degree of apprehension over communicating with the dying was 3.28±0.32 points out of 5 points. In relation to the general characteristics, the degree of death anxiety was statistically significantly lower in the group of nursing students in higher year levels and in the group of nursing students with a religion. In addition, the group with a religion had lower apprehension over communicating with the dying than the other groups. There was a statistically significant positive correlation between death anxiety and apprehension over communicating with the dying ($r = 0.54$ and $p = 0.000$). Especially, among the sub-dimensions of death anxiety, pure death anxiety, awareness of the shortness of time of the patient, and fear of matters related to death showed a statistically significant positive correlation with apprehension over communicating with the dying. Based on the results of this study, it is suggested that a program that can lower

nursing students' death anxiety and apprehension over communicating with the dying be included in the nursing curriculum.

References

[1] H. Choi, M. J. Park, "Comparison of death orientation of nurses before and after hospice training program", J Korea Acad Fundam Nurs, vol. 11, no. 2, **(2004)**, pp. 213-219.
[2] I. C. Fineberg, N. S. Wenger, L. Forrow, "Interdisciplinary education: evaluation of a palliative care training intervention for pre-professionals", Acad Med, vol. 79, no. 8, **(2004)**, pp. 769-776.
[3] J. Y. Han, N. Y. Lee, "Nursing students' attitude toward death and perception on hospice care", Asian Oncol Nurs, vol. 9, no. 2, **(2009)**, pp. 95-103.
[4] J. H. Kang, "A study on intensive care unit nurses' recognition of death", Unpublished master's thesis, Sahmyook University, Seoul, Korea, **(2011)**.
[5] O. H. Cho, J. H. Han, G. H. Hwang, "Subjective health status, attitude toward death and spiritual well-being of nurses, JKCA, vol. 13, no. 10, **(2013)**, pp. 375-384.
[6] H. S. Park, "Nursing college students attitudes toward death and the spiritual well-being", Faith Scholarship, vol. 12, **(2007)**, pp. 195-232.
[7] M, Braun, D. Gordo, B. Uziely, "Associations between oncology nurses' attitudes toward death and caring for dying patients". Oncol Nurs Forum, vol. 37, no. 1, **(2010)**, pp. 43-49.
[8] R. M. Epstein, R. L. Street Jr., "Patient-centered communication in cancer care: Promoting healing and reducing suffering", Bethesda, MD: National Cancer Institute, NIH Publication No. 07-6225, **(2007)**.
[9] H. J. Lee, "Spiritual well-being and perception of death in nursing students", Korean J Hosp Palliat Care, vol. 7, no. 1, **(2001)**, pp. 1229-1285.
[10] S. N. Kim, H. J. Kim, S. O. Choi, "Effects of a hospice and palliative care education program including meaning in life on attitudes toward end-of-life care and meaning in life among nursing college students", J Korea Acad Fundam Nurs, vol. 17, no. 3, **(2011)**, pp.454-463.
[11] K. S. Choi, S. Y. Han, "Knowledge of pain management and hospice awareness of nursing students in cancer ward", JKAIS, vol. 14, no. 3, **(2013)**, pp. 1116-1122.
[12] H. J. Ko, J. O. Choi, H. P. Lee, "The reliability and factor structure of K-Templer Death Anxiety Scale", Kor. J. Psychol.: Health, vol. 11, **(2006)**, pp. 315-328.
[13] D. Templer, "The construction and validation of a death anxiety scale", J Gen Psychol, vol. 82, **(1970)**, pp. 165-177.
[14] B. Hayslip, "The measurement of communication apprehension regarding the terminally ill", Omega, vol. 17, **(1986-1987)**, pp. 251-261.
[15] W. S. Choi, S. N. Choi, W. K. Suh, "A study on hospice volunteers` self-efficacy and death anxiety", K. J. F. W, vol. 12, no. 2, **(2007)**, pp. 193-212.
[16] K. Y. Kim, J. S. Yong, "Spirituality, death anxiety and burnout levels among nurses working in a cancer hospital", Korean J Hosp Palliat Care, vol. 16, no. 4, **(2013)**, pp. 264-273.
[17] H. M. Chochinov, B. J. Cann, "Interventions to enhance the spiritual aspects of dying", J Palliat Med, vol. 8, **(2005)**, pp. 103-115.
[18] H. S. Kwen, "Death readiness and death anxiety of cancer patients", Unpublished master's thesis, Chonbuk National University, Jeonju, Korea, **(2010)**.
[19] H. J. Cho, E. S. Kim, "The effect of the death education program on the death anxiety and attitudes toward nursing care of the dying patients of the nursing student", Korean J Hosp Palliat Care, vol. 8, **(2005)**, pp. 163-172.
[20] H. J. Lee, "Spiritual well-being and perception of death in nursing students", Korean J Hosp Palliat Care, vol. 7, no. 1, **(2004)**, pp. 29-36.
[21] W. S. Choi, "A study on the elderly's ego integrity and death anxiety", J Korean Geriatr Soc, vol. 27, **(2007)**, pp. 755-773.
[22] H. J. Go, J. O. Choi, H. P. Lee, "Reliability and factor structure of K-Templer Death Anxiety scale", Kor. J. Psychol.: Health, vol. 11, no. 2, **(2006)**, pp. 315-328.
[23] C. F. Robinson, "Early program evaluation of the impact of ELNEC communication education on registered nurse death Anxiety and communication apprehension scores", Unpublished doctor's dissertation, Grand Valley State University, Michigan, USA, **(2012)**.
[24] A. R. Hwang, "Communication to hospice clients", Korean Korean J Hosp Palliat Care, vol. 11, no. 1, **(2008)**, pp. 1-11.
[25] J. M. Deffner, J. S. K. Bell, "Nurses' death anxiety, comfort level during communication with patients and families regarding death, and exposure to communication education: A quantitative study", J Nurses Staff Devt, vol. 21, **(2005)**, pp. 19-25.

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