

An analysis of nursing students' death concern

Aiko Tanaka*

Abstract :

A questionnaire survey was conducted in order to examine characteristics of death concern of nursing, medical and general students and to compare death concern levels of nursing students across grade levels. There were 539 valid responses of the students, students were 173 from nursing students, 184 from medical and 182 from general students. Results showed that the nursing students' death concern was significantly higher than that of the medical and general students, that death concern was influenced by the students' major and their previous experience of caring for relatives, and that there was no significant difference in their death concern across the nursing students' grade levels. It was suggested that the efficacy of the scale used needs to be examined and that more sufficient time be provided for nursing students to reflect more deeply on life and death.

Key words : death concern, questionnaire, nursing students

Introduction

It is an extremely important matter for nurses, who work directly with human life, to have an established concept of life and death. Nursing students in particular are in the process of establishing their own concepts¹⁾ and are therefore sometimes unable to accept patients' death or are confused about what happens. Thus, it is quite significant to understand how nursing students think and feel about death. It would also be important to determine nursing students' learning process by monitoring the formation of their concept of life and death and this requires a certain degree of quantification. However, there are very few previous studies that have attempted to quantify interest and attitudes of nurses towards death.

Review of Literature

Scales used in previous studies and some findings of each are as follows.

Templer's Death Anxiety Scale (Table 1): This scale consists of fifteen questions. Respondents answer True or False, and the scale ranges from

TABLE 1 Templer's Death Anxiety Scale Items

| | |
|----|--|
| 1 | I am very much afraid to die. |
| 2 | The thought of death seldom enters my mind. |
| 3 | It doesn't make me nervous when people talk about death. |
| 4 | I dread to think about having to have an operation. |
| 5 | I am not at all afraid to die. |
| 6 | I am not particularly afraid of getting cancer. |
| 7 | The thought of death never bothers me. |
| 8 | I am often distressed by the way time flies so very rapidly. |
| 9 | I fear dying a painful death. |
| 10 | The subject of life after death troubles me greatly. |
| 11 | I am really scared of having a heart attack |
| 12 | I often think about how short life really is. |
| 13 | I shudder when I hear people talking about a World War III. |
| 14 | The sight of a dead body is horrifying to me. |
| 15 | I feel that the future holds nothing for me to fear. |

0 to 15²⁾. This scale has been translated into Italian³⁾, Arabic⁴⁾ and Dutch⁵⁾ versions, and is being used worldwide. The studies which have used this scale include topics such as advance directives of the elderly (documenting decisions for care before situations arise that require those decisions)⁶⁾ and measuring death anxiety of nurses who are involved in caring for HIV patients at home⁷⁾. There is also a report based on ordinary people indicating that as social psychological maturity and physical age increase, death anxiety decreases⁸⁾.

Thornton & Powell's Death Anxiety Scale (Table 2): This scale consists of 25 questions on a 5-point scale with scores ranging from 0 to

* School of Nursing, Yamaguchi Prefectural University

TABLE 2 Thorson & Powell Death Anxiety Scale Items

| | |
|----|--|
| 1 | I fear dying a painful death. |
| 2 | Not knowing what the next world is like troubles me. |
| 3 | The idea of never thinking again after I die frightens me. |
| 4 | I am not at all anxious about what happens to the body after burial. |
| 5 | Coffins make me anxious. |
| 6 | I hate thinking about losing control over my affairs after I am gone. |
| 7 | Being totally immobile after death bothers me. |
| 8 | I dread to think about having an operation. |
| 9 | The subject of life after death troubles me greatly. |
| 10 | I am not afraid of a long, slow dying. |
| 11 | I do not mind the idea of being shut into a coffin when I die. |
| 12 | I hate the idea that I will be helpless after I die. |
| 13 | I am not at all concerned over whether or not there is an afterlife. |
| 14 | Never feeling anything again after I die upsets me. |
| 15 | The pain involved in dying frightens me. |
| 16 | I am looking forward to a new life after I die. |
| 17 | I am not worried about ever being helpless. |
| 18 | I am troubled by the thought that my body will decompose in the grave. |
| 19 | The feeling that I will be missing out on so much after I die disturbs me. |
| 20 | I am worried about what happens to us after we die. |
| 21 | I am not at all concerned with being in control of things. |
| 22 | The total isolation of death is frightening to me. |
| 23 | I am not particularly afraid of getting cancer. |
| 24 | I will leave careful instructions about how things should be done after I am gone. |
| 25 | What happens to my body after I die does not bother me. |

100⁹⁾. One study measured undertakers' death anxiety using this scale, with the result that their death anxiety level was found to be much higher than that of men in other professions¹⁰⁾. Another comparison was made on death anxiety between youth and the elderly among African-American females, with the result that the females' anxiety was significantly higher¹¹⁾. A further comparison was made between the European and African students, with no significant difference in their scores¹²⁾.

Collett-Lester Fear of Death Scale (Table 3): This scale is made up of four dimensions: your own death, your own dying, the death of others and the dying of others. There are 32 questions on a 5-point scale with a higher score indicating a higher level of fear¹³⁾. A study was done using the old version scale by examining the influence of death education on medical students who had not yet exposed to clinical rotations. The result revealed that their attitude towards death improved after completing a course on death education¹⁴⁾.

Dickstain's Death Concern Scale: In this scale, "death concern is conceptualized as conscious contemplation of the reality of death and negative evaluation of that reality¹⁵⁾." The scale includes 30 items with four response alternatives per item. Questions 1 through 11 relate to thinking about

TABLE 3 Collett-Lester Scale Items

| | |
|---|---|
| | your own death |
| 1 | the total isolation of death |
| 2 | the shortness of life |
| 3 | missing out on so much after you die |
| 4 | dying young |
| 5 | how it will feel to be dead |
| 6 | never thinking or experiencing anything again |
| 7 | the possibility of pain and punishment during life-after-death |
| 8 | the disintegration of your body after you die |
| | your own dying |
| 1 | the physical degeneration involved in a slow death |
| 2 | the pain involved in dying |
| 3 | the intellectual degeneration of old age |
| 4 | that your abilities will be limited as you lay dying |
| 5 | the uncertainty as to how bravely you will face the process of dying |
| 6 | your lack of control over the process of dying |
| 7 | the possibility of dying in a hospital away from friends and family |
| 8 | the grief of others as you lay dying |
| | the death of others |
| 1 | the loss of some one close to you |
| 2 | having to see their dead body |
| 3 | never being able to communicate with them again |
| 4 | regret over not being nicer to them when they were alive |
| 5 | growing old alone without them |
| 6 | feeling guilty that you are relieved that they are dead |
| 7 | feeling lonely without them |
| 8 | envious that they are dead |
| | the dying of death |
| 1 | having to be with someone who is dying |
| 2 | having them want to talk about death with you |
| 3 | watching them suffer from pain |
| 4 | having to be the one to tell them that they are dying |
| 5 | seeing the physical degeneration of their body |
| 6 | not knowing what to be about your grief at losing them when you are with them |
| 7 | watching the deterioration of their mental abilities |
| 8 | being reminded that you are going to go through the experience also one day |

death. The response items range from "never" to "often". Items 12 through 30 reflect concern or anxiety about death with response items ranging from "strongly disagree" to "strongly agree". Possible scores on the total instrument range from 0 to 90 with higher scores indicating greater death concern.

Waskel conducted a study using this scale and reported that death concern, temperament types and intensity of crisis were significantly related with each other¹⁶⁾.

In Japan, Katabami, et al.¹⁷⁾ translated this scale into Japanese with the title "Shi no Fuan Shakudo" and conducted a study of death concern of the elderly. According to this study, the age group over 75 years old had a slightly higher death anxiety level than the younger age group, indicating that anxiety anticipating death increased with age.

When we compare the above measurement tools, we can see that Dickstain's Death Concern Scale

TABLE 4 Dickstain's Death Concern Scale Items

| | |
|----|--|
| 1 | I think about my own death. |
| 2 | I think about the death of loved ones. |
| 3 | I think about dying young. |
| 4 | I think about the possibility of my being killed on a city street. |
| 5 | I have fantasies of my own death. |
| 6 | I think about death just before I go to sleep. |
| 7 | I think of how I would act if I were to die within a given period of time. |
| 8 | I think about how my relatives would act and feel upon my death. |
| 9 | When I am sick I think about death. |
| 10 | When I am outside during a lightning storm I think about the possibility of being struck by lightning. |
| 11 | When I am in an automobile I think about the high incidence of traffic fatalities. |
| 12 | I think people should first become concerned about death when they are old. |
| 13 | I am much more concerned about death than those around me. |
| 14 | Death hardly concerns me. |
| 15 | My general outlook just doesn't allow for morbid thoughts. |
| 16 | The prospect of my own death arouses anxiety in me. |
| 17 | The prospect of my own death depresses me. |
| 18 | The prospect of the death of my loved ones arouses anxiety in me. |
| 19 | The knowledge that I will surely die does not in any way affect the conduct of my life. |
| 20 | I envision my own death as a painful, nightmarish experience. |
| 21 | I am afraid of dying. |
| 22 | I am afraid of being dead. |
| 23 | Many people become disturbed at the sight of a new grave but it does not bother me. |
| 24 | I am disturbed when I think about the shortness of life. |
| 25 | Thinking about death is waste of time. |
| 26 | Death should not be regarded as a tragedy if it occurs after a productive life. |
| 27 | The inevitable death of man poses a serious challenge to the meaningfulness of human existence. |
| 28 | The death of the individual is ultimately beneficial because it facilitates change in society. |
| 29 | I have a desire to live on after death. |
| 30 | The question of whether or not there is a future life worries me considerably. |

encompasses not only anxiety and fear of death but also thought about death, thus measuring a more comprehensive attitude towards death. Accordingly, this scale seems the most appropriate tool for measuring nursing students' thought and interest in death.

The present study holds the following two objectives: 1) Comparison of death concern among nursing students, medical students and general students, and examination of characteristics of nursing students' death concern; and 2) Examination of nursing students' death concern across grade levels. By achieving these objectives, the author seeks to obtain suggestions for death education and establishment of appropriate concepts of life and death.

Method

The formulation of this questionnaire is as follows: The framework of the questionnaire consists of three dimensions: death concern scale, life experience deemed to influence death concern, and face items. After review of available questionnaires, the one selected that most suited the

population to study was Dickstain's Death Concern Scale was used for the above-stated "reason. The question items of this scale were reviewed by five medical professionals and items. I think about the possibility of my being killed on a city street", When I am outside during a lightning storm I think about the possibility of being struck by lightning", I am afraid of being dead", The inevitable death of man poses a serious challenge to the meaningfulness of human existence", and The death of the individual is ultimately beneficial because it facilitates change in society" were eliminated for this study because they were deemed irrelevant and difficult to understand for Japanese subjects. Thus the remaining 25 questions were used on a 4-point scale. After the scale was revised, the Cronbach alpha value for the 25 questions was 0.82 (n = 539), indicating internal consistency.

Subjects: Subjects selected included nursing students, public health nursing and midwifery majors at nursing school (collectively referred to as nursing students hereafter); the medical students at University (medical students hereafter); and first-year students at University (general students). The medical students were selected for comparison with nursing students, both of whom will be working in the same field dealing with human life and death. Because of the practical difficulty of using all six grade levels, only the first-, third- and sixth-year medical students were chosen.

Procedure: The questionnaire forms were filled out by the subjects themselves. A form indicating the purpose of the research was attached to the questionnaire and only those students who gave consent were asked to respond. The completed forms were collected in such a way as to protect the respondents' anonymity. The research was conducted between May and June of 1998.

Method of analysis: Data analysis was performed using the SPSS statistical software package, conducting descriptive statistics and analysis of variance. First, a comparison was made of death concern among the nursing, medical and general students, examining their characteristics.

Then, death concern was compared across the grade levels of the nursing students.

TABLE 5 Majors and Grade Levels of the Subjects

| Majors | Grade Levels | Number |
|---------------------------|--------------|--------|
| Nursing | First-year | 45 |
| Nursing | Second-year | 33 |
| Nursing | third-year | 46 |
| Public Health · Midwifery | | 49 |
| Total | | 173 |
| Medicine | First-year | 22 |
| Medicine | Third-year | 91 |
| Medicine | Sixth-year | 71 |
| Total | | 184 |
| Science | First-year | 43 |
| Economics | First-year | 4 |
| Education | First-year | 77 |
| Humanities | First-year | 58 |
| Total | | 182 |

Results

1) Information on subjects: The number of valid respondents was 539, of which there were 173 nursing students, 184 medical students and 182 general students (see Table 5).

2) Characteristics of death concern by item: Results are shown in Table 6 with the mean scores.

3) Comparison among the three groups: The mean scores were statistically compared among the three groups regarding their death concern level. The nursing students had a mean score of 62.29 (± 8.78), the medical students 59.05 (± 8.29) and general students 59.72 (± 9.36), indicating a statistical significance in differences between the nursing and medical students, and between the nursing and general students ($p < 0.05$).

4) Life experience deemed to influence death concern: There was no significant difference between the three groups in experience of caring for relatives, experience of facing relatives' death, faith

TABLE 6 Death Concern Questionnaire Items and Means

| Questionnaire Items | | *Reversed items | | |
|---------------------|--|------------------|------------------|------------------|
| | | nursing students | medical students | general students |
| 1 | I think about my own death. | 2.70 | 2.84 | 2.84 |
| 2 | I think about dying young. | 2.45 | 2.64 | 2.45 |
| 3 | I think about death just before I go to sleep. | 2.16 | 2.14 | 2.13 |
| 4 | I think of how I would act if I were to die within a given period of time. | 2.79 | 2.79 | 2.64 |
| 5 | I think about how my relatives would act and feel upon my death. | 2.58 | 2.59 | 2.51 |
| 6 | When I am sick I think about death. | 2.20 | 2.21 | 2.21 |
| 7 | I have fantasies of my own death. | 2.35 | 2.36 | 2.23 |
| 8 | I think people should first become concerned about death when they are old.* | 1.80 | 2.10 | 2.10 |
| 9 | I am much more concerned about death than those around me. | 2.02 | 1.94 | 1.91 |
| 10 | Death hardly concerns me.* | 2.91 | 2.66 | 2.67 |
| 11 | The prospect of my own death arouses anxiety in me. | 2.71 | 2.34 | 2.55 |
| 12 | The prospect of the death of my loved ones arouses anxiety in me. | 3.66 | 3.22 | 3.46 |
| 13 | The knowledge that I will surely die does not in any way affect the conduct of my life.* | 2.21 | 2.06 | 2.00 |
| 14 | I envision my own death as a painful, nightmarish experience. | 1.70 | 1.66 | 1.74 |
| 15 | I am afraid of dying. | 2.58 | 2.30 | 2.52 |
| 16 | I am disturbed when I think about the shortness of life. | 2.28 | 2.10 | 2.10 |
| 17 | Thinking about death is waste of time.* | 3.29 | 3.24 | 3.13 |
| 18 | Death should not be regarded as a tragedy if it occurs after a productive life.* | 1.83 | 1.92 | 1.89 |
| 19 | I have a desire to live on after death. | 2.81 | 2.21 | 2.56 |
| 20 | The prospect of my own death depresses me. | 2.24 | 1.99 | 2.07 |
| 21 | I think about the death of loved ones. | 2.98 | 2.70 | 2.73 |
| 22 | When I am in an automobile I think about the high incidence of traffic fatalities. | 2.69 | 2.68 | 2.48 |
| 23 | My general outlook just doesn't allow for morbid thoughts.* | 2.23 | 2.16 | 2.23 |
| 24 | Many people become disturbed at the sight of a new grave but it does not bother me.* | 3.12 | 2.70 | 2.79 |
| 25 | The question of whether or not there is a future life worries me considerably. | 1.91 | 1.57 | 1.79 |

TABLE 7 Experience of Caring for Relatives

| | nursing students | medical students | general students | Total |
|-------|------------------|------------------|------------------|------------|
| Yes | 56 (32.7) | 53 (29.1) | 48 (26.7) | 157 (29.5) |
| No | 115 (67.3) | 129 (70.9) | 132 (73.3) | 376 (70.5) |
| Total | 171 (100) | 182 (100) | 180 (100) | 533 (100) |

TABLE 8 Experience of Facing Relatives' Death

| | nursing students | medical students | general students | Total |
|-------|------------------|------------------|------------------|------------|
| Yes | 64 (37.0) | 61 (33.3) | 69 (38.3) | 194 (36.2) |
| No | 109 (63.0) | 122 (66.7) | 111 (61.7) | 342 (63.8) |
| Total | 173 (100) | 183 (100) | 180 (100) | 536 (100) |

TABLE 9 Faith and Creed

| | nursing students | medical students | general students | Total |
|---------|------------------|------------------|------------------|------------|
| Yes | 11 (6.4) | 12 (6.6) | 14 (7.7) | 37 (6.9) |
| Neutral | 29 (16.8) | 39 (21.4) | 42 (23.2) | 110 (20.5) |
| No | 133 (76.9) | 131 (72.0) | 125 (69.1) | 389 (72.6) |
| Total | 173 (100) | 182 (100) | 181 (100) | 536 (100) |

TABLE 10

Influence of the Majors and the Experience of Caring for One's Relatives on Death Concern

| | sum of squares | DF | Mean squares | F | Sig of F |
|----------------------|----------------|-----|--------------|-------|----------|
| Main Effects | 1577.272 | 3 | 525.757 | 6.84 | 0.000 |
| Majors | 1392.772 | 2 | 696.386 | 9.059 | 0.000 |
| Experience of caring | 133.995 | 1 | 133.995 | 1.743 | 0.187 |
| 2-way interaction | 726.182 | 2 | 363.091 | 4.723 | 0.009 |
| Majors×Experience | 726.182 | 2 | 363.091 | 4.723 | 0.009 |
| explained | 1813.694 | 5 | 362.739 | 4.719 | 0 |
| Residual | 38896.132 | 506 | 76.87 | | |
| Total | 40709.826 | 511 | 79.667 | | |

and creed (see Tables 7, 8 and 9). However, when the two variables of students' major and their experience of caring for relatives were combined, there was a significant influence on death concern ($p < 0.01$) (see Table 10).

5) Comparisons were made across the grade levels in order to examine the influence of studies on the grade levels in terms of death concern. The mean scores were as follows: first-year students = 60.84 (± 10.44), second-year = 63.27 (± 9.8), and third-year = 61.61 (± 8.15), and health and midwifery majors = 63.62 (± 7.05). There was no significant difference among the grade levels.

Discussion

The death concern level was the highest for the nursing students with a significant difference from the other two groups of students. This result seemed to be influenced by a greater level of experience caring for their relatives¹⁸⁾. One of the major motivations for nursing students entering the nursing school was their previous experience caring for their relatives. Thus, the nursing students had death concern which was already greater than that of other groups of students.

We can also say that nursing students in general have more frequent opportunities to think or worry about death than medical or general students. The relationship between this fact and previous experience of caring for relatives or the nursing field itself remains to be examined in the future.

The comparison across the grade levels with regard to death concern yielded no significant result. That is, no significant influence from clinical practice and nursing education was found. This result was the same as that of another study where comparison was made before and after the clinical practice of the medical students; again, the difference was not significant¹⁹⁾.

In conclusion, we can infer two things from these results.

One is a possibility that this scale may not possess enough accuracy or sensitivity to measure differences in death concern levels among grade levels. There are very few cases where this scale has been applied in Japan; therefore, we need more studies using this scale to examine its efficacy.

The other is a concern that nursing education (including clinical practice) may not be providing nursing students with sufficient opportunity to think about life and death. A packed schedule of classes, labs and practice may be depriving students of ample time and space to think deeply about the matter of life and death. Yanagida recommends reading memoirs and stories in order to reflect more profoundly on death²⁰⁾. Such time should be considered necessary for nursing

students.

Last but not least, one future research topic in this regard is the examination of how nursing students' death concern might change during their nursing practice after graduation.

References

- 1) Mizutani S, Morisita T: Studies on basic factors about "Death Education" for nursing students. *Journal of Mie Nursing College* 12, 35-42, 1991.
- 2) Templer DI: The construction and validation of a death anxiety scale. *J General Psychol Rep* 82, 165-177, 1970.
- 3) Saggino A, Kline P: Item factor analysis of the Italian version of the death anxiety scale. *J Clin Psychol* 52(3), 329-333, 1996.
- 4) Abdel-khalek AM: Two scales of death anxiety: Their reliability and correlation among kuwaiti samples. *Percept Mot Skills* 84,921-922, 1997.
- 5) Hoogstrain J, Koeke P, Laan J: Templer's death anxiety scale revisited: The Dutch Version. *Percept Mot Skills* 87,1259-1264, 1998.
- 6) Palker NB, Nettles-carlson B: The prevalence of advance directives: Lessons from a nursing home. *Nurse Pract* 20(2), 7-8,13,17-18, 1995.
- 7) Demmer C: Death anxiety, coping resources, and comfort with dying patients among nurses in AIDS care facilities. *Psychol Rep* 83, 1051-1057, 1998.
- 8) Rasmussen CA, Brems C: The relationship of death anxiety with age and psychosocial maturity. *J General Psychol* 130(2), 141-144, 1996.
- 9) Thorson JA, Powell FC: Element of death anxiety and meanings of death. *J Clin Psychol* 44, 691-701, 1988.
- 10) Thorson JA, Powell FC: Undertakers' death anxiety. *Psychol Rep* 78, 1228-1230, 1996.
- 11) Thorson JA, Powell FC: Age differences in death anxiety among African-American women. *Psychol Rep* 83, 1173-1174, 1998.
- 12) Thorson JA, Powell FC: African- and Euro-American samples differ little scores on death anxiety. *Psychol Rep* 83, 623-626, 1998.
- 13) Lester D: The Collett-Lester fear of death scale: The original version and a revision. *Death Stud* 14(5), 451-468, 1990.
- 14) Kaye J, Gracely E: Changes in students' attitudes following a course on death and dying. *J cancer educ* 9(2), 77-81, 1994.
- 15) Dickstein LS: Death concern: Measurement and correlates. *Psychol Rep* 30, 563-571, 1972.
- 16) waskel SA: Temperament types: Midlife Death Concerns, demographics, and intensity of crisis. *J Psychol* 129(2), 221-233, 1994.
- 17) Katabami Y, Sugiyama Y, Nakano O, Sato K, Abe K: Factoral study of the attitudes toward death in the elderly. *Annual report gerontological research*. 4,144-152,1988.
- 18) Murata K: "Depth study of nursing students and the change of nursing views(in Japanese)." *The Japanese Journal of Nursing Science* 5(4),18-22, 1980.
- 19) Tanaka A, Sugi Y, Kanayama M, Nakao H, Azuma R, Ikeguchi E, Okuda M, Li K, Kobayashi Haruo, Hobara T: Survey of medical students' feelings about death and terminal care. *Yamaguchi Medical Journal* 48(4), 165-172, 1999.
- 20) Yanagida K: "Dignity death for me (in Japanese)." *The Journal of Clinical Research on Death and Dying* 20(2),110, 1997. 79