

Research Article

Death Anxiety and Its Related Factors among Advanced Nurse Practitioner Candidates: A Cross-Sectional Study

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Aim. To examine death anxiety and its related factors among candidates to become advanced nurse practitioners. **Background.** Nurses are required to care for dying patients and frequently face death-related issues in clinical practice. Yet, as human beings, it is natural for nurses to feel anxious about their own mortality, which can be incited by witnessing the death of another person. It is evident that a nurse's death anxiety level may influence how they care for their patients. However, studies to date focus primarily on the death anxiety of patients. Little is known about such experiences among registered nurses, especially those training to be advanced nurse practitioners. **Design.** This is a quantitative cross-sectional study. **Methods.** Participants were postgraduate students pursuing their advanced nurse practitioner degree at Nam Dinh University of Nursing, Vietnam. The enrolment criteria included full-time student status and a willingness to participate in the study. Data were collected from 297 participants who completed a self-administered questionnaire during February or March 2022. Death anxiety was measured using Templer's Death Anxiety Scale. **Results.** Most advanced nurse practitioner candidates demonstrated a moderate level of death anxiety (109/297; 39.1%). Nearly three in ten (74/297; 26.5%) reported a high level of death anxiety. No statistically significant associations between nurses' life satisfaction, age, and death anxiety were found. Death anxiety levels did not differ by gender, work position, workplace, or frequency of caring for dying patients ($p > 0.05$). **Conclusions.** There is an identified need to support nurses, especially future nurse clinical leaders, to manage their death anxiety. Professional training programs should offer nurses the opportunity to develop skills necessary to cope with their negative attitude toward death. Further research is recommended to confirm the apparent associations between death anxiety and demographic and psychosocial factors. Those relationships should be examined with appropriate consideration of the contextual and cultural environment in which the study is performed.

1. Introduction

Death brings an inevitable ending to every person's life. While other great apes show compassionate care for a dying member of their species, *Homo sapiens* appears to be the only animal that can apprehend or anticipate the death of ourselves and others. In other words, humans uniquely possess a concept of death, with which comes a sense of our own mortality [1, 2]. However, thoughts of death often trigger uncomfortable emotional or psychological

experiences, among which existential death anxiety (also referred to as thanatophobia) is common. Death anxiety is described as a "negative emotional reaction provoked by the anticipation of a state in which the self does not exist" [3]. Notably, although fear and anxiety are not precisely the same concept, death anxiety and fear of one's own death, or the process of dying, are terms that are sometimes used interchangeably [4, 5]. An important distinction for a practicing nurse is that death anxiety differs from necrophobia, which is the fear of another person dying or who is dead.

Nursing studies to date have focused on death anxiety among various populations of patients, especially those receiving treatment for cancer [6, 7]. Nevertheless, as nurses play a primary role as caregivers to patients, they are unavoidably confronted with workplace situations in which anxiety regarding their own death may be triggered. Being humans, nurses cannot avoid their natural and instinctual anxiety towards death. Moreover, such feelings may echo the nature of their work, in which they must attend to ill and traumatized persons whose death they regularly witness. This makes their experience of death anxiety distinctive from that of others. Studies recently conducted in Iran and Turkey reveal that nurses report a moderate level of death anxiety [8], while their death anxiety score is significantly higher than that of physicians, paramedics, and other healthcare professionals [9].

Death anxiety affects both professional and personal aspects of nurses' lives. It provokes negative emotions such as anger, irritation, worthlessness, sadness, depression, death obsession, and even suicidal ideation [9, 10]. It can also adversely impact nurses' attitude towards and quality of work and be detrimental to their relationships with patients. Those with higher death anxiety levels typically feel uncomfortable discussing death with patients and their families. Furthermore, demonstrable death anxiety by nurses is associated with a less collaborative approach towards colleagues and reduced composure when communicating with patients regarding their care [3, 11]. Indeed, a fear of death may prejudice the attitude and willingness of a nurse to uphold highly professional standards, including providing spiritual or palliative care for dying persons [11, 12].

Death anxiety is related to various developmental, social, and cultural factors such as age, gender, and religiosity or adherence to a belief system [11]. Karabağ Aydın and Fidan [8] found that death anxiety is negatively associated with life satisfaction of nurses. Interestingly, Kudubes et al. [12] reported that nurses with longer working experience seem to have greater anxiety about death. While the reasons for this observation can be speculated, it exemplifies that our understanding of nurses' death anxiety and its associated factors is still limited. Investigation of death anxiety experienced by nurses may help this sector of healthcare professionals understand their personal attitude towards death. The findings of such research will facilitate the development of interventions or education programs enabling nurses to overcome their reluctance to embrace the challenges inherent in caring for dying people [10, 11].

Advanced practitioners play a significant and unique role in assuring the quality of care among nurses. Issues surrounding the care of terminally ill patients care are emotionally complex, so nurse practitioners should receive specialist training to foster resilience when encountering potentially highly stressful situations. Hence, there is a pressing need for a better awareness of death anxiety among this population. This study was conducted (1) to examine death anxiety experienced by a cohort of Vietnamese advanced nurse practitioner candidates and (2) to explore the association between selected factors and death anxiety reported by those nurses.

2. Methods

2.1. Study Design. A quantitative cross-sectional study was performed. Participants were registered nurses pursuing an advanced practice nurse (APN) degree at Nam Dinh University of Nursing, Vietnam. In Vietnam, nurses who hold an undergraduate degree and have at least two years' experience of clinical practice can return to tertiary education to complete an 18-month course that leads to the APN postgraduate qualification. Nam Dinh University of Nursing is the first and currently only university dedicated to nursing education in Vietnam, which offers training from bachelor to doctoral levels for nurses throughout the country.

The study was piloted in January 2022, with primary data collected during the following February and March. The inclusion criteria were (a) being a full-time student of the APN program and (b) being willing to participate in the study. In order to recruit participants, with permission of the lecturer, the researchers approached the cohort of nurses at the end of a learning session. The researchers presented the proposed study to the class, and all eligible participants were invited to enroll in the study. Each nurse who agreed to participate signed a consent form before completing the questionnaire.

There were 380 students in the APN program at January 2022. For the pilot study, 30 of these were randomly selected from the class list supplied by the University's Office of the Registrar. All 30 nurses agreed to participate in the pilot survey. These individuals were subsequently excluded from the primary data collection. A total of 340 nurses were invited, of whom 300 (88.0%) gave written consent and completed a questionnaire. The information provided by three respondents was excluded from the data screening step because their responses were incomplete. Data were collected for analysis from the answers of the remaining 297 subjects.

2.2. Instruments. Data were collected using self-administered questionnaires. The demographic section of the form was designed to contain information on participants' age, gender, work position, and work experience. The frequency of providing care for dying patients was rated against a 4-point Likert psychometric scale, with the available responses "never," "sometimes" (rarely or occasionally), "frequently" (on a weekly basis), and "very frequently" (on a daily basis). Templer's Death Anxiety Scale (DAS) [13] was used to measure death anxiety. This part of the questionnaire consisted of 15 items, measuring respondents' anxiety about their own death. The scale has two formats, the Likert and the "yes/no" type. The latter format was used in this study due to its simplicity. The anxiety score is the numerical sum of the scores for all items, ranging from 0 to 15, the greater the score, the higher the level of death anxiety. An anxiety score from 0 to 6 indicates no anxiety, whereas scores between 7 to 9 and 10 to 15 suggest moderate and severe anxiety, respectively. The internal consistency coefficient of the scale ranged from 0.76 to 0.88 [9]. Cronbach's α coefficient of the DAS found in the pilot study of this research was 0.78.

The satisfaction with life scale (SWLS) [14] was used to evaluate life satisfaction of the participating nurses. The scale consists of 5 items. Respondents rate their agreement to different judgments about their own life on a 7-point rating scale, ranging from “strongly disagree” to “strongly agree.” The total score for life satisfaction varies from 5 to 35. A higher score indicates more satisfaction with life, a cognitive, nonemotional component of the construct of subjective well-being. Pavot and Diener [15] reported that concurrent validity, discriminant validity, and test-retest reliability of SWLS had each been confirmed in numerous tests and correlated positively with scores on other measures of well-being and self-esteem. The internal consistency coefficient of SWLS piloted with 30 subjects in this study was 0.79.

Except for demographic information, all instruments of the current study were translated from English into Vietnamese by using the forward translation technique [16]. First, each question was translated into Vietnamese individually by two bilingual translators (one native Vietnamese and one native American), who then met to compare their translations in order to develop the first draft of the questionnaire. The preliminary version was critically reviewed by one researcher (NHL), and recommended amendments were discussed with both translators to ensure that semantic equivalences were protected. The questionnaire was then finalized, prepared, and used for the pilot study. Following this step, some minor changes to formatting were made to enhance the legibility and comprehensibility of the questionnaire.

2.3. Statistical Analysis. Descriptive statistics, including percentage, mean, standard deviation, mode, and median, were used to describe the characteristics of the sample. The associations between death anxiety and other factors were examined using Spearman’s rank correlation coefficient (ρ). The nonparametric Kruskal–Wallis H and Mann–Whitney U tests were utilized to compare death anxiety scores across different groups of participants. The significance level for all tests was set at 0.05.

2.4. Ethical Consideration. Prior to conducting this study, the research design and plan were considered by the Ethical Review Committee of Thai Nguyen National Hospital. Approval was granted on 18 January 2022; decision number 58/HDDD-BVTWTN.

3. Results

The mean age of the study participants was 38.99 ± 5.29 , the vast majority of whom were female (83.9%). Most nurses worked as clinical practitioners (58.4%) and at provincial hospitals (47.3%). The percentages of respondents who reported that they care for dying patients “frequently” and “very frequently” were 6.8% and 6.5%, respectively. Notably, more than one-fifth of the sample (20.8%) declared they had not cared for such patients (Table 1).

As presented in Table 2, the mean score for death anxiety was 7.71 ± 2.93 , reflecting a moderate level of anxiety.

TABLE 1: Characteristics of the research sample ($n = 297$).

Characteristics	<i>N</i>	%	Mean	SD
Age (min: 27, max: 52)			38.88	5.29
Gender				
Men	45	16.1		
Women	234	83.9		
Current position				
Administrative	102	36.6		
Clinical	163	58.4		
Other nonclinical field	14	5.0		
Work place				
District hospital	60	21.5		
Provincial hospital	132	47.3		
National hospital	69	24.7		
Other (private clinic, educational institution)	18	6.5		
Caring for dying patients				
Very frequently	18	6.5		
Frequently	19	6.8		
Sometimes	184	65.9		
Never	58	20.8		

SD: standard deviation.

Importantly, 26.5% of the sample reported a high level of death anxiety. The mean life satisfaction score was 23.24 ± 5.60 , with a mode of 30.00.

There were no statistically significant associations among death anxiety, life satisfaction, and age (Table 3).

Of note, the data analysis also found no difference between death anxiety levels of males and females (Mann–Whitney U value = 5633.50, $p = 0.463$). There were also no statistically significant variations in death anxiety among nurses with different frequencies of caring for dying patients (Kruskal–Wallis H value = 2.69, degrees of freedom (df) = 3, $p = 0.441$), work positions (Kruskal–Wallis H value = 0.84, df = 2, $p = 0.659$), and workplaces (Kruskal–Wallis H value = 4.14, df = 3, $p = 0.247$).

4. Discussion

In this study, most nurses reported a moderate level of death anxiety. Similarly, research by Aghajani and colleagues (2011) on Iranian nurses and by Karabağ Aydın and Fidan [8] on Turkish nurses found moderate anxiety regarding death among their study participants. Significantly, 65.6% of subjects in the current study demonstrated at least a moderate level of death anxiety, while 26.5% reported a high level. That almost three out of every ten surveyed nurses were suffering from severe death anxiety is of profound concern. These results for advanced nurse practitioner candidates in Vietnam emphasize the extent of the problem and indicate a critical need for the global healthcare profession to pay proper attention to death anxiety among nurses, as highlighted herein.

Fear of death occurs among a higher proportion of nurses than that of other healthcare personnel [11]. Professionally, it may lead to diminished work performance, poor nurse–patient relationships, and occupational burnout [9]. Death counseling, death support, and care for the dying are essential roles of nurses, which help protect the dignity of

TABLE 2: Death anxiety and life satisfaction of the research sample ($n = 297$).

Factors	<i>n</i>	%	Mean \pm SD	Median	Mode	Min–max
Death anxiety			7.71 \pm 2.93	8.00	9.00	1.00–15.00
No anxiety	96	34.4				
Moderate anxiety	109	39.1				
High anxiety	74	26.5				
Life satisfaction			23.24 \pm 5.60	23.00	30.00	10.00–35.00

SD: standard deviation.

TABLE 3: Factors related to death anxiety ($n = 297$).

		Life satisfaction	Age
Death anxiety	Spearman's ρ	0.02	0.05
	<i>p</i> value (2-tailed)	0.778	0.414

patients and their families. However, nurses' own death anxiety would likely negatively influence how they conduct those professional responsibilities [12]. Nurses with high death anxiety may be unwilling to discuss death-related issues with a terminally ill patient and, hence, could not provide them with appropriate care [3, 10, 11]. All of these issues are detrimental to the quality of nursing provision. The complex interaction of the emotive and instinctive anxiety of death on a personal level with exposure to dying and dead people on a professional level makes the issue extremely problematic. Lehto and Stein [17] described how death anxiety is usually not considered a part of conscious experience as it is commonly denied or repressed to avoid the "paralyzing fear and terror that would impede survival." However, nurses frequently hear about, see, or face death issues in their occupation. Such experiences would heighten anxiety over time [17], so they may become overwhelmed by stressors related to death and dying at their workplace [11]. Participants in the current study were candidates for the APN, who will shortly be expected to play an essential role in managing nursing care services at their hospital or clinic. Obviously, the impact would be significant if a high level of death anxiety jeopardizes either their personal health or professional performance. Our findings, corroborating those of previous studies, suggest that helping nurses to effectively manage their death anxiety should be urgently prioritized. Further research is needed to provide theoretical and empirical evidence that identifies the point at which nurses' death anxiety becomes abnormal, pathological, and harmful. Up to now, published investigations have focused merely on the level of death anxiety rather than seeking to identify contributing factors or recognizable signs among study subjects.

The current study failed to confirm a statistically significant relationship between life satisfaction and death anxiety. In the literature, the association between these variables is still inconclusive. Karabağ Aydın and Fidan [8] investigated a group of 411 nurses and found an inverse relationship ($\beta = -0.118$, $p < 0.05$); i.e., the less satisfied a person is with their life, the greater their fear of death. In contrast, another study on the general population by Kumpasoglu et al. [18] reported no linkage between death anxiety and life satisfaction. The relationship between these two concepts, if any, might be more complex and nuanced

than would superficially appear. It is plausible to speculate that an individual who has enjoyed a fulfilling life would be less challenged by the thought of dying because they have experienced "enough" happiness. On the other hand, it is also reasonable to argue that a person with a satisfying life might feel more anxious about death because they do not want to relinquish this pleasant reality. Thus, when investigating the nonlinear relationship between death anxiety and life satisfaction, it is recommended that the roles of other contributing factors, such as life experience and religion, should be taken into consideration.

The current research did not support any association between nurses' age, gender, work position, or frequency of caring for dying patients with their experienced death anxiety. Published findings on the role of each of these factors are inconsistent. Kudubes et al. [12] attested that nurses with more than five years of employment in clinical settings demonstrated higher death anxiety than those with less work experience. A qualitative study by Tang et al. [10] revealed that nurses identified age and work experience as factors influencing their fear of death. Specifically, those who were older and had more nursing experience were better able to reconcile their workplace exposure to death and dying with their personal feelings and thus were less anxious about their own mortality. On the other hand, critical care nurses were reported to submit a significantly higher score of death anxiety than those working in general wards [19].

Death anxiety was also correlated by Aghajani and colleagues (2011) with marital status but not with age, gender, work shift, or end-of-life patient care. In contrast, Khajoei et al. [9] found no significant difference in levels of death anxiety based on nurses' demographic information. These results suggest that the associations among working, demographic factors, and nurses' anxiety are very contextualized. Moreover, as a consequence, they should be scrutinized to ensure that the interrelationships between these several determinants and the way in which they collectively impact on how death anxiety manifests among members of the nursing profession are appropriately addressed. Future studies should not only focus on nurses' levels of death anxiety that do or do not vary with individual demographic factors but also explore the undoubtedly complex nature of this extreme form of apprehension. For

example, studies conducted on the general population found that adolescents are mainly concerned by the fear of dying too soon. Parents of young children, however, are most worried about the negative impact of their death on their family. The elderly, on the other hand, are often fixated by thoughts of either becoming a burden to others or dying alone [4].

5. Limitations

Subjects of the current study were conveniently recruited from a single institution. Thus, the sample's representativeness is somewhat limited. More importantly, it is recognized that death anxiety is influenced by cultural and social contexts. Hence, as the research was conducted in one country, Vietnam, caution should be exercised if extrapolating from the findings to generalize to other settings and cultures.

6. Conclusions

In this study of APN candidates, most nurses demonstrated a moderate level of death anxiety. Yet, nearly three in ten participants (26.5%) reported a high level. This draws attention to an imperative need to support nurses, especially future nurse clinical leaders, to manage their death anxiety. Professional training programs should equip nurses with the skills required to deal with their negative attitude towards death.

No associations among nurses' life satisfaction, age, and death anxiety were found herein. There were also no statistically significant differences in death anxiety levels between nurses of different gender, work position, workplace, or frequency of caring for dying patients. Further research is warranted to verify the associations between death anxiety and demographic and psychosocial factors. Those relationships should be examined with due consideration for the varying contextual and cultural environments in which nurses work.

Data Availability

The data are available upon request from Dr. Nguyen Hoang Long with email: long.51@hotmail.com.

Disclosure

The funder did not play any role in the study's design, data collection, analysis, and manuscript writing, nor in submitting the article for publication.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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