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OPEN Exploring patient death experiences among Iranian nursing students

Parastoo Majidipour¹, Maryam Janatolmakan^{02,3}, Bahare Andayeshgar⁰⁴ & Alireza Khatony^{105,6⊠}

Patient death can be a stressful experience for nursing students, leading to various undesirable psychological and emotional effects. However, research documenting these experiences remains limited. This study explores the experiences of Iranian nursing students when facing patient death. This qualitative study employed a purposive sample of 14 undergraduate nursing students. Data was collected through semi-structured interviews and analyzed using conventional content analysis. Lincoln and Guba's (2004) criteria guided the data management process. Data analysis revealed three primary categories with six corresponding subcategories. These categories encompassed the significance of death, reactions to death, and the transformation of professional perspectives. Subcategories included positive and negative meanings attributed to death, emotional and behavioral responses, and the positive and negative effects on participants. The findings reveal that experiencing patient death significantly impacts nursing students psychologically and emotionally. Consequently, it is recommended that nursing curricula incorporate essential training modules addressing appropriate responses to death and effective communication with bereaved families. Further research should explore strategies to mitigate negative impacts and optimize positive outcomes related to this phenomenon.

Keywords Death, Experience, Nursing students, Patient, Qualitative study

Death, an inevitable aspect of life, can present profound challenges for nurses and nursing students entering the profession¹. Experiencing patient death during their education can evoke a wide range of emotions, thoughts, and beliefs, playing a crucial role in shaping their professional identity and attitudes toward patient care^{2,3}. On one hand, death offers a valuable opportunity for learning and professional growth⁴. Observing and participating in the dying process provides a deeper understanding of life and death, the meaning of suffering and loss, and the importance of quality end-of-life care⁵. These experiences can transform students into more competent and compassionate nurses with strong communication and caregiving skills⁶. However, evidence suggests that experiencing death can be challenging and exhausting for many nursing students⁷. Studies show that confronting death, especially early in their education, can trigger negative emotions and fatigue, including anxiety, fear, grief, helplessness, guilt, and futility^{7,8}. These emotions can impact students' mental well-being, potentially leading to burnout, decreased motivation, and attrition from the nursing profession⁹. Various factors contribute to nursing students' reactions to patient death, including a lack of knowledge and preparedness, insufficient training in spiritual and emotional care for dying patients, and inadequate support from professors and colleagues^{5,10}. Furthermore, students' cultural and personal beliefs and attitudes can influence how they interpret and experience death¹¹. Despite the importance of this topic, recent research on the experiences of patient death has primarily focused on experienced nurses, with less attention given to nursing students^{10,12}, particularly in Iran. This study employs a qualitative content analysis approach to address this gap and gain deeper insights into nursing students' experiences confronting patient death. This method allows for a comprehensive examination of their experiences, meanings, and emotions¹³. A deeper understanding of these experiences can improve nursing education and provide necessary support in this area. By designing comprehensive educational

¹Clinical Research Development Center, Imam Reza Hospital, Kermanshah University of Medical Sciences, Kermanshah, Iran. ²Student Research Committee, Kermanshah University of Medical Sciences, Kermanshah, Iran. ³Nursing and Midwifery Care Research Center, Tehran University of Medical Sciences, Tehran, Iran. ⁴Department of Biostatistics, School of Health, Kermanshah University of Medical Sciences, Kermanshah, Iran. ⁵Social Development and Health Promotion Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran. 6Infectious Diseases Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran. ☐email: Akhatony@gmail.com

programs and providing coping skills training, students can be better prepared to face death effectively and utilize these experiences for growth and professional development. This study addresses the following research questions:

- 1. What is the Iranian nursing students' understanding of the phenomenon of patient death?
- 2. What is the significance of patient death in the experiences of Iranian nursing students?
- 3. How do Iranian nursing students emotionally respond to patient death?

Materials and methods Study design

This qualitative study employed a conventional content analysis approach. This approach is particularly valuable when existing theory or documentation on the phenomenon under investigation is limited ¹⁴. The Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines informed the reporting of findings ¹⁵.

Study setting and recruitment

This study took place in Kermanshah, a city in western Iran. The study population consisted of undergraduate nursing students recruited through purposive sampling. Inclusion criteria included having experienced at least one instance of patient death and willingness to participate. The researcher visited various departments based on student internship schedules to recruit eligible participants. Sampling continued until data saturation was achieved, which occurred after twelve interviews; however, two additional interviews were conducted to ensure saturation ¹³.

Data collection method

Data was collected through semi-structured, in-depth interviews. Participants received an explanation of the study objectives and provided informed consent. Interviews were scheduled at the participants' convenience and conducted in a quiet room within the researcher's facility. The first author, a 40-year-old female researcher with a Bachelor's degree in nursing and a Master's degree in educational management, conducted the interviews. Her expertise includes qualitative research. A predetermined set of questions guided the interviews, including: "Please describe your experience with patient death," "How do you personally define death?", "How do you respond to patient death?" and "How does patient death impact your perception of the nursing profession?". Exploratory questions such as "Please provide further elaboration," "How," and "Why" were used to elicit deeper insights. Interviews lasted an average of 40–50 min and were audio-recorded with participant consent. Each interview was conducted in a single session, with no need for repetition.

Data analysis

Data analysis followed each interview, with participant statements transcribed and analyzed using the method outlined by Graneheim and Lundman (2004)¹³. This iterative process began after the first interview and continued until data saturation. Audio recordings were transcribed verbatim and reviewed multiple times to ensure a thorough understanding of the content. Subsequently, semantic units were identified, coded, and grouped into categories based on shared meanings. MAXQDA version 0.9.5 facilitated data management.

Trustworthiness

To ensure the accuracy and rigor of the data, Lincoln and Guba's (2004) four criteria of credibility, transferability, dependability, and confirmability were utilized ¹⁶. Several strategies were implemented to enhance the credibility of the findings. These strategies encompassed peer review, long-term engagement with the participants, and participant review. During participant review, the research findings were shared with three nursing students to assess the level of agreement between the results and their own experiences. To enhance the transferability of the data, the research findings were made available to three nursing students for evaluation regarding the alignment between the findings and their own experiences. The dependability of the data was strengthened through a comprehensive description of each research stage, enabling others to assess the accuracy and consistency of the study. To increase the confirmability of the data, excerpts from the interviews, along with their corresponding analyses, were shared with two external observers who possessed expertise in qualitative research and familiarity with the research topic. These external observers were responsible for confirming the accuracy of the coding process.

Ethical considerations

Ethical approvalwas obtained from the Ethics Committee of Kermanshah University of Medical Sciences (code: IR.KUMS.REC.1397.041). Before participation, individuals received a thorough explanation of the research objectives and had their questions addressed. Participants were assured of confidentiality and data security and informed of their right to withdraw without consequence. Written informed consent was obtained from all participants.

Results

This qualitative study included 14 undergraduate nursing students (mean age = 22.7 ± 2.2 years). The majority of participants were single (n=9, 64.3%) and male (n=10, 71.4%). All participants were in their eighth semester of nursing studies (Table 1). Following the interviews and removal of duplicate codes, 137 codes were identified. Data analysis revealed three main categories and six subcategories. The main categories were: significance of death, responses to death, and professional perspective transformation. Subcategories included: positive meaning, negative meaning, emotional reactions, behavioral reactions, positive effect, and negative effect (Table 2).

Variables	
Sex, n(%)	
Male	10 (71.4)
Female	4 (28.6)
Age, Mean ± SD ^a	22.7 ± 2.2
Marital status, n(%)	
Single	9 (64.3)
Married	5 (35.7)

Table 1. Demographic characteristics of participants. ^aStandard deviation.

Main categories	Subcategories
Significance of death	Positive meaning
	Negative meaning
Reactions to death	Emotional responses
	Behavioral responses
Transformation of professional perspective	Positive effects
	Negative effects

Table 2. Main categories and subcategories of nursing students' experiences with patient death.

Significance of death

Two distinct interpretations of the death phenomenon, both positive and negative, emerged from the analysis of student perspectives.

Positive meaning

Participants expressed a range of emotions and experiences associated with a positive interpretation of death. These included sensations of departing from the physical body, weightlessness, profound stillness, security, comfort, dissolution, tunnel-like passages, glimpses of light, and encounters with deceased loved ones. For example, participants shared:

"In general, I have a positive perspective on the phenomenon of death, and I find it rather comforting. I believe it signifies the transition of an individual from one realm to another, where justice prevails and the burdens of earthly life are alleviated". (p. 14)

"From what I observed, death brought relief from pain for many individuals, and I believe they no longer experience any suffering thereafter". (p. 13)

"Death shouldn't be seen as the ultimate conclusion; rather, it serves as a bridge that carries individuals from one realm to another. Based on my research, those with a stronger sense of spirituality and deeper religious beliefs along with a higher level of spiritual well-being tend to face death more gracefully". (p. 8)

"I hold the belief that death serves as a passage for the human soul, transferring it from one world to another, preserving its eternal existence". (p. 4)

Negative meaning

Conversely, participants also expressed a negative interpretation of the death phenomenon. This perspective encompassed emotions associated with the cessation of life, the termination of existence, the disintegration of the physical body, and feelings of pain and anxiety. Participants described this perspective as:

"In my perspective, death is a somber phenomenon that often remains unspoken of among many individuals". (p. 12)

"Death, although a natural occurrence, is an unsettling experience for everyone involved". (p. 11)

"Overall, death is an inevitable journey that every person goes through, and there is no escape from it". (p. 8)

Reactions to death

Within this category, subcategories emerged about both emotional and practical responses.

Emotional responses

Regarding emotional reactions to the death phenomenon, participants expressed experiences of shock and denial, fear, anger, depression, bargaining, and remorse. Participants provided the following statements about these emotional reactions:

"I had a personal experience involving a woman and her husband who were involved in an accident. They were both brought to the CPR ward of the emergency department, and unfortunately, the woman passed away. Witnessing the husband's sorrow, I couldn't help but burst into tears. My deepest regret was that if she had reached the hospital earlier, she might have had a chance to survive". (p. 13)

"During the initial semesters of the nursing program, whenever we encountered the scene of a patient's death, we would instinctively break down in tears, to the extent that the instructor had to remove us from the scene". (p. 5)

Behavioral responses

Behavioral reactions to the death phenomenon center around the treatment process, which involves an accumulation of experience, learning from the phenomenon of death, and implementing therapeutic measures. Participants shared the following insights regarding these behavioral responses:

"As we accumulate more experience, our emotional focus diminishes, and we shift our attention towards the treatment process. We aim to execute resuscitation accurately, even in situations where the prospects of patient recovery seem bleak, ensuring that we still carry out the appropriate actions". (p. 5)

"As students, our primary goal is to learn and acquire knowledge. Witnessing patient deaths aids our understanding of the treatment procedures, enables us to handle such cases, and helps us identify any errors that may have occurred. This knowledge allows us to prevent similar mistakes from happening again. Consequently, I believe that observing patient deaths can be beneficial for our learning process". (p. 6)

Transformation of professional perspective

The findings revealed that the observation of patient deaths has a dual impact on students' attitudes towards the nursing profession, encompassing both positive and negative effects.

Positive effects

The positive effects of the patient death phenomenon on students' attitudes towards the nursing profession encompass several aspects. These include a drive to improve their performance after graduation, gaining familiarity with the challenging aspects of the nursing profession, comprehending the significance of supportive nursing, and enhancing their theoretical and practical competence. Participants provided the following statements concerning these positive effects:

"In a few months, I will be joining the official nursing staff, which requires me to be fully focused and exercise increased caution when responding to CPR codes. I must provide proper care during such critical moments". (p. 7)

"At the beginning of the semester, I held a negative perception of my chosen field. However, as I encountered various patients, my theoretical and practical knowledge improved. Witnessing different types of deaths played a significant role in transforming my outlook on death. Now, I approach this phenomenon from a scientific standpoint, and my negative perspective has dissipated". (p. 6)

Negative effects

The patient death phenomenon also gives rise to negative effects on students' attitudes towards the nursing profession. These include developing a negative outlook on the profession, perceiving it as emotionally draining, contemplating leaving the nursing profession, experiencing feelings of emptiness, developing preferences for specific departments of work, and experiencing boredom with the nursing profession. Participants shared the following statements regarding these negative effects:

"Ideally, I would prefer to have a different job or work in a ward where patient deaths are less frequent, such as the surgery ward". (p. 14)

"Individuals hold diverse perspectives on death, but personally, it had a distressing impact on me. There was a period where I became disenchanted with the nursing profession and felt that continuing in this environment would have a negative emotional toll on me". (p. 13)

Discussion

This study explored the experiences of Iranian nursing students facing patient death, offering valuable insights into their perceptions and interpretations of death. The findings revealed diverse perspectives, with some students viewing death as a liberation from suffering, a natural transition, or even a pleasant phenomenon. Participants with stronger religious beliefs often perceived death as a bridge to the afterlife. These findings align with previous research. Imanzadeh and Sharifi's (2019) study on cancer patients¹⁷ highlighted the acceptance of death, visualizations of death, and belief in an afterlife, echoing the perspectives observed in this study. However, it is crucial to acknowledge that perceptions of death can vary across age groups. Mahmood Ashiri (2020) found that children's understanding of death encompasses concepts of irreversibility, learning, and loss of vital functions¹⁸, emphasizing the need to consider developmental factors when addressing death with nursing students. Furthermore, Galvin et al. (2020) emphasized the importance of preparing for death, rather than the mere quantity of deaths experienced, in mitigating psychological distress¹⁹. This suggests that equipping nursing students with coping mechanisms and education can positively influence their well-being. Ünlü and Uludağ (2020) highlighted the connection between compassionate care and perspective²⁰, emphasizing the importance of effective communication with dying patients and their families. Developing compassionate perspectives

and providing appropriate care can help students navigate the challenges of patient death and enhance endof-life care. Bilgic's (2021) study²¹ reported a positive attitude towards death among students, aligning with
the current findings and suggesting that nursing students may view death favorably. Similarly, Shorey, André,
and Lopez (2017) explored patient death experiences among care unit personnel, identifying themes related to
psychological and physical effects, coping strategies, and cultural influences²², further validating the present
study's outcomes. The findings of this study highlight the diverse perspectives of Iranian nursing students on
patient death. Integrating these findings into nursing education can foster a deeper understanding of death and
equip students with the necessary skills and attitudes to provide compassionate end-of-life care. Addressing
the topic of patient death, its associated challenges, and providing simulated and real-world experiences can
enhance student preparedness for these situations.

The participants in this study often perceived death negatively, associating it with the end of life, inescapability, inevitability, bitterness, finality, and the body's disintegration. These perceptions align with Mahmood Ashiri (2020) and Timmerman (2022), who explored the concept of death, highlighting attributes like irreversibility, learning, and the loss of vital functions ^{18,23}. Notably, the notions of irreversibility and loss of vital functions resonate with the participants' understanding of death as the definitive end of life, confirming a congruence between these studies. Similarly, Imanzadeh's (2019) research on cancer patients revealed their acceptance of death's inevitability, viewing it as a challenge and believing in an afterlife¹⁷. This aligns with the participants' negative perceptions, reflecting a broader understanding of death as the cessation of life and the irreversible loss of essential functions.

Participants' reactions to death fell into two categories: emotional and behavioral. Emotional responses included crying, fear, remorse, depression, indifference, shock, and emptiness. Some participants expressed a desire for medical intervention, such as resuscitation, during a patient's dying moments. Conversely, behavioral responses involved focusing on treatment, seeking more experience, learning from death, and engaging in therapeutic actions. Several studies corroborate these findings. Gurdogan, Kınıcı, and Aksoy et al. (2019) reported student anxiety surrounding patient death²⁴, while Trivate et al. (2019) identified a spectrum of negative, positive, and ambiguous emotions associated with death²⁵. Szczupakowska et al. (2021) found that nursing students' reactions included perceptions of life's fragility, compassion, depression, grief, despair, anger, and fear of death⁷. Similarly, Talwalkar et al. (2019) identified sadness, isolation, despair, and regret as common emotional responses to death²⁶. While previous research predominantly focused on negative reactions, this study explores both positive and negative reactions and their consequences. This emphasis on positive reactions distinguishes the current study, offering a unique perspective on Iranian nursing students' experiences with patient death.

The study revealed that encountering patient death had both positive and negative effects on participants' attitudes towards the nursing profession. Negative attitudes stemmed from limited experience in the early years of education, the emotional toll of patient deaths, and the influence of peer reactions. However, as students gained experience and competence in managing patient deaths and performing resuscitation, they developed greater self-confidence and a more positive outlook on their profession. This finding aligns with existing literature highlighting the importance of healthcare providers' attitudes towards death. Perceiving death as frightening and ominous can hinder compassionate care for dying patients and their families, negatively impacting nurses' wellbeing^{2,26,27}. For instance, Talwalkar et al. (2019) found that students who had experienced patient deaths tended to distance themselves from patients and families, leading to professional dissatisfaction²⁶. Conversely, Kim et al. (2016) reported higher job satisfaction among religious students who had experienced patient deaths²⁸. This suggests that personal beliefs and coping mechanisms play a significant role in shaping attitudes towards death and professional experiences. Similarly, Fajilan et al. (2018) found that students exhibited both positive and negative attitudes towards their profession after encountering patient death. Negative attitudes included emotional challenges, anxiety, and sorrow, while positive attitudes involved viewing the experience as a valuable learning opportunity for professional growth²⁹. This underscores the complex and multifaceted nature of student nurses' experiences with death and its impact on their professional identity. In our study, participants' attitudes towards the nursing profession were shaped by their experiences with patient death, encompassing both positive and negative dimensions. Nursing education must address the emotional impact of patient deaths, provide opportunities for increased experience and competence, and foster a rational approach to death. By doing so, nursing students can develop the necessary attitudes and skills to provide effective and compassionate end-of-life care.

Limitations

This qualitative study, like all research of its kind, has limitations. The study was conducted within a specific university setting and focused solely on nursing students, potentially limiting the generalizability of findings to other populations. Additionally, the study took place in a Muslim country with a prevalent belief in the afterlife. This cultural and religious context may have influenced participants' experiences and perspectives, potentially impacting the results.

Conclusion

This study provides valuable insights into the experiences of Iranian nursing students facing patient death. The findings highlight that death holds diverse meanings for these students, significantly impacting their mental and physical well-being and potentially influencing the quality of care provided. Therefore, addressing this issue within nursing education is crucial. Incorporating the topic of patient death into the curriculum from the early stages, including discussions and educational activities on coping strategies, can equip students with a better understanding of death and the necessary skills to navigate these challenging situations. To ensure comprehensive education, university authorities should consider incorporating subjects related to managing

patient death and providing care for grieving families into the nursing curriculum. This will provide students with a deeper understanding of the emotional and psychological needs of patients and families during end-of-life care, ultimately improving patient outcomes and enhancing service quality. Finally, future research should focus on exploring and evaluating strategies to mitigate the negative effects of patient death and promote positive outcomes among nursing students.

Data availability

The datasets analyzed in the current study can be obtained from the corresponding author upon reasonable request.

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Author contributions

PM, MJ, BA, and Ak made significant contributions to the study design. PM and MJ were responsible for data collection, while the data analysis was conducted by PM, MJ, BA, and Ak. The final report and manuscript were

prepared by PM, MJ, and Ak. All authors critically reviewed and approved the final manuscript.

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Ethics approval and consent to participate

The study received ethical approval from the research ethics committee of Kermanshah University of Medical Sciences (Code: IR.KUMS.REC.1397.041). Written informed consent was obtained from all participants, and the experiment protocol involving human subjects adhered to the guidelines of national/international/institutional regulations or the Declaration of Helsinki.

Competing interests

The authors declare no competing interests.

Additional information

Correspondence and requests for materials should be addressed to A.K.

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