Original Article

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Relationship between Death Anxiety and Mental Health Status among Nurses in Hospitals Affiliated to Babol University of Medical Sciences

S. Moudi (PhD)*[1], A. Bijani (MD)[1], M. Tayebi [2], S. Habibi [2]

1.Social Determinants of Health Research Center, Health Research Institute, Babol University of Medical Sciences, Babol, I.R.Iran

2.Yahya Nejad Hospital, Babol University of Medical Sciences, Babol, I.R.Iran

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ABSTRACT

BACKGROUND AND OBJECTIVE: Nurses are frequently faced with death and dying patients due to the nature of their job. Death anxiety in these people may be associated with depression, generalized anxiety and suicidal thoughts, which may impair their performance. This study aims to assess the relationship between death anxiety and mental health status among nurses.

METHODS: This analytical study was carried out through evaluation the intensive care unit, emergency and operating room nurses in hospitals affiliated to Babol University of Medical Sciences using Templer's Death Anxiety Scale (DAS) and General Health Questionnaire (GHQ-28). DAS score ranged from 0 to 15; higher score indicated greater death anxiety. GHQ evaluated physical health, anxiety, social activity and depression. Respondents who got higher scores had more psychological problems.

FINDINGS: Of 142 nurses who participated in this study, 88 nurses (68.7%) had high death anxiety and 40 nurses (31.3%) had low death anxiety. There were no significant relationship between death anxiety and variables of age, gender, marital status, place of activity and education level. There was a significant inverse relationship between death anxiety and subscales of GHQ including anxiety (p=0.008) and lack of social activity (43 nurses [31.6%] with low death anxiety vs. 93 nurses [68.4%] with high death anxiety) (p=0.046).

CONCLUSION: The results of this study demonstrated that death anxiety is highly prevalent among nurses. Therefore, educational intervention programs are necessary to reduce death anxiety and its complications.

KEY WORDS: *Death Anxiety, Mental Health, Nurse.*

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*Corresponding author: S. Moudi (MD)

Address: Social Determinants of Health Research Center, Health Research Institute, Babol University of Medical Sciences, Babol, I.R.Iran

Tel: +98 11 32223594-7

E-mail: sussan.mouodi@gmail.com

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Introduction

Anxiety is a response to an unknown, inner and vague danger and is originated from conflict. Death anxiety is one of the well-known types of anxiety (1). Death is an inevitable truth and every one may have their own perception and reaction to death. Death anxiety is a feeling of fear, anxiety or fear from the thought of death or anything that is somehow related to death. This type of anxiety is common in all cultures and different groups and religions face it in different ways (2).

Societies that have more religious practices, have less death anxiety. In addition, a stronger belief in the afterlife has negative relationship with death anxiety (3). Death anxiety may be associated with depression, generalized anxiety and suicidal thoughts, which may impair someone's performance (4). Nurses are one of the groups that are frequently faced with death and dying patients because of the nature of their job and this encounter with death may cause death anxiety in them. Ignoring this problem may have unwanted and inappropriate complications such as mental problems for nurses (4–7).

Studies have shown that most nurses unfortunately do not have a proper perception of the process of death and are not well prepared to provide good care for the dying patients (8).

High death anxiety in nurses may manifest as refraining from talking about death with patients, whereas the elderly and dying patients tend to talk about this with people (9). Activity in the operating room, emergency room and intensive care units including ICU and CCU and dealing with patients' life cause mental disorders and death anxiety more than other sections, because these sections are extremely sensitive and impose a great amount of mental pressure and stress on medical staff, especially nurses (8, 10–13). Previous studies have indicated that death anxiety is more severe in females and those with weaker religious believes.

In addition, being aware of old age and end of life care will be associated with more positive outlook toward death (14–17). This study aims to investigate the prevalence of death anxiety and it relationship with mental status of nurses in the ICU, CCU, emergency and operating room in hospitals affiliated to Babol University of Medical Sciences. Results of this study may help us in planning and intervening in order to reduce the level of anxiety in nurses and improve their health.

Methods

After receiving permission from the ethics committee of Babol University of Medical Sciences, This cross-sectional study was conducted among staff in the ICU, CCU, emergency and operating rooms of Shahid Beheshti and Ayatollah Rouhani Hospitals (Babol, Iran), who were selected using convenience sampling method. Templer's Death Anxiety Scale (DAS) and General Health Questionnaire (GHQ-28) were used for collecting the required data.

Templer's Death Anxiety Scale included 15 questions that measure the attitudes of respondents to the death. Respondents answer every question with a "yes" or "no". A yes indicates the presence of anxiety in that person. Therefore, the scores of this scale range from 0 to 15 and high score indicates high death anxiety. Evaluations regarding the validity and reliability of Death Anxiety Scale inside and outside Iran indicated that this scale benefits from an acceptable validity and reliability (18–21).

Based on these studies, score of 0 – 6 is considered as low death anxiety and score of 7 – 15 is considered as high death anxiety. General Health Questionnaire is a valid screening tool to identify psychological problems in the general population. This tool was designed by Goldberg in 1972 and the 28-question version has the highest validity, sensitivity and specificity compared with other versions (22 and 23). Validity and reliability of the questionnaire for Iranian population was confirmed in a study by Ebrahimi et al. (23). This test consists of four subareas including physical health, anxiety, social activity and depression and evaluates (Self-Rating) disease symptoms from one month earlier to the time of the test.

Each question in this questionnaire can have a score of 0 – 3 (0 = never, 1 = usual, 2 = a little more than usual and 3 = far more than usual) based on four-point scale and overall, the total score for each person can be 0–84. Respondents who gain higher scores have more psychological problems. In this study, people whose general health score was more than 23 were considered as people suffering from mental disorders. Moreover, classification was carried out in each quad subarea of this questionnaire according to the following cut scores: 0–6= none or minimum degree, 7–11= slight, 12–16= average, 17–21= severe. The validity of this questionnaire and its related subareas have been measured and approved previously in various studies (24–27). All participants were reassured regarding the confidentiality of their

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personal information. The collected data were analyzed using Stata ver. 8 and Chi Square test, while $p<0.05$ was considered significant.

Results

160 questionnaires were distributed among nurses and 142 nurses completed the questionnaires (a response rate of 88.8%). Among those who have registered their personal information, 120 of them were female (85.1%) and 21 (14.9%) were male. 110 participants (78.6%) were married and 30 participants (21.4%) were single. The mean age participants was 31±8.4 years and the age range of the subjects was 23 – 51 years. Most participants (117 participants, 85.4%) had B.A. degree, 18 participants (13.1%) had associate degree and 2 participants (1.5%) had M.A. degree. 47 participants (37.6%) worked in Emergency Department, 35 participants (28%) worked in ICU, 24 participants (19.2%) worked in the operating room, 18 participants (14.4%) worked in CCU and others worked in two sections. 48 nurses (36.4%) watched 1–6 patients die within the last 3 months (table 1). More than half of the nurses were responsible for caring of more than 6 dying patients or participated in their resuscitation.

However, there was no significant relationship between their death anxiety and their participation in caring of dying patients. 94 nurses (68.6%) had high death anxiety and 43 nurses (31.4%) had low death anxiety and there was no significant relationship between intensity of death anxiety and variables of age, gender, marital status, place of work and level of education (table 2). 80 participants (58%) had no mental disorder while 58 participants (42%) had mental disorder. Although there was no significant relationship between death anxiety and general health status, death anxiety had a significant negative relationship with two subareas of general health including anxiety (p=0.008) and lack of social activities (p=0.046); that is, nurses with fewer anxiety symptoms expressed more death anxiety (table 3).

Table 1. The frequency of nurses who participated in care for patients in the final stages of life and resuscitation within the last three months

Number patients in the final stages of life Distribution of nurses	0 cases N(%)	1–3 cases N(%)	4–6 cases N(%)	More than 6 cases N(%)
Participation in caring	18(14.5)	28(22.6)	13(10.5)	65(52.4)
Participation in resuscitation	22(16.8)	35(26.7)	23(17.6)	51(38.9)
Nurses who witnessed the death of patients	25(18.9)	48 nurses (36.4) witnessed the death of 1–6 patients in three months		59(44.7)

Table 2. Comparing death anxiety intensity based on personality profile

Demographic data	Death anxiety intensity	Low anxiety N(%)	High anxiety N(%)	P-value
Age (years)	20-29	18(36)	32(64)	0.201
	30-39	20(33.9)	39(66.1)	
	40-49	2(11.8)	15(88.2)	
	≥50	0	2(100)	
gender	Female	39(33.9)	76(66.1)	0.319
	Male	4(19.1)	17(80.9)	
Marital status	Married	34(31.8)	73(68.2)	0.792
	Single	9(32.1)	19(67.9)	
Hospital section	ICU	9(26.5)	25(73.5)	0.647
	CCU	8(44.4)	10(55.6)	
	Emergency	15(32.6)	31(67.4)	
	Operating room	8(36.4)	14(63.6)	
Education level	Associate's degree	6(35.3)	11(64.7)	0.827
	B.A.	36(31.9)	77(68.1)	
	M.A.	0	2(100)	
Mental health status	Without mental disorder	23(29.5)	55(70.5)	0.537
	With mental disorder	19(34.5)	36(65.5)	
Participation in care for patients in the final stages of life and resuscitation within the last three months	0 cases	7(41.2)	10(58.8)	0.176
	1–3 cases	4(14.3)	24(85.7)	
	4–6 cases	3(23.1)	10(76.9)	
	More than 6 cases	21(34.4)	40(65.6)	
Facing death within the last three months	0 cases	8(33.3)	16(66.7)	0.705
	1–6 cases	13(28.3)	33(71.7)	
	More than 6 cases	19(33.3)	38(66.7)	

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Table 3. Death anxiety intensity based on areas of General Health Questionnaire

Variable	Death anxiety intensity	Low anxiety N(%)	High anxiety N(%)	Total N(%)	p-value
Physical symptoms	None or minimum	19(25.7)	55(74.3)	74(100)	0.087
	Slight	13(13.7)	28(68.3)	41(100)	
	Average	8(47.1)	9(52.9)	17(100)	
	Severe	3(75)	1(25)	4(100)	
	Total	43(31.6)	93(68.4)	136(100)	
Anxiety	None or minimum	16(21.3)	59(78.7)	75(100)	0.008
	Slight	17(45.9)	20(54.1)	37(100)	
	Average	8(42.1)	11(57.9)	19(100)	
	Severe	1(33.3)	2(66.7)	3(100)	
	Total	42(31.3)	92(68.7)	134(100)	
Social activity	None or minimum	17(39.5)	26(60.5)	43(100)	0.046
	Slight	26(29.2)	63(70.8)	89(100)	
	Average	0	4(100)	4(100)	
	Severe	0	0	0	
	Total	43(31.6)	93(68.4)	136(100)	
Depression	None or minimum	37(30.1)	86(69.9)	123(100)	0.509
	Slight	2(33.3)	4(66.7)	6(100)	
	Average	3(60)	2(40)	5(100)	
	Severe	1(50)	1(50)	2(100)	
	Total	43(31.6)	93(68.4)	136(100)	

Discussion

In this study, 68.7% of nurses had high death anxiety and 31.3% had low death anxiety. There was no significant relationship between death anxiety and variables of age, gender, marital status, number of children, education and hospital section of activity, job status and general health status, while it had significant negative relationship with anxiety and lack of social activity in nurses.

The frequency of death anxiety in our study was more than the study of Masoudzadeh et al. (4) and this different might be related to increased work load of nurses and continuous shifts without rest. In addition, the study of Masoudzadeh et al. was conducted among all hospital staff and not just medical staff, whereas the present study was only conducted among nurses.

There was no significant relationship between death anxiety and variables of age, gender, marital status, number of children, education, hospital section of activity and job status, whereas the frequency of death anxiety was more among women in the studies of Masoudzadeh et al. (4) and Buzzanga et al. (27), which may be attributed to death anxiety measurement scale, since death anxiety in this questionnaire was based on the expressions of respondents and men are less willing to express their feelings including fear. On the other hand, difference in the results of different studies may be attributed to the role of culture, religion and customs of the community, the differences between the role of man and woman and even differences between men and women in expressing their fear and anxiety. Our results regarding lack of significant relationship between death anxiety and age was consistent with the studies of Masoudzadeh et al., but not with the studies of Belsky et al. (28) and Stevens et al. (29), in which people older than 60 years had considerably less death anxiety compared with younger people. This difference might be due to different age range of the study, since nurses older than 60 years were not included in the present study. In a study by Aghajani et al. among nurses in the special and general sections of Shariati Hospital in Tehran (8), the mean score of death anxiety among nurses in general sections was significantly different from nurses in special sections.

In addition, there was a significant relationship between death anxiety and marital status, organizational position and the current place of work in this study. However, no significant relationship was found with age, gender, shift work, the number of care for patients with end stages of life or direct participation in resuscitation. Study of White et al. demonstrated that people with high death anxiety are more affected by psychological distress and had significantly less life satisfaction compared with

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people with low death anxiety (15). However, there was no significant relationship between death anxiety and mental health of nursing department in our study. Based on a study by Jo et al. in Korea, family ties, marital status, religious activities, health status and happiness were among the factors that affected death anxiety in the elderly in this country (14). Death anxiety is among the tensions that exists in nurses' daily activities and ignoring this issue may lead to discontent and psycho-neurological problems in nurses and may impair proper care for patients.

There was no significant relationship between death anxiety and level of participation in care for patients in the final stages of life and facing with patients' death. 58% of nurses had no mental disorder and 42% had mental disorder, which indicates the importance of paying more attention to mental health of nurses.

Moreover, although there was no significant relationship between death anxiety and general health status, there was a significant negative relationship between death anxiety and two subareas of general health including anxiety and lack of social activities; that is, the nurses who reported fewer symptoms of anxiety and had lower levels of social activity, had higher death anxiety, which may indicate the fact that we need to consider various factors including environmental causes, family, biological and social factors for finding the cause of death anxiety and it is not just anxious people who report high death anxiety. In other studies, the nurses who had more social activity and work experience expressed less death anxiety, which may be due to increased self-confidence and clinical efficiency.

Ignoring the role of patients as a contributing factor in the work environment (including attitude, the relationship between personnel and the level of personal satisfaction among the staff and etc.), which is quite an important factor, was one of the limitations of the present study. It is suggested that future studies use bigger sample size and consider background and work experience of nurses and a psychiatrist must have a clinical interview with those who have high death anxiety. Considering the fact that about 70% of nurses in these public hospitals had high death anxiety, it is necessary to hold intervention training programs to reduce the level of death anxiety and its complications and improve health status of nurses and provide better service to patients who refer to these medical centers.

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References

1. Sadock BJ, Sadock VA. Kaplan and Sadock's Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry. 10th ed. Lippincott, Williams & Wilkins publication: 2007.

2.Huerta A, Yip M. A study of religious certainty and death anxiety, Project Proposal. WCP:262. 2006. Available from:http://jrscience.wcp.muohio.edu/humannature06/ProposalArticles/Draft1...Astudyofreligiou.html

3.Duff RW, Hong LK. Age density, religiosity and death anxiety in retirement communities. Rev Relig Res. 1995;37(1):19-32

4. Masoudzadeh A, Setareh J, Modanlookordi M. Evaluation of death anxiety among staffs of a state hospital. Eur Psychiat 2013;28(1):1

5. Peters L, Cant R, Payne S, O'Connor M, McDermott F, Hood K, et al. How death anxiety impacts nurses' caring for patients at the end of life: a review of literature. Open Nurs J. 2013;7:14-21.

6. Jennings BM. Work Stress and Burnout Among Nurses: Role of the Work Environment and Working Conditions. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. 2008;2:2-137.

7.Aghajani M, Valiee S, Tol A. Death anxiety among nurses in critical care and general wards. Iran J Nurs .2011;23(67):59- 68. [In Persian]

8.Robbins I, LIoyd C, Carpenters S, Bender MP. Staff anxieties about death in residential settings for elderly people. J Adv Nurs. 1992;17(5):548-53.

9.Naderi F, Bakhtiarpour S, Shokuhi M. The comparison of death anxiety, optimism and sense of humor in female nurses. Sci Res Quart Woman Culture. 2010;1(3):41-50.[In Persian].

10.Lehto RH, Stein KF. Death anxiety: an analysis of an evolving concept. Res Theory Nurs Pract. 2009; 23(1):23-41.

11.Fridh I, Forsberg A, Bergbom I. Doing one's utmost: nurses' descriptions of caring for dying patients in an intensive care environment. Intensive Crit Care Nurs. 2009;25(5):233-41.

12.Iranmanesh S, Dargahi H, Abbaszadeh A. Attitudes of Iranian nurses toward caring for dying patients. Palliat Support Care. 2008;6(4):363-9.

13.Jo KH, Song BS. Effect of family cohesion, subjective happiness and other factors on death anxiety in Korean elders. J Korean Acad Nurs. 2012; 42(5):680-8.

14.White W, Handal PJ. The relationship between death-anxiety and mental health/distress, Omega. J Death Dying, 1991;22(1):13-24.

15.Chow HP. A time to be born and a time to die: exploring the determinants of death anxiety among university students in a western canadian city. Death Stud. 2017;6:1-8.

16.Hong M, Hong S, Adamek ME, Kim MH. Death attitudes among middle-aged koreans: role of end-of-life care planning and death experiences. Inter J Ag Human Dev. 2017;0(0):1-18.

17.Tavakoli MA, Ahmadzadeh B. Investigation of validity and reliability of templer death anxiety scale. Though Behav Clin Psychol. 2011;6(21):72-80.[In Persian].

18.Tomás-Sábado J, Gómez-Benito J. Psychometric properties of the spanish form of templer's death anxiety scale. Psychol Rep. 2002;91(2):116-20.

19.Hoogstraten J, Koele P, van der Laan J. Templer's death anxiety scale revisited: the dutch version. Percept Mot Skill. 1998;87(3-2):1259-64.

20.Canplell A, Walker y, Farrel G. Confirmatory factor analysis of the GHQ-12: can I see that again?. Aus New Zealand J psych. 2003;37(4):475-83.

21.Goldberg DP1, Gater R, Sartorius N, Ustun TB, Piccinelli M, Gureje O, et all. The validity of two versions of the GHQ in the WHO study of Mental illness in general health care. Psychol Med. 1997;27(1):191-7.

[DOR: 20.1001.1.15614107.1395.19.2.7.6]
[DOI: 10.22088/jbums.19.2.47]

22.Ebrahimi A, Molavi H, Moosavi G, Bornamanesh A, Yaghobi M. Psychometric Properties and Factor Structure of General Health Questionnaire 28 (GHQ-28) in Iranian Psychiatric Patients. Journal of Research in Behavioural Sciences 2007; 5(1): 5-11

23.Jahani Hashemi H, Noroozi K. Mental health in students in Qazvin University of Medical Sciences. Payesh, 2004; 2(3): 145-152 [in Persian]

24.Dadkhah B, Mohammadi M, Mozaffari N. Mental health status of the students in Ardabil University of Medical Sciences. J of Ardabil University of Medical Sciences Health. 2004; 1(6): 31-36 [in Persian]

25.Noorbala AA, Bagheri yazdi SA, Mohammad K. The Validation of General Health Questionnaire- 28 as a Psychiatric Screening Tool, Hakim Research Journal. 2009; 11(4): 47- 53 [in Persian]

26. Buzzanga V, Miller H, Perne S. The relationship between death anxiety and level of self-esteem: A reassessment. Bull Psych Soc.1989; 27(6) : 570-572

27.Belsky J. The psychology of aging. Brooks/Cole Publishing Company. 1999

28.Stevens SJ, Cooper PE, Thomas LE. Age norms for Templer's Death Anxiety Scale. Psychol Rep. 1980; 46(1):205-6.

[DOR: 20.1001.1.15614107.1395.19.2.7.6]

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