

Anxiety of Death in Iranian Nurses: A Descriptive Study

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ABSTRACT

The purpose of this study was to determine the rate of death anxiety among nurses of different hospital wards, and its relation with some personal-social factors. This study was a cross-sectional analysis conducted in the form of a survey on 387 nurses working in educational hospital. The tool for collecting the data was personal-social characteristics questionnaire and Templar Death Anxiety Scale. The results showed a statistically significant difference between the average death anxiety among nurses working in critical and general wards ($p < 0.05$). Marital status, organizational position, and the current place of service had significant correlations with death anxiety. It is important to establish the supportive systems and determine the sources of this tension in nurses.

KEY WORDS: Anxiety, Death, Nurse, Iran.

1. INTRODUCTION

Anxiety is a reaction to an unknown, vague, unconscious, uncontrollable, inner danger that can be caused by many factors (Stuart and Laraia, 2001). Specific tensions have been recognized and named based on their origins, the most important of which is death anxiety. "Death anxiety" is a multidimensional concept which is difficult to be defined. It is normally described as the fear to die or the fear of others' deaths. In other words, "death anxiety" is the name given to the feeling of foreseeing one's death, the fear of its process or the death of the important people in one's life (Gire, 2002). Since the beginning of human civilization, thinking about death has always played a crucial role in man's life (Abdel-khalek and Tomas-sabado, 2005) and in Feifel's (1990) opinion "from the beginning of human civilization the existing fact of death and man's limited knowledge of it, has made it a powerful as well as moving worry. Many believe that man's inability against future and death is the most unpleasant feature of him" (Feifel, 1990). Although death is a biological and psychological fact and one's feelings towards death process have many things to do with the way one is socialized (Korte, 1985), thinking about death is always dreadful and many prefer not to preoccupy their minds with it (Gailliot, 2006). This happens maybe due to the fact that death reminds us of man's vulnerability in spite of all the great technological progresses (Korte, 1985, Valiee, 2012). Thus, being afraid of it is always an unpleasant experience among human beings (Abdel-khalek, 2002, Peyrovi, 2016).

Death probability is an undeniable fact for all people in all times and everyone shows some level of anxiety towards it. For instance, studies have shown that 29.6 % of patients suffering from epilepsy (Otoom, 2006), and 69 % of councillors (Hunt and Rosenthal, 2000) have experienced great death anxiety. Besides, 55.7 % of the staff in Iranian hospitals have reported the same thing (Masoudzade, 2008, Moridi, 2014). However, specific groups of people are in much greater contact with this phenomenon due to various reasons (Suhail and Akram, 2002, Valiee, 2013). For example, looking after patients is the major source of concern for people working in health care system. This is because of the increasing number of the elderly in the care centers for end stage patients (Korte, 1985); Nurses are also prone to these tensions and fears considering their constant contact with patients (Davies, 1996, Valiee, 2014), thus death is an important, recurring, and daily event in nursing (Abdel-khalek and Tomas-sabado, 2005). Nursing is an interpersonal process through which a nurse can help an individual, family, or society prevent or adapt to an unpleasant experience (Arthur, 1998, Faraji, 2015). Studies have shown that unfortunately many nurses do not have a proper interpretation of death and its process and lack adequate preparations to take care of patients. This has resulted in nurses' disability to care for the dying patients and their mental needs. Understanding the dying people, controlling their symptoms, and the information required for them regarding their disease are among the main issues nurses must be prepared (Korte, 1985, Valiee, 2016). Benoliel believes "being exposed to death and dying for a long time is nurse's emotional tax and nurses use the defense mechanism of resignation to avoid being personally involved with the patients. Studying and testing nurses' beliefs, and tensions regarding the care they give patients are of high importance, p.150" (Benoliel, 1972). Nurses' and doctors' death anxiety highly affects any contact with and taking care of the patients, particularly for those who are prone to quick death (Deffner and Bell, 2005). Robins (1992) showed in his study that nurses who take care of the elderly and the dying patients have great death anxiety which causes them to avoid talking about it, while most elderly people tend to talk about the issue (Robbins, 1992). Payne (1998), also showed that those nurses giving soothing care suffer from less death

anxiety. Other studies have shown that death anxiety is in direct relationship with general anxiety, general depression and depression caused by death (Abdel-khalek and Tomas-sabado, 2005), as well as age, gender, religion, physical health, etc. and some contradictory cases between each pair, such as the relation between age and death anxiety. Accordingly, while some studies show a rising and direct relationship between death anxiety and aging (Fathi, 2014; Schumaker, 1991; Wagner and Lorian, 1984), some others illustrate a curvy shaped relationship (Bengtson, 1977). The present data on the phenomenon of death anxiety among the providers of health care services, particularly nurses, have not been studied well (Deffner and Bell, 2005).

Thus, considering the importance of death anxiety, esp. its genesis in specific occupations such as nursing, alongside with its great effectiveness on the process of care given by nurses, and the lack of proper studies in Iran on this important subject, the present research was conducted with the purpose of determining the rate of death anxiety among nurses, and its relationship with some demographical characteristics.

2. METHODS & MATERIALS

This research was a descriptive-analytical study conducted in a cross-sectional method. The sample included all the nurses working in different wards of Shariati Hospital, Tehran University of Medical Sciences, which was selected by a census method. Using the nursing office, a list was provided of all the nurses working in the hospital; 400 nurses were chosen through a survey to participate in the study. Therefore, researchers attended each ward based on the work schedule of each nurse and provided them with the questionnaires. Throughout the research, 13 of the samples quit the study for various reasons (intendancy, defect in completing the questionnaire, and...), leaving the researchers with 387 final samples (96.75%). The inclusion criteria were: having a diploma or higher degree in nursing and being employed in the study environment. Easy access to samples and having various wards within the center were the reasons behind choosing this hospital.

The data collection means was a twofold questionnaire which was to be completed via self-report. The first section included questions about the personal-social information and the potentially effective factors on the rate of death anxiety of nurses which consisted of 15 questions about a series of data such as age, gender, marital status, number of children, educational level, having living parents, employment type, the current and previous wards, working shift, organizational position, the average number of patients they looked after during each working shift, the number of dying patients they looked after during the last three months, the number of direct participation in CPR during the last three months, and the number of deaths they called during the last three months (indirect engagement in the patients' death process). The second section included the Templer Death Anxiety Scale (1970), consisting of 15 questions with right and wrong formats. that the procedure for working with this scale is like this: 1 point will be given to each correct answer for 9 out of 15 questions, and 1 point to each incorrect choice for the remaining 6. The total point of the questionnaire will be somewhere between 1 and 15, with the higher point showing the more death anxiety. Based on the results and calculations of people's percentage of anxiety which was followed by comparing them with those of similar studies, the death anxiety of nurses were categorized as minor (0-6), moderate (7-9), and intense (10-15).

The content validity was used to determine the validity of the first part of the tool for collecting the data. After studying the sources related to the subject of the study, the academic experts were provided with the data to express their corrective comments and suggestions. Then, the suggested corrections were executed. The Templar Death Anxiety Scale is a standard questionnaire that has been used many times in numerous researches around the world to measure death anxiety. It has been translated, factor analyzed, and validated in Iran. For instance, Rajabi and Bohrani (2001), used it in a study on 138 university students in Ahwaz and reported its inner consistency to be 73%. The Internal reliability method was used to measure the reliability in this study. The inner coherence between odd and even questions in the completed questionnaire by 10 sample units was calculated 86% using the Kuder-Richardson Formula. In their study, Masoudzade (2008), also reported the coherence coefficient of the questions in templar death anxiety scale to be 95%.

This study was approved by the Research Committee of the Tehran University of Medical Sciences (TUMS), no 5317610186. All participants were volunteers. Written consent was taken from all participants, and they were assured that they could leave the study at any time, even after they had provided consent. They were also assured about the confidentiality of their information; this meant that their names and other significant characteristics that might reveal their identity would not be published in the study report. Within this study, CCU, ICU, Dialysis, and ER were categorized as the critical hospital wards, and the remaining ones as the general hospital wards. The data were analyzed using SPSS 11.5 (SPSS, Inc, Chicago, IL, USA) using χ^2 , regression, and *t* tests. The *P*-value was set at 0.05 for significant differences.

3. RESULTS

The findings of the present study showed that the average age of nurses was 32.67 ± 6.8 , 86.2 % of nurses in general wards and 73.5 % nurses in critical wards were female, 47.8 % of nurses in general wards and 58.1 % nurses in critical wards were married, 94.4 % of nurses in general wards and 97.4 % nurses in critical wards had a Bachelor degree. 53.4 % of the units under study in general wards and 47.7% in critical wards were officially employed, 38.8% in general wards and 37.4% in critical wards were married and had children and the parents of 59.1% of nurses in the units under study in general wards and 65.2% in critical wards were alive. The results also showed that the working shifts of 53.9 % of nurses in general wards and 58.7 % of nurses in critical wards were circular and nursing was the organizational position of 63.4% in general wards and 72.3% in critical wards. Among the nurses, 59.9% were working in general wards and 40.1% in critical wards (Table.1).

The findings of the study illustrated that the average level of death anxiety of nurses was 8.12 ± 2.34 . Also, 56.4% of the sample units in general wards were suffering from moderate, 26.72% from minor, and 17.24% from intense anxiety. Also 16.3% of nurses in critical wards had minor, 53.55% moderate and 30.32% intense death anxiety.

The results showed that the average anxiety level of nurses in critical wards (8.30 ± 2.4) had a statistically significant difference ($p < 0.05$) with that of nurses in general wards (8.26 ± 2.1). Also the results of the statistical tests were also illustrating a statistically significant difference between the average death anxiety and factors such as marital status ($p < 0.046$), organizational position ($p < 0.001$), and current ward they are working at ($p < 0.02$) (Table.2). But the average of death anxiety did not show any significant difference with variables such as age, gender, marital status, number of children, educational degree, having living parents, employment type, the current and previous ward of working, working shift, organizational position, the average number of patients they looked after during each working shift, the number of dying patients they looked after during the last three months, the number of direct participation in CPR during the last three months, and the number of deaths they called during the last three months.

Considering the significance of the results with regard to the relation among the three variables of marital status, organizational post, and current ward of service, and the level of death anxiety, a regression model was provided to determine which of these variables could be a better predictor of the anxiety level of nurses. It showed no statistically significant relation between the three variables and the dependent variable, death anxiety.

DISCUSSION

Conducting different studies and addressing the effective factors are among the ways to promote mental health among nurses, which cannot only develop the body of science, but can also increase the awareness over this issue. Death anxiety is one of the effective factors on nurses' mental health. Findings showed that considering death anxiety, the society under our study is not in a desirable condition as only one fourth of it belongs to the category of those suffering from minor anxiety. Reasons such as high work pressure and consecutive working shifts without a chance for rest can be stated as the factors giving rise to this result. The results of a study by Masoudzade (2008), also showed that 57.8 % of the staff in public hospital has great death anxiety. They also address working conditions, and age and gender composition of the sample units as the effective factors on death anxiety. However, their study was conducted on all the hospital staff and not merely on the medical group (Masoudzade, 2008). Studies have shown that the anxiety level in nursing is more than in any other occupation. The study by Chen, regarding death anxiety in three groups of university students (experienced nursing, inexperienced nursing, and nonmedical) in Taiwan showed that experienced nursing students had greater death anxiety compared to the other two groups and the nonmedical students had the least anxiety. Nursing education could be a factor in increasing the death anxiety among university students (Chen, 2006). The results of the studies on death anxiety in other countries also show that the level of this anxiety varies in different cultures and is more in developing countries. For instance, the level of death anxiety in Egyptian university students was higher than that of Spanish university students (Abdel-khalek and Tomas-sabado, 2005).

The results showed that death anxiety of nurses in critical wards is more than that of nurses in general wards. These findings agree with the results of the study by Payne and colleagues which stated that nurses giving soothing care have less death anxiety than the nurses in critical wards (Mahmmodi, 2016; Payne, 1998). Abdel-khalek and Tomas-sabado also believe death to be an important, recurring, and daily event in nursing, particularly for the nurses at critical wards, and believe the higher level of anxiety in nurses working in critical wards is the consequence of their daily encounter with death, constant care for dying patients, the necessity to make quick decisions, and the effectiveness of those decisions on people's lives (Abdel-khalek and Tomas-sabado, 2005, Taifoori and Valiee, 2015).

Within this research no observation was made of any relation between the ages of working nurses in various wards and the level of death anxiety. While some studies show a rising, direct relationship between death

anxiety and aging (Schumaker, 1991; Valiee, 2013; Wagner and Lorian, 1984) some others show a curvy shaped relationship which illustrates the highest level of anxiety occurring during middle age (Bengtson, 1977; Mahmodi and Valiee, 2016). In other studies, reported a reverse relation between aging and death anxiety. Older nurses show less tension than younger ones (Deffner and Bell, 2005; Suhail and Akram, 2002). The study by Masoudzade (2008), showed no relationship between aging and death anxiety among hospital staff. Considering the present contradictions, Rasmussen and Berms (1996), conducted a study to find the relationship between age and death anxiety, which also incorporated the variable of social puberty in different ages. One of the effective factors on the absence of a relationship between age and anxiety level can be caused by this fact that most of the nurses in this study are in a lower age range, mostly younger than 40.

The results of the study showed no relationship between gender and death anxiety level. The study by Schumaker (1991), showed no significant difference between Japanese male and female sample units, but a significant difference was found between Australian men and women, in which women's death anxiety was more than men's. Some studies such as Dattel & Neimeyer (1990), report women's anxiety to be more than men's and in general consider the sources of worries for death to be more in women than in men (Larijani, 2010). There has been no significant difference between men and women reported in any other studies. The difference in findings of various studies could be due to the role of culture, religion, and customs dominant in each country, and the different roles of men and women or the expression of fear and anxiety by men in our society. As we can see in Templar Death Anxiety Scale, the word "fear" has been mentioned while most men have little tendency to express feelings including fear.

In addition, there was a significant difference between the education levels of nurses and their anxiety level. The level of death anxiety of nurses with Master's degree (8.72 ± 2.1) was more than Bachelor's degree (8.25 ± 2.25) and Associate's degree (5.21 ± 2.34). It can be said that the increase in the level of education can be a factor of growth in responsibility and consequently in expectations from oneself when taking care of patients and their lives. There was a significant relationship between marital status of nurses in different wards and their death anxiety level. Single people (8.17 ± 2.45) suffered more from death anxiety than married ones (8 ± 2.24). It could be concluded that the presence of supporting systems brings about mental assurance and a decrease in anxiety. Also the relationship between the organizational position of nursing and anxiety level could be more due to the greater contact of nurses with patients than that of other positions such as matron and supervisor.

There was no relationship between employment type, number of children, living parents, and working shifts with the level of death anxiety. No relationship was observed in other studies between working shifts and death anxiety level (Bashiri, 2016; Korte, 1985). There was no significant difference among important variables such as the number of dying patients they looked after, and the number of deaths they called, which seemed to be in relation with death anxiety level of nurses. Korte failed to find any relationship between the number of dying patients they looked after and the level of death anxiety as well (Afazel, 2013; Korte, 1985).

One of the limitations of this study was the researcher's lack of control on the recent events in the lives of nurses, such as the last death they faced with, any encounter with rage, religious views, any the ill-health of the nurses or their families which could affect death anxiety. Another limitation of the present study was the limited area of study, considering the effectiveness of workplace, management methods, relationships among colleagues, level of job satisfaction, work stresses, etc. This study was conducted in a single hospital to restrict the effects of such factors to minimum. Therefore, it is suggested that the relationship between death anxiety and factors such as job satisfaction and management method of workplace be studied. Considering the results of this research, a qualitative study is suggested to be done in order to clarify the dimensions of death anxiety better and more. Also, as this study was conducted in a cross-sectional way, a longitudinal study is suggested, critically on university students of medical and nursing groups, where death anxiety of nurses and patients in different wards can be compared with each other. We also suggest that a study be conducted regarding the relationship between death anxiety and important factors such as religion, culture, and the way one sees his/her future after death.

Table.1. Demographic Information of practitioner nurses

Demographic Information		General wards		Critical wards		total	
		number	%	number	%	number	%
Age	20-29	86	37/1	68	43/9	154	39/8
	30-39	104	44/8	61	39/4	165	16
	40-49	37	15/9	25	16/1	62	16
	50<	5	2/2	1	0/6	6	1/6
	Total	232	100	155	100	387	100
Gender	Female	200	86/2	114	73/5	314	81/1
	Male	32	13/8	41	26/5	73	18/9
	Total	232	100	155	100	387	100
Education Level	Associate	9	3/9	0	0	9	2/3
	Bachelor	219	94/4	151	97/4	370	95/6
	Master	4	1/7	4	2/6	8	2/1
	Total	232	100	155	100	387	100
Marital Status	Married	111	47/8	90	58/1	201	51/9
	Single	121	52/2	65	41/9	186	48/1
	Total	232	100	155	100	387	100
Employment Type	Obligatory duty	76	32/8	49	31/6	125	32/3
	Contract	3	1/3	1	0/6	4	1
	Contract	28	12/1	29	18/7	57	14/7
	Trial	1	0/4	2	1/3	3	0/8
	Official	124	53/4	74	47/7	198	51/2
	Total	232	100	155	100	387	100
Level of Anxiety	Minor	62	26/72	25	16/13	87	22/49
	Moderate	130	56/04	83	53/55	213	55/02
	Intense	40	17/24	47	30/32	87	22/49
	Total	232	100	155	100	387	100
Previous Ward of Service	Critical	78	33/6	72	46/5	150	38/8
	General	67	28/9	33	21/2	100	25/8
	None	87	37/5	50	32/3	137	35/4
	Total	232	100	155	100	387	100
Number of Dying patients they took care of in the last three months	0	56	24/1	27	17/4	83	21/45
	1	55	23/7	45	29	100	25/9
	1-3	46	19/8	41	26/5	87	22/4
	3-6	30	12/9	15	9/7	45	11/65
	6<	45	19/5	27	17/4	72	18/6
	Total	232	100	155	100	387	100
Number of direct participations in a CPR during the last three months	0	72	31	38	24/5	110	28/4
	1-3	82	35/3	60	38/7	142	36/7
	4-6	61	26/4	32	20/7	93	24
	7<	17	7/3	25	16/1	42	10/9
	Total	232	100	155	100	387	100
Number of deaths they called during the last three months	0	101	43/5	51	32/9	152	39/3
	1-5	104	44/8	90	58/1	194	50/1
	6<	27	11/7	14	9	41	10/6
	Total	232	100	155	100	387	100
Number of patients they take care of in each working shift	6>	60	25/8	61	39/4	121	31/27
	6-8	33	14/3	16	10/3	49	12/66
	8-10	15	6/5	9	5/8	24	6/2
	10<	124	53/4	69	44/5	193	49/87
	Total	232	100	155	100	387	100

Table.2. Relation between some demographical variables of nurses and levels of death anxiety

Variables		Level of Death Anxiety						Total	
		Minor		Moderate		Intense			
		Number	%	Number	%	Number	%	Number	%
Marital status	married	44	21/9	114	56/7	43	21/4	201	100
	single	53	28/5	82	44/1	51	27/4	186	100
$\chi^2=6/168$ P<0/046									
organizational position	Nurse	67	25/8	117	45/2	75	29	259	100
	Head of ward	9	15	44	73/3	7	11/7	60	100
	Staff	8	38/1	11	52/4	2	9/5	21	100
	supervisor	5	17/2	18	62/1	6	20/7	29	100
		8	44/4	6	33/4	4	22/2	18	100
$\chi^2=25/1$ P<0/001									
Ward of Service	General	62	26/72	130	56/04	40	17/24	232	100
	critical	25	16/13	83	53/55	47	30/32	155	100
$\chi^2=7/78$ P<0/02									

4. CONCLUSION

As we know, nursing is an interpersonal process and the quality of care given to patients is determined by many factors (Arthur, 1998). In addition, nurses' awareness and ability to use their knowledge, esp. when taking care of a dying patient, are considered to be significant among these factors. Thus, considering the higher level of anxiety among nurses in critical hospital wards and the necessity to make decisions quickly, it seems that attending to this issue and searching for techniques to decrease this tension are of great importance. Therefore, it seems that programmers and health care managers must pay specific attention to this problem and provide supporting systems to satisfy the emotional and mental needs of nurses in critical hospital wards.

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