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The Relationship between Death Anxiety and Spirituality Constructs with General Health among Nursing and Midwifery Students

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Abstract

Background and Objectives: Undoubtedly, health is one of the most important issues of human life to which different factors can basically contribute. The present study was conducted to investigate the relationship between death anxiety and spirituality constructs with general health among nursing and midwifery students.

Methods: Study population of this cross-sectional study comprised all students of the Faculty of Nursing and Midwifery of the Ahvaz Jundishapur University of Medical Sciences in academic year 2015. Of this population, 205 people were selected by random sampling and enrolled in the study. To gather data, 36-item Short Form Health Survey, Death Anxiety Scale, and Daily Spiritual Experience Scale were administered. Data were analyzed by multiple linear regression with stepwise method.

Results: According to Pearson correlation coefficient, general health was significant correlation with death anxiety (r=-0.465, P<0.0001) and spiritual experiences (r=0.685, P<0.0001), and regression analysis indicated that death anxiety and spiritual experiences together explained %45.2 of the variance in general health (B=-0.586 and 0.602 respectively).

Conclusion: Because death anxiety and spiritual experiences are predictors of general health, the students' general health can be promoted by relief of death anxiety and enhancement of spirituality.

Keywords: Death, General Health, Midwifery, Nursing, Spirituality.

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Introduction

Sometimes, humans forget that being healthy is precious. In many prayers (duas), asking God for recovering and maintaining good health is recited (1). Being healthy is a main human life issue and an essential prerequisite for playing social roles (2). Health is a state of complete mental, physical, and social well-being and peace and not merely the absence of disease or infirmity (3). Different dimensions of health are reciprocally associated; if a behavior causes one of the health dimensions to be promoted, other health dimensions are undoubtedly promoted (4).

Morbid attitude toward death is one of the effective factors on health (5). Death is one of the most painful unknowns of which any humans may think for a moment at least (6). Death anxiety is a feeling of apprehension associated with thinking of one's own or others' death or considering death to be ceasing to be (7). Death anxiety, as a type of phobia, reminds us of human vulnerability despite considerable technological progresses (5). Because of various responses to thinking of death among people (8), it is considered to be a serious threat to mental well-being (9) such that death anxiety has been incorporated into the criteria of NANDA International Nursing Diagnosis for delivery of health care services to patients (10, 11). For delivery of health care services, especially nursing care, lacking the required

knowledge to cope with death anxiety and its arousal in the patients causes decline in quality of the delivered services to them (12). Most people involved in health care have been reported to suffer from high levels of death anxiety (13), and women found to suffer higher levels of death anxiety than men (14). Death anxiety has been reported to be associated with mental health (5,6,15), spiritual health (16), and quality of life (8).

Health and illness are not two absolute and completely independent states, but they comprise a continuum which is formed by sociocultural and psychological factors (17). Spirituality is one of the factors that possibly affects health (18). Spirituality refers to individual efforts to answer the ultimate question and find out the meaning and purpose of life (19). Besides that, spirituality is considered to be searching for the answers that are concerned with the fundamentals of existence and life, i.e. meaning of life and most importantly internal relationship with beyond the universe and God Almighty (20). Some people do not consider spirituality and religion to be two distinct concepts because both of them offer certain frameworks to understand the meaning and value of life (21); however, these two concepts are distinct. Spirituality explains a much more personal phenomenon than mere religiosity (22). Religion tends to encourage humans to practice daily rites such as prayer and fasting, but spirituality is concerned with all new levels of meaning beyond any practices. For example, most spiritual people are honest, but not vice versa (23).

Spiritual experiences frequently cause shifting of or change in individual moral values. The aim of this process is to overcome self-centeredness and move toward cooperation and altruism (24). Spirituality inspires a feeling of inner peace, and love of and interest in God and others (25,26). It is highly important to have spiritual states in helping professions. Spiritualism in nursing is associated with health and well-being, delivering better health care services to patients, collaborating with colleagues more efficiently, and avoiding negative behaviors and tending to practice positive and constructive ones (27,28). According to the conducted studies, spirituality causes decrease in mortality in cardiovascular disease patients and decline in blood pressure in patients with hypertension, helps cope with critical illnesses (18,29), and improve health, psychological well-being (30-32), and hope (33).

Significance of health in individual and family life and critical role of this divine blessing is obvious to all people. Regarding the above-mentioned, the chronic and everlasting nature of death anxiety, the significance of spiritualism from intrapersonal and interpersonal perspectives, and because these two variables can contribute to promoting others' health in helping professions in addition to helping promote health among the staff themselves, this study was conducted to investigate the relationship between death anxiety and spirituality constructs with general health among nursing and midwifery students.

Methods

The study population of this cross-sectional study comprised all nursing and midwifery students of the Ahvaz Jundishapur University of Medical Sciences in the academic year 2015. The participants were selected according to convenience sampling. Sample size was calculated to be 227 people according to Cochrane's formula; however, because of withdrawal and inaccurate completion of questionnaires, 205 students were enrolled in the study. The inclusion criteria were being nursing and midwifery students and consent to respond to the study instruments. To gather the data, the instruments below were used:

Short Form 36-item Health Survey (SF-36): SF-36 is a self-report questionnaire, which was developed by Ware and Sherbourne and is mainly used to investigate the quality of life and health (34). This instrument consists of 36 items to investigate physical and mental health through eight subscales (35). The scores of the items of each subscale are scaled according to Likert scale, depending on the number of each item's choices, aggregated, and converted into a 0 to 100-point continuum. Then, the standardized score of each respondent for each

subscale is calculated with mean of 50 and standard deviation of 10. The reliability coefficients of its eight subscales and two components have already been calculated using internal consistency and test-retest method.

Most studies have reported reliability coefficients of the SF-36 to be over 0.80. Content validity of the SF-36 has been investigated with reference to many health scales, indicating that this instrument does measure most health components. Besides that, the experimental validity of the SF-36 scales has been reported to be 0.80-0.90 in the studies on physical and mental health (36). In Iran setting, the reliability and validity of this instrument have already been confirmed. Internal consistency coefficients of its eight subscales have been reported to range 0.70-0.85 and test-retest coefficients with one-week interval 0.43-0.79 (37, 38). In addition, the Cronbach's alpha coefficient of this instrument has been derived 0.93 for mental health, 0.86 for physical health, and 0.78, 0.78, 0.85, 0.81, 0.85, 0.72, and 0.75 for the subscales vitality, emotional role, mental health, physical functioning, physical role, bodily pain, and general health perceptions, respectively (39). In this study, the Cronbach's alpha coefficient of SF-36 was derived 0.675 for physical health and 0.763 for mental health.

Daily Spiritual Experience Scale (DSES): This scale was developed by Teresi and Underwood (2002) to measure people's perceptions of a superior force in daily life, interaction with this beyond-the-universe force, feeling of deep inner peace, and cooperation with the public (40). This scale consists of 16 six-choice items. The choices are many times a day, every day, most days, some days, once in a while, and never or almost never. The reliability and validity of the DSES have been investigated by Taghavi and Amiri, and reported to be 0.96 according to test-retest and 0.88 according to Spearman-Brown split-half method. The Cronbach's alpha coefficient of this scale has been derived 0.91 (41) as well. In this study, the Cronbach's alpha coefficient of the DSES was derived 0.69.

Death Anxiety Scale (DAS): Consisting of 15 items to measure the respondent's attitude toward death, DAS was developed by Templer (1970) (42). The items are responded by two (Yes-No) choices. The answer Yes answer represents the existence of anxiety. Accordingly, the scores of this scale range 0-15 and the higher the score is, the higher levels of anxiety the respondents have. The original version of this scale has acceptable reliability such that its test-retest reliability coefficient has been derived 0.83, and its concurrent validity 0.27 with reference to state anxiety and 0.40 with reference to depression scale (43). In a study, the reliability of this scale was reported 0.76 according to test-retest method and its internal consistency 0.83 (44). Reliability and validity of this scale have been found to be 0.60 by split-half reliability and 0.73% by internal consistency. Besides that, to investigate convergent validity of this scale, two scales, death worry scale and state anxiety scale, were administered. The correlation coefficient between DAS and death worry scale was derived 0.40 and between DAS and state anxiety scale 0.43 (43).

The Cronbach's alpha coefficient of the DAS was derived 0.64 in this study. Moreover, the data on age, education level, marital status, and economic status were gathered by a researcher-developed questionnaire. Notably, after the number of the samples was determined, the research instruments were distributed among the samples according to convenience random method. Necessary explanations about the voluntary nature and method of filling out the instruments, responding to them in an unbiased and unprejudiced manner, keeping the data drawn from the instruments confidential, and helping conduct a genuine study were given to the participants. Then, the questionnaires were collected and the data drawn from acceptably completed ones included in analysis. The data were analyzed by multiple regression analysis with stepwise method in SPSS-22 and $P< 0.01$ was considered level of significance. In this study, general health was considered response variable and spirituality constructs and death anxiety independent variables.

Result

According to descriptive statistics, 102 (49.7%) participants were BSc nursing students, 79 (38.5%) BSc midwifery students, 14 (6.82%) MSc nursing students, and the rest (4.87%) MSc midwifery students. The mean [standard deviation (SD)] age of the participants was 23.53 (4.04). Regarding marital status, most (90.8%) of the participants were single, and according to four-point Likert scale (poor to excellent), 6.2% of the participants had poor economic status, 53% moderate, 40.2% very good, and 4.3% excellent.

Mean (SD) general health was derived 41.07 (6.82), death anxiety 7.63 (1.0924), and spiritual experiences 38.67 (6.60). The mean value of each studied variable was found to be moderate with reference to the total score for each instrument. General health was correlated with death anxiety and spiritual experiences (r=-0.465, P<0.0001 and r=0.658, P<0.0001, respectively)

Table 1. Mean (standard deviation) and correlation matrix between predictive variables and measured variable, i.e. general health

variable	M	SD	1	2
1. general health	41.07	6.82	1	
2. death anxiety	7.63	1.92	-0.465	1
3. spiritual experiences	38.67	6.60	0.658	-0.525

To investigate the contribution of death anxiety and spiritual experiences to predicting general health, regression analysis with stepwise method was used. The assumptions of linearity, normality, fixed variance, and lack of multicollinearity were established. Because the levels of significance (P) of the predictive variables, i.e. spiritual experiences and death anxiety, were considered to be <0.05, the regression model could be considered significant (F=37.83, P<0.001).

Accordingly, the variables spiritual experiences and death anxiety contributed to predicting general health. The regression analysis indicated that 45.2% of variance in general health in the participants could be explained by these two variables. According to beta coefficients, spiritual experiences (B=0.602, P=0.001) explained variance in general health more markedly than death anxiety (B=-0.586, P=0.007) such that 60% and 58.6% of variance in general health was explained by spiritual experiences and death anxiety, respectively. Besides that, the correlation coefficient between the predictive variables and the measured variable, general health, was derived 0.646. Partial correlation of spiritual experiences (0.548) represented great contribution of this variable in the model after removal of its correlation with the independent variable, i.e. death anxiety. Additionally, the partial correlation of death anxiety (0.187) represented small contribution of this variable in the model.

Discussion

This study was conducted to investigate the relationship between death anxiety and spirituality constructs with general health among the nursing and midwifery students. Pearson correlation demonstrated a negative, significant correlation between death anxiety and general health but a positive, significant correlation between spiritual experiences and general health. Moreover, regression results demonstrated that death anxiety and spiritual experiences could concurrently predict general health. This finding means that people with lower levels of death anxiety and higher levels of spirituality and associated experiences have better general health, which is consistent with previous studies (5, 6, 8, 15, 28, 31, 34).

Death anxiety refers to a feeling of apprehension associated with thinking of one's own or others' death (7) that can affect health. In this regard, Ghorbani and et al study demonstrated that death anxiety was a significant predictor of mental health (5). Other studies have confirmed this finding (6, 15).

Table 2. Results of stepwise regression analysis between predictive variables and the measured variable

predictive variables	R	R Square	Beta	B	Std. Error	t	Sig.	Partial correlation	confidence interval	
									lower	upper
spiritual experiences	0.67	0.452	0.571	0.602	0.065	9.32	0.001	0.548	0.475	0.729
death anxiety			-0.166	-0.586	0.217	-9.70	0.007	0.187	-0.159	-1.01

Death is a fact in life that any people might have faced it more or less (6). Because death is an unknown fact and humans cannot persist in fighting it despite the technological progresses, it causes fear and anxiety (5) which may put humans' health at risk, because some people respond to this fact insensibly and intemperately. In this regard, the people who have fear of death are supposed to fight it because they pay great attention to their health. Ghorbanalipoor and et al study demonstrated that people with high levels of death anxiety were more involved in health-promoting behaviors than people without this disorder (45). To explain this assumption, we can argue that health generally refers to complete mental, physical, and social well-being and peace and not merely the absence of illness or infirmity (3). Therefore, the people that are more frequently involved in health-promoting behaviors are indeed exhibiting that they feel that they lack complete peace and are therefore seeking to practice health-promoting behaviors to escape or fight well-being and peace-disturbing agents. From another perspective, anxiety refers to somehow disturbed well-being and peace, or generally speaking, altered health.

Spirituality, defined as seeking to understand the universe, establish inner relationship with God, and find meaning of life (20), can play a significant part in health. Maddaah Karani and et al concluded that spiritual experiences could predict psychological health (30). Other studies have confirmed this finding (31, 32). Besides that, spirituality can affect the body. For example, increased level of spirituality and associated experiences exert great effects in decreasing blood pressure in people with hypertension and therefore mortality in people with cardiovascular disease (22). Even, spirituality can help cope with and tolerate physical and mental pain and suffering (28, 29). One's spirituality affects one's own and others' health positively. More clearly, one of the spirituality domains, being accountable for and cooperating with others (41), causes people to communicate with others constructively and positively particularly in helping professions and deliver more efficient health care services, and adopt spirituality-oriented attitudes toward others so as to cope with life difficulties more efficiently (27,28,31). In fact, spirituality helps people see life as a meaningful concept and encourages them to be patient in facing difficulties and take a positive attitude toward life events and interpret them optimistically. In other words, spirituality helps find meaning of negative experiences and take a positive attitude toward them, tolerate pain and suffering, believe in existence of a divine and mighty resource, observe ethical values, cooperate with people, and have hope for life (29). This orientation induces physical, mental, and social well-being and peace, which helps promote health.

As with most studies, the present study suffers from certain limitations. In this study, only nursing and midwifery students of the Ahvaz Jundishapur University of Medical Sciences were enrolled, the data were gathered only by questionnaire and other types of instruments were not used, the respondents' responses to certain items may be biased, and potentially confounding variables were not controlled for. Therefore, the findings should be generalized with caution. In the light of the effects of death anxiety and spiritual experiences on humans' function and quality of life, it is necessary to control larger studies, with controlling for confounding variables, on staff of certain professions such as health and medical professions, especially nurses, because nurses can greatly assist the patients with death anxiety through relieving death anxiety in themselves and learning how to respond to the patients' death anxiety, and deliver spiritual care to others at both personal and interpersonal levels through enhancing spirituality. Moreover, further studies can be conducted with larger sample size and tactfully controlling for confounding variables.

Conclusion

In the light of the present study findings, death anxiety and spiritual experiences can predict general health. Overall, the intervention and education to increase knowledge about meaning and nature of death as well as spirituality and spiritual experiences can serve

as a barrier to declining health and contribute to promoting physical and mental comfort.

Conflict of interest

The authors declare no conflict of interest.

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