Fear of death and its relationship with emotional intelligence of nursing students in Concepción*

Miedo a la muerte y su relación con la inteligencia emocional de estudiantes de enfermería de Concepción

Medo da morte e sua relação com a inteligência emocional de estudantes de enfermagem de Concepción

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ABSTRACT

Objective: To understand fear of death and its relationship with emotional intelligence and other variables in nursing students in the last years of study. Methods: A descriptive and correlational study. Students (n = 188) responded to a questionnaire about: socio-cultural characteristics; Fear of Death and Emotional Intelligence Scales. Results: We obtained a measure of medium to high for fear of death (x = 3.35) and also the emotional perception component was positively correlated with the fear of death, while understanding and emotional regulation were negatively correlated with fear of death. The higher scores for fear of death were associated with the female gender, with lower levels of courses, and the perception of lower academic preparation on the subject. Conclusions: High levels of emotional intelligence, associated with less fear of death, provides evidence for the necessity of developing emotional skills in students facing transcendent situations and the unknown, such as death and the dying process.

Keywords: Attitude to death; Fear; Emotional intelligence; Students, nursing

RESUMO

Objetivo: Conocer el miedo a la muerte y su relación con la inteligencia emocional y otras variables en estudiantes de enfermería de los últimos años de estudio. Métodos: Estudio descriptivo y correlacional. Los estudiantes (n=188) respondieron a un cuestionario sobre: características socioculturales; Escalas de Miedo a la Muerte y de Inteligencia Emocional. Resultados: Se obtuvo un promedio medio-alto en miedo a la muerte (3,35). La percepción emocional se correlacionó positivamente con miedo a la muerte, mientras que la comprensión y la regulación emocional se correlacionaron negativamente con el miedo a la muerte. Las puntuaciones más altas de miedo a la muerte se asociaron con el sexo femenino, con los niveles inferiores de los cursos y con la percepción de menor preparación académica en el tema. Conclusiones: Los niveles altos de inteligencia emocional, se asociaron con menos miedo a la muerte, lo que evidencia la necesidad de desarrollar en los estudiantes habilidades emocionales frente a situaciones trascendentales y desconocidas, como son la muerte y el proceso de morir.

Descritores: Actitud frente a la muerte; Miedo; Inteligencia emocional; Estudiantes de enfermería

RESUMEN

Objetivo: Conocer el miedo a la muerte y su relación con la inteligencia emocional y otras variables en estudiantes de enfermería de los últimos años de estudio. Métodos: Estudio descriptivo e correlacional. Os estudiantes (n=188) responderam a um questionário sobre: características socioculturais; Escalas de Medo da Morte e de Inteligência Emocional. Resultados: Obteve-se uma medida de médio para alto em medo da morte (x=3,35) e também o componente percepção emocional se correlacionou positivamente com o medo da morte, enquanto a compreensão e regulação emocional se correlacionaram negativamente com o medo da morte. As pontuações mais altas de medo da morte associaram-se com o gênero feminino, com os níveis inferiores dos cursos e com a percepção de menor preparo académico no tema. Conclusões: Os níveis altos de inteligência emocional, associaram-se com menos medo da morte, o que evidencia a necessidade de desenvolver nos estudantes habilidades emocionais frente a situações transcendentais e desconhecidas, como são a morte e o processo morter.

Descritores: Atitude frente à morte; Medo; Inteligência emocional; Estudantes de enfermagem

* Study conducted at a university in the city of Concepción*, Chile; due to an ethical consideration we are not revealing the name of the institution, rather we mention only the city.

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INTRODUCTION

For the majority of people, death generates attitudes such as fear and anxiety. The fear of death is a concept that is inserted in the dying process, and includes the fear of death itself and what happens after it. It is defined as an emotional reaction to the perception of signs of a real or imagined danger or threat to one’s existence, which can be triggered by environmental or situational stimuli, as well as internal stimuli of the individual, relating to one’s own death or another’s (1,2).

This phenomenon is not foreign to health professionals, especially nurses, since they live and work in a particular culture which of necessity leads them to confront death. Today death is concealed, making it even more difficult to face it in a natural way. Technological and scientific advances have further complicated the process, because they are used to fight, at all costs, against the inevitability of death. The family is often separated from this process, either by cultural barriers which do not permit externalizing of emotions when facing these events, (3) or by technological abilities that create unrealistic expectations in the presence of imminent death.

In these circumstances the professionals face the dying process and death of their patients, where care becomes a mediating tool that can help improve the quality of the death (4).

Regarding the professionals in training, such as nursing students, they will necessarily travel into transcendental and unfamiliar situations when some of the patients in their care inevitably pass through the process of dying and death. They understand the importance of their professional behavior from theory, and of the need for humanized care to accompany this moment. The ethical values of human care and presence guide them to procure an accompanied and dignified death (5).

However, to address the care giving experience during the dying process and death, requires certain emotional skills that have to do with how to communicate with the patient, with one’s decision-making, his coping ability, problem solving and also with his integration into the overall care (6). There is a tendency in biomedical education that still prevails in some way (7), resulting in a deficient awareness and acquisition of these emotional aspects in the education of professionals (8).

Emotional skills necessary to face the fears of death and the dying process can be based on the model of emotional intelligence (EI). EI is defined as the capacity to perceive, comprehend and regulate one’s emotions and those of others, to discriminate between them and to use the information as a guide for one’s thoughts and actions (9).

This ability for managing one’s emotions while interpreting those of others, is especially useful in performing nursing functions, as the ability to evaluate and distinguish between patients’ emotional responses may be decisive in the establishment of an effective and meaningful relationship between nurse and her patient (10).

In the education of nursing students, it is relevant to know their experience of death as well as their fear of it, because death and the dying process are experiences inherent in the development of their professional work; because of this, they are more susceptible to presenting anxiety levels and attitudes that can affect the quality of care (2-11).

Considering that these emotional aspects may be related to the manner in which professionals confront the death of their patients (10), the main objective of this study was to understand the fear of death and its relationship to emotional intelligence and other variables in nursing students in the last years of their education.

It is expected that results will contribute to the generation of evidence regarding the need for formal preparation of future nurses about the emotional issues of coping with the experience of death, permitting the recognition of competencies necessary for providing care to improve the quality of the dying process and death.

METHODS

This was a descriptive, correlational study. From a population of 252 students in recent years of a university in the city of Concepción, we obtained a sample of 188 students in 3rd, 4th and 5th levels. We chose the latter years of study because of the clinical experience that exposes them to patient care.

Procedure. The questionnaire was administered to students in the third and fourth levels before the start of a class, simultaneously and without notice, under informed consent. The format was one of self-application, thus ensuring confidentiality. Class attendance is considered a random event. There was a percentage of failure due to lack of class attendance and rejection of 3% and 16% of the 3rd and 4th levels, respectively. The 5th level students were contacted individually in their clinical practice areas, with a failure rate of 30%, which was mainly due to the difficulty in contacting them.

The ethical aspects of this research were ensured through review and approval by the Ethics Committee of the Faculty of Medicine. Regarding the issue of privacy, investigators decided not to reveal the name of the university to which students belonged.

Data collection: The data collection instrument consisted of questions about age, gender, religion, grade level, previous experience with death and the
perceived level of preparedness on the subject of death, plus two scales: La Escala Miedo a la Muerte (The Fear of Death Scale) of Collet-Lester, Spanish version, (12,13), comprised of four subscales of seven items each, that deal with the Fear of One’s Own Death, the Fear of One’s Own Dying Process, Fear of Death of Others, and the Fear of Dying Process of Others. The responses used a Likert-type scale, from 1 (none) to 5 (very much), thus obtaining a total score and one for each subscale. Higher scores indicated a greater fear of death or the dying process. The Trait Meta Mood Scale (TMMS-24) of Salovey and Mayer, adapted to Spanish, (14) measured emotional intelligence. It consisted of 24 items, divided into three subscales: emotional perception, emotional understanding and emotional regulation. In the subscale of emotional perception, midrange scores indicated better emotional perception, and scores in high and low ranges indicated that individuals should improve their perception; in the emotional understanding subscale, high scores indicated a better understanding and the third sub-scale aimed to evaluate the emotional regulation, where high scores indicated excellent emotional regulation. Participants were to rate each of the statements about themselves on a Likert scale of 1 to 5 points, representing their degree of agreement with each of them. The total score was obtained by summing the responses of each sub-scale, which ranged from 8 to 40 points.

Pilot study: A pilot study was conducted among nursing students from another university. This allowed us to validate the understanding of the questions and the time required to respond. Adjustments were made in the wording of questions. The questionnaire was applied again with the modifications, but this time, with another group of students, which measured the reliability and validity of the instruments. The results of the evaluation of reliability for the Fear of Death Scale in the sample of students demonstrated a good overall internal reliability (Cronbach’s α = 0.90) and it was acceptable for each of the subscales (Fear of one’s own death = 0.77, Fear of one’s own dying process = 0.82, Fear of death of others = 0.80, Fear of dying process of others = 0.73). The TMMS-24 instrument also obtained good reliability overall (Cronbach’s α = 0.88) and for each of the subscales (Perception 0.87, Understanding 0.89, Regulation 0.85).

Processing and data analysis: The SPSS program, version 15.0, was used for statistical analysis. The analysis used descriptive and inferential statistics of a correlational type (Pearson’s r) to establish the relationship between the variable fear of death and the sub-components of the emotional intelligence scale. For analysis of other variables, the Student t-test and ANOVA were applied. The value that was accepted as being statistically significant was: p < 0.05.

RESULTS

Profile of the study population
The average age of participants was 22 years (1.4 SD). The gender distribution was mostly female (77%). The majority claimed to have a religious faith (80%) and to have experienced a significant death, at the mean age of 12 years (89%). A third of students said they felt prepared to address issues related to death (37%).

Results of application of the tools
The Fear of Death Scale
The descriptive analysis of this variable reflected a distribution near the normal curve. The mean score of the fear of death in nursing students was moderate to high (c = 3.35, SD 0.64, Asim.-0, 12). What students feared least was their own death. The highest score for a subscale corresponded to the Fear of Death of Others, this was both in the overall score and for each level of study (Table 1).

Table 2. shows the descriptive aspects of the Fear of Death Scale, and differences in socio-cultural factors. Among the variables that were significantly associated with the fear of death were the level of study, gender and degree of preparation on themes of death. Regarding the level of study, the Tukey’s post-hoc test associated differences in the means of the third level students who presented greater scores of fear of death, with students in the fourth and fifth year of the career that had much lower levels. This relationship presented a coefficient of determination of 18% (η² = 0.18).

The female students had significantly higher scores (t = 2.63, df = 186, p = 0.01) in the Fear of Death Scale, than did the male students.

The degree of preparation on the themes of death was significantly associated with the fear of death (F = 4.865, df = 4, p = 0.001). Tukey’s post-hoc test associated the highest differences in means in those students who stated that they felt “not prepared to face the themes of death”, “slightly prepared” and “moderately prepared” with those who obtained lower scores for the fear of death and that stated that they felt “mostly prepared” or “well prepared”. This relationship had a low degree of explanation of 9% (η² = 0.09).

Furthermore, no significant differences were found in the means of the Fear of Death Scale, with whether or not they had a religious faith (t = 0.187, df = 183, p = 0.852), and with previous experience of a significant death (t = 1.030, df = 186, p = 0.305).

Association with Emotional Intelligence Scale
As shown in Table 3, the fear of death was correlated significantly and inversely with the emotional comprehension subscale (r -0.173 p = 0.01 r² 0.03) of
the emotional intelligence questionnaire. A similar tendency occurred with the sub-scales of the Fear of Death Scale, where a significant inverse correlation existed with three of the four sub-scales of fear: fear of one's own death \( (r = -0.176, p = 0.01, r^2 = 0.03) \), fear of the death of others \( (r = -0.147, p = 0.04, r^2 = 0.021) \) and fear of the dying process of others \( (r = -0.146, p = 0.04, r^2 = 0.021) \). This signifies that greater emotional understanding lowers fear of the close brush of death in general, such as their own death or death and dying process of others, and vice versa.

The fear of one’s own death and dying process were significantly correlated with the emotional perception subscale \( (r = 0.169, p = 0.022; r^2 = 0.028 \text{ and } r = 0.25, p = 0.005, r^2 = 0.06, \text{ respectively}) \). The positive correlation can be explained because the higher emotional intelligence scores on this subscale indicate that an individual “pays too much attention.” To pay too much attention is related to higher scores of fear of death. Likewise, there was a significant and inverse correlation between fear of the death of others \( (r = -0.155, p = 0.03, r^2 = 0.024) \), with the emotional regulation subscale. This signifies that better regulation of expressed emotion, with high scores on this subscale of emotional intelligence, is related to a lower fear of death or vice versa. However, the existence of these correlations between some components of the fear of death and emotional intelligence present a weak association, accounting for a small percentage of the variation.
DISCUSSION

The nursing students had higher levels of fear of death within the range considered to be medium-high, which coincides with the results of other studies (15,16) which showed attitudes of fear about death in young adults, especially in adolescents; possibly because young people perceive death as interference in their profession and for the developmental tasks they need to accomplish.

However, the results of this investigation demonstrate that the fear of death is primarily perceived when confronting the death and dying process of others. This is probably because nursing students are in close proximity to confront these experiences (17), perceiving them with uncertainty about the unknown; to think that you will stand before a person who is dying, brings to the surface our own fears. This was further supported by the results obtained in this investigation, where students who have had scarce practice and less preparation have levels of fear of death significantly higher than students in courses that have had more practice and more preparation. This is consistent with investigations (18,19) that queried the effect of educational courses both for nursing students and nurses on themes of preparation for death, concluding that these courses can have the action of significantly reducing death anxiety. The time dedicated to the preparation would be a factor influencing the results. This further supports the results of this investigation, where the years of education are demonstrated to be related with a decrease in the fear of death in these students. It would be desirable, for further research, to differentiate between emotional preparation, preparation for care, and how each of these areas relates to the fear of death. With respect to the same, evidence exists (8) demonstrating that the simulation type of educational methodologies regarding experiences of care at the moment of death achieved significant learning required for patient care at the end of life, significantly reducing the stress and levels of death anxiety in nursing students later.

On the other hand, it was evident in this study that females presented significantly higher levels of fear of death, confirming the trend of numerous investigations (20,21). According to one study, (20) the explanation for this finding is due to the higher emotional expressiveness in females. Also, (22) fear would correspond to an emotional expression that would depend on the social context where it manifests, observing “the rules of manifestation” of emotions. These would then be culturally specific requirements about who can express what type of emotion, to whom and when. They are socially learned norms that regulate the expression of emotions in their social context (23). This determines distinct patterns of emotional expression related to gender and probably to the profession. For this reason, it is mentioned (24) that the greater emotional attention span that the female gender has would be cemented in cultural traditions inclined towards the woman, mother, nurse, who must have more “tacit emotional attention” for the “emotional work” that relates directly to the nurse with her patients.

This investigation found no significant evidence of the relationship between fear of death and having a religious faith. However, religious beliefs appear to be a human response to the anguish provoked by the idea of death, as they offer protection against fear and provide a guarantee of transcendence. The results of different investigations are varied and generally religious faith manifests a tendency to diminish the fear of death (21). According to authors, (25) much of the contradictions that appear in research on the relationship between fear

<table>
<thead>
<tr>
<th>Variables</th>
<th>Correlation</th>
<th>Emotional perception</th>
<th>Emotional understanding</th>
<th>Emotional regulation</th>
</tr>
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<tbody>
<tr>
<td>Fear of one's own death</td>
<td>Pearson 0.086</td>
<td>-0.176 (*)</td>
<td>-0.108</td>
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<tr>
<td></td>
<td>Sig. (bilateral) 0.248</td>
<td>0.017</td>
<td>0.144</td>
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<tr>
<td>Fear of one's own dying process</td>
<td>Pearson 0.205 (**)</td>
<td>-0.085</td>
<td>-0.043</td>
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<tr>
<td></td>
<td>Sig. (bilateral) 0.005</td>
<td>0.251</td>
<td>0.562</td>
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<tr>
<td>Fear of death of others</td>
<td>Pearson 0.129</td>
<td>-0.147 (*)</td>
<td>0.155</td>
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<tr>
<td></td>
<td>Sig. (bilateral) 0.082</td>
<td>0.046</td>
<td>0.035</td>
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<tr>
<td>Fear of dying process of others</td>
<td>Pearson 0.117</td>
<td>-0.146 (*)</td>
<td>-0.039</td>
<td></td>
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<tr>
<td></td>
<td>Sig. (bilateral) 0.114</td>
<td>0.048</td>
<td>0.603</td>
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<tr>
<td>TOTAL Fear of death</td>
<td>Pearson 0.169 (*)</td>
<td>-0.173 (*)</td>
<td>-0.107</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (bilateral) 0.022</td>
<td>0.019</td>
<td>0.147</td>
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* Correlation is significant at level 0.05 (bilateral).
of death and religion could be due to methodological error, by failing to differentiate between spirituality and religiosity, understanding spirituality as a construct characterized by high levels of life satisfaction, a heightened sense of the meaning of life, belief in an afterlife that would not be subject to a religious affiliation. Confirming this, an investigation (25) found that spiritual well-being correlated negatively and significantly with death anxiety, more than the practice of religion. It therefore suggests further research to assess levels of spirituality and consider this aspect as significant for interventions that help to develop coping strategies for the fear of death among students.

Previous experience of a significant death was not associated with the fear of death. Perhaps this is because the majority had experienced a significant death in their lives. It would be desirable to find out, in future research, how self-efficacy compared to a meaningful life. It is acknowledged (18) that, although the fact of facing a significant death in life may be common to all people, it will never be the same experience confronted by each individual.

The results support the main hypothesis of this research on the relationship between fear of death with the components of emotional intelligence. In general terms, and as seen in several investigations (10,18,26,27) there is a relationship that indicates that a greater understanding of emotions and greater regulatory capacity lowers the fear of death and the fear of the dying process of others. In other words, those who understand their emotions adequately and have abilities to control them, present with better psychological adjustment, which would translate into a reduction of the mean scores for the fear of death (26).

In turn, those with higher emotional perception present a higher fear of death and the dying process of others. This high susceptibility to the perception of emotional stimuli, as has been documented in other studies, (10,27) can signify excessive focus on one’s emotions, without sufficient capacity to discriminate, which may promote the development of insecurity and anxiety (26,27).

On the other hand, an investigation (28) conducted in university students from different cultures suggested that disclosure of the lived experience, emotionally, is a strategy to overcome encountered stress. There is evidence, (8) in addition to methodologies based on simulation, that experiences and further reflection would allow significant learning of this difficult subject.

Finally, the results are supported by the theoretical model of emotional intelligence, in which appropriate emotional management helps to resolve problems and facilitate adaptation to stressful situations, such as confronting death (9).

However, limitations of this study should be considered. The first is that, although the instruments used were reliable and valid, the answers were found to be restrictive, since the respondents expressed that they did not have the opportunity to expand their responses. The second is that the results corresponded to the local context and are limited to a university in the city of Concepción, although they are consistent with other studies. The third is that the results established a relationship of the main variables; an additional study would be needed to determine their real influence.

CONCLUSIONS AND IMPLICATIONS FOR NURSING EDUCATION

This study permitted us to know that the fear of death is an emotion present in nursing students, confirming its relationship with emotional intelligence, where the highest levels of emotional intelligence are associated with less fear of death. The implications of these findings are far reaching, because this fear of death could prevent quality therapeutic interaction with patients and families dealing with the end of life process.

It is concluded that the professional education of the different levels of study permitted students to overcome the fear about death and feel more prepared. This evidence guides the necessary formation of emotional competencies that would endow prospective nursing professionals with coping skills and strategies appropriate for providing necessary care in these situations at the end of life.

Ultimately, to avoid uncomfortable emotions such as the fear of confronting death can affect the quality of care and generate negative responses in the professionals. We need a pedagogy of the process of dying and death, from an emotional perspective. This suggests implementing an online emotional education teacher in nursing for the undergraduate, which should be focused on the possibilities of educational intervention in regard to emotional management in end of life processes, through strategies for meaningful learning in this area.

Acknowledgement

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