ATTITUDES OF NURSES WORKING EMERGENCY AND INTENSIVE CARE UNITS TOWARD GOOD DEATH AND DEATH ANXIETY

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Good Death and Death Anxiety

Aim: Our study aimed to define and measure attitudes toward good death and death anxiety in nurses working at emergency service and intensive care.

Material and Method: The scope of this research involved the nurses working at emergency service and intensive care units in public hospitals and university hospitals associated with the Local Health Authority in Burdur (N=168). The sample not selected the questionnaire forms were applied to 140 volunteers nurses who agreed to participate in this study. The research data included collecting sociodemographic data of the nurses, and administering the Templer Death Anxiety Scale and the Good Death Scale.

Results: The study included 140 nurses working either at emergency services (46.4) or intensive care units (53.6) of the hospital. The total Death Anxiety score was 8.24±3.05. The inter-subscale correlations of Good Death scale subgroups were found to be statistically significant (Personal control r=0.65, p=0.001; Clinical criteria r=0.72, p=0.001; Personal control and Clinical criteria r=0.63, p=0.001) a significant relationship (but at a low level) was determined between subgroups and Death Anxiety (Death Anxiety r=0.23, p=0.006, Personal control r=0.18, p=0.037; Clinical criteria r=0.23 p=0.006). No correlation was found between the number of working years in the profession, working years in the current institution, age, monthly working hours and the sub-scales of the Death Anxiety and the Good Death scale.

Discussion: In Turkey, the concept of “good death” has not yet been clarified and yet professionals have had to approach this stressful condition and topic on their own. We believe that these professionals should be supported through guidance, mentoring, and education programs to deal with both the clinical and the humanitarian aspects of death, an inevitable constant in life.

Keywords
Death Anxiety; Hospice Care; Good Death

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Introduction
What constitutes a “good death”? The Institute of Medicine’s definition is: “Decent or good death is one that is: free from avoidable distress and suffering for patients, families, and caregivers; in general accord with patients’ and families’ wishes; and reasonably consistent with clinical, cultural, and ethical standards” [1]. Recent research has led to determining some criteria related to the concept of good death. Some of these criteria are as follows: death largely without pain, determination of treatment choices in the terminal period, conformity to religious and moral beliefs of the individual, having a life quality, believing that her/his life has come to an end, and cooperation and harmony with healthcare providers [2]. Death inevitably affects all people so it is quite important to support people in the way they desire. In Turkey in 2014, 390,121 people died and “bad” death or mortality occurred at a rate of approximately 5.1 per thousand [3]. The definitions of “good death” were categorized into core themes and subthemes, and the frequency of each theme was determined by the perspectives of the stakeholder, patient, family, and health care providers (HCPs) [2]. Good death which the palliative care workers have adopted is a kind of death in which the physical symptoms and pain of the patient is under control while preparing him/her psychologically. If these conditions are not provided for the patient, then we cannot talk about the term “good death” [4]. Many current studies have indicated that patients most prefer the treatments that focus on communication and that are compatible with their values, while doctors most prefer biomedical treatment options aligned with their values [5]. We think that making contact with the patients approaching death and giving them the support they need might help the nurses examine their own feelings related to life, illness, death, and loss and thus provide patients with better physical and psychological care: in this way the quality of behaviour and care toward patients approaching death can be improved. Working in intensive care is described as hard as it includes providing support to the patient, relieving patients from pain, relieving patients from anxiety, communicating, touching, facing death, comforting family and friends, and supporting other nursing staff [6]. In addition, doctors and nurses working in critical care frequently feel that they are powerless to alter some situations [7]. Also, clinical factors reflect the more biomedical aspects of a good death. Critical care nurses reported that they had more occupational stress, sustained greater burnout, and experienced more death anxiety than hospice nurses [8]. Therefore, in Burdur, Turkey, we aimed to determine the approach of health professionals to the concept of “good death” and the factors affecting death anxiety, defined using scales.

Material and Method
Our study is a descriptive and cross-sectional study which was planned to determine the death concept and death anxiety of nurses working at emergency service and intensive care units. The scope of the research included nurses working at emergency service and intensive care units in public hospitals and university hospitals associated with the Local Health Authority in Burdur, Turkey (N=168). Volunteers were composed of 140 nurses who agreed to participate in this study. The research was evaluated through a sociodemographic data form composed of 10 questions including personal features (gender, age, marital status, number of children, family type, education status, smoking and/or alcohol use, chronic disease condition, the work unit and number of years working, etc.) and the Templer Death Anxiety and Good Death scales. All participants met with a survey taker in a face-to-face interview. Each face-to-face interview required 25-35 minutes of the nurse’s time. The study was approved by the ethics committee of Mehmet Akif Ersoy University (dated 28.03.2014, no: 79325306-020-10818) and the required institutional permissions for the research were obtained.

Templer Death Anxiety Scale
Death anxiety was evaluated by using the Templer Death Anxiety Scale. This scale was developed by Templer in 1970 and is composed of a total of 15 questions aiming at determining death anxiety level [9]. The original form includes true/false questions. In their study, Akça and Kösü adapted it into Turkish and transformed it into a seven-point Likert type scale by utilizing other studies in the literature as examples, believing this would result in more effective measurement [10]. Also, the response spaces for the Likert type scale were reversed in negatively-worded questions to prevent the possibility of repeating the same answers and because of the tendency of the attendants to reply to questions positively. Templer identified the reliability coefficient of the scale (Kuder Richardson Formula 20) as 0.76 and product-moment correlation coefficient as 0.83. In the Turkish version, the internal consistency was Cronbach’s alpha = 0.72, test-retest was r=0.80, p<0.01 (n=127). In a better selected and better standardized sample group, an analysis of 326 persons reported a Cronbach alpha of 0.74. These data are close to both the original Templer DAS test-retest and the McMordie Likert test-retest results. In his adaptation to Polish, Donovan identified the half segmentation correlation as r=0.77 and defined that result as “a rate with a strong reliability” [11].

Good Death Scale
The evaluation was made by using the Good Death Scale which was developed in 2003 by Schwartz et al. to determine the concept and features of good death [12]. The scale includes 17 questions in total and 3 sub-dimensions. The first sub-dimension, the psycho-social spiritual sub-dimension, consists of 9 questions (4, 6, 7, 8, 9, 10, 11, 12, 13) and describes the psycho-social and spiritual sides of death. The second sub-dimension, the personal control sub-dimension, consists of three questions (15, 16, 17) and describes mental concentration, communication ability, and physical functions. The third sub-dimension, the clinical sub-dimension, consists of five questions (1, 2, 3, 5, 14) and describes the medical and clinical sides of death. Each statement in the scale were evaluated by a quartet Likert type grading system as none (1), some (2), mild (3), much (4). There were no inversely-stated expressions. The total scoring ranged between 17 and 68 [12].

The data from the research were analysed by using SPSS 17.0 for Windows. The scale values, arithmetic mean, standard deviation, and the values defined by counting were calculated as a number percent. Due to the importance of the differences be-
between the mean scores of the groups, a 2-independent sample T test was used for double-measurement values; the one-way ANOVA test was used to compare more variables in measurable life quality, and the post-hoc Tukey test was used to determine the factor causing significance. Cronbach alpha method was used to determine the consistency of scales and Pearson correlation method was used to determine the relationship between them. The results were evaluated at 95% confidence interval and at p<0.05 significance level.

Results
The study involved 140 nurses working at emergency services 65 (46.4%) and intensive care 75(53.6%) units of the hospitals. Of the participants, 121(86.4%) were women, 97(69.3%) were married, and their mean age was 32.82±7.35 (min-max=18-45). It was found that 10 (7.1%) of the nurses were working as unit responsible nurses. The nurses were working 168.74±24.05 hours per month on average. Their average number of years working in the profession was 12.33±7.56 year, and the average working years in their current institution was 6.02±5.35 year. Of the nurses 24(17.1%) had chronic diseases, 51(36.4%) were active smokers, and 19(13.6%) used alcohol. It was determined that of the 24(17.1%) of the nurses had chronic diseases, 6(25%) had respiratory tract diseases (chronic obstructive lung disease, asthma, or bronchitis), 7(29.2%) had cardiovascular diseases (hypertension, coronary failure, or valvular heart problems), 2(8.4%) had diabetes, 2(8.4%) had thyroid disease and 2 (8.4%) had central nerve system disease (Meniere disease, migraine).

The total death anxiety of nurses was measured at 8.24±3.05. The death anxiety conditions are shown in Table 1. The Cronbach alpha value of death anxiety was 0.706. In our study, the sub-group consistency of the good death scales used to determine which dimensions of death were given importance, as follows: Cronbach alpha values 0.877, Personal Control 0.909, Clinical 0.820. The opinions of nurses on good death concept and the factors increasing death anxiety have been evaluated in Table 2, while the factors affecting multiple analysis results have been evaluated in Table 3. It was observed that female nurses had more death anxiety than male nurses and those female nurses gave more importance to the closure and personal control side. It was found that smoking status increased the importance given to closure and the clinical sides of death, and education and number of children correlated with an increase in the importance given to the personal control side of death. The inter-subscale correlations were found between the mean scores of the groups, a 2-independent sample T test was used for double-measurement values; the one-way ANOVA test was used to compare more variables in measurable life quality, and the post-hoc Tukey test was used to determine the factor causing significance. Cronbach alpha method was used to determine the consistency of scales and Pearson correlation method was used to determine the relationship between them. The results were evaluated at 95% confidence interval and at p<0.05 significance level.

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### Table 1. Death anxiety conditions of nurses working at emergency services and intensive care units (Death Anxiety Scale)

| Concept of good death | Mean±SD | p
|-----------------------|---------|------
| Closure               | 3.34±0.56 | 0.025
| Personal Control      | 3.46±0.71 | 0.625
| Clinical anxiety      | 3.22±0.53 | 0.772

### Table 2. Factors affecting the concept of good death and death anxiety (univariate analysis)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| Male                    | 3.34±0.56 | 0.020
| Female                  | 3.31±0.56 | 0.025

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| At and under age 35     | 3.31±0.56 | 0.025
| Over age 35             | 3.38±0.57 | 0.143

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| Married                 | 3.34±0.59 | 0.020
| Single                  | 3.51±0.56 | 0.025

<table>
<thead>
<tr>
<th>Child</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| Yes                     | 3.39±0.57 | 0.025
| No                      | 3.22±0.53 | 0.025

<table>
<thead>
<tr>
<th>Family Type</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| Nuclear                 | 3.35±0.56 | 0.025
| Extended               | 3.09±0.56 | 0.025

<table>
<thead>
<tr>
<th>Educational Status</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| High school             | 3.31±0.55 | 0.025
| Associate degree        | 3.34±0.65 | 0.025

<table>
<thead>
<tr>
<th>Smoking</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| No                      | 3.21±0.56 | 0.025
| Quit                    | 3.48±0.49 | 0.025

<table>
<thead>
<tr>
<th>Alcohol Use</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| No                      | 3.34±0.57 | 0.025
| Yes                     | 3.30±0.54 | 0.025

<table>
<thead>
<tr>
<th>Chronic disease</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| No                      | 3.34±0.58 | 0.025
| condition              | 3.35±0.56 | 0.025

<table>
<thead>
<tr>
<th>Total</th>
<th>Mean±SD</th>
<th>p</th>
</tr>
</thead>
</table>
| 140 (100.0)             | 3.34±0.56 | 0.025
Death anxiety. In Achehan’s study, death anxiety was found to be higher in women [11]. Similarly, in studies conducted with other groups in the literature, death anxiety scores for women were found to be higher than that of men [16, 17]. In addition, some studies found that emergency nurses experienced post-traumatic stress disorder more often than their colleagues working in other departments did. The reason for this was that emergency nurses encountered sudden death of an adolescent, little child or infant quite frequently, resulting in feeling distress [18]. Actually, we are of the opinion that the departments dealing with death are frequently very stressful departments. Here in this stage, it is possible to understand the death anxiety of nurses having a child, as they are affected by stress and they feel the trauma of young and infant deaths by identifying with them, as presented in the literature. The age of nurses (higher age) and length of work experience (longer time) have always been found to be significantly positive in relation to less anxiety about death [15]. Also, training and education are important in HCPs. For example renal nurses with more experience and training in palliative care have lower death fear and more positive attitudes toward caring for dying patients [14]. And these results support our study as well. Because, the second domain, personal control, focuses on the more physical aspects of the dying experience, such as being female, increasing age, and level of education. However, contrary to the literature, it was found in our study that working time had no effect on death anxiety. Therefore, we can explain this case with the idea that personal features of those working in traumatic departments affect their responses to trauma. In fact, some research indicated that the perception of death on the part of nurses can vary depending on the department they are working for or their personal characteristics [14]. Furthermore, considering that nurses belong to a profession where frequent deaths are possible, further studies are essential in order to better understand their perception of inadequacy, and their reactions to unexpected conditions and deaths [14].

**Conclusions**

Thus, for those working in hospital departments with high mortality incidence we propose that self-consciousness against death phenomenon should be enhanced and supportive education programmes should be prepared related to dealing with death and its aftermath. Moreover, we believe that the nurses of units with high mortality incidence should be assisted through guidance and should be trained about proper ways of communicating with family and patients through the use of motivational teaching methods.

Even though the staff had enough equipment, knowledge, and skills, providing care for dying patients and fulfilling their needs, respecting their beliefs, giving information, and supporting their families remain the inevitable factors of a difficult process. Being of service during this process, it is very important for health professionals to know what issues must be coped with and how to overcome them. Personal experiences inform the approach of professionals to the dying, having both scientific and humanitarian features [19].

**Competing interests**

The authors declare that they have no competing interests.
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5. Steinhauser KE, Christakis NA, Clipp EC, McNeilly M, McIntyre L, Tulsly JA. Factors considered important at the EOL by patients, family, physicians, and other care providers. JAMA 2000;284:2476-82.

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