

How Death Anxiety Impacts Nurses' Caring for Patients at the End of Life: A Review of Literature

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Abstract: Nurses are frequently exposed to dying patients and death in the course of their work. This experience makes individuals conscious of their own mortality, often giving rise to anxiety and unease. Nurses who have a strong anxiety about death may be less comfortable providing nursing care for patients at the end of their life. This paper explores the literature on death anxiety and nurses' attitudes to determine whether fear of death impacts on nurses' caring for dying patients. Fifteen quantitative studies published between 1990 and 2012 exploring nurses' own attitudes towards death were critically reviewed. Three key themes identified were: i). nurses' level of death anxiety; ii). death anxiety and attitudes towards caring for the dying, and iii). death education was necessary for such emotional work. Based on quantitative surveys using valid instruments, results suggested that the level of death anxiety of nurses working in hospitals in general, oncology, renal, hospice care or in community services was not high. Some studies showed an inverse association between nurses' attitude towards death and their attitude towards caring for dying patients. Younger nurses consistently reported stronger fear of death and more negative attitudes towards end-of-life patient care. Nurses need to be aware of their own beliefs. Studies from several countries showed that a worksite death education program could reduce death anxiety. This offers potential for improving nurses' caring for patients at the end of their life.

Keywords: Attitudes, death anxiety, end of life care, spirituality, thanatophobia.

INTRODUCTION

Numerous studies over the last 30 years have explored death anxiety among individuals. This is a feeling of dread, anxiety or fear at the thought of death or anything to do with dying: a common fear or phobia [1]. Nurses, in the course of their clinical work are frequently exposed to the processes surrounding patient deaths. Nurses' personal attitudes towards death and dying may, however, influence the quality of care they provide during the terminal stages of a person's life. Faced with emotional issues such as the reality of deaths, nurses need skills and experience to manage such fears.

DEATH ANXIETY

Attitudes are formed as a result of a favorable or unfavorable evaluation of a person, object, or thing and are expected to change over time and with experience. The fear of death is a universal phobia experienced by humans [1], with societal preference strongly advocating the preservation of life in many fields, such as in medicine [2]. Individuals have their own attitudes towards death influenced by personal, cultural, social and philosophical belief systems that shape a person's conscious or unconscious behaviors [3]. These attitudes are attached to human emotions, which

are in turn attached to actions taken towards the object of the emotions [4] in this case, death. Exposure to the processes accompanying the death of others makes individuals conscious of their own mortality, giving rise to anxiety and unease – although how these issues are related is complex [5]. Thus 'death anxiety' may be experienced, which is described as a 'negative emotional reaction provoked by the anticipation of a state in which the self does not exist' [6] accompanied by feelings of fear or dread [7] (see Table 1). It is proposed that one reason for a degree of apprehension may be the 'unknowable'- what really happens beyond death. These emotional factors experienced by nurses may influence how a nurse cares for a patient in the terminal stages of the patient's life [8].

This paper explores the literature on death anxiety and nurses' attitudes to answer the question: Does fear of death impact on nurses' caring for patients at the end of life and if so, what steps should be taken to improve the quality of care?

METHODS

Publications were sought using electronic databases in healthcare and global search engines Google and GoogleScholar. Few studies were identified using common healthcare databases- perhaps owing to the terms used in indexing. For example a search of Ovid Medline using key search terms was unproductive with regard to nursing studies. The search terms included death anxiety; attitude to death; anxiety or fear; hospice care, death; human; patient and stress- psychological.

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Table 1. Some Definitions of Death Anxiety

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|---|---|
| Death anxiety (Tomer 1996) [6] | A negative emotional reaction provoked by the anticipation of a state in which the self does not exist. |
| Death anxiety (Farley 2010) [9] | A feeling of dread, apprehension or solicitude (anxiety) when one thinks of the process of dying, or ceasing to 'be'. |
| Fear of death (Wong <i>et al.</i> , 1994) [10]. | Specific and conscious thoughts against death. |

The main sources were PubMed and the reference lists of identified studies. Studies conducted prior to 1990 were excluded in order to maintain the currency of data. The titles of papers and the abstracts were examined and where relevant the full papers were read to select articles for review. Owing to various designs, sampling methods, levels of evidence and outcomes the results are presented as a descriptive narrative report rather than in another format such as a meta-analysis.

Outcome of Search and Data Synthesis

Fifteen studies between 1990 and 2012 that explored nurses' own attitudes towards death were included in the review. All were quantitative descriptive surveys of nurses, with three being repeated measure designs that evaluated nurses' attitudes prior to and after an educational intervention. The included studies assessed general nurses [11-15], oncology nurses [4, 16, 17], emergency or critical care nurses [12, 18], hospice or palliative care nurses [19, 20], nephrology nurses [21] and a study of multidisciplinary staff members including nurses [22]. In addition, one study of nursing students' views [23] was included because it relates to antecedents of professional nurses' views. The studies involve nurses from various continents and a broad range of countries: Canada, Iran, Israel, Japan, Spain, Turkey, UK, and USA. This suggests that evidence is now substantial across groups of registered nurses internationally.

Selection of Studies and Data Synthesis

All primary studies were included if they focused on death anxiety in the nursing profession. Data were synthesized in accordance with guidance from the Critical Skills Appraisal Programme for quantitative studies [24]. Study details were tabulated to report the design and instruments used, and to extract the results and study outcomes. Owing to variations in design and levels of evidence, no examination was made of the quality of the studies.

RESULTS

The reviewed studies and their outcomes are summarized in Table 2. The three major themes identified in the reviewed studies were: i). level of death anxiety; ii). death anxiety and attitudes towards caring for the dying, and iii). death education: necessary for emotional work.

Level of Death Anxiety

The attitudinal components underlying fear of death have been examined using a number of valid assessment scales. The Death Attitude Profile-Revised (DAP-R) measures five subscales related to death anxiety. These were: Fear of death (7 items) includes fear of death and fear of the death of significant others; (ii) Neutral (or natural) acceptance (5 items) measuring the extent to which a person accepts the reality of death in a natural manner and neither fears it, nor welcomes it. (iii) Approach acceptance (10 items) is related

to belief in an afterlife, and (iv) Escape acceptance (5 items) assesses the option of death as an alternative to a miserable life. Finally, Death avoidance (5 items) measures attempts to avoid thoughts about death as suggested by Wong, Reker, and Gesser in 1994 [10]. The score for each sub-scale is the mean score of all its items. DAP-R had adequate validity and reliability according to Wong *et al.* and Braun *et al.* (2010) except for a low alpha for neutral acceptance recorded by Braun. The scale has accumulated a substantial body of reliability and validity data.

Payne *et al.* [19] used the DAP-R to assess the death anxiety of 60 hospice and emergency nurses and although limited differences were identified between groups, concluded that hospice nurses had lower death anxiety. Attitudes of 145 oncology nurses in Israel (all of whom frequently experienced patient deaths) revealed a moderate fear of death using the DAP-R [4]. Zyga *et al.* [25] examined 44 Greek renal nurses' attitudes using DAP-R. They found nurses with specific palliative care education did not have a fear of death and had less difficulty talking about death and dying. Those in hospital palliative care or other teams had statistically significant different relationships with fear of death and neutral acceptance scores, with nursing experience and age the highest predictors of nurses' attitudes towards death [25]. Similarly, in a study of 355 inpatient and outpatient oncology nurses in USA, those with more work experience had more positive attitudes towards death [17]. In addition to these reports, data from the comparative studies exploring death anxiety versus attitudes to patient caring (listed in Table 2) showed that almost always, the age of nurses (higher age) and length of work experience (longer time) were significantly positively related to less anxiety about death. Thus, as a corollary and as suggested in a number of the studies, there was a need for further education about death and dying for *younger* nurses to lessen their anxieties.

The Templer Death Anxiety Scale (DAS) is another self-report measure of death anxiety. The DAS consists of 15 true-false items measuring death anxiety at a conscious level. Thus scores range from 1 to 2 and the total score from 0 to 15, with higher scores indicating a greater degree of death anxiety. Santisteban-Etxeburu and Mier [20] using the DAS, found that death anxiety level was moderately low (5.75; 38%) in a sample of 24 health professionals in a palliative care unit.

The use of various approaches to reporting the results in the studies and different assessment scales limits direct comparisons of death anxiety. However, results suggest that the level of death anxiety of nurses working in hospitals in general, oncology, renal and hospice care or in community services is not particularly high –generally at or below the 50th percentile on the scorecards. Nurses' level of death anxiety appeared to be mediated by nurses' older age and also length of nursing practice.

Table 2. Summary of Death Anxiety Studies and their Outcomes

| Author/Setting/ Nursing Discipline | Design/Sample & Instruments | Findings | Outcomes | Effect/Correlations |
|---|--|---|---|---|
| Black (2007) [22] Healthcare Professionals including nurses in New York state, USA | Cross-sectional survey (N=135) (nurses, doctors social workers): who managed older patients- using Death Attitude Profile- Revised (DAP-R). | Age correlated positively with fear of death, (p= .004), avoidance of death (p= .007); negatively with neutral acceptance of death (p =.001), escape acceptance of death (p=.034). Negative correlations were found between collaborating with other professionals regarding directives and fear of death, avoidance of death, and escape acceptance of death. | Death anxiety was a predictor of professionals' communication with others about advance directives. Experts in end-of-life care recommend probing the relationship between healthcare provider communication behavior and personal death attitudes. | Significant inverse relationship between 2 attitude subscales 'Avoidance' and 'Escape' and caring for dying. |
| Braun 2010 [4] Oncology nurses in Israel | Survey of nurses (N=147) using Frommelt Attitude Toward Care of the Dying Scale (FATCOD), Death Attitude Profile - Revised (DAP-R) | Nurses had moderate levels of fear of death ($\chi^2=4.11$), death avoidance ($\chi^2=2.93$), approach acceptance ($\chi^2=3.53$), & escape acceptance ($\chi^2=3.6$), with correlation of Fear of death with Death avoidance & Approach acceptance. Approach acceptance was correlated with Death avoidance & Escape acceptance. Mean FATCOD: 125.7. | Nurses' personal attitudes towards death were associated with their attitudes to caring for dying patients, with most demonstrating positive attitudes. A mediating role was found for death avoidance, suggesting some may use avoidance to cope with fear of death. Culture and religion may be key to attitudes (most were Jewish). | Significant positive relationship between 4 subscales. |
| Deffner 2005 [11] Registered nurses in USA | Correlation study- Cross sectional survey (N= 190) using Death Anxiety Scale | Regression analysis showed death anxiety level was significantly inversely related to comfort level of nurse when communicating with patients/ families regarding death (p = .000). Age, education, years of nursing, exposure to communication education for dealing with death showed negative Gamma values or R, indicating that discomfort decreases as age, education, experience, current nursing employment, work in other areas, and exposure to communication education increase. | Comfort level of the nurse during communication with patients and families is adversely affected by an increase in the nurse's own death anxiety, and positively affected by exposure to communication education. Importantly, nurses should identify their level of death anxiety/be exposed to education on communicating with patients/families regarding death. | Significant inverse relationship: comfort and attitude to death. |
| Dunn 2005 [16] Oncology and med- surg registered nurses in USA | Cross-sectional survey (N=58) using Fromelt Attitudes Towards Care of the Dying (FATCOD) and Death Attitude Profile- Revised (DAP-R) scale | Nurses who reported spending more time with dying patients had more positive attitudes. No significant association was found between nurses' attitude towards death and attitude to caring for dying patients. | Nurses were positive about caring for the dying; there was no effect of death anxiety on attitude towards caring for dying patients; some subscales were associated with demographic variables & scales. Education programs on death and dying are recommended. | Non-significant relationship death anxiety and caring for dying. |
| Ho et al. 2012 [21] Renal registered nurses in Spain | Cross sectional survey (N=202) using Frommelt Attitude Toward Care of the Dying Scale-Form B. | Nurses were managing elderly patients at end of life (EOL); they held positive attitudes towards caring for the dying, 88.9% viewed EOL care as an emotionally demanding task, 95.3% reported that addressing death issues require special skills and 92.6% reported that education on EOL care is necessary. | Further education about end of life care was recommended for Spanish renal nurses. | N/A |

(Table 2) contd.....

| Author/Setting/ Nursing Discipline | Design/Sample & Instruments | Findings | Outcomes | Effect/Correlations |
|--|--|--|--|---|
| Hutchison and Sherman 1992 [23] Student nurses in USA | Non-random trial of didactic or experiential death & dying training for students (N=74): pretest- posttest using Templer Death Anxiety Scale (DAS) | No differential effects of training technique were found. However, DAS post-test scores were significantly lower than the pre-test scores for both groups; also maintained at 8-week follow-up. | There was inconclusive evidence of the effect of training on students' level of death anxiety. Training positively impacted on students' levels of anxiety. | Anxiety was lower after training and at 8 weeks. |
| Inci 2007 [12] Oncology & ICU Nurses in Turkey (not in English) | Pretest-posttest- Surveys: Effects of death education - using Death Anxiety Scale (DAS), Death Depression Scale (DDS), & Attitude Scale Euthanasia, Death and Dying Patients (EDDP). | DAS and DDS scores decreased significantly ($p < .05$) after training; Non significant change in EDDP ($p > 0.05$). No effect of death education by age, years of work, how they were affected by terminal patient nursing or the meaning attributed to death. | There was a positive effect on nurses' death anxiety after death and dying training over 7 sessions, however there was no impact of nurses' age, years working or how they reported being affected. | Anxiety was lower after training. |
| Iranmanesh <i>et al.</i> 2008 [13] Hospital general and oncology nurses in Iran | Cross sectional survey of nurses (N=114) using translated Death Attitude Profile-Revised (DAP-R) and Frommelt's Attitude towards Caring for Dying Patients (FATCOD) | Fear of death was negatively ($r = -.199$) correlated with attitude toward giving care to the dying. Neutral to moderately positive attitude toward caring for dying (FATCOD mean 3.55/15). Most were likely to give care and emotional support to persons at the end of life whilst taking an authoritative approach. | Lack of education and experience, as well as cultural and professional limitations, may have contributed to the negative attitude toward some aspects of the care for people who are dying among the nurses surveyed. | Significant inverse and also positive relationships between attitude to death and caring for dying. |
| Lange, Thom and Kline 2008 [17] Inpatient & outpatient oncology nurses in USA | Cross-sectional survey (n=355) using FATCOD & DAP-R instruments. | Statistically significant relationships were found among age, nursing experience, previous experience with caring for the terminally ill, and scores on FATCOD and DAP-R. Nursing experience and age were the variables most likely to predict nurses' attitudes toward death and caring for dying patients. | RNs with more work experience tended to have more positive attitudes toward death and caring for dying patients. Less experienced oncology nurses will benefit from increased education, training, and exposure to providing and coping effectively with end-of-life care. | Significant inverse relationship: attitude to death and caring for dying. |
| Matsui & Braun 2010 [14] Hospital adult and childrens' nurses caring for terminal patients in Japan | Pretest- posttest survey (N=190 RNs;176 care workers): using Death Attitude Profile (DAP), Japanese version, and Attitude Scale about Euthanasia, Death, and Dying Patient. | After 7x 90min sessions of nurse education on death and dying- multiple regression showed better attitudes toward caring for the dying were positively associated with seminar attendance and negatively associated with fear of death. There was no difference between RNs and care workers' responses. | Attitudes (measured by FATCOD) were not correlated with job certification or work setting but with death attitudes and seminar attendance. Staff education is important for maintaining and improving standards in end-of-life care in institutional settings. | Significant inverse relationship: attitude to death and caring for dying. |
| Myashita <i>et al.</i> 2007 [15] Hospital general nurses in Japan | Cross-sectional survey (n=178) using FATCOD & Death Attitude Inventory (DAI). (Japanese versions) & Pankratz Nursing Questionnaire. | Multivariate linear regression identified various subscales that were related to caring; Death anxiety domain, DAI ($r = -.17, P = .02$), death relief ($r = -.19, P = .012$), death avoidance ($r = .33, P = .001$), and life purpose ($r = .38, P = .001$) were significantly correlated with DAI (positive attitude toward caring for the dying). | Most participants had a positive attitude toward caring for the dying patient and recognized the need for patient- and family-centered care. Educational and administrative efforts to strengthen nursing autonomy are necessary. | Significant inverse & positive relationships for attitude to death and caring for dying. |
| Payne <i>et al.</i> 1998 [19] Hospice and emergency nurses in England | Mixed methods: survey (N=60) using Death Attitude Profile-Revised Questionnaire & semi-structured interview. | Hospice nurses had lower death anxiety, as shown by 8 of 32 items with significantly more positive responses than emergency nurses. Subscale differences were not reported. | Limited differences were shown between disciplines. Between groups- hospice nurses appeared to have low death anxiety despite frequent exposure to deaths. | Significant difference by demographics. |

(Table 2) contd.....

| Author/Setting/ Nursing Discipline | Design/Sample & Instruments | Findings | Outcomes | Effect/Correlations |
|---|---|--|---|--|
| Rooda 1999 [3] Metropolitan private hospital nurses and visiting nurses (USA) | Cross-sectional survey (N=403) using Frommelt Attitude Toward Care of the Dying Scale, and Death Attitude Profile-Revised (DAP-R), | DAP-R scores were related to sex, religious affiliation, and current contact with terminally ill patients. FATCOD scores (e.g., showing acceptance of death) were positively related to current contact with dying patients, negatively correlated with two DAP-R subscales (Fear of Death and Death Avoidance), and positively correlated with two other DAP-R subscales (Approach Acceptance and Neutral Acceptance). | Nurses' attitudes toward death and their current contact with terminally ill patients were predictive of their attitudes toward caring for terminally ill patients. | Significant inverse relationship: 2 subscales of DAP-R and between attitude to death and caring for dying. |
| Santisteban 2006 [20] Various practitioners in palliative care unit in Spain | Cross-sectional survey (N=24) using Templer's DAS and Maslach's MBI | Average death anxiety was 5.75. Nurses scored highest on depersonalization. Factors related to team relationships were most stressing. Assistant nurses hardly ever sought family or colleague support to discuss work-related topics. | Average death anxiety was 5.75, similar to other studies, but this figure varies depending on the presence of spiritual beliefs or otherwise. Differences in MBI variables were seen between professions. | Mean death anxiety 5.75.- context not reported. |
| Zyga 2012 [25] Renal nurses including palliative- trained- in Greece | Descriptive quantitative survey (N=49) using Death Attitude Profile-Revised (DAP-R) | Nursing experience and age predicted nurses' attitudes towards death. Nurses with specific education on palliative care had less difficulty talking about death and dying and did not have a fear of death. | Hospital-based teams (palliative care, supportive care or symptom assessment teams) had statistically significant different relationships with fear of death and neutral acceptance scores. | Significant difference by demographics. |

Death Anxiety and Attitudes Towards Caring for the Dying

Six studies of nurses' death anxiety conducted comparative surveys about attitude to caring for dying patients [3, 4, 13, 14, 16, 17]. The Frommelt Attitude Towards Care of the Dying Scale (FATCOD) is a 30-item scale that measures nurses' attitudes to caring for the dying and their families using an equal number of positive and negative items (Frommelt, 1991). Scores are based on a scale of 1-5 (maximum score 150). It has high reliability and validity according to Frommelt (1991) and had adequate reliability in a study of oncology nurses by Braun *et al.* in 2010 (Cronbach alpha: .89) [4].

In Israel, Braun [4] investigated the attitudes of 145 oncology nurses using the FATCOD and DAP-R scales. The nurses (all of whom frequently experienced patient deaths) had positive attitudes towards caring for the dying (FATCOD mean: 125.7)(84%), and their attitudes' towards death were significantly associated with their attitudes to caring for dying patients. Similarly, in Iran [13], attitudes of 114 hospital general and oncology nurses were found to be neutral to moderately positive toward giving care to the dying (mean FATCOD score 3.55/5; 71%). Although Fear of Death was negatively correlated ($r = -.199$) with attitude toward caring for the dying, most nurses were likely to give care and emotional support to persons at the end of life, with religion a strong mediator. For example, 'most nurses' accepted death as a natural part of life and as a 'gateway' to the afterlife.

In Japan, Miyashita *et al.* [15] surveyed 178 hospital nurses (who had all cared for a terminal patient) using FATCOD- form B (Japanese version) and the Death Attitude Inventory (DAI). Nurses showed positive attitudes towards caring for the dying and had a mean score of 16/28 (57%) on the death anxiety subscale of DAI. Also in Japan, Matsui and Braun [14] surveyed 190 RNs and 177 care workers in convalescent homes and aged care homes and found the FATCOD score (mean 107; 71%) was negatively associated with fear of death and escape acceptance (i.e., those with better attitudes to end of life care had less fear of death and were less accepting of death as a means of escape) on the DAP Japanese version. Of note, care workers had less experience of death and dying than RNs in the sample.

Earlier, Rooda [3] surveyed 403 hospital and community nurses in USA and found FATCOD scores (e.g., showing acceptance of death) were positively related to current contact with dying patients and with two DAP-R subscales (Approach Acceptance and Neutral Acceptance), and negatively correlated with two DAP-R subscales (Fear of Death and Death Avoidance). Also in USA, Dunn surveyed 58 oncology and medical-surgical nurses, finding that the nurses had positive attitudes towards caring for dying patients (FATCOD mean; 130.7/150: 87%), were not hesitant in developing relationships with dying patients and felt that educating and preparing patients for death were important. Of note, there was no difference in attitudes between oncology and other nurses. Deffner and Bell [11] also in USA investigated the comfort level (attitude) of 190 registered nurses about communicating with patients about death. They reported a statistically significant inverse relationship of comfort level of the nurse when

communicating with patients and families regarding death ($p = .000$). They concluded that individuals who are generally more anxious about life (or death) events find it less comfortable to talk with patients and families about death than others who are less anxious.

In summary (and as shown in Table 2, column 5) most of the comparative studies identified significant associations between FATCOD and some of the subscales that measured death anxiety (whether these were negative or positive). Whilst all studies were based on convenience samples and all were self-reported surveys, the use of sufficiently large cohorts (most $N = >100$; range 28 to 403) and validated instruments lent weight to the reliability of the findings. Some evidence showed an inverse association between nurses' attitude towards death and their attitude towards caring for dying patients, showing that nurses who were more anxious about death had a less positive attitude towards caring for the dying. This appears to be a complex relationship mediated by factors such as nurses' age, length of nursing work experience, level of education in death and dying, their culture and also religion. Some factors noted to be absent were assessment of cross-cultural beliefs and the views of male nurses (who were under-represented in studies).

Death Education: Necessary for Emotional Work

Nursing is emotional work because nurses' own emotions become involved when they experience feelings towards their patient [26]. Furthermore, in addition to clinical nursing skills, end of life care involves skills in dealing with both the patient and a grieving family. It demands emotional maturity from nurses [27]. Some nurses in this role use strategies to avoid discussing with patients their emotional issues or concerns, thus maintaining an emotional distance [28]. For example, Iranian nurses were likely to give nursing care and emotional support to dying patients, but were not likely to discuss death and would not tell patients the honest truth about their condition [13]. The studies above showed this could be attributed to the nurses' personal death anxiety as a limiting factor in their comportment or way in which they conducted care. Deffner and Bell [11] related this to emergency nurses' level of 'comfort' in caring for the dying; when in discomfort, nurses may avoid such contact. For example, a nurse may request not to be allocated to care for a dying child, which was regarded as one of the most stressful situations nurses may have to cope with [29]. These examples fit with the notion that anxiety caused by an anticipated threat to wellbeing initiates avoidance behavior as a technique that humans employ to reduce an impending threat [30]. Escape (the 'flight' response) or avoidance (pre-flight response) allows individuals to distance themselves from the perceived threat [31]. Whether nurses are aware of it or not, these emotional factors may ultimately negatively influence a nurses' clinical skills performance.

Reviewed studies advanced the idea that nurses should receive death and dying education based on evidence that younger nurses reported higher levels of anxiety about death and held more negative attitudes towards caring for the dying [17, 25]. Three studies explored such teaching programs regarding death education [12, 14, 23].

In Turkey, Inci [12] conducted repeated surveys prior to and after 90-minute teaching sessions for nurses over 7 weeks for staff of an oncology and children's hospital. At the end of the education, death anxiety and death depression decreased significantly ($p < 0.05$) according to DAS. However, it should be noted there was no impact of nurses' age, years working or how they reported being affected.

In Japan, Matsui and Braun [14] applied multiple regression analysis to demonstrate that more positive attitudes of 190 RNs and 177 care workers in aged care homes were positively associated with seminar attendance on end of life care and negatively associated with fear of death. Similarly, renal nurses in Greece who had specific education on palliative care had less difficulty talking about death and dying and did not have a fear of death [25].

Nursing students are the registered nurses of the future and therefore their beliefs are informative. Hutchison and Sherman [23] showed that 83 North American nursing students' fear of death was significantly less after participation in a 6-hour workshop on death and dying (DAS mean initial: 6.79, post: 5.82; $P = < .05$) with results that were maintained after 8 weeks. The above results indicate that education on death and dying has potential to remediate nursing student and RN fears about death. Such interventions may ultimately translate into better quality of nursing care for patients at the end of life.

DISCUSSION

The care of dying patients presents ethical challenges for nurses, contradicting the medical mandate which is strongly focused on restoring patients to health [2]. In particular, the primary work of critical care, intensive care and emergency doctors and nurses is to rescue patients from medical crises. It is also complicated by the clinical environments in these areas that are designed to allow for intervention and observation, are rarely private for the patient or their family and are always in high demand. Thus, time for caring is limited. There is also a real conflict for nurses who have the competing demands of caring for a dying patient along with an acute or "rescuable" patient group. This conundrum was also a conflict for cancer nurses [32].

It was unsurprising, then, that some nurses facing the prospect of a patient dying felt anxious and were uncertain how to cope with the procedures that surround death. A number of studies reported inverse statistically significant correlations between staff attitudes to death and intention to discuss death and dying. Depending on a nurses' orientation to fear of death, nurses who held higher anxiety scores on fear of death were less likely to have a positive attitude towards caring for a patient at the end of life. There was evidence that short courses in death education could reduce the death anxiety of registered nurses [14, 25] with likely subsequent improvement in nurses' coping with death and dying. Hutchison and Sherman's work [23] with student nurses also showed positive results after participation in a 6 hour workshop on death and dying. Thus, there are opportunities to improve education for nurses at both undergraduate level and post-registration, through continuing education. It would also be important to evaluate the depth of death education provided at undergraduate level. A planned system of mentoring for younger, inexperienced

nurses in the workplace could provide further support for nurses.

The emotional work of nurses is especially important in forming a therapeutic relationship with a patient, but this carries the risk of stress and burnout [33]. In end of life care, palliative and hospice nurses rated stress induced by the workplace environment and work pressures more highly than experiences of frequent deaths [34]. In this field nurses also need to deal with the expectation that the nurse-patient relationship is about to be severed [27]. Nurses in Spain viewed caring for patients at the end of life as emotionally demanding work [21]. Given any nurses' strong beliefs and attitudes to dying, nurses may have developed negative attitudes towards caring and might apply protective coping mechanisms by distancing themselves from death or practising death avoidance behaviors. However, an additional study of intensive care nurses showed positive attitudes towards caring for the dying characterized as 'doing one's utmost' to provide dignified end of life care, the main relationships being with the patient's relatives [35]. McClement [36] when reporting on experienced intensive care nurses described the care of the dying as enhancing nurses' personal growth.

That younger nurses in the reviewed studies consistently reported stronger fear of death and more negative attitudes towards caring at end of life in the current review concurred with the findings of other studies [7, 37]. Younger nurses may not be experienced nurses and may not be well skilled in dealing with emotional work [26]. Erikson and Grove [26] described why nurses' emotions matter and constructed how this is manifested:

'When emotion management is part of what it takes to perform a job effectively (as it is in nursing), the task is referred to as "emotional labor". Nurses may use 'surface acting' or 'deep acting' to manage emotion. 'For example, nurses may manage their emotions in interactions with others by covering up (surface acting), pretending to have unfelt emotions (surface acting), and making an effort to actually feel emotions that were expected at work (deep acting). Successfully suppressing and evoking emotions can be experienced as stressful.' (p: conclusion)

These authors reported a study of stress in 829 urban acute care nurses' in USA using valid assessment scales [26]. Nurses <30 years of age were significantly more likely to experience higher rates of intense feelings of frustration, anger and irritation (agitation) than those over 30. Nurses aged <30 reported a mean level of agitation of 11.22 compared to a mean of 8.80 for nurses over 30 ($t = -4.16$, $df = 827$, $p < .001$). No significant differences were found between the age groups for positive emotional experiences (such as happiness or pride), although these were experienced by all nurses. Stressful environments and the experience of unpredictable circumstances were among the antecedents of death anxiety according to Lehto [1]. Overall, these results suggest that younger nurses are more at risk of negative attitudes to end of life care.

In line with previous research [5] both cultural background and the depth of a nurses' belief in a higher being (a God) appeared to influence beliefs about death and dying. There were differences in fear of death attitude scores between nurses in western countries such as USA and Middle Eastern or Asian studies, with nurses in USA and in Israel reporting low anxiety on fear of death and higher attitude towards caring for the dying (87% and 84% positive scores on FATCOD respectively). This was in contrast to nurses in Japan whose mean score was 57%. Nurses in Turkey and in Iran rated their attitudes in between these scores. Nurses with high scores on intention to care for dying patients in Israel were mostly of the Jewish religion, with religiosity perhaps impacting on their approach to caring for the dying should they believe in a higher order being. Supporting this were findings from Iran where most nurses were positive about caring for the dying (FATCOD mean 71%) and showed commitment to religious beliefs, with 80% reporting daily prayer and 82% reported they always experienced God in their daily life [13]. Those who viewed death as a gateway to the afterlife or who viewed death as a 'natural part of life' had higher scores on caring. The authors stated that Iranians were very familiar with death owing to recent war and natural disasters in that country. The above results suggest particular cultural environments and religiosity influence nurses' attitudes to death, such that each nursing culture needs to be understood independently. Irish [38] described the differences between ethnic cultures owing to the various meanings given to death and perceptions of death and mourning, such that within their therapeutic relationship nurses should be aware of their patients' culture and when death is said to occur.

Some limitations to this review are recognized. Attitudes to death are complex human phenomena and not all the factors that influence these beliefs may be captured by the measurement instruments that were used. As the DAP-R measure was developed in USA, it might not function well cross-culturally. Further, self-reports such as in these studies have potential for bias: social desirability was a possible confounder, as suggested by Martin [39] saying that for hospital nurses, the admission of anxiety concerning death is more socially acceptable than denial. The studies were quasi-experimental with non-random samples and most comprised >80% of females. The larger cohorts were likely to be adequately powered to detect differences between groups. However the current review identifies further issues and raises important questions that should be answered about nurses' skill levels.

CONCLUSION

Nursing care of the dying is a particularly demanding role that requires nursing skill and also necessitates nurses to have insight into their personal beliefs about death and dying. Nurses who had a more positive attitude towards death were more likely to have a positive attitude towards providing end of life care for patients. Nurses need to consider their own race and spiritual beliefs (as well as those of the dying patient) because these may affect their objectivity in caring for a patient and the end of their life. Regardless of the cultural settings in which nurses work (or their continent) younger nurses under age 30, with less ability to cope with negative attitudes and the demands of

emotional work would benefit from death education in the workplace.

CONFLICT OF INTEREST

The authors confirm that this article content has no conflicts of interest.

ACKNOWLEDGMENTS

Declared none.

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Received: October 8, 2012

Revised: November 26, 2012

Accepted: November 27, 2012

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