Student nurses' experience of, and attitudes toward care of the dying: a cross sectional study

Abstract

Background

Nurses are the professional group with the greatest contact with those at the end of life and their attitudes toward the care of the dying is important in care delivery.

Aim

We investigated the relationship between student nurses' attitudes towards care of the dying and (i) demographics, (ii) course factors, and (iii) experience of caring for people who are dying.

Design

A cross sectional survey using the Frommelt Attitude Toward Care of the Dying (FATCOD) scale to measure respondents' attitudes.

Setting/participants

Nursing students studying at a university in the United Kingdom.

Results

A total of 567 completed questionnaires were returned, with 91.9% of respondents being classed as having a positive attitude toward care of the dying (FACTCOD score ≥65). In adjusted analysis, higher (more positive) FATCOD scores were associated with time on course and experience of caring for the dying. Third year students had a score of 2.18 points greater than those in their first year (95% CI 0.36 to 4.01, p=0.017). The adjusted differences in scores were 2.22 points greater for those who had prepared a dead body (95% CI 0.57 to 3.87, p=0.008), 2.95

points greater for those who had cared for a dying patient (95% CI 1.09 to 4.08 p=0.002), and 2.03 points greater for those who had cared for a dying relative or friend (95% CI 0.69 to 3.37, p=0.003).

Conclusion

Length of time in education and practical experience of caring for dying individuals are independently associated with positive attitudes towards care of the dying among student nurses.

Keywords

Palliative care, Nursing students, Education, Life experiences, Cross-sectional study

What is already known about the topic?

- The need for adequately prepared nurses to provide palliative care is increasing
- The relative influence of education and experience on attitudes towards care of the dying is not known

What this paper adds?

- Experience with dying patients was positively and independently associated with attitudes towards end-of-life care
- Those at a later stage in their course of study had greater positive attitudes towards end-of-life care
- Student nurses desire further education in palliative care

Implications for practice, theory or policy

- Student nurse exposure to both practical experience of, and formal education in, care of the dying is important if the future nursing workforce is to be adequately equipped to provide care to dying patients.
- An increase in palliative care related content is likely to be welcomed by undergraduate student nurses.

Background

With an ageing population and greater prevalence of long-term conditions,[1, 2] there is an increasing need for palliative care. The supply of the workforce to meet this demand is also affected by demographic changes with an ageing healthcare workforce,[3] and a nursing shortage that affects developed and developing countries alike.[4] Nurses play a key and substantial role in the delivery of palliative care and need to be adequately prepared for a role that is simultaneously growing and changing, now encompassing conditions beyond cancer, open discussions and set plans of care, and considered a generalist rather than a specialist skill. [5-8]

In England, the End of Life Care Strategy included calls for improvements in quality care for dying patients and better and more widespread training in end-of-life care for healthcare providers.[9] A gap in the training needs and training provision for those delivering care at the end of life has been noted.[10] The knowledge and skills of health professionals are associated with the quality of palliative care delivered.[11, 12] Many pre-registration nurses do not experience caring for the dying until after qualifying,[13] with approximately 40% of first year student nurses having no direct contact with dying individuals.[14] Clinical experience of, and exposure to, dying patients has been seen to increase positive attitudes towards care of the dying.[15-17] This may be due, in part, to the development of coping strategies.[18] It is argued that the limited experience gained by some student nurses may result in a negative

attitude, as students are not compelled by their situation to think about death and resolve any fears that they may have.[19]

There is some qualitative evidence that care providers' attitudes can affect the care provided, especially in care of the dying.[20] This could be due to an affective component of a person's attitude whereby if they dislike a certain task or section of care, this component will lead to them avoiding it.[17] Although nursing students may feel anxious and unprepared to work with dying people.[21] it is argued that a person's attitude towards a topic can be created or changed through contact and knowledge of the area.[5]

A greater affirmative attitude towards care of the dying has been found among female nursing students compared with their male counterparts.[22] There is conflicting evidence as to the association with age and attitudes. Older nurses may have greater acceptance of death as an escape from suffering and pain.[18] Others have found that nurses aged over 40 years have greater tendency to avoid thinking about death.[17] We conducted a cross-sectional study of student nurses to measure their attitudes towards care of the dying and to test for associations with demographics, course-related factors and reported experiences of caring for the dying.

Methods

Study design

A cross sectional survey of student nurses using a self-completion questionnaire.

Participants and setting

The respondents recruited were nursing students studying at a University in the Midlands of the United Kingdom where around 10 hours of specific palliative care education is concentrated in the second half of their training programme. All undergraduate nursing courses within the UK are required to equally divide the timetable between lectures and clinical practice although there are no specific requirements with regard to time spent studying palliative or end-of life care.[23] As the focus of the study was care of the dying, where patients are typically (though not exclusively) older in age, the study sample was restricted to those studying adult nursing or in the common foundation programme prior to a field of nursing being chosen.

Sampling and approach

To ensure a sufficient sample size to produce precise estimates, all students of the different years of study were approached. Signed consent was not acquired from respondents so as to ensure anonymity. Consent was assumed through completion of the questionnaire. Liaison with course representatives and individual lecturers allowed for dates and times of lectures to be compiled. Student nurses were then approached at the end of these lectures. The purpose of this study was explained to them in a group setting and questionnaires were handed out for completion in the respondents' own time. Respondents were told about a drop box for them to return

their completed questionnaires. However, with the express permission of the lecturer, the students were given the option of completing their questionnaires there and then and these were then collected when everyone appeared to be finished and had left the lecture theatre or classroom. This process was to limit the risk of disruption to lectures. The details of each student group, such as year of study, were noted along with the date to allow for assessment of response by year and specific class.

Questionnaire

The questionnaire produced was an A4 black and white booklet consisting of three sections spread over four pages. On the first page of the booklet an introductory paragraph informed students of what the questionnaire included and who to contact for further information. The first set of questions captured demographic data of the respondent such as gender and age.

The middle of the booklet contained an attitude scale. To measure attitudes towards care of the dying, Frommelt's Attitude Toward Care of the Dying (FATCOD) scale was used[24]. This scale uses 30 statements to measure both the respondent's attitude towards a dying patient and toward a dying patient's family. There are an equal number of positive (e.g. 'Giving care to the dying person is a worthwhile experience') and negative (e.g. 'I would hope the person I am caring for dies when I am not present') statements. Each statement is rated on a five-point Likert scale. Negative statements have reversed scoring. An overall score is then calculated and

transposed to a percentage scale of 0 to 100 with a score of greater than 65% of the total possible indicating a positive attitude toward care of the dying. A negative attitude is indicated by a score of less than 50% of the total.[17] Validity and reliability of the FATCOD scale has been tested extensively.[19, 24, 25] The FATCOD scale has been found to have a reliability coefficient ranging from 0.85 to 0.94 and a content validity of 1.00.[26]

Three closed questions with binary yes/no responses asked: "Have you ever been involved in the preparation of a deceased person's body (washing and shrouding)?"; "Have you ever cared for a dying patient"; and "Have you ever cared for a dying member of your family or a close friend?". To ascertain views on the need for more education respondents were asked "In which of the following areas do you feel more education, (in relation to palliative care) is needed on your course?" and were able to select an unlimited number from a list of options (pain management, ethics, achieving quality care, symptom management, cultural diversity, communication, grief and bereavement, loss, final hours of death, all of the above, none of the above).

Analysis

All data was inputted into and managed using SPSS software version 17. Frequencies were used to describe the sample in terms of demographics and course-related factors. To test whether FATCOD scores varied according to gender, age or stage of study, unpaired T-tests were used for binary variables and F-tests

from analysis of variance were used for non-binary categorical variables. To test whether FATCOD scores varied according to each of the three binary variables relating to experience, unpaired T-tests were used. Adjusted mean differences were estimated using a multiple regression model with FATCOD score as the dependent variables and all other variables as covariates. Variance inflation factors were estimated to check for multicollinearity.[27]

Ethics approval was gained from the University of Nottingham's Medical School Ethics Committee (Ethics reference number D26062012SNMP 20/8/2012). Data was collected between October and December 2012.

Findings

Questionnaires were distributed at nine lectures. Lectures were chosen to maximise the number of students sampled from all branches of their programme and to avoid overlap. Of the 628 questionnaires distributed, a total of 567 were completed and returned, a response of 90.3%. Of these 513 (90.5%) were female and the majority were aged 21 years or less (N=337, 59.4%). As year one students were taught together and not divided into their chosen branch, 300 completed questionnaires were from year one students (52.9%), with 88 (15.5%) and 179 (31.6%) questionnaires from undergraduate nurses in their second and third/fourth year of their programme respectively. Most of the respondents were studying adult nursing (N=435, 77.0%).

Table 1: Description of the sample in terms of demographics and course related factors (N=567)

Demographics and course-related factors		N (%)
Gender:	Male	54 (9.5)
	Female	513 (90.5)
Age:	21 or under	337 (59.4)
	22-25	93 (16.4)
	26-35	84 (14.8)
	36-50	53 (9.3)
Year:	One	300 (52.9)
	Two	88 (15.5)
	Three/Four	179 (31.6)
Branch:	Adult	435 (77.0)
	Child	54 (9.6)
	Mental Health	62 (11.0)
	Learning Disability	14 (2.5)
	Missing	2

The mean FATCOD score was 75.9 points (SD=8.20). The majority of respondents (N=521, 91.9%) were considered to have a positive attitude, as defined by as score above the cut off of 65% of the total score possible.[17] In unadjusted analysis, higher FATCOD scores were associated with being in an older age group ($p<0.001$), being in the third year of study ($p<0.001$), and studying within the adult branch of a nursing programme ($p<0.001$) (see Table 2). There were also unadjusted associations between higher FATCOD scores and having prepared a dead body ($p=0.003$), cared for a dying patient ($p<0.001$) and having cared for a dying relative or friend ($p<0.003$).

Table 2: The difference in FATCOD score means between Gender, Age, Year of study, Branch and reported respondent experiences with palliative care – Unadjusted and adjusted scores

		FATCOD Mean (SD)	Unadjusted mean difference (95% CI)	Unadjusted P Value	Adjusted mean difference (95% CI)[3]	Adjusted P Value[4]
Gender	Male	77.5 (9.12)	Reference category	0.088[1]	Reference category	0.749
	Female	75.7 (8.08)	1.81 (-0.49 to 4.11)		-0.36 (-2.56 to 1.84)	
Age	21 or under	74.8 (7.45)	Reference category	<0.001[2]	Reference category	0.143
	22-25	78.3 (8.27)	3.53 (1.68 to 5.39)		1.08 (-0.80 to 2.96)	
	26-35	77.6 (8.43)	2.8 (0.90 to 4.77)		1.47 (-0.45 to 3.39)	
	Over 35	75.2 (10.7)	0.4 (-1.94 to 2.75)		-1.24 (-3.55 to 1.64)	
Year	One	74.1 (7.70)	Reference category	<0.001[2]	Reference category	0.017
	Two	75.4 (7.02)	1.32 (-0.56 to 3.20)		-0.43 (-2.50 to 1.64)	
	Three+	79.1 (8.59)	5.01 (3.55 to 6.48)		2.18 (0.36 to 4.01)	
Branch	Adult	76.2 (8.23)	Reference category	<0.001[2]	Reference category	0.503
	Child	73.8 (6.59)	-2.40 (-4.72 to -0.08)		1.13 (-1.19 to 3.44)	
	Mental Health	75.4 (9.34)	-0.84 (-3.03 to 1.34)		0.37 (-1.85 to 2.60)	
	Learning Disability	74.6 (6.86)	-1.56 (-5.93 to 2.80)		2.82 (-1.54 to 7.18)	
Prepared a body	No	73.8 (7.27)	Reference category	0.003[1]	Reference category	0.008
	Yes	78.6 (8.50)	4.87 (3.56 to 6.18)		2.22 (0.57 to 3.87)	
Cared for a dying patient	No	72.4 (7.49)	Reference category	<0.001[1]	Reference category	0.002
	Yes	77.7 (8.00)	5.22 (3.85 to 6.60)		2.95 (1.09 to 4.08)	
Cared for a dying relative or friend	No	74.8 (8.11)	Reference category	<0.001[1]	Reference category	0.003
	Yes	77.7 (8.05)	2.83 (1.46 to 4.21)		2.03 (0.69 to 3.37)	

1 P values based on upaired t-tests.

2. P values based on anova F-test.

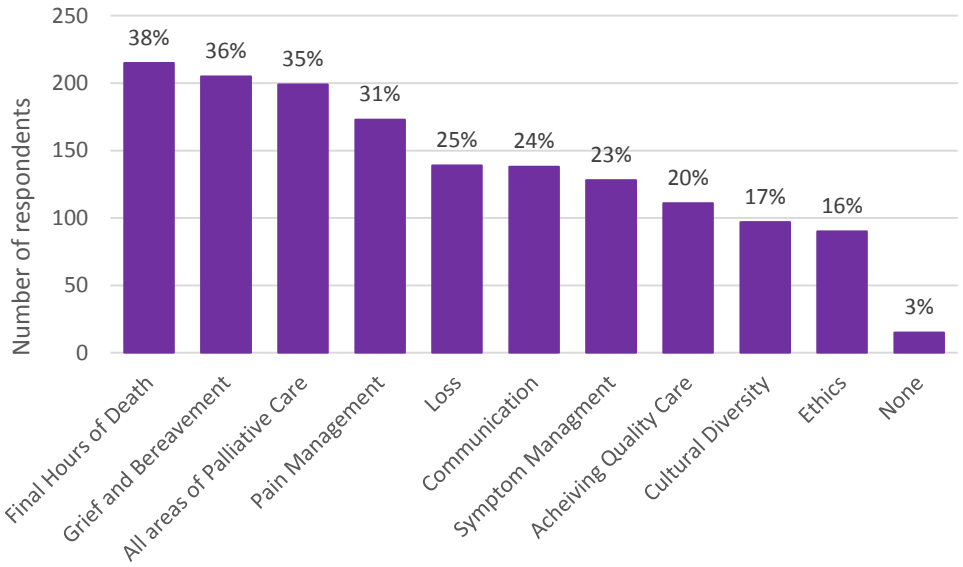
3. Estimated from a multiple linear regression model with FATCOD score as the dependent variable, and all other factors as covariates. Adjusted mean differences represent the beta coefficients. Mean variance inflation factor=1.31; R-squared=0.155.

4. P values based on likelihood ratio tests.

CI = confidence interval.

In adjusted analysis, higher FATCOD scores were associated with length of time on the programme and experience of caring for the dead and dying. After adjustment, those in the third and fourth year of study had a FATCOD score of 2.18 points higher than those in their first year (95% CI 0.36 to 4.01 p=0.017). The adjusted differences in scores were 2.22 points higher for those who had prepared a dead body compared with those who had not (95% CI 0.57 to 3.87, p=0.008), 2.95 points higher for those who had cared for a dying patient (95% CI 1.09 to 4.08 p=0.002), and 2.03 points higher for those who had cared for a dying relative or friend (95% CI 0.69 to 3.37, p=0.003).

Figure 1: Areas within palliative care where respondents reported a wish for more education (n=567)[1]



1 Responses in answer to the question 'In which of the following areas do you feel more education (in relation to palliative care) is needed on your course'. With 11 response categories.

Figure 1 shows the number of respondents who expressed interest in receiving more palliative care education in particular areas. The area selected by the most number of participants (N=215, 37.9%) was the final hours of death, followed by education in grief and bereavement (N=205, 36.2%). However over a third expressed a need for more education in all areas of palliative care (N=199, 35.1%) and only 15 (2.7 %) wanted no further education in palliative care.

Discussion

In this sample of student nurses studying at a large nursing school in the United Kingdom, attitudes toward caring for the dying were predominantly positive. If using previously reported cutpoints to define a positive attitude (as opposed to fair or negative),[17] then more than nine in every 10 respondents fell within this category. After adjustment for potential confounders, being at a later point in their course of study, and having experience of death and dying were independently associated with more positive attitudes. The overwhelming majority of the sample reported a need for further education within palliative and end-of-life care. The areas of particular concern for student nurses were the final hours of death, grief and bereavement, and pain management.

The mean FATCOD score as a percentage of the total score in the present study was 76. This is consistent with other studies of undergraduate healthcare students [22] but lower than surveys of registered nurses, where mean attitude scores ranged

between 84% and 87%.[19, 25, 26] It is perhaps unsurprising that attitudes become more positive as student nurses transition to registered nurses and is consistent with our finding of more positive attitudes being associated with greater experience. However the difference is relatively modest.

Within a sample predominantly female, reflecting the wider population of nurses, we did not find any association between gender and attitudes toward care of the dying, a finding consistent with other studies.[22, 28] For student nurses, being older was associated with more positive outcomes but not after adjusting for factors, noticeably time on their course and previous experience of caring for the dying. In a previous study, younger age was found to be a predictor of greater improvement in attitude after an end of life education intervention,[28] perhaps suggesting a lower baseline among younger students. Where older nurses were found to have more positive attitudes, [19] there was no adjustment for level of experience.

We found that those at a later stage of their undergraduate programme had more positive attitudes toward care of the dying. In a study of registered nurses, those working eleven or more years were found to have higher FATCOD scores,[19] although others have found no difference in terms of length of employment.[17] Experience appears to be key. In our study attitude scores were higher for students reporting having experience of preparing the body of a patient who had died, and for those who had experienced caring for a dying patient or cared for a dying relative or friend. This is consistent with findings from other studies.[17, 19, 24, 26]

Although we did not ask respondents as to their 'fear of death', previous work suggests that nurses who report a greater fear of death are likely to have more negative attitudes toward caring for the dying.[25]

Almost all respondents expressed a strong desire for further education in palliative care as part of their undergraduate nursing programme. Student nurses perceived that it was in providing care during the final hours of dying and in helping bereaved friends and relatives where greater input was particularly required. A survey of nursing schools in Canada conducted in 2004 and repeated in 2010 suggests that greater amounts of class time is being dedicated to palliative care.[29] In North America surveys of nurses working in oncology have found that continuing education is often cursory suggesting that unmet training needs extend beyond pre-registration programmes and beyond nurses working in non-specialist settings.[30] The evidence from other studies that those receiving more education in palliative care exhibit more positive attitudes to the care of the dying further highlights the potential of embedding more palliative care within undergraduate curricula.[17, 22, 24]

To our knowledge this is the largest study of care providers of attitudes towards palliative and end-of-life care, allowing us to make estimates with a high level of precision and detect subtle associations between attitudes and other factors where they exist. Previous studies using the FATCOD scale have been predominantly undertaken in samples of registered nurses,[16, 17, 19, 24-26] with sample sizes ranging

from 34,[24] to 355.[19] Two previous studies of undergraduate healthcare students and undergraduate nurses had sample sizes 115,[22] and 73,[28] respectively. Response to our survey was over 90% limiting any response bias that may have occurred. The survey took part in one large school of nursing in the UK. A national survey would have allowed us to look at regional variation but we have no reason to suspect that this school is atypical in terms of the student nurses who study there. Social desirability bias, may have inflated the positive attitudes towards care of the dying in response to perceived expectations about women and particular professional groups,[31] though the self-completion nature of the survey and the anonymity this afforded respondents should have kept this to a minimum. The cross-sectional study design means that we cannot infer causality in the associations between attitudes and other factors that we observed.

Conclusion

Our findings suggest that student nurses are open to education about palliative care and have the potential to develop positive attitudes towards dying in the field of palliative care. This study has illustrated how being at the later stage of study within an undergraduate nursing programme and having direct experience with death and dying are independently associated with positive attitudes. This strongly suggests that educationalists must recognise the need for student nurses to learn both the theory and practice of palliative care to adequately care for an ageing population with complex needs at the end of their life.

Conflict of Interest Statement

The authors declare that there is no conflict of interest.

Funding source

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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