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EMPIRICAL RESEARCH MIXED METHODS

Registered Nurses' attitudes towards end-of-life care: A sequential explanatory mixed method study

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Abstract

Aims: To examine registered nurses' attitudes about end-of-life care and explore the barriers and facilitators that influence the provision of high-quality end-of-life care.

Design: A sequential explanatory mixed methods research design was used.

Methods: An online cross-sectional survey was distributed to 1293 registered nurses working in five different hospitals in the Kingdom of Saudi Arabia. The Frommelt Attitudes Towards Care of the Dying Scale was used to assess nurses' attitudes towards end-of-life care. Following the survey, a subset of registered nurses were interviewed using individual semi-structured interviews.

Results: Four hundred and thirty-one registered nurses completed the online survey, and 16 of them participated in individual interviews. Although nurses reported positive attitudes towards caring for dying patients and their families in most items, they identified negative attitudes towards talking with patients about death, their relationship with patients' families and controlling their emotions. The individual interview data identified the barriers and facilitators that registered nurses experience when providing end-of-life care. Barriers included a lack of communication skills and family and cultural and religious resistance to end-of-life care. The facilitators included gaining support from colleagues and patients' families.

Conclusion: This study has identified that while registered nurses hold generally favourable attitudes towards end-of-life care, they have negative attitudes towards talking with patients and families about death and managing their emotional feelings.

Relevance to clinical practice: Education providers and leaders in healthcare settings should consider developing programmes for undergraduate nurses and nurses in clinical practice to raise awareness about the concept of death in a cross-section of cultures. Nurses' attitudes towards dying patients will be enhanced with culture-specific knowledge which will also enhance communication and coping methods.

Reporting method: This study used the Mixed Methods Article Reporting Standards (MMARS).

KEYWORDS
attitude, barriers, end-of-life care, facilitators, registered nurses, palliative care

1 | INTRODUCTION

End-of-life care is the physical, psychological, social and spiritual support that is provided during the last phase of a patient's life when a cure or complete reversal of the disease process is no longer possible (National Cancer Institute, 2022). It is part of palliative care services and encompasses the provision of essential care such as hygiene, pressure area care, pain relief and communication with families (Waller et al., 2020). The World Health Organization (WHO) has identified that only 14% of the approximately 56.8 million people in need of end-of-life care currently receive it (WHO, 2020). There are inequities in the availability of end-of-life care services with 78% of those in need living in low- and middle-income countries where access to palliative care is insufficient (WHO, 2020). Insufficient access can result in people receiving end-of-life care in general hospitals instead of specialist palliative care settings (Rumbold & Aoun, 2021; Worldwide Hospice Palliative Care Association, 2015). This is due to increased demand for end-of-life services but is exacerbated by the lack of integration of end-of-life care into the healthcare system globally which results in the under-development of specialist end-of-life care services (Worldwide Hospice Palliative Care Association, 2015). Therefore, there is an urgent need for specialised end-of-life care wards, resources and training among health professionals to improve access and care quality in general hospitals. Nurses are crucial members of the multidisciplinary team and are often the healthcare professional group most commonly assessing end-of-life patients and identifying their needs (Schroeder & Lorenz, 2018). In providing end-of-life care, nurses must demonstrate acceptance, empathy and honesty, which are closely related to their attitudes which in turn impact their feelings and thoughts and therefore their actions (Fishbein & Ajzen, 2011). Therefore, knowing nurses' attitudes towards end-of-life care is important in understanding and determining their ability to provide quality end-of-life care.

1.1 | Background

Nurses' attitudes towards end-of-life care have consequences for dying patients and their families. A recent systematic review revealed that RNs with positive attitudes towards end-of-life care were associated with better outcomes for patients and families such as continuous pain relief, endorsement of open visiting, advocating for patients' rights and wishes and trying to meet patients' needs (Alshammari et al., 2022). Factors that influenced nurses' having a positive attitude to end-of-life care, included their end-of-life care experiences, education, the context in which they work and their work environment (Hussin et al., 2018). Better communication skills and better symptom management are also found to be factors that positively improve nurses' attitudes towards end-of-life care (Stacy et al., 2019). On the other hand, nurses with negative attitudes towards end-of-life care failed to sufficiently manage symptoms of distress in dying patients, avoided direct communication and were reluctant, to tell the truth and discuss disease and death openly with patients (Chan et al., 2020; Limbu & Taylor, 2021). Some nurses may be uncertain about how to behave in the context of a patient's imminent death (Zheng et al., 2018). This uncertainty can be based on the individual nurses' conception of death, as responses to death vary across cultures, religions, social values and traditions (Blaževičienė et al., 2020; Oztoprak & Terzioglu, 2021). Nurses with negative attitudes towards death and end-of-life care may express their own fear, anxiety, hopelessness and helplessness towards dying patients (Ay & Öz, 2019). While previous studies provide important information, they have predominately included nurses working in hospice and palliative care settings with little known about nurses who provide end-of-life care in general hospital settings (Alshammari et al., 2022). In addition, previous research has not explored the barriers and facilitators that influence nurse attitudes towards end-of-life care in these settings (Achora & Labrague, 2019; Alshammari et al., 2022).

What does this paper contribute to the wider global clinical community?

1. The support of senior staff and cooperation with the patient's family members were factors that facilitated the provision of end-of-life care.
2. Nurses' avoidance of talking about death, inability to control their emotions and challenges involved in family decision-making are barriers to effective end-of-life care.
3. Registered nurses should be supported by the development of protocols about end-of-life care decision-making, communication skills as well as availability of psychological consultancy that is easily accessible to facilitate coping with death.

Therefore, this is an important area of study as general hospital settings often have nurses with limited end-of-life care skills and provide a broad range of care services with minimal resources, which can have a negative impact on the quality of care provided (Carvajal et al., 2019).

Understanding nurses' attitudes and the factors that impact their attitudes towards providing end-of-life care may assist in overcoming barriers and optimising end-of-life care in general hospital settings. Previous studies have demonstrated that socio-demographic factors such as cultural background, post-graduate qualification and experience can influence how nurses provide end-of-life care and can act as barriers or facilitators to the provision of quality care (Karbasi et al., 2018; Scherrens et al., 2018). Also, some studies found that nurses from countries with greater integration of palliative and end-of-life care in education and the healthcare systems have more positive attitudes towards end-of-life care (Abudari et al., 2014; Lynch et al., 2013). In the Kingdom of Saudi Arabia (KSA) end-of-life care is not well-integrated into healthcare systems but it is a healthcare priority in the Saudi Vision 2030 (Saudi Vision 2030, 2016). Nurses' attitudes towards providing end-of-life care have not been explored in KSA general hospital settings. The nursing workforce in KSA is made up of nurses from different cultural backgrounds; hence, they are likely to have varying attitudes towards end-of-life care which may impact clinical practice (Aljohani, 2020). Given the importance of nurses' attitudes towards end-of-life care, it is essential to understand those attitudes and explore the barriers and facilitators that influence the provision of quality end-of-life care by multicultural nursing staff in general hospitals.

2 | THE STUDY

2.1 | Aims

The aim of this study was to examine registered nurses' (RNs) attitudes towards end-of-life care and explore the barriers and facilitators that influence the provision of high-quality end-of-life care.

2.2 | Design

A sequential explanatory mixed methods research design (Creswell & Creswell, 2018) was used consisting of a quantitative phase followed by a qualitative phase.

2.3 | Sample/participants

Registered Nurses working in five large metropolitan hospitals in the Kingdom of Saudi Arabia (KSA) were invited to participate. The hospitals were purposively selected from Ministry of Health (MOH) hospitals, to ensure respondents were from different regions of KSA. Registered Nurses were eligible to participate if they were working in adult Medical, Surgical, Cardiac, Oncology and Palliative Care inpatient wards. Those working in Emergency and Critical Care and paediatric units were excluded because withdrawal of treatment and models of care in these settings occurs for a broad range of conditions and may not relate to advanced, progressive and/or incurable diseases (Del Olmo et al., 2019). According to the MOH, a total of 1293 RNs were employed in the targeted wards. Sample size calculations were conducted in Qualtrics (2018) using a population of 1293 nurses, a 95% confidence interval, and an acceptable error rate of 5%. Approximately 297 participants were needed, however, 431 nurses completed the survey (Table 1). For the qualitative study phase, convenience sampling was used to select a subset of participants who were willing to participate in an online semi-structured interview.

2.4 | Data collection

Data were collected over 5 months between October 2020 and February 2021.

2.4.1 | Quantitative data collection

Data were collected using an online questionnaire consisting of 11 demographic items and the Frommelt Attitudes Towards Care of the Dying Scale (FATCOD) (Frommelt, 1991). Potential participants were recruited via flyers with a Quick Response (QR) code linking them to the participant information sheet and online questionnaire. The FATCOD consists of 30 statements that are scored on a 5-point Likert scale, where 1 = *Strongly Disagree* and 5 = *Strongly Agree*. The scores of negative items were reversed. Scores greater than 3 indicate positive attitudes, scores less than 3 indicate negative attitudes and scores of 3 indicate uncertainty. Scores from the 30 questions are summed to calculate a total FATCOD score that ranges from 30 to 150, with scores greater than 90 indicating more positive attitudes. The FATCOD tool has two subscales; FATCOD1—nurses' attitudes towards providing care to dying patients (items: 1–3, 5–11, 13–15, 17–19, 21, 23–27 and 30; possible range 21–105) and FATCOD2—nurses' attitudes towards the patient's family (items: 4, 9, 12, 16, 18, 20, 22, 28 and 29; possible range 9–45) (Frommelt, 1991).

The FATCOD has been translated and validated in several languages, including Spanish, Iranian, Turkish, Italian and Chinese (Edo-Gual et al., 2018; Iranmanesh et al., 2010; Karadag et al., 2019; Mastroianni et al., 2015; Wang et al., 2016) and has also been administered in the Saudi Arabian context in English (Abudari et al., 2014). The FATCOD has been reported to have a Cronbach's alpha ranging from .61 to .80, indicating high internal consistency and reliability (Frommelt, 1991; Karadag et al., 2019).

TABLE 1 Characteristics of the Participating Nurses ($N = 431$).

	All participants ($n = 431$)	
	n	%
Variable	**431**	**100**
Demographic characteristics		
Gender		
Male	63	14.6%
Female	368	85.4%
Age		
20–30	135	31.3%
31–40	219	50.8%
>41	77	17.9%
Religion		
Christian	210	48.7%
Muslim	150	34.8%
Hindu	49	11.4%
Other and no specific religion	22	5.1%
Nationality		
Philippines	174	40.4%
India	135	31.3%
Saudi Arabia	92	21.3%
Others	27	7%
Professional characteristics		
Ward		
Medical	184	42.7%
Surgical	176	40.8%
Cardiac	8	1.9%
Oncology	51	11.8%
Palliative	12	2.8%
Country of qualification		
Philippines	168	39.0%
India	132	30.6%
Saudi	90	20.9%
Others	35	9.5%
Highest nursing qualification		
Bachelor	337	78.2%
Diploma	50	11.6%
Post-graduate	44	10.2%
Frequency of end-of-life care provision		
Daily	129	29.9%
Once per week	74	17.2%
Once per month	62	14.4%
Few times per year	139	32.3%
Never	27	6.3%
Previous education on end-of-life care		
2–4 h	156	36.2%
4–8 h	75	17.4%
1–2 days	71	16.5%
3–5 days	39	9.0%
More than 5 days	62	14.4%
Format of previous end-of-life care education		
In-service workshop	131	30.4%
Online workshop	97	22.5%
Conference workshop	50	11.6%
Lectures	266	61.7%
Specialist training programme	46	10.7%
Not attend	25	5.8%
Interest in additional end-of-life care education		
Yes	380	88.2%
No	51	11.8%

2.4.2 | Qualitative data collection

Data were collected through semi-structured interviews conducted by the first author using videoconferencing software (Zoom™) (Zoom Video Communication, 2022) or by telephone. The interview questions and interview guide were developed by the primary author in collaboration with three experienced nurses who hold PhD qualifications. The questions were informed by the principles of the Theory of Reasoned Action (Ajzen & Fishbein, 1980) and were designed to guide the semi-structured interviews (File S1). The interview guide was pilot tested with two RNs, no data from the pilot testing were included in the final analysis. Interviews were audio-recorded and lasted between 8 and 32 minutes.

2.5 | Ethical considerations

Ethics approval for the study was granted from the University of Wollongong Human Research Ethics Committee (Approval no. 2020/255) and the Human Research Ethics Committee Saudi Arabian Ministry of Health (Approval no. 1441-1798736). A participant information sheet was included as the landing page for the online survey and included information about the study's purpose and that participation was voluntary. An alphanumeric code was assigned to each participant to ensure the confidentiality of survey responses. In the qualitative phase, participants gave written informed consent, and their responses were analysed and reported anonymously. The interviews were audio-recorded and saved as password-protected audio files, which only the researchers had access to.

2.6 | Data analysis

2.6.1 | Quantitative phase

Data were downloaded from Qualtrics (Qualtrics XM, 2022) and analysed in SPSS version 27.0 (IBM, 2020). The significance level was set at $p < .05$. Means, standard deviation, frequencies and percentages were used to describe the data. Differences and associations between RNs' attitudes and demographic characteristics were analysed using independent *t* tests, one-way ANOVA and Pearson's correlation. Multiple linear regression was used to predict factors that influenced RNs' attitudes towards end-of-life care.

2.6.2 | Qualitative phase

The audio-recordings of interviews were transcribed verbatim and analysed using deductive thematic analysis following the guidelines by Braun and Clarke (2016). Consistent with this approach, data analysis was informed by the Theory of Reasoned Action and sought to understand the 'barriers' and 'facilitators' that nurses experienced when providing end-of-life care. The thematic analysis involved: (1) familiarisation with the data where each interview was read and re-read, (2) generating initial codes to identify key concepts by three authors independently (FA, GM and JS), (3) combining codes and consolidating all data relevant to 'barriers' and 'facilitators', (4) reviewing themes, (5) defining themes and (6) producing the report (Braun & Clarke, 2016).

2.7 | Validity and reliability/rigour

Lincoln and Guba's (1986) evaluative criteria were used to ensure trustworthiness. A defined purpose, process and setting of the project facilitated transferability which was further supported by using participants' verbatim quotes. To ensure credibility, the research team met regularly, and team members reviewed transcripts, coded data and allocated data to themes. The use of participants' verbatim quotes further supported the identification of themes (Lincoln & Guba, 1985). Dependability was supported by the first author conducting and transcribing all the interviews and using field notes and an audit trail during data analysis. Confirmability occurred by three research team members independently analysed the data to objectively check that the participants' voice was privileged in the findings (Lincoln & Guba, 1985).

3 | RESULTS/FINDINGS

3.1 | Quantitative phase

This study formed part of a doctoral study examining RNs' knowledge, attitudes and beliefs towards end-of-life care. A total of 431 out of 490 (87.8%) participants completed both the demographic questions and the FATCOD items. Most respondents were female (85.4%, $n = 368$) and worked in Surgical and Medical wards (83.5%, $n = 360$). A total of 29.9% ($n = 129$) of respondents reported providing end-of-life care in the ward on 'a daily basis', and a similar proportion (32.3%, $n = 139$) reported providing end-of-life care 'only a few times a year'. More details about RNs' demographical and professional characteristics are shown in (Table 1).

3.2 | Participants' attitudes towards end-of-life care (FATCOD)

The total mean score for all participants on the FATCOD was 101.53 (SD = 11.57), with a range from 78 to 141 (Table 2 and File S2). The mean score of FATCOD1 (attitudes of nurses towards the provision of care to patients) was 96.38 (SD = 8.47) and of FATCOD2 (attitudes towards the family members of end-of-life patients) was 35.90 (SD = 4.77).

Nurses showed positive attitudes towards caring for dying patients and their families in the majority of items, with a mean score of 3.11 (SD = 1.19) to 4.16 (SD = .85) (Table 3). However, items 3, 6 and 11 had a mean score of less than 3, indicating a negative attitude towards talking with patients about death. Participants also reported negative attitudes towards the relationship with patient's families in items 9 and 29. Items 8, 13 and 26 relate specifically to the emotional feelings of nurses towards end-of-life patients producing the lowest mean scores, ranging from 2.73 to 2.94. Participants' responses to each item in the FATCOD are presented in Table 2 and File S2.

The Cronbach's alpha reliability coefficient for the 30-item FATCOD scale was .78. The Cronbach's alpha reliability coefficient for the FATCOD1 (patient-related items) was .69 and for FATCOD2 (the family related items) was .64.

3.3 | Pearson's correlation analysis

There were very weak relationships between demographic variables and the mean FATCOD, FATCOD1 and FATCOD2 scores, with Pearson's correlation coefficient (*r*) values ranging from .01 to .319 (Table 3). However, there were weak positive correlations between participants age and the overall FATCOD, FATCOD1 and FATCOD2 mean scores ($r = .319$, .302, and .251 respectively, $p < .01$.), while weak negative correlations were found between different hospital sites and the total FATCOD, FATCOD1 and FATCOD2 mean score ($r = -.275$, −.237 and −.260, respectively, $p < .01$). Additionally, there were negligible but statistically significant correlations between the total FATCOD, FATCOD1 and FATCOD2 mean scores and gender, religion, nationality, country, where the nursing qualification was gained, and previous attendance at end-of-life care education ($p < .05$).

3.4 | Univariate analysis

Table 4 reports the univariate analysis of the comparisons of the FATCOD scores based on the participants demographic

TABLE 2 FATCOD total mean score ($n = 431$).

Cores	Mean (SD) scores ($n = 431$)
FATCOD total scale	101.53 (11.57)
FATCOD1 subscale total (patient-related items)	69.38 (8.47)
FATCOD2 subscale total (family related items)	32.15 (4.50)
1. Giving nursing care to the dying person is a worthwhile learning experience.	3.97 (.99)
2. Death is not the worst thing that can happen to a person.	3.13 (1.34)
3. I would be uncomfortable talking about impending death with the dying person.	2.51 (1.05)
4. Nursing care for the patient's family should continue throughout the period of grief and bereavement.	3.82 (1.03)
5. I would not want to be assigned to care for a dying person.	3.38 (1.12)
6. The nurse should not be the one to talk about death with the dying person.	2.44 (1.10)
7. The length of time required to give nursing care to a dying person would frustrate me.	3.20 (1.13)
8. I would be upset when the dying person I was caring for gave up hope of getting better.	2.73 (1.10)
9. It is difficult to form a close relationship with the family of a dying person.	2.93 (1.09)
10. There are times when death is welcomed by the dying person.	3.50 (.88)
11. When a patient asks, 'Nurse am I dying?' I think it is best to change the subject to something cheerful.	2.76 (1.12)
12. The family should be involved in the physical care of the dying person.	3.89 (.96)
13. I would hope the person I am caring for dies when I am not present.	2.94 (1.08)
14. I am afraid to become friends with a dying person.	3.31 (1.18)
15. I would feel like running away when the person actually died.	3.54 (1.15)
16. Families need emotional support to accept the behaviour changes of the dying person.	4.04 (.90)
17. As a patient nears death, the nurse should withdraw from his/her involvement with the patient.	3.38 (1.18)
18. Families should be concerned about helping their dying members make the best of his/her remaining life	4.09 (.85)
19. The dying person should not be allowed to make decisions about his/her physical care.	3.39 (1.18)
20. Families should maintain as normal an environment as possible for their dying members.	3.87 (.80)
21. It is beneficial for the dying person to verbalise his/her feelings.	4.16 (.79)
22. Nursing care should extend to the family of the dying person.	3.82 (.95)
23. Nurses should permit dying persons to have flexible visiting schedules.	3.96 (.90)
24. The dying person and his/her family should be the in-charge decision makers.	3.74 (.91)
25. Addiction to pain-relieving medication should not be a nursing concern when dealing with a dying person.	3.14 (1.16)
26. I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.	2.76 (1.11)
27. Dying persons should be given honest answers about their condition.	3.68 (.94)
28. Educating families about death and dying is not a nursing responsibility.	3.11 (1.19)
29. Family members who stay close to a dying person often interfere with the professionals' job with the patient.	2.54 (1.00)
30. It is possible for nurses to help patients prepare for death.	3.64 (.89)

Abbreviation: FATCOD, Frommelt Attitudes Towards Care of the Dying Scale.

characteristics. There were statistically significant differences in FATCOD scores based on age, religion, hospital, country of initial nursing qualification, frequency of end-of-life care provision and previous education on end-of-life care ($p < .05$). Mean total FATCOD scores were higher for RNs whose initial nursing qualification was gained from countries with advanced palliative care integration such as Australia, the UK, the USA and South Africa ($n = 15$, mean score = 108.46, SD = 11.05), in comparison to native Saudi Arabian nurses ($n = 90$, mean score = 94.01, SD = 8.23). There were also statistically significant differences in FATCOD mean scores between the different age groups. Nurses aged 31 years and older had more positive attitudes compared to younger RNs ($F = 10.537$, $p < .001$).

3.5 | Predictors of RNs' positive attitudes

Multivariate linear regression analysis identified that only age and hospital site were significant predictive influencing factors of RNs' attitudes (adjusted $R^2 = .20$, $F(1, 431) = 9.17$, $p < .001$) (Table 5).

3.5.1 | Qualitative phase

A total of 16 RNs from five hospitals, aged between 26 and 60 years who were predominantly female ($n = 14$) participated in the individual semi-structured interviews. All participants had a nursing

TABLE 3 Correlations between FATCOD and demographics characteristics.

	Total FATCOD	FATCOD1	FATCOD2
Total FATCOD	1	.946**	.791**
FATCOD1	.946**	1	.548**
FATCOD2	.791**	.548**	1
Hospital	−.275**	−.237**	−.260**
Age	.319**	.302**	.251**
Gender	.098*	.084	.095*
Religion	.117*	.95*	.122*
Nationality	.138**	.124*	.121*
Ward	.056	.047	.055
Country where nursing qualification was gained	.165**	.157**	.127**
Highest nursing qualification	.060	.046	.067
How frequently do you provide end-of-life care to patients in your ward?	.032	.010	.063
How much education on end-of-life care have you attended over your professional nursing career?	.078	.061	.087
What was the format of the end-of-life care education you attended? (Mark all that apply)	.148**	.119*	.158**
Would you be interested in having additional education on end-of-life care?	−.150**	−.120*	−.159**

**Correlation is significant at the .01 level (2-tailed).; *Correlation is significant at the .05 level (2-tailed).

Abbreviation: FATCOD, Frommelt Attitudes Towards Care of the Dying Scale.

baccalaureate ($n=14$) or diploma ($n=2$). Participants worked in a broad range of settings (Surgical $n=7$; Medical $n=4$; Palliative $n=2$; Oncology $n=2$ and Cardiac $n=1$). Eight participants were from India, six from the Philippines and one from KSA and South Africa. Fourteen RNs were interviewed via videoconferencing using the Zoom platform and two via telephone. Interviews occurred at a mutually agreeable time and the interviewer ensured privacy and a quiet environment during the interviews. The interviewer wrote field notes and personal reflections during and immediately after each interview to record keywords, how participants discussed topics and any questions that arose in relation to the study's overall focus. Qualitative data collection explored the 'barriers' and 'facilitators' experienced by nurses when providing end-of-life care.

3.6 | Barriers and facilitators

Participants identified several personal and professional factors that contributed to the development of a positive attitude towards

TABLE 4 Univariate analysis of FATCOD and demographic characteristics.

Demographic and professional characteristics	*n*	FATCOD mean (SD) Scores	*t/F*	*p*
Age				
<30	135	91.63 (7.40)	10.537	<.001
31–45	262	101.41 (11.25)		
>46	34	109.17 (13.28)		
Country of initial nursing qualification				
Philippines and Malaysia	170	105.96 (11.89)	16.874	<.001
India and Nepal	134	100.05 (9.64)		
Saudi Arabia	90	94.01 (8.23)		
Jordan and Lebanon	12	101.25 (13.65)		
Australia and UK and USA and South Africa	15	108.46 (11.05)		
Sudan and Egypt and Chad	4	103.00 (17.32)		
Religion				
Christian	210	104.91 (11.52)	13.610	<.001
Muslim	150	97.62 (10.96)		
Hindu	49	98.90 (9.57)		
Other and Non-specify religion	22	101.81 (10.87)		
Hospital				
Hospital A	108	103.92 (10.39)	22.534	<.001
Hospital B	110	107.41 (11.28)		
Hospital C	124	98.12 (10.86)		
Hospital D	66	93.63 (8.38)		
Hospital E	23	103.26 (11.71)		
Frequency of end-of-life care provision				
Daily	129	101.68 (11.68)	3.454	.009
Once per week	74	98.60 (11.53)		
Once per month	62	102.12 (12.42)		
Few times per year	139	103.58 (11.17)		
Never	27	96.96 (8.65)		
How much education on end-of-life care attended				
2–4 h	156	102.05 (12.87)	3.837	.005
4–8 h	75	97.14 (8.52)		
1–2 days	71	102.51 (11.05)		
3–5 days	39	102.00 (12.65)		
More than 5 days	62	104.34 (11.11)		

Abbreviation: FATCOD, Frommelt Attitudes Towards Care of the Dying Scale.

TABLE 5 The result of multiple linear regression analysis of attitudes influencing factors.

Independent variable	*b*	*SE*	β	*t*	*p*
Hospital	−2.271	.465	−.236	−4.878	<.001
Age	2.589	.437	.281	5.929	<.001

95% CI, $R^2 = .20$, $F(1, 431) = 9.173$.

end-of-life care for patients and their families. For personal factors, participants described end-of-life care as compassionate care; care that allowed them to learn and understand individual end-of-life patient and family needs and care preferences. Such compassionate care helps meet the patients' physical comfort, emotional well-being and spiritual support needs and improves shared decision-making. To illustrate, Participant #12 remarked, '… compassionate care … is providing them with good care and services, respecting their decisions, listening to their words, showing them empathy, building trust and allowing their family to be with them if they wish'.

The feelings evoked by being in close contact with dying people and their relatives were identified as another factor that enabled nurses to develop positive attitudes and practices towards end-of-life care. For example, nurses imagining themselves or their families facing the same predicament as the patients created empathy with the patient and led to feelings of being responsible for providing end-of-life care with compassion. As Participant #16 reflected, '… we should do everything for the patient. Also, we should consider each and every patient as our family member. We should treat them like that'.

Participants identified some professional barriers that influenced their attitudes towards providing end-of-life care. Poor communication skills were a barrier to providing effective end-of-life care to patients and their families. Some RNs reported not having enough experience and confidence to engage in difficult conversations with patients and their families. A particular challenge was the lack of skills and confidence in having complex conversations that require maintaining a balance between hope and explicit truth telling. Participant #8 described, 'I want to improve my skills in talking, especially in giving psychological support to the patient, or to the primary caregivers, who are usually with a patient at that time. But, I'm not really very good at talking'. Three participants from both specialist and non-specialist palliative care units reported that language barriers also impacted communication. Participant #2 noted, 'There is a barrier when it comes to talking because I'm not really that good at speaking Arabic'.

Nurses in non-specialist palliative care units experienced barriers related to the location where end-of-life care is delivered. Participant #13 explained, 'It was difficult to deal with (end-of-life) patients as I work in the medical unit'. This difficulty arises because general wards are not always staffed with experienced end-of-life care staff and equipped with the necessary equipment to meet the unique needs and special care requirements that end-of-life patients and their families require as participant #10 said 'Our ward is a mix ward, mix with surgeries, medical patients and oncology patients. So we take care of the end-of-care patients but we are not equipped and developed to become proficient to take care of those patients'. In addition, participants described the busyness of general wards which made it difficult for them to have the time they needed to provide optimal care to patients at the end-of-life. Participant #7 stated 'We are always busy … there is no time, you will not be able to provide maximum care to terminal patients'. Participant #6 summarised their experience in a Cardiac ward by saying, 'The main difficulty of this stage is involving people in their own needs. This is because each person is unique and is talking about their goals. Respecting (the patients) wishes is quite challenging for me while on duty'.

Facilitators to providing effective end-of-life care included support from colleagues and patient's family. Less experienced and new RNs who received direct support from senior nurses, doctors and other specialists felt they could successfully deliver high-quality end-of-life care. This direct support enabled and supported RNs to provide effective end-of-life care. Participant #9 summarised the value of direct support by saying: 'We share our experiences with each other so that we know how to deal with them (end-of-life patients) in the future, especially if you are new (RN). We share, ask, and seek information from our colleagues, especially the seniors'.

The RNs who were interviewed described the role of family in detail and highlighted the importance of their presence in influencing nurses' attitudes towards end-of-life care. For example, participants' attitudes towards providing end-of-life care were closely linked to the families' opinions and decisions about the same. Participant #4, an RN from a specialist palliative care unit, reflected on this saying: 'For me, I need to feel what the family feels about the patient's end-of-life. And if they agree (to approach end-of-life care), we agree, if they don't agree, we don't agree. We will not force what we know and what we want, we will let the family decide for the patient'. This is because RNs consider families to be a major support system in facilitating or hindering end-of-life care. As Participant #10 commented, 'They (family members) are the number one support system of the patients besides themselves. Nurses are just an additional factor in the hospital; it is the family and the patients themselves who are at the centre of care'.

The participants demonstrated their willingness to allow families to physically stay with patients. They regarded it to be important in providing high-quality end-of-life care. The participants acknowledged that the presence of patients' families rendered a sense of cooperation, because the families spend the most time with the patients during the last phase of their lives. Participant #8 remarked, '… they are with the patients 24 hours/7 days. Their cooperation and understanding with us would really make nursing easy in providing end-of-life care'. However, participants expressed that visitors and family presence have been limited due to the COVID-19 pandemic. In this context, Participant #5 stated, 'They (family) were welcome to visit before, but because of the COVID pandemic now, the watchers or relatives are limited. Before the pandemic, we allowed unlimited visitors for all the patients who were dying or in end-of-life care'.

4 | DISCUSSION

This paper provides insights into the attitudes of RNs who work in general hospitals in Saudi Arabia towards end-of-life care and the factors that influence their attitudes. Understanding RNs' attitudes and the factors that influence them is important because of the strong association between nurses' attitudes and their behaviour in providing quality end-of-life care. According to the Theory of Reasoned Action (TRA), people intend to act in ways that allow them to obtain favourable outcomes (attitudes) and meet the expectations of others (subjective norms) (Ajzen & Fishbein, 1980). When interpreting the findings from this study from the perspective of the TRA, the online survey showed that in general RNs had favourable attitudes towards end-of-life care. However, there were aspects of end-of-life care to which RNs showed unfavourable attitudes, such as avoiding talking with patients and families about death and not being able to control their emotions, which indicates an opportunity for development. The interviews provided an opportunity to clarify these findings. Although RNs in the interviews identified the factors that enabled them to provide end-of-life care with compassion, such as the support of senior staff and cooperation of patients' families, they expressed some personal, professional and cultural issues. These issues include a lack of communication skills, infrequent exposure in providing end-of-life care in general wards, the COVID-19 pandemic and family decision-making which can impede the provision of quality end-of-life care. These findings are important in providing recommendations to policymakers that aim to enhance the quality of RNs' provision of end-of-life care in general hospitals, in KSA and internationally. Exploring the factors that influence RNs' attitudes towards end-of-life care also helps to provide guidance in developing end-of-life care education and upskilling our current and future nursing workforce.

This study showed that RNs' exposure to end-of-life patients does not necessarily lead to positive attitudes towards end-of-life care. Despite having prior experience providing end-of-life care, this study's participants had less positive attitudes, compared to previous studies. For example, Croxon et al. (2018) and Hendricks-Ferguson et al. (2015) concluded that greater exposure to end-of-life care led to greater acceptance to provide end-of-life care, which, in turn, resulted in more positive overall attitudes. One possible reason for the fewer favourable attitudes of the nurses with greater exposure to end-of-life care in the current study compared with previous studies is that these RNs would have been exposed to many end-of-life cases in a short period because of the COVID-19 pandemic (Fernandez et al., 2020; MOH, 2020). This explanation is in line with what Teixeira Cardoso et al. (2021) found, in their study of nurses attitudes towards death and end-of-life care during the COVID-19 pandemic, where nurses with greater exposure to death had negative attitudes towards end-of-life care. RNs have been found to express more grief and despair while caring for dying patients during the pandemic (Orozco, 2022; Teixeira Cardoso et al., 2021). These findings might explain the very low mean scores in the current study (ranging from 2.73 to 2.94) for the items asking about nurses' ability to control their emotions during the moment of patients' deaths. This emphasises the need for nurses' self-care, the capacity to build resilience and self-confidence to be able to provide optimal end-of-life care (Kondo & Nagata, 2015). Nurse administrators and hospital policymakers can support nurses by developing strategies to enhance nurses' positive self-perceptions and improve their attitudes towards end-of-life care through professional training, emotional support (Becker et al., 2017) and psychological support to ensure RNs maintain positive attitudes in order to cope with the challenges of providing end-of-life care.

This study also expands on existing literature that proposes that RNs trained in countries with high levels of palliative care integration have more positive attitudes towards end-of-life care than RNs who are trained in countries with limited palliative care integration. Nurses from Australia, the US, the UK and South Africa scored an average of 108.46 ± 11.05, which is higher than the average scores of other groups in this study as well as higher than the scores reported by other studies conducted in countries with less palliative care integration (Alshammari et al., 2022). The explanation for these differences might be that countries with high levels of palliative care integration generally have well-established policies and procedures that manage end-of-life care well from diagnosis to death (Abarshi et al., 2017). These provide clarity of role responsibilities which encourages confidence in nurses providing care. Therefore, it is very important to develop end-of-life care policies and procedures in countries with low integration of palliative care to enhance clinical practice and thereby improve nurses' confidence in providing end-of-life care. This will, in turn, contribute to more positive attitudes towards providing end-of-life care.

Furthermore, the results indicate that while nurses may be comfortable with the idea of providing end-of-life care, they have negative attitudes towards discussing end-of-life care with patients and their family members. Most participants expressed negative attitudes towards communicating with patients and family members about the diagnosis and end-of-life care. Participants reported that this negative attitude stems from poor communication skills and knowledge, which creates a huge gap between nurses and patients and families at end of life, causing nurses to feel mistrust and a need to acquire communication skills (Hökkä et al., 2020). Our findings support the results of Chan et al. (2020) and Hussin et al. (2018), who reported that a lack of skill in communicating with patients and their family members makes nurses wary of the topic. The importance of our study lies in the fact that we discovered that the communication skills that nurses want to acquire, specifically, are the skills required to talk about the psychological and spiritual aspects of death. The reason for these specific skills is so that nurses can confidently approach the topic of end-of-life care while maintaining patients' and families' hope. Both Muslim and non-Muslim nurses face great difficulty in approaching the topic of death and end-of-life care because of its complexity in the Islamic faith and its sensitivity in Saudi Arabian culture. Specifically, when patients are told that they are inevitably going to die because of an

incurable illness, they experience a conflict between accepting the inevitable or clinging to life and believing that God ('Allah') might cure them of illness at any moment. This maintenance of hope is in line with Islamic beliefs that death, life, illness and healing are all determined by God (Allah) only (Quran 26:80–81 n.d.). This conflict is very typical among Muslim patients (Leong et al., 2016). Therefore, it is important to develop nursing education to include culturally sensitive communication between nurses, patients and their family members about death and end-of-life care. This may include providing special courses focusing on communication, discussing their diagnosis with patients and strategies to approach the topic of end-of-life care while maintaining hope and avoiding cultural and faith conflicts.

This study showed that the role of the family in Saudi society, which is very similar to the family's role in other Arab and Asian communities, is crucial in the acceptance or rejection of end-of-life care for terminally ill patients (Fang et al., 2016). Nurses focused on the families' decision to choose the treatment plan for the patient in terms of either accepting the provision of end-of-life care or continuing curative treatment. Most of the nurses, stated that the family should be aware of the diagnosis before the patient, which is the prevailing culture in Saudi society, where the truth is hidden from the patients so that they do not become despairing about their incurable disease (Alyami, 2021). These results about the family's role align with previous studies in Arab and Asian contexts, which contradict the results of studies conducted in Western contexts. For example, a study conducted by Gu et al. (2016) in China found that families always wanted to know the disease diagnosis before the patient was informed and to decide whether to accept or reject end-of-life care on the patient's behalf. This result was supported by other studies conducted in other Arabic and Asian countries (Wallace, 2015). However, these results contrast with practices in Western societies, where patients are the first to know their diagnosis and are empowered to decide whether they want end-of-life care or continue curative treatment (Fukuzawa & Kondo, 2017). The conflict between cultural expectations of family roles in some Arabic and Asian cultures and the clinical and ethical requirements expected of RNs can lead to challenging situations for nurses. This conflict can be difficult for nurses as they try to balance their professional and ethical responsibilities with their personal cultural norms and values and those of the patients and families they are caring for (Mani & Ibrahim, 2017). To be specific, nurses learn in college that patients have the right to know their diagnosis and treatment plan. However, in clinical settings, nurses are surprised when they find cultural differences between their patients and their families and when their dealings with patients and families contradict what they have been taught.

4.1 | Strength and limitations

There are both strengths and limitations to this study. The survey instrument has been translated and validated in different languages and reported to have a Cronbach's alpha ranging from .60 to .80, indicating high internal consistency and reliability. It captured comprehensive domains of end-of-life care. The Theory of Reasoned Action informed the qualitative questions to help in identifying the barriers and facilitators that influenced the provision of end-of-life care. Although this study provides important information on end-of-life care practices in general hospital settings in Saudi Arabia, its limitations, such as the use of purposive sampling and the absence of member checking, should be acknowledged. These limitations may impact both the generalisability and credibility of the findings. Therefore, when interpreting and applying the results to disparate settings, it is important to take these factors into consideration. Nevertheless, the study provides new knowledge that may be useful for future comparisons and offers valuable insights to address current and future challenges when end-of-life care is provided in general hospital settings.

5 | CONCLUSION

The aim of this study was to explore RNs' attitudes towards end-of-life care and to understand the barriers and facilitators in providing such care. The results indicate that while RNs hold favourable attitudes towards end-of-life care, they have negative attitudes towards talking with patients about death and managing their emotional feelings. The qualitative section explained RNs' unfavourable attitudes in terms of identifying their lack of communication skills as well as family, cultural and religious resistance to end-of-life care. Supporting patients and families as they approach the end of life requires a skilled workforce and acknowledgement that communication skills are just as important as physical care skills to ensure that nurses can provide the best holistic care.

5.1 | Relevance to clinical practice

To enhance the attitudes of RNs regarding end-of-life care, the researcher recommends that healthcare and educational institutions review existing education and training to ensure that all nurses possess the appropriate competencies related to end-of-life care. This can be facilitated by developing education training modules about end-of-life care directives, implementing advance care planning protocols and promoting evidence-based practice models. Nursing practice in end-of-life care dictates the presence of a compassionate nurse, who provides comfort care and emotional support, and who is constantly present to guide and support the family during the patient's death. In addition to that, educate and support nurses to understand the patient's and family's attitudes and beliefs towards end of life which can impact the provision of culturally congruent care and positive end-of-life care outcomes. Although not the focus of this study, the availability of psychological consultancy and guidance services that are easily accessible to healthcare professionals, patients and their relatives would also facilitate coping with death. These services would provide opportunities for RNs to reflect on their experiences of dealing with death, coping with grief

and providing support to dying patients and their families (Zheng et al., 2018). Future research is required to investigate effective strategies for providing education and training to nurses in end-of-life care and the role of other members of the multidisciplinary team, including doctors, in influencing the attitudes of nurses towards end-of-life care. Furthermore, it is recommended that future research explore the perspectives of patients and their families regarding the provision of end-of-life care in the Saudi context.

AUTHOR CONTRIBUTIONS

Fares Alshammari: Conceptualisation, Data curation, Methodology, Formal analysis, Funding acquisition, Investigation, Validation, Writing—Original Draft, Writing—Review and Editing, Visualisation, Project Administration. Jenny Sim: Conceptualisation, Data curation, Methodology, Formal analysis, Validation, Writing—Review and Editing, Supervision. Samuel Lapkin: Conceptualisation, Data curation, Methodology, Formal analysis, Validation, Writing—Review and Editing, Supervision. Gemma Mcerlean: Conceptualisation, Data curation, Methodology, Formal analysis, Validation, Writing—Review and Editing, Supervision.

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CONFLICT OF INTEREST STATEMENT

No conflict of interest has been declared by the authors.

DATA AVAILABILITY STATEMENT

The authors confirm that any data used in the submitted manuscript have been lawfully acquired in accordance with the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity. The relevant fieldwork permission was obtained from

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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