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ORIGINAL ARTICLE

International Journal of Older People Nursing

WILEY

Palliative and end-of-life educational interventions for staff working in long-term care facilities: An integrative review of the literature

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Abstract

Background: Given the increase in the number of deaths within long-term care facilities (LTCFs), the need for palliative and end-of-life (EOL) care education among such facilities has been increasing. As such, a systematic synthesis of global palliative and EOL care educational approaches and evaluation can aid further educational development.

Objective: To synthesise the current literature on palliative and EOL care educational interventions for staff working in LTCFs and identify barriers to, and facilitators of, intervention implementation.

Methods: The study used an integrative review framework wherein indexed databases, namely, CINAHL, EMBASE, MEDLINE, PsycINFO, Web of Science, Cochrane Library and Japan Medical Abstract Society, were systematically searched for studies published in English and Japanese between 2007 and 2019. Search terms that are related to palliative care, LTCF, and education were combined to increase search sensitivity. The quality of the papers was assessed using Joanna Briggs Institute Critical Appraisal Tools and the Mixed-Methods Appraisal Tool.

Results: A total of 52 studies were included in the review. Our results suggested that although studies in this area and setting have been evolving, suboptimal developmental research and educational practices, global variability and unstandardised approaches to education and lacking viewpoints from service users have remained. Barriers to intervention implementation were also reported due to the specific characteristics of LTCFs, which include high staff turnover and considerable variation in professional skills and experience.

Conclusions: Given the different LTCF types, systems and policies across each country or region, further research on standardised educational interventions with contextual considerations using large-scale studies with robust methodology is needed to meet the increasing demand for palliative and EOL care among the global ageing population.

Implications for practice: Palliative and EOL care educational intervention for LTCF staff need to include more consideration of context, organisational culture and the user involvement throughout the process of education and research to enhance the quality of care in this complex setting.

KEYWORDS
education, health personnel, integrative review, long-term care, palliative care, residential facilities

1 | INTRODUCTION

Palliative and end-of-life (EOL) care for older populations has globally impacted policy and practice (World Health Organization Regional Office for Europe, 2011). With the increase in the average life expectancy and number of individuals dying at an older age due to complex conditions, the need for palliative and EOL care outside acute care settings has been rising. This has been increasingly evidenced due to the COVID-19 pandemic that has taken lives of a large proportion of older population who reside in community and residential facilities (Lancet, 2020; Kunz & Minder, 2020). Although the individual's home has traditionally been the most preferred place of death (Agar et al., 2008; Fukui, Yoshiuchi, Fujita, Sawai, & Watanabe, 2011), an increasing number of older individuals are dying in long-term care facilities (LTCFs) (Broad et al., 2013). Accordingly, LTCFs, which have also been referred to as nursing homes, care homes, residential care homes and skilled nursing facilities according to their system and policies, are residential-type establishments that provide 24-h, 7-days-a-week care for older individuals (Froggatt et al., 2017; Sanford et al., 2015).

LTCF residents, who usually have multiple comorbidities and dementia, often progress from frailty to EOL within such facilities (Froggatt & Reitinger, 2011). Direct care providers in LTCFs include both qualified and unqualified individuals with a wide variety of educational and training backgrounds who often do not have palliative and EOL care education (Anstey, Powell, Coles, Hale, & Gould, 2016; Karacsony, Chang, Johnson, Good, & Edenborough, 2015). Though international literature has supported the view that demand for palliative and EOL care in LTCFs is increasing, the education required to meet such a demand has been lagging (Evenblij et al., 2019; ten Koppel, Onwuteaka-Philipsen, van der Steen, et al., 2019; ten Koppel, Onwuteaka-Philipsen, Van den Block, et al., 2019; Smets et al., 2018). Limited resources and staffing continue to restrict staff education and training opportunities (Evenblij et al., 2019; Froggatt, 2005). Consequently, educational programmes on palliative and EOL care need to consider such LTCF characteristics (Froggatt, 2001).

Owing to societal needs, the number of studies on palliative and EOL care education in LTCFs has been gradually increasing since the early 2000 s. This has been guided by various international initiatives from the UK, such as the Gold Standard Framework for Care Homes (GSFCH) (The Gold Standard Framework, 2018) and Six Steps to Success (The End of Life Partnership, 2017). Moreover, the End-of-Life Nursing Education Consortium Geriatric curriculum (ELNEC-G) from

What does this research add to existing knowledge in gerontology?

- While need to improve palliative care in long-term care settings is recognised globally, most initiatives are ad hoc bespoke programmes that fail to recognise clinical setting characteristics or measurable outcomes.
- This review highlights the need for robust educational interventions that considers the impact on residents, families and staff.
- Educational interventions were mostly evaluated using staff's self-reported increase in knowledge, skills and confidence, with little follow-up to ensure its incorporation into clinical practice or effect on patient outcomes.

What are the implications of this new knowledge for nursing care with older people?

- Educational interventions for LTCFs need to address the characteristics of LTCFs such as high staff turnover and limited resources.
- Our findings offer useful insights on the development of palliative care educational programmes that highlight the need for standardised programmes based on measurable outcomes with some flexibility on addressing individual facility's contextual and educational needs.
- It is important to consider the mode of delivery of educational intervention; continuous staff support and follow-up are required to sustain its educational effect into practice.

How could the findings be used to influence policy or practice or research or education?

- This review highlights the need for more high-quality studies that are guided by implementation and andragogical frameworks and consider the characteristics of long-term care settings.
- Our findings highlight the care staff's concerns towards having conversations regarding palliative and EOL care with residents and their family.
- Educational intervention also needs to contribute to develop a culture of palliative and EOL care in LTCF.

the USA (American Association of Colleges of Nursing, 2019) has been used to provide education aimed at improving palliative and EOL care for those engaged in geriatric care, although its target group includes nurses in general and not specific to LTCF settings. Such initiatives have been widely recognised and used both nationally and internationally. While various approaches for improving palliative and EOL in LTCFs have been attempted, considerable variety and differences in educational interventions have been noted. Evidence has also suggested that the types of LTCFs and levels of palliative and EOL care development vary greatly among different systems and countries (Froggatt et al., 2017; ten Koppel, Onwuteaka-Philipsen, van der Steen, et al., 2019; ten Koppel, Onwuteaka-Philipsen, Van den Block, et al., 2019).

A systematic review by Hall, Kolliakou, Petkova, Froggatt, and Higginson (2011) on the effectiveness of interventions aimed at improving palliative care in LTCFs concluded the need for more robust trials in the area. Another systematic review by Anstey et al. (2016) regarding EOL education and training for nursing home staff reported that studies on EOL or palliative care education programmes in LTCFs had insufficient quality and programme credibility. As such, robust and synthesised evidence that would help determine the most appropriate educational approaches for improving palliative and EOL care from the perspective of care providers and recipients in LTCF settings has been lacking.

Acknowledging the limitations of the existing literature, the present review aimed to synthesise the current literature on palliative and EOL care educational interventions for staff working in LTCFs and identify barriers to and facilitators of intervention implementation. This review is part of a larger study concerning the translation and adaptation of a palliative care educational intervention developed in Europe into the Japanese LTCF setting. Therefore, studies published in both English and Japanese had been included for a wider understanding of international and Japanese evidence on this topic.

2 | METHODS

An integrative review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher, Liberati, Tetzlaff, & Altman, 2009). This type of review, which is the broadest among the research review methods, does not limit the inclusion of a study based on design. Instead, qualitative, quantitative, experimental and mixed-method studies may all be included to obtain a better understanding of the phenomenon under investigation (Booth, Sutton, & Papaioannou, 2016). This review framework as well as the five stages suggested by Whittemore and Knafl (2005) (i.e. 'problem identification stage', 'literature search stage', 'data evaluation', 'data analysis' and 'presentation') were used to guide the review process and enhance this review's rigour (Department of Health, 2008).

The problem identification stage was based on a preliminary literature search (Whittemore & Knafl, 2005). At the literature search stage, the first author performed a computerised search for peer-reviewed papers published in English or Japanese between 2007 and 2019. The search dates were restricted from 2007 as there had been policy changes that impacted on palliative and EOL care practice in long-term care settings, such as the End-of-life care strategy for England and Wales published (Department of Health, 2008) and the introduction of the EOL care financial incentives for LTCFs that provide EOL care in Japan (Ministry of Health, Labor, & Welfare, 2006). In addition to the database searches, the reference lists from current and previous literature reviews and research studies were examined to identify relevant articles not identified during the computerised database searches. The databases searched included CINAHL, EMBASE, MEDLINE, PsycINFO, Web of Science, Cochrane Library and the Japan Medical Abstract Society database. The contents of the following key journals on palliative care, general nursing and gerontological nursing from 2007 to 2019 were manually reviewed: *Palliative Medicine*, *Journal of Advanced Nursing*, *Journal of Clinical Nursing* and *Journal of Japan Academy of Gerontological Nursing*. MeSH terms and text words for LTCFs, palliative care, education and health personnel were combined. The search terms used are presented in Appendix S1, while inclusion and exclusion criteria are detailed in Table 1.

Study abstracts, titles and full texts, if necessary, were screened by the lead author (KI) against the inclusion/exclusion criteria and checked by the second reviewer (FH). Any discrepancies unresolved

TABLE 1 Inclusion and exclusion criteria

Inclusion	1. Original research 2. Examined educational interventions regarding palliative and end-of-life care for staff working in long-term care facilities 3. Education targets were the staff within the facility 4. Published between 2007 and 2019 5. Written in English or Japanese
Exclusion	1. Not mentioning elements (by name or description) of palliative and end-of-life care and educational intervention in the article's title, abstract or text 2. Studies conducted in institutions, such as hospitals, clinics, hospices or home care settings (patient's own home) 3. Educational intervention was for residents and/or family/carers 4. Education targets were external staff visiting the facilities to provide care 5. Low-quality papers with methodological flaws and/or insufficient information 6. Studies using a design with no available appraisal tools, such as audits, service evaluations and action research

by a discussion between the reviewers were adjudicated by a third reviewer (SM). Full-text versions of the studies that matched the selection criteria were retrieved and subsequently analysed.

During the data evaluation stage, two researchers independently evaluated the papers using Joanna Briggs Institute Critical Appraisal Tools for qualitative and quantitative studies (Aromataris & Munn, 2017) and the Mixed-Methods Appraisal Tool (2018) for mixed-methods studies, multi-methods studies, audit and action research (Hong et al., 2018).

The data analysis stage consisted of data reduction, data display, data comparison, drawing conclusions and verification process (Miles, Huberman, & Saldana, 2019; Whittemore & Knafl, 2005). Categories extracted included the type of educational intervention, education focus, target staff, evaluation method and barriers to and facilitators of educational intervention implementation. A data extraction table was developed to extract data from the included studies. All data extraction procedures were conducted by the first reviewer, after which a second reviewer checked 25% of the data extracted to confirm their accuracy.

3 | RESULTS

Our literature search identified 3528 papers, among which 2629 papers were screened for their titles and abstracts based on inclusion and exclusion criteria after eliminating duplicates. Full texts of 149 papers were then obtained for full-text screening, after which 52 titles were retrieved and assessed on their quality (Figure 1). The subsequent sections provide details of the synthesis of the included papers, educational interventions, outcome evaluations and barriers to and facilitators of educational intervention implementation. An overview of included papers is shown in Appendix S2; the item-level scores of critical appraisals are presented in Appendix S3.

3.1 | Synthesis of the included papers

This integrative review included 52 papers spanning 49 studies conducted in 13 countries, namely, the UK (*n* = 16), USA (*n* = 8), Canada (*n* = 6), Japan (*n* = 6), Belgium (*n* = 2), Sweden (*n* = 2), Australia (*n* = 3), Finland (*n* = 1), Hong Kong (*n* = 1), Ireland (*n* = 1), Italy (*n* = 1), New Zealand (*n* = 1) and Norway (*n* = 1), with one international study conducted in Belgium, England, Finland, Italy, the Netherlands, Poland and Switzerland. Study designs included cluster randomised control trials (*n* = 4), quasi-experimental studies (*n* = 23), qualitative studies (*n* = 8), mixed-methods studies (*n* = 6), multi-methods studies (*n* = 5), action research (*n* = 3) and audit (*n* = 3).

Education foci were on general palliative/EOL care (*n* = 36), advance care planning (ACP) and EOL communication (*n* = 7), dementia (*n* = 4), cultural competence (*n* = 1) and symptom management
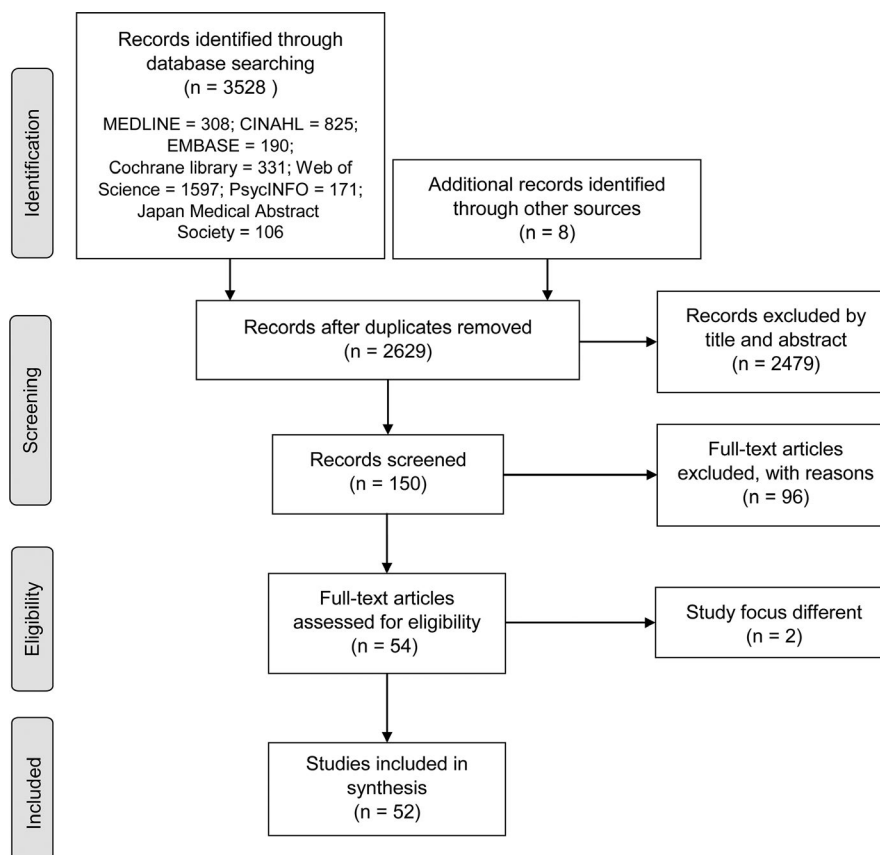

FIGURE 1 PRISMA (Preferred reporting items for systematic reviews and meta-analyses (Moher et al., 2009) flow diagram

(n = 1). The duration of the interventions varied greatly from a 1-h online programme (Kreisl Wilson, Tariman, & Graf, 2018) to regular sessions held over up to 18 months (Wickson-Griffiths et al., 2015). Educational interventions were provided within a facility (n = 31), at an external site (n = 9), at both on- and off-site facilities (n = 9), through online sessions (n = 1), through online learning (n = 1) and through blended learning comprising online learning and on-site education (n = 1). Various educational approaches were reported, such as an external trainer or facilitator providing on-site education (n = 22), train-the-trainer sessions (n = 10), staff members taking responsibility for education (n = 2), a combination of external educators and staff members (n = 5), a combination of online learning and an external facilitator (n = 1), simulation (n = 1), online learning only (n = 1), external site visitation (n = 1), self-directed learning (n = 1), pamphlets (n = 1) and blended learning (n = 1). The target participants for the educational interventions were registered nurses (RNs) only (n = 7); care workers (CWs) only (n = 5), including health care assistants and certified nursing assistants; RNs and CWs (n = 5); RNs and physicians (n = 1); and a mix of staff members from different disciplines (n = 34).

3.2 | Educational interventions

Among the 36 studies on educational interventions for general palliative and EOL care, six were supported by the GSFCH (Badger, Clifford, Hewison, & Thomas, 2009; Badger et al., 2012; Hall, Goddard, Stewart, & Higginson, 2011; Hockley & Kinley, 2016; Kinley, Preston, & Froggatt, 2018; Kinley et al., 2014), two adapted from the 'Route to Success in End of Life Care – achieving quality end-of-life are in care homes' (NHS End of Life Care Programme, 2017) (Kinley, Stone, Butt, Kenyon, & Lopes, 2017; O'Brien, Kirton, Knighting, Roe, & Jack, 2016), one by the GSFCH and the Liverpool Care Pathway for Care Homes (Hockley, Watson, Oxenham, & Murray, 2010), one by Palliative approach toolkit (Davis, Morgans, & Dunne, 2019), one by the ABC EOL education programme (Mayrhofer et al., 2016) and one by the PACE Steps to Success Programme (Van den Block et al., 2019). Moreover, five studies partially used the End-of-life Nursing Education Consortium (ELNEC) as a guide for their educational materials (Grossman, 2007; Kreisl Wilson et al., 2018; Kunte, Johansen, & Isenberg-Cohen, 2017; Malik & Chapman, 2017; Wen et al., 2012), while one developed an ACP programme based on the GSFCH (Baron, Hodgson, & Walshe, 2015). The remaining educational interventions on general palliative and EOL care were ad hoc programmes (Boomer, Ross, & Dillion, 2019; Cronfalk et al., 2015; Eguchi, Nagahata, Matsuda, Yamauchi, & Yamachi, 2013; Farrington, 2014; Frey, Boyd, Robinson, Foster, & Gott, 2017; Hirakawa, Yasui, Aomatsu, & Uemura, 2011; Hockley, 2014; Kaasalainen, Brazil, & Kelley, 2014; Kortes-Miller, Jones-Bonofiglio, Hendrickson, & Kelley, 2016; Koyama, 2011; Lee et al., 2013; Livingston et al., 2013; Mohlman, Dassel, Supiano, & Caserta, 2018; Phillips, Davidson, Jackson, & Kristjanson, 2008; Pitman, 2013; Shimada, Ito, Hirayama, & Takahashi, 2015; Verreault et al.,

2018; Waldron, Hasson, Kernohan, Whittaker, & McClaughlin, 2008; Yamachi, Nagahata, Matsuda, Yamaguchi, & Eguchi, 2013).

Other studies focused on specific topics that were related to palliative and EOL. Interventions that were related to improving ACP and EOL communication were another recurring theme among the included studies. Accordingly, these studies reported that following staff education on ACP, documentation on ACP- and/or EOL-related conversations with residents and families increased (Aasmul, Husebo, & Flo, 2018; Ampe, Sevenants, Smets, Declercq, & Van Audenhove, 2017; Baron et al., 2015; Kunte et al., 2017; Sussman et al., 2018; Wils, Verbakel, & Lisaerde, 2017), accompanied by a reduction in hospital transfers (Kunte et al., 2017) and deaths (Baron et al., 2015). Some programmes had been developed to meet the increasing needs for culturally sensitive palliative and EOL care in settings where residents have diverse cultural backgrounds (Kataoka-Yahiro, McFarlane, Koijane, & Li, 2017; Livingston et al., 2013). Considering that LTCF residents tend to have dementia, three studies focused on enhancing palliative and EOL care for those with advanced dementia (Arcand et al., 2009; Kuhn & Jeannine, 2012; Nakanishi, Miyamoto, Long, & Arcand, 2015). Such educational interventions resulted in greater staff satisfaction with communication (Arcand et al., 2009), as well as increased knowledge and better attitudes towards palliative care for residents with advanced dementia (Nakanishi et al., 2015).

Some studies have referred to or used andragogical frameworks or models during the development, implementation and evaluation of their educational interventions, which include Knowles' adult learning theory (Malik & Chapman, 2017), experiential learning cycle model (Shimada et al., 2015), adult learning, reflective learning, problem-based learning and constructive learning (Lamppu et al., 2019), Organisational change theory (Moore et al., 2017) and ECHO model of education (Dowling, Payne, Larkin, & Ryan, 2019).

3.3 | Outcome evaluations

While three studies assessed the impact of their interventions for up to 12 months, 18 studies conducted pre- and immediate post-intervention evaluation and 12 studies performed post-intervention evaluation. Intervention evaluations were focused on staff-related outcomes (n = 21), resident/family outcomes (n = 1) or a combination of staff and resident/family outcomes (n = 18). Outcome measures for quantitative studies and quantitative portions of mixed-method studies varied, with some employing validated tools and others utilising originally created tools. Although an increasing number of studies have used validated tools, variations in use still exist. Accordingly, 16 studies had used validated tools, the targets and focus of which are presented in Table 2.

Most of the studies assessed palliative/EOL care knowledge, attitude, quality of care and perception, as well as staff members' level of satisfaction with the programme. Though staff knowledge was the most common outcome, a variety of assessment tools had been used, including the End-of-Life Nursing Educational

TABLE 2 Validated outcome measurement tools used in included studies

Outcome	Focus of measurement	Tool	Reported or data gathered by	Studies
Resident/family	Satisfaction with care at the end-of-life	After Death Bereaved Family Member Interview[a]	Family/carers	Arcand et al. (2009) and Livingston et al. (2013)
		FAMCARE-2	Family/carers	Kataoka-Yahiro et al. (2017)
		End-of-Life in Dementia–Satisfaction with Care	Staff	Van den Block et al. (2019)
		Family Perception of Care Scale[a]	Family/carers	Verreault et al. (2018)
	Relative's experiences during the final weeks	Quality of life-AD	Family/carers	Livingston et al. (2013)
	Stress symptoms	General Health Questionnaire	Family/carers	Livingston et al. (2013)
	Resident-experienced symptoms and signs	Symptom Management for End-of-Life Care in Dementia	Family/carersStaff	Verreault et al. (2018) and Moore et al. (2017)
		Edmonton Symptom Assessment System	Staff (or research nurse)	Lamppu et al. (2019)
		Pain Assessment in Advanced Dementia	Staff (or research nurse)	Lamppu et al. (2019) and Moore et al. (2017)
		Waterlow Scale (pressure ulcer)	Staff	Moore et al. (2017)
		Neuropsychiatric Inventory,	Staff	Moore et al. (2017)
		Cohen-Mansfield Agitation Inventory	Staff	Moore et al. (2017)
		Symptom Management at EOL in Dementia	Staff	Moore et al. (2017)
	Comfort	Comfort Assessment in Dying scales	Family/carers,Staff	Van den Block et al. (2019) and Verreault et al. (2018)
	Quality of life	WHOQOL-BREF	Residents	Bökberg, Behm, Wallerstedt, and Ahlstrom (2019)
Resident/family (cont)		WHOQOL-OLD	Residents	Bökberg, Behm, Wallerstedt, et al. (2019)
		Health-related quality of life	Staff (research nurse)	Lamppu et al. (2019)
		Quality of Life in Late-Stage Dementia Scale	Staff	Moore et al. (2017)
	Quality of dying	Quality of Dying in Long-Term Care	Staff	Van den Block et al. (2019)
	Satisfaction with care	End-of-Life in Dementia–Satisfaction with Care	Staff	Lamppu et al. (2019) and Van den Block et al. (2019)
	Communication	Family Perception of Physician-Family Communication	Family/carers	Van den Block et al. (2019)

TABLE 2 (Continued)

Outcome	Focus of measurement	Tool	Reported or data gathered by	Studies
Staff	Confidence in palliative care skills	Palliative care education questionnaire	Staff	Frey et al. (2017)
	Depression	Hastian and McLean's Brief Screen of Depression	Staff	Frey et al. (2017)
	Compassion satisfaction, burnout and secondary traumatic stress	Professional QOL scales	Staff	Frey et al. (2017)
	Psychological empowerment	Spreitzer's Empowerment Scales	Staff	Frey et al. (2017)
	Satisfaction with care	FAMCARE-2	Staff	Kataoka-Yahiro et al. (2017)
	Knowledge and attitude towards palliative care for dementia	Questionnaire on palliative care for advanced dementia scale	Staff	Nakanishi et al. (2015)
	Knowledge of palliative care	Palliative Care Quiz for Nurses (U of Ottawa)	Staff	Pitman (2013)
		ELNEC Test	Staff	Pitman (2013)
		Palliative Care Survey[a]	Staff	Van den Block et al. (2019)
	Level of confidence in making decisions within each end-of-life care domain	Modified Critical Action Confidence Survey	Staff	Kreisl Wilson et al. (2018)
	Person-centredness of care	Person-centred Care Assessment Tool	Staff	Bökberg, Behm, Wallerstedt, et al. (2019)
	Person-centredness of the care environments	Person-Centred Climate Questionnaire	Staff	Bökberg, Behm, and Ahlström (2019)
	Self-efficacy in communicating with residents and their families at the end-of-life	Self-Efficacy in End-of-Life Care Survey	Staff	Van den Block et al. (2019)
	Educational needs regarding communication and cultural and ethical values	End-of-Life Professional Caregiver Survey	Staff	Van den Block et al. (2019)
Resident record	Involvement of residents and families in the conversations	Observing Patient Involvement Scale	–	Ampe et al. (2017)
	Profile of the most recent five deaths and associated care	After Death Analysis form	–	Badger et al. (2009)
	Resident characteristics and resource use	Modified InterRAI Form	–	Mayrhofer et al. (2016)

[a]Tools developed specific to long-term care facilities.

Consortium Knowledge Assessment Test (Lange, Shea, Grossman, Wallace, & Ferrell, 2009) and Palliative Care Quiz for Nursing (Ross, McDonald, & McGuinness, 1996) for nurses, the Hospice And Palliative Nurse Association's 10-item instrument for certified nurse assistants (Kunte et al., 2017), the Questionnaire on Palliative Care for Advanced Dementia (qPAD) (Long, Sowell, Hess, & Alonzo, 2012) and the Palliative Care Survey (Thompson, Bott, Boyle, Gajewski, & Tilden, 2011) for multidisciplinary staff. The level of confidence in decision-making (Kreisl Wilson et al., 2018), self-efficacy (Van den Block et al., 2019) and satisfaction (Kataoka-Yahiro et al., 2017) had also been assessed. Frey et al. (2017) examined staff well-being pre- and post-intervention by assessing depression (Hakstian & McLean, 1989), compassion satisfaction (Stamm, 2010), burnout (Malach-Pines, 2005) and secondary traumatic stress (Figley, 2013) and empowerment (Spreitzer, 1995) as secondary outcomes. This was the only study that determined the impact of their educational intervention on staff well-being, although no significant differences had been reported in the aforementioned aspects. All abovementioned staff outcome measures were self-reported, with no study following up whether educational interventions and increased staff knowledge had actually been embedded in practice.

Resident outcomes were assessed in terms of quality of care, quality of life, quality of death, care satisfaction, symptom experience, comfort and staff and resident/family communication, which had been mostly assessed or reported by family/carers or staff members. One study directly asked residents regarding their quality of life (Bökberg, Behm, & Ahlström, 2019), while five studies conducted surveys to deceased residents' family. Resident outcome measures that were selected to assess quality of life, comfort, care quality, symptom management and satisfaction included Symptom Management for EOL Care in Dementia, the Comfort Assessment in Dying scales (Van den Block et al., 2019; Verreault et al., 2018) and the Quality of Dying in Long-Term Care (Hall, Longhurst, & Higginson, 2009). The quality of EOL care from the perspective of the residents' families was assessed using the After Death Bereaved Family Member Interview (Arcand et al., 2009; Livingston et al., 2013) and the Family Perception of Care Scale, while family satisfaction was measured using the FAMCARE-2 (Aoun, Bird, Kristjanson, & Currow, 2010) satisfaction instrument (Kataoka-Yahiro et al., 2017).

Other sources for evaluation included residents' records and documentation. Several tools were used to evaluate whether the intervention had been incorporated into daily care and determine the extent to which EOL care conversations had been conducted between staff and residents/family. Such tools included the OPTION scale (Elwyn et al., 2005) to evaluate residents' and families' degree of involvement in conversations (Ampe et al., 2017); the After Death Analysis audit tool for GSF to record details of the five most recent deaths (Badger et al., 2009); and the interRAI (interRAI, 2019) for resident characteristics and care needs and estimate resource use (Mayrhofer et al., 2016). Audit data such as the number of emergency hospital admission cases (Di Giulio et al., 2019; Kunte et al.,

2017), place of resident's death (Hockley et al., 2010; Kinley et al., 2017; Mayrhofer et al., 2016) and completion of documentation such as Do-Not Resuscitate document and ACP (Di Giulio et al., 2019; Finucane, Barbara, Moyes, Oxenham, & Murray, 2013; Kinley et al., 2017; Kuhn & Jeannine, 2012; Kunte et al., 2017; Mayrhofer et al., 2016) were also used to evaluate practice change due to their interventions.

3.4 | Barriers to and facilitators of educational intervention implementation

Although majority of the studies reported positive intervention outcomes, many experienced barriers to the implementation and continuation of educational interventions. The most frequently reported barrier was time constraints between education/training and work (Aasmul et al., 2018; Ampe et al., 2017; Hall, Goddard, et al., 2011; Kunte et al., 2017; Waldron et al., 2008; Wickson-Griffiths et al., 2015). The high turnover of staff and administrative personnel also contributed to the loss of learning and difficulty of ensuring continuity of education (Kuhn & Jeannine, 2012; Kunte et al., 2017; O'Brien et al., 2016). Our results showed that the overall culture on palliative and EOL care in the LTC setting affected staff members' motivation for engaging with education. Closed communication cultures within LTCFs or avoiding conversations around palliative and EOL care hindered the development of cultures that improve palliative and EOL care (Hall, Goddard, et al., 2011; Kinley et al., 2014; Nakanishi et al., 2015). Furthermore, the unwillingness or reluctance by staff to engage with the programme and lack of confidence in talking with residents regarding death and dying hindered their involvement in palliative and EOL care-related activities (Aasmul et al., 2018; Ampe et al., 2017; Hall, Goddard, et al., 2011; Sussman et al., 2018).

The included studies suggest that the lack of clarity concerning roles and responsibilities during palliative and EOL care activities impacted education within the facilities (Ampe et al., 2017; Mayrhofer et al., 2016; Sussman et al., 2018). Another barrier included relationship issues, such as lack of trust or understanding between LTCFs and external organisations, including GPs and out-of-hours services (Badger et al., 2012). Similar findings were noted among different professionals within a facility (Cronfalk et al., 2015; Farrington, 2014; Nakanishi et al., 2015). This created difficulties in establishing appropriate communications and inter-professional collaboration, both of which are necessary for the continuity and delivery of palliative and EOL care within and across organisations.

An organisation's recognition and value of palliative and EOL care quality had been found to impact how much they devoted their resources (time, staff and money) to educational interventions (Ampe et al., 2017; Davis et al., 2019; Finucane et al., 2013; Kaasalainen et al., 2014; Kinley et al., 2014; Kuhn & Jeannine, 2012; Mayrhofer et al., 2016). This is also related to the extent at which facilities focused on post-intervention support for their staff members. Most of the included studies did not conduct long-term evaluation of

the interventions. Farrington (2014) reported that although their e-learning intervention positively impacted staff members' knowledge of and confidence with palliative and EOL care, it lacked regular, structured support for post-course reflection and discussion among staff members. Thus, whether improvement of care had been sustained remained unclear.

Facilitators of interventions included active engagement and support from senior and managerial level staff, participation of all staff levels in interventions, readiness of LTCFs and the presence of a stable workforce (low staff turnover). Engagement and support from managers and leaders as a matter of policy helped with the implementation of interventions and promoted better staff commitment (Aasmul et al., 2018; Ampe et al., 2017; Arcand et al., 2009; Badger et al., 2009; Cronfalk et al., 2015; Frey et al., 2017; Kinley et al., 2014; Mayrhofer et al., 2016). Continuous education for all staff levels was also a key to a successful intervention and better relationships among facility staff members (Ampe et al., 2017; Arcand et al., 2009). Mayrhofer et al. (2016) reported that a facility's readiness, which included the roles and responsibilities of trainers and how and where they were situated in the organisational structure, how the intervention was integrated into the everyday workflow, staff turnover rates and the level of senior-level personnel engagement, determined the level of participation in their intervention. Furthermore, another study showed that effective advertisement and promotion of the intervention had a positive impact on staff engagement (Wickson-Griffiths et al., 2015).

4 | DISCUSSION

The importance of palliative and EOL care education for LTCFs has been increasingly recognised, given the rise in the number individuals dying in this environment. The recent COVID-19 pandemic and global high death rates in LTCFs posed the importance of preparation and ability of staff to integrate palliative and EOL care for their residents and family (Gilissen, Pivodic, Unroe, & van den Block, 2020; Payne et al., 2020). The number of studies attempting to gather evidence on this matter has been increasing over the past two decades. Interestingly, the findings of the present review show that a gradual change has been occurring in the quality of palliative and EOL care education and their study methodologies. However, although most of the research had been undertaken in countries advocating palliative and EOL care as a matter of policy, a gap in actual practice exists. In addition, many educational programmes have lacked details of whether such programmes were based on evidence-based practices or national standards. With regard to study quality, most of the studies adopted a pre- and post-intervention comparison design without controls, with only four randomised controlled trials (RCTs) being included herein, suggesting the lack of RCTs in this area. This may be attributed to the challenges of conducting such studies in this particular care setting given the characteristics of LTCFs, such as high staff turnover rates, limited resources for education and variations in facility

types and resident characteristics (Hall et al., 2009; Murfield, Cooke, Moyle, Shum, & Harrison, 2011; Shepherd, Nuttall, Hood, & Butler, 2015). However, recent years have seen some increase in the use of RCTs, potentially addressing the paucity of robust evidence. However, caution is needed when considering what constitutes 'best' evidence in this setting, as other research methodologies such as action research and implementation science, may be beneficial in seeking to address many of the barriers that have been identified for LTCFs.

The present review suggested considerable variability in educational interventions and noted a lack of globally standardised interventions to date. Only one study attempted an intervention across seven countries; the findings showed great variances across and within these countries (Oosterveld-Vlug et al., 2019; Van den Block et al., 2019). Implementation of their intervention was influenced by the programme itself and its delivery, how and what kind of people were involved in the programme and the implementing practice's context (Oosterveld-Vlug et al., 2019). Given that level of palliative care development and LTCFs differ from one country to another (Centeno et al., 2007; Clark et al., 2020; Froggatt et al., 2017) and that diverse educational backgrounds and practice experience of staff members, this study highlighted that preparing and providing standardised programmes that meet unique educational goals and needs has remained a challenge. Also, the included studies were conducted in countries where palliative care is at an advance stage of integration (Clark et al., 2020) and there is less evidence from countries with less integration. Therefore, it is important to question whether such standardisation is required and whether it is more helpful to consider 'core' competencies along with specific competencies for different roles and responsibilities, rather than a one-size-fits-all approach.

In their cluster RCT, Van den Block et al. (2019) revealed no significant changes in primary outcomes given the complexity of their intervention with multiple components implemented over a year, which made it difficult to explain which component was effective. Also, over-standardisation of the intervention meant that specific needs of each intervention site were not met. A systematic review by Low et al. (2015) on interventions aimed at altering staff behaviour and resident outcomes in nursing homes concluded that no 'magic bullet' exists for improving staff behaviour and resident outcomes. These studies illustrated the difficulty of setting outcomes during complex interventions, such as educational programmes. Therefore, educational interventions for LTCFs cannot focus solely on the topic of palliative care. Instead, theories of learning, organisational characteristics and the context within which the intervention has to be delivered also need to be integrated into the design while also considering the implementation process.

The multifaceted needs of LTCFs have an impact on the implementation of educational efforts. The present review reported various barriers to implementing educational interventions. As noted in the literature, staff shortage and high turnover rates, which limits their time for educational sessions, had been the major barrier to educational interventions. Other important points, such as

institutional cultures of palliative and EOL care, also had an impact on how facilities value and assign educational resources. However, the present review suggested that the lack of managerial support, understanding of palliative care and education can contribute to insufficient post-intervention support or continuity of education. Staff members' perceptions of palliative and EOL care have also been considered a barrier in this review. Conversations regarding EOL care choices or preferences with residents and their families had been a significant hurdle for staff members, particularly care workers, who tended to avoid such topics. This may be attributed to the many staff members who are reluctant to accept responsibility for palliative and EOL care within the facility. Continuous support for changing perceptions and addressing fears related to palliative and EOL care is imperative for ensuring staff confidence within such settings.

A recent scoping review on strategies for palliative care education and organisational intervention implementation highlighted the importance of the context and tailored delivery that meets the needs of the setting (Collingridge Moore et al., 2020). Our results also suggest the necessity for considering contextual issues and the use of implementation frameworks to guide intervention. Kitson, Harvey, and McCormack (1998) argued that a successful implementation occurs when the level of evidence is high, staff are receptive to change, and appropriate facilitation has been provided. Although education alone may not be sufficient to promote changes, a combination of evidence-based education, culture of change and support is needed in such settings. Consequently, recent studies have attempted various educational intervention approaches. Rather than just delivering traditional on-site learning sessions and train-the-trainer type interventions, recent interventions have provided continuous high facilitation and increased use of technology, such as online courses and online conference systems. The combination of technology use and continuous support in practice may enable LTCFs, where time and resources are limited, to sustain and embed learning outcomes in practice.

Educational interventions aim to improve staff members' knowledge, attitudes and skills, with the ultimate goal of improving the quality of palliative and EOL care and residents' experiences. However, residents' input had been missing from the included papers, while only a few studies had assessed the impact of their interventions from the viewpoint of the service users. To actualise person-centred care, input from the care recipients, including those with dementia, should be sought. Patient and public involvement and engagement in education, practice and research has been widely recognised and practised as an important component of health and social care (Backhouse et al., 2016; Dewar, 2005; Twiddy, Muir, Boote, & PiCHRG, 2013). Various hurdles related to the social skills of both residents and researchers, resources and organisational factors have been reported in research involving older residents; however, several methods allow for the residents' voice to be heard, such as utilising sufficient resources for developing relationships with residents and individualised communication with researchers (Backhouse et al., 2016).

Some strengths and limitations of the current review need to be highlighted. Accordingly, one key strength has been the inclusion of both English and Japanese papers, which may have provided a wider global context compared to previous review papers on a similar topic. However, papers in other languages and grey literature may need to be explored to further enhance our understanding.

5 | CONCLUSION

This integrative review has synthesised the literature on current palliative and EOL care educational interventions for staff working in LTCFs and identify barriers to and facilitators of intervention implementation. Although the importance of and need for palliative and EOL care education among staff working in LTCFs has long been recognised, suboptimal study quality and variation in education have been reported. To address such issues, this review reveals the recent increase in the number of trials that employ more updated educational approaches, includes more resident and family involvement in the design of the educational interventions and considers the specific characteristics of LTCFs.

IMPLICATIONS FOR PRACTICE

- It is important to develop measures that ensure consistency in terms of educational interventions that help to address widespread variability and quality considerations in the LTCF setting.
- Staff education needs to include a focus not just on supporting skills and knowledge base but also strategies to address contextual considerations within this setting.
- Whilst there are challenges, the involvement of LTCF residents and their family in curriculum development and implementation in this setting is required in order to deliver effective person-centred palliative and end of life care.

CONFLICT OF INTEREST
The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS
KI, SM, AR,FH and SP designed the study; KI and FH involved in data collection and analysis; and KI, SM, AR, FH and SP prepared the manuscript.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

Appendix S1

Appendix S2

Appendix S3

How to cite this article: Iida K, Ryan A, Hasson F, Payne S, McIlfatrick S. Palliative and end-of-life educational interventions for staff working in long-term care facilities: An integrative review of the literature. *International Journal of Older People Nursing*. 2020;00:e12347. https://doi.org/10.1111/opn.12347