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The Impact of Compassionate Care Education on Nurses: A Mixed-Method Systematic Review

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Impact of Compassionate Care Education on Nurses

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Involved in drafting the manuscript or revising it critically for important intellectual content.	AC, MS, ML, NC, JH, JD, CL, ES
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ABSTRACT

Aims: To identify, describe, and summarise evidence from quantitative, qualitative, and mixed-method studies conducted to prepare nurses and nursing students to lead on and/or deliver compassionate care.

Design: Mixed-method systematic review.

Data sources: CINAHL, Medline, PsychINFO, and SocINDEX (January 2007–February 2018).

Review methods: Papers were screened by two independent reviewers using an online screening tool and data were extracted using a st andardised data extraction table. Parallel-results convergent synthesis was used to synthesise evidence from included qualitative, quantitative, and mixed-method studies. Quality appraisal and risk of bias assessment were conducted.

Results: Fifteen studies were included with three main themes and six sub-themes: (1) programme impact (impact on ward-level and senior nurses and impact on nursing students and educators); (2) programme characteristics (characteristics leading to positive outcomes

and characteristics leading to negative outcomes); and (3) programme implementation (implementation barriers and implementation facilitators). Compassionate care education programmes helped enhance nurses' ability to engage in reflective practice, deal with clinical challenges, and gain confidence. The importance of nurturing compassionate care delivery in nursing education was highlighted in the literature. Various nursing-level, patient-level, and organisational barriers to compassionate care delivery were identified.

Conclusion: The impact of compassionate care educational programmes on nurses was predominantly positive. Further evaluation of the long-term impact of these programmes on nurses, patients, and organisations is warranted.

Impact: Optimal delivery of compassionate care can be achieved by building organisational infrastructures that support nurses from all levels to attend education programmes and lead on compassionate care delivery.

Key words

leadership, compassion, care, education, nurses, systematic review

INTRODUCTION

Compassion is a core component of the nursing profession and a necessary element of nursing care (Costello & Barron, 2017). It also serves as an important feature of modern nursing, a fundamental aspect of high-quality healthcare provision, and a motivator for many nurses to select nursing as their profession (O'Driscoll, Allan, Liu, Corbett, & Serrant, 2018; Shantz, 2007).

Compassionate care is "a deep feeling of connectedness with the experience of human suffering that requires personal knowing of the suffering of others" (Peters, 2006; p. 38), and "a virtuous response that seeks to address the suffering and needs of a person through relational underst anding and action" (Sinclair et al., 2016; p. 193). Dewar, Pullin, and Tocheris (2011) conceptualized compassionate care in terms of the relationship that exists between vulnerable human beings that must be nurtured.

Developing nurses' capacity for compassion is possible by providing organisational support and professional education (Zamanzadeh, Valizadeh, Rahmani, van der Cingel, & Ghafourifard, 2018). It is also acknowledged that compassionate care is not delivered in a vacuum, but within the context of diverse healthcare delivery systems, environments, and cultures (Jones, Winch, Strube, Mitchell, & Henderson, 2016).

Background

The emerging consensus in health policy discourse is that care and compassion are under threat in today's healthcare environment. Consequently, there is an increasing emphasis on developing interventions to improve compassionate care delivery as a key component of quality healthcare (Blomberg, Griffiths, Wengström, May, & Bridges, 2016; Mannion, 2014; Sinclair et al., 2016). However, the development of these interventions is a

challenge and research results on their effectiveness are conflicting (Blomberg et al., 2016; Sinclair et al., 2016). Bridges et al. (2017) suggest that there is a dearth of evidence to inform health service managers on how to promote compassionate healthcare. While nurses want to be compassionate in their practice to improve outcomes for patients and families, Tierney, Seers, Tutton, and Reeve (2017) stressed the importance of considering compassionate care interventions for healthcare providers in general and, particularly, nurses.

A lack of compassionate care delivery was identified as one of the factors leading to failures in care (Francis, 2013). A systematic review of 24 studies on compassionate care delivery found that training nurses in compassionate care delivery enhanced patient satisfaction, quality of life, mood, and wellbeing and increased nursing job satisfaction and reduced burnout (Blomberg, Griffiths, Wengström, May, & Bridges, 2016). Moreover, a 12-month leadership training in compassionate care delivery increased nurses' self-awareness and helped them build better relationships with their colleagues (Dewar & Cook, 2014). Similarly, Masterson, Robb, Gough, and Machell (2014) reported that the "Enabling Compassionate Care in Practice" programme helped increase nurses' understanding and clinical application of the 6Cs (Care, Compassion, Courage, Competence, Communication, and Commitment). Research evidence on the impact of compassionate care education programmes on nurses and on which programme characteristics work best for nurses is sparse. However, this knowledge is important to the success and sustainability of compassionate care in practice (Francis, 2013). Therefore, a review of the literature is warranted to inform decision-making on relevant education programmes for nurses that will enable delivery of compassionate care in practice.

THE REVIEW

Aims

The aim of this mixed-method systematic review was to identify, describe, and summarise evidence from quantitative, qualitative, and mixed-method studies conducted to prepare nurses (i.e. registered nurses, clinical nursing leaders, and nursing educators) and nursing students to lead on and/or deliver compassionate care.

This review aimed to answer the following questions: (1) What is the impact of compassionate care education programmes on registered nurses, clinical nursing leaders, nursing educators, and/or nursing students?; (2) what programme characteristics have led to positive and/or negative outcomes?; and (3) what are the barriers and/or facilitators to the implementation of compassionate care education programmes?

Design

Mixed-method systematic reviews help synthesise evidence from qualitative, quantitative, and mixed-method studies (Kavanagh, Cambell, Harden, & Thomas, 2012; Pluye & Hong, 2014). This emerging design combines the strengths of quantitative and qualitative research approaches and accounts for their respective limitations (Pluye & Hong, 2014).

Guidelines for reporting mixed-method reviews are lacking (Flemming, Booth, Hannes, Cargo, & Noyes, 2018). Therefore, to minimise reporting bias, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist (Moher et al., 2009) and the enhancing transparency in reporting the synthesis of qualitative research (ENTREQ) guidance (Tong, Flemming, McInnes, Oliver, & Craig, 2012) were amalgamated and used in the reporting of this review. It is worth noting that the reporting of this review

does not consistently conform to PRISMA for the effect data, since estimates of precision (e.g. confidence intervals) were not reported in primary studies.

Search methods

The inclusion and exclusion criteria were pre-determined, based on the review questions, and reported in accordance with the PICOS (Population, Interventions, Comparator, Outcomes, and Studies) framework (Moher et al., 2009) (Table 1). The criteria for inclusion were papers that: (1) primarily focused on nurses and/or nursing students; (2) had a primary focus on promoting compassionate care; (3) measured the impact of compassionate care education on nurses and/or nursing students; (4) reported on the barriers and/or facilitators to compassionate care programme delivery; and (5) conducted in healthcare settings and/or educational institutions. Literature reviews, opinion papers, conference abstracts, policy reports, theses, and dissertations were excluded.

The electronic databases CINAHL, Medline, PsychINFO, and SocINDEX were searched on October 14th, 2016. The search and final updates were completed on February 5th, 2018 to identify the latest evidence. The reference lists of eligible papers and studies included in systematic reviews were checked for potentially relevant studies. The PICOS framework guided the database search.

The following keywords were truncated, searched on title and abstract, and combined using Boolean terms ' AND', 'OR', and 'NOT' and the proximity operator 'N' as follows: (compassion* N5 car*) and (nurs*) and (educat* OR course* OR program* OR model* OR framework* OR curricul* OR intervention* OR workshop* OR coach* OR "reflective practice"). Another search string (i.e. leader*) was added and combined with the above strings using ' AND' (Table S1). The search was limited to studies published between January 1st, 2007 and February 28th, 2018 in English. There is no gold st andard for limiting

the search in systematic reviews to a specific timeframe; however, studies published within a 10-year timeframe are considered recent (Saab, L anders, & Hegarty, 2016).

Search outcome

Papers identified from the electronic database search were exported to Covidence, an online screening tool used by Cochrane reviewers (The Cochrane Collaboration, 2017). Each of the papers was screened on title and abstract and irrelevant records were excluded. The full-text of potentially eligible papers was then assessed. Title, abstract, and full-text screenings were conducted by the reviewers in pairs and screening conflicts were resolved either by consensus or a third reviewer.

Overall, 551 records were identified through database searching. Following deletion of duplicates, 200 records were screened on title and abstract and irrelevant records (N=82) were excluded. The full text of the remaining 118 papers was screened. Papers that did not meet the review eligibility criteria were excluded (N=103) and the remaining 15 papers were included in this review. Reference list checks from eligible studies and studies included in systematic reviews did not yield any additional papers. Abstract, title, and full-text screenings were conducted independently by two reviewers and screening conflicts were resolved by a third reviewer. The process of study identification, screening, and selection is presented in Figure 1.

Quality appraisal

The research design guided the choice of the quality appraisal and risk of bias assessment tools. The methodological quality of qualitative studies (N=10) was assessed using the Critical Appraisal Skills Program (CASP, 2017) checklist. The quality of mixed-method studies (N=4) was assessed using the 13-item Mixed Methods Appraisal Tool (MMAT) (Pluye & Hong, 2014), and the risk of bias for the pre-post study (N=1) was

assessed using the seven questions of the Effective Practice and Organisation of Care (EPOC, 2015) tool. Quality appraisal and risk of bias assessment were conducted by four reviewers and crosschecked by a fifth reviewer for accuracy. Studies were included in this review regardless of their methodological quality to minimise the risk of study selection bias (Saab et al., 2018).

Data extraction

Findings from the included papers were extracted using a standardised data extraction table (Table S2). Data extraction was performed by four reviewers who were involved in record screening and quality appraisal. The extracted data included the author(s) and year; country and setting; aim(s); study design and theoretical underpinning; study population; programme/intervention description; data collection method and instrument; and the key findings presented in accordance with the review questions. One reviewer crosschecked the data extraction table for accuracy.

Data synthesis

A meta-analysis was not possible due to the heterogeneity in the study designs, educational programmes, outcomes measured, instruments used to measure outcomes, and data collection settings (Higgins & Green, 2011). In mixed-method systematic reviews, data from quantitative and qualitative studies are synthesised either sequentially (i.e. sequential exploratory synthesis) or concurrently (i.e. convergent synthesis), with the latter being the most commonly used method of synthesis (Hong, Pluye, Bujold, & Wassef, 2017; Pluye & Hong, 2014). There are three subtypes of convergent synthesis namely data-based convergent synthesis, results-based convergent synthesis, and parallel-results convergent synthesis. Parallel-results convergent synthesis was used in the present review to subsequently incorporate the integration of qualitative and quantitative data in the results. This type of

synthesis is best suited for reviews that have two or more review questions (Hong et al., 2017). The present review has three distinct questions. Evidence pertaining to each of the three questions from each of the 15 reviewed studies was extracted and presented separately. Findings for each review question were then grouped and synthesised thematically and thematic areas were used as headings.

Three main themes and six sub-themes emerged from the synthesis of the reviewed literature as follows: (1) programme impact (impact on ward-level and senior nurses and impact on nursing students and educators); (2) programme characteristics (characteristics leading to positive outcomes and characteristics leading to negative outcomes); and (3) programme implementation (implementation barriers and implementation facilitators).

RESULTS

Study characteristics

Of the included studies (N=15), 10 were qualitative studies, four were mixed-method studies, and one was a pre-post pilot study. Most studies were conducted in the UK (N=12) and in acute care settings (N=8). Eight studies were underpinned by a theoretical framework or model. Participants in most reviewed studies (N=9) were registered nurses as well as nurses in managerial and leadership positions. Moreover, nurses were the main sample group in three studies that included allied healthcare professionals (Bridges et al., 2017; Dewar & Nolan, 2013) and nursing educators (Smith, Gentleman, Loads, & Pullin, 2014). Sample sizes ranged between 16 (Adamson & Dewar, 2015) and 2,242 participants (O'Driscoll et al., 2018).

Various interventions and programmes were highlighted in the reviewed literature, including: Compassion Café (Jones et al., 2016; Winch, Henderson, & Jones, 2015); modules with principles of compassionate care (Adam & Taylor, 2014; Adamson & Dewar, 2015);

Leadership in Compassionate Care Programme (Adamson & Dewar, 2015; Dewar, Pullin, & Tocheris, 2011; MacArthur, Wilkinson, Gray, & Matthews-Smith, 2017); the ENGAGE card (Engaged by your senior team; Nurtured by your manager; Glad to come to work; Acknowledged by your senior team; Guided by your manager; and Empowered to improve patient care) and improvement initiatives (Day, 2014); Enabling Compassionate Care in Practice Programme (Masterson et al., 2014); Creating Learning Environments for Compassionate Care (Bridges et al., 2017); Care Makers Programme (Zubairu et al., 2017); and Compassion in Practice Vision and Strategy (O'Driscoll et al., 2018). The complete study characteristics are included in Table 2 and data from individual studies are summarised in Table 3.

In terms of methodological quality; data collection, study design, and recruitment were appropriate in all but one qualitative study, whereby the sample size was not specified (Dewar et al., 2011). Rigour in data analysis was addressed in six qualitative studies, two did not address ethical issues (Adam & Taylor, 2014; Masterson et al., 2014) and only one reported on the relationship between the researcher and participants (MacArthur et al., 2017). With the exception of one study (Adamson & Dewar, 2015), findings from qualitative studies were clearly discussed (Table S3). The four mixed-method studies reported on qualitative and quantitative methods. Two mixed-method studies considered the researcher's influence (Dewar & Cook, 2014; Zubairu et al., 2017), only one reported on sample representativeness (Zubairu et al., 2017), and another failed to address quantitative and qualitative research questions, data analysis, sampling, and limitations (Winch et al., 2015) (Table S4).

The risk of bias in the pilot pre- and post-test study by Day (2014) was found to be low in relation to selective outcome reporting but high for the shape of the intervention, the intervention affecting data collection, blinding, and the risk of data contamination (Table S4).

Programme impact

Impact on ward-level and senior nurses

Overall, there was a consensus in the reviewed literature regarding the positive impact of compassionate care education programmes on nurses; this helped increase their ability to engage in reflective practice, deal with challenging situations, gain confidence to lead on compassionate care delivery, and attain a sense of pride. A 12-month compassionate care leadership programme enabled nurses to "influence the way things happened in the ward or unit; being able to discuss tough issues at work; reflecting on care to improve it and feeling valued for their contribution" (Dewar & Cook, 2014; p.1261). Moreover, nurses reported improved engagement in compassionate and respectful conversations (98%), self-awareness (78%), relationships (93%), and reflective practice (58%) (Dewar & Cook 2014). Similarly, the "Enabling Compassionate Care in Practice Programme" helped increase nurses' knowledge, understanding, and practical application of the 6Cs. Nurses also reported gaining courage and confidence to lead, get in touch with core nursing values, and engage in quality improvement and consulting activities (Masterson et al., 2014).

The "Care Maker" programme is a novel education programme that emphasises the 6Cs of care in practice (Zubairu et al., 2017). An evaluation of this programme found that 93.4% of nurses felt proud to be Care Makers and 60.4% reported increased job satisfaction. Most participants (89.3%) reported that their role enabled them to incorporate the 6Cs into practice. Qualitatively, participants reported an improved capability to challenge poor practice, prioritise patient safety, and initiate improvement initiatives. Similarly, following exposure to the ENGAGE card, improvement initiatives, and focus group discussions, a significant improvement in leadership and coaching skills was seen among nurses in the study by Day (2014). In addition, nurses found that focus group discussions allowed them to

come forward with ideas about individualising care. Nurse Managers also seemed motivated to respond to low engagement and increasing sense of pride (Day, 2014).

In some studies, the impact of compassionate care education programmes was delineated by the programme level of adoption, programme sustainability, and nurses' level of seniority. MacArthur et al. (2017) analysed the impact of the Leadership in Compassionate Care Programme on wards and development sites (N=14); senior nurses (N=7); and senior individuals in the National Health Service (NHS) and higher education institutions (N=5). It was found that, where there were high levels of program adoption, outcomes such as compassionate care for patients, relatives, and staff were significantly increased. In contrast, where there was a low level of adoption, the experiences of the participants were less positive and outcomes were more limited. A qualitative process evaluation (N=25 nurses) to identify the extent to which "Creating Learning Environments for Compassionate Care" (CLECC) programme was implemented found that staff were more engaged with patients and prioritised patient care over the completion of tasks (Bridges et al., 2017). However, sustaining the programme and its impact proved difficult.

Nurses in senior positions were found to have greater awareness in relation to national compassionate care initiatives. In an survey assessing the impact of the "Compassion in Practice Vision & Strategy" (CiPVS), a national programme built on the 6Cs, O'Driscoll et al. (2018) found that 88.3% of senior managers were aware of CiPVS compared with 46.5% of middle manager and 26.3% of ward-level nurses (X^2, 136.20; df=4; $p<0.001$). In addition, qualitative findings from the survey described a workforce that felt frustrated, overworked, and unsupported (O'Driscoll et al., 2018).

Impact on nursing students and educators

The importance of building a culture of compassion and nurturing compassionate care delivery among nursing students and during specialist nursing education were highlighted across several studies. Adam and Taylor (2014) explored nursing students' (N=30) learning needs in relation to compassionate care delivery. Nursing students stressed the importance of communication skills to challenge staff that lack compassion and respond to anxious and aggressive relatives. They also wanted skills to respond to bullying, deal with emotive situations, and build resilience (Adam & Taylor, 2014). One of the strategies to address these needs was highlighted by Adamson and Dewar (2015). In this study, real patient stories were used to enhance compassionate caring knowledge and skills as part of a blended module. It was found that patient stories enabled students to relate to and engage emotionally with patients, challenged their thinking, and helped increase their awareness of patient perspectives. Similarly, nurses undertaking specialist nursing education in operating theatre nursing were exposed to dignity preservation education with an element compassionate care (Blomberg et al., 2015). Education helped these nurses get to know patients, make themselves known to patients, and preserve patient privacy.

The "train the trainer" approach was identified as a key element to help nursing students and ward-level nurses develop their compassionate caring skills. Smith et al. (2014) interviewed nursing educators (N=8) about their experiences of compassion. In this study, participants highlighted the need to build a school culture that enabled lecturers to help nursing students develop their compassionate caring skills, leadership development, culture, and professional and personal development. Similarly, of the 39 educators who attended "Compassion Café," 22 stated that the content of the session was appropriate to their background, 22 believed that the 'Café' session exposed them to useful ideas and concepts,

and 21 perceived the content as useful to meet their needs, including teaching café methodology (Winch et al., 2015).

Programme characteristics

Characteristics leading to positive outcomes

Most reviewed studies (N=9) reported on programme characteristics that have led to positive outcomes. At the level of nursing education, these included: reflective stories, class discussions, and role-plays (Adam & Taylor, 2014) in addition to clinical stories that challenged nursing students' thinking and helped them become aware of patient perspectives (Adamson & Dewar, 2015).

At a clinical level, several novel and innovative programme delivery strategies we associated with positive outcomes. These include: the ENGAGE tool (Day, 2014); the 7Cs (i.e. being Courageous; Connecting emotionally; being Curious; Collaborating; Considering other perspectives; Compromising; and Celebrating) (Dewar & Nolan, 2013); factors 'inside-the-workplace' (e.g. relationships within and across the teams, treatment plans, and care priorities); and factors 'outside-the-workplace' (e.g. knowledge, understanding, and experience with critical incidents) (Jones et al., 2016).

Positive outcomes were also linked to involving nurses from all levels in compassionate care education (Bridges et al., 2017) as well as and promoting a culture of compassionate care in healthcare organisations (O'Driscoll et al., 2018). This was found to increases nurses' commitment to deliver compassionate care, make a contribution to improve patient experience, and view work from a different and positive lens (Zubairu et al., 2017).

Characteristics leading to negative outcomes

Only two studies reported on programme characteristics that have led to negative outcomes. These included 'outside-the-workplace' factors such as the stress caused by competing work and family demands (Jones et al., 2016). Moreover, nurses in the study by O'Driscoll et al. (2018), expressed frustration at being exhorted, through CiPVS, to deliver compassionate care while feeling that they were not treated with compassion themselves. This is an ongoing challenge in the nursing profession at present.

Programme implementation

Implementation barriers

Six studies reported on barriers to the implementation of compassionate care programmes. Barriers can be divided into nursing-level barriers, patient-level barriers, and organisational barriers. For instance, nursing students in the study by Adam and Taylor (2014) stated that the negative attitudes and behaviours of colleagues, nurses, patients, and their relatives served as barriers to compassionate care delivery. Reluctance of patients and families to ask questions, focusing on the medical rather than the compassionate side of care, using medical jargon, and strong emphasis on procedural rather than compassionate care were also identified as a barriers to programme implementation and subsequent compassionate care delivery (Adamson & Dewar, 2015; Jones et al., 2016).

Moreover, several factors mediated the impact and sustainability of the programmes at organisational-level. These include: the lack of available resources, the priorities of the wider system, workload, and lack of organisational support (Bridges et al., 2017; MacArthur et al., 2017; O'Driscoll et al., 2018).

Implementation facilitators

Facilitators of compassionate care were addressed in six studies and included the use of teach back method to check patient understanding and the use of open and honest stories (Adamson & Dewar 2015). Moreover, leadership coaching with ward managers and matrons, regular reflections, learning about the things that matter to people, and having relatives round daily on the ward enhanced communication and freed up time for compassionate nursing care (Day, 2014; Dewar et al., 2011). Jones et al. (2016) and MacArthur et al. (2017) found that the recognition of nurses by their superiors (i.e. senior and leadership staff) and investing time in initial groundwork with ward teams positively influenced programme sustainability. Furthermore, the plasticity programmes, such as the CLECC programme, enabled nurses to develop and adapt practices that suited local circumstances (Bridges et al., 2017).

DISCUSSION

This mixed-method systematic review examined the impact of compassionate care education programmes on nurses, explored programme characteristics that have led to positive and negative outcomes, and identified barriers and facilitators to the implementation of such programmes.

Evidence from this review suggests, overall, that the impact of compassionate care educational programmes on ward-level nurses, nursing leaders, nursing students, and nursing educators was positive. For instance, the ENGAGE card combined with quality improvement initiatives and staff focus group discussions improved staff engagement and leadership skills and helped reduce the incidence of hospital acquired pressure ulcers and falls (Day, 2014). Leadership programmes related to compassionate care also enabled nurses to influence the way things happened on their ward, helped them discuss tough issues at work (Dewar & Cook, 2014), and gave them more confidence to lead (Masterson et al., 2014). Compassion

Cafés were also found to be instrumental in engaging nurses and nursing educators in peer-based learning and sharing of ideas (Jones et al., 2016; Winch et al., 2015).

The importance of compassionate care education early in nursing career (Smith et al., 2014), and at undergraduate level is emphasised as key to overcoming the impediments to compassionate care delivery (Adam & Taylor, 2014; Adamson & Dewar, 2015). However, the participants in most studies included in this review were representative of managerial and senior positions. Although this was linked to better awareness of compassionate care programmes and strategies such as CiPVS, there was underrepresentation in this review from nurses in frontline clinical leadership who are more likely to be involved in direct patient care. Moreover, less representation in studies from low and middle management and ward level frontline nurses may have resulted in findings of lower awareness of such initiatives as in the study by O'Driscoll et al. (2018). Evidence suggests that, supporting both, senior and junior staff to avail of compassionate care programmes, is as a key step to embracing and sustaining change and promoting patient centeredness (Luxford, Safran, & Delbanco, 2011; MacArthur et al., 2017). To bridge the knowledge gap between senior management, middle management, and ward level nurses, Burston, Chaboyer, Wallis, and Stanfield (2011) recommended a hybrid model of change that involves top-down and bottom-up leadership in compassionate care programmes.

The barriers identified to compassionate care delivery were related to lack of available resources, lack of time, and lack of support (Bridges et al, 2017; MacArthur et al., 2017; O'Driscoll et al., 2018). Educational programmes may have a positive result but there is evidence also that workplace culture and team relations play key roles. For example, an emphasis on procedural care and competing demands between work and family may compromise compassionate care delivery (Jones et al., 2016). Therefore, compassionate care educational programmes should include skills for nurses to engage in self-compassion as well

as compassion for others. The role of professional education in developing compassionate nursing staff was stressed in the literature (Bray et al., 2014). Particularly those programmes that demonstrate to staff that their experience and wellbeing matter and provide staff with the opportunity to reflect on the human dimension of care, their own well-being, resilience, and support (Massie & Curtis, 2017). It is important to note that staff wellbeing and support are also thought to have a positive impact on patient-centred care delivery (National Leadership and Innovation Centre, 2017).

Limitations

It is clear from this review that there is a lack of robust and high-level evidence regarding the type of education programmes/interventions that are most effective to cultivate a culture of compassionate care and prepare leaders in compassionate care delivery. For instance, in most reviewed studies, compassionate care was integrated within a larger programme rather than as a standalone programme. As a result, it was unclear whether outcomes achieved were secondary to the initial programme, or secondary to the compassionate care component of the programme.

Methodologically, limitations exist in relation to sample representativeness, level of evidence, and validity and reliability of data collection instruments. For instance, the methodological quality of the reviewed qualitative studies was low as many failed to address the relationship between the researcher and participants, did not account for ethical issues, and did not employ measures to enhance rigour. Sample representativeness was questionable in mixed-method studies and the risk of bias for the only experimental study was relatively high (Day, 2014). In terms of statistical analysis and reporting, none of the included studies reported on estimates of precision and only O'Driscoll et al. (2018) reported on level of significance using p-values only. Of note, p-values alone do not provide direct estimates of

how likely a result is true. In contrast, effect sizes and measures of uncertainty are key to adding meaning to study findings (Chavalarias, Wallach, Li, & Ioannidis, 2016).

Rigour was sought throughout this review by assessing the methodological quality and risk of bias of the reviewed studies and synthesising and presenting evidence using rigorous methodologies and guidelines (Kavanagh et al., 2012; Moher et al., 2009; Pluye & Hong, 2014; Tong et al., 2012). However, three key limitations are noteworthy. Firstly, study selection bias could have occurred, as only studies that answered the review questions were included. Secondly, the literature search was limited to four databases and did not include records from the grey literature. Finally, the reviewed studies were heterogeneous in terms of design, data collection instruments, compassionate care programmes, sample size, data collection settings, and outcomes measured, which made it impossible to conduct a meta-analysis.

Implications

Creating a compassionate culture in healthcare is complex and compassion needs to be viewed through the four lenses of self, manager, team, and organisation (NHS, 2014). This approach may offer a useful framework to develop a strategic approach to the promotion and development of compassion in healthcare as well as the design of education programmes that have a positive and sustainable impact on nursing at all levels.

Findings from this review stress the need for education programmes designed to consider and promote a compassionate workplace culture. Moreover, there is a strong need to establish novel education programmes that, not only promote compassionate care delivery at all levels of care, but also promote self-compassion in nursing.

There is a need for research to include a 360-degree evaluation of educational programmes in compassionate care i.e. from the point of view of those who undertake the programme, patients of nurses educated/trained in compassionate care delivery, and organisations that sponsored their nurses to avail of compassionate care programmes. Researchers are also encouraged to conduct longitudinal studies to explore the long-term impact of compassionate care programmes on patient outcomes and outcomes in relation to leadership-building skills, and to assess whether positive outcomes were maintained over time. This is key, since concerns regarding the sustainability of compassionate care programmes were raised in the literature (Bridges et al., 2017; MacArthur et al., 2017). Moreover, researchers evaluating compassionate care programmes ought to use valid and reliable data collection instruments and recruit representative samples to enhance the generalisability of findings.

CONCLUSION

Evidence from this mixed-method systematic review suggests that compassionate care programmes had a positive effect on clinical leadership and confidence to lead change in practice. There were positive influences on nurses in terms of caring for patients compassionately, preserving patient privacy, fostering empathy, and offering individualised care. Moreover, compassionate care education led to improved job satisfaction, heightened sense of wellbeing, and increased pride in the nursing profession.

Given the positive outcomes linked to compassionate care programme delivery, from the findings of this review we conclude that it is important to: (1) support educational programmes for nurses and nursing students that emphasise both, self-compassion and delivery of compassionate care; and (2) programmes that include consideration of workplace

culture and staff well-being. The review findings also support further evaluation of the long-term impact of these programmes on nursing leadership and on outcomes for nurses, patients, and healthcare organisations.

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TABLE 1 Inclusion criteria using the PICOS framework

PICOS	Inclusion criteria	Exclusion criteria
Population	Nursing staff (i.e. staff nurses, clinical nurse leaders, and/or nursing students)	Non-nursing staff or studies where findings from nursing and non-nursing staff were indistinguishable
Interventions	Any intervention that involves preparing nursing staff to deliver compassionate care	Interventions that are not primarily focused on preparing nursing staff to deliver compassionate care
Comparator	Another intervention, model, programme, usual care, or one group pre-post comparison	Studies without a comparator were not excluded
Outcomes	Description of theory, content, and clinical exposure associated with the programme	No description of theory, content, and clinical exposure associated with the programme
	Measure of impact on nursing staff	No measures of programme impact on nursing staff
	Reporting of barriers and/or facilitators to programme delivery and/or implementation of learning into practice	No reporting of barriers and/or facilitators to programme delivery and/or implementation of learning into practice
	All healthcare settings	Non-healthcare settings
Studies	Quantitative, qualitative, and mixed-method studies	Literature reviews, opinion papers, conference abstracts, policy reports, theses, and dissertations

TABLE 2 Key study characteristics (n=15)

Country	UK (n=12)
	Australia (n=2)
	Sweden and Norway (n=1)
Setting	Acute care (n=8)
	University (n=3)
	NHS Trusts (n=2)
	Acute care and university (n=1)
	Residential care (n=1)
Study Design	Qualitative (n=10)
	Mixed-method (n=4)
	Pilot pre- and post-test (n=1)
Theoretical Underpinning	None (n=7)
	Compassion Café (n=2)
	Appreciative Relationship Centred Leadership (n=1)
	Appreciative Inquiry (n=1)
	Appreciative Inquiry and Action Learning Processes (n=1)
	Action Research (n=1)
	Normalisation Process Theory (n=1)
	Realistic Evaluation (n=1)
Population	Nurses (n=5)
	Directors of nursing, nurse managers, and staff nurses (n=4)
	Nursing students (n=2)
	Nurses and allied healthcare professionals (n=2)
	Nurses and nursing educators (n=1)
	Nursing educators (n=1)
Sample Size (min-max)	16–2,242

TABLE 3 Summary of included studies (n=15)

Reference	Country Setting	Design	Sample	Education	Data collection	Key Findings [a]
Adam and Taylor (2014)	UK University	Qualitative descriptive	30 nursing students	Compassionate care module	Reflective papers	**1.** Improved communication skills **2A.** Reflections, class discussions, and role playing **3B.** Nurses and patient relatives
Adamson and Dewar (2015)	UK University	Qualitative descriptive	16 nursing students	Leadership in Compassionate Care Programme	Moderated sessions	**1.** Students related to and engaged with stories **2A.** Patient stories **3A.** Teach back method and real stories **3B.** Reluctance of patients and families to ask questions, undermining compassionate care, and medical jargon
Blomberg et al. (2015)	Sweden and Norway Hospital	Qualitative descriptive hermeneutical	60 nurses	Operating Theatre Nurse education	Written critical events	**1.** Nurses getting to know patients, making themselves known to patients, being compassionate, and helping preserve patient privacy
Bridges et al. (2017)	UK NHS and University	Qualitative process evaluation	25 nurses and allied healthcare professionals	Creating Learning Environments for Compassionate Care	Individual interviews and observations	**1.** Benefit to own wellbeing and capacity to care, prioritising care, engaging with patients, and being compassionate **2A.** Principles underpinning the programme **3A.** Practices that suited local circumstances **3B.** Lack of resources, lack of time, and organisational priorities
Day (2014)	UK Hospital	Pilot pre-post	58 nurses (pre-test)	ENGAGE card and other	Completion of ENGAGE card and focus	**1.** Positive improvement in all ENGAGE components **2A.** Humanised teaching and the ENGAGE card

Reference	Country Setting	Design	Sample	Education	Data collection	Key Findings [a]
			57 nurses (post-test)	initiatives	groups	**3A.** Leadership, reflection, and coaching sessions
Dewar and Cook (2014)	UK Hospital	Mixed-method	408 nurses (quantitative) 65 nurses (qualitative)	Compassionate Leadership Programme	Survey and reflections	**1.** Improvement in self-awareness, relationships, reflective thinking, conversations, and culture of learning
Dewar and Nolan (2013)	UK Hospital	Mixed qualitative methods	57 nurses and allied healthcare professionals	Not applicable	Observations, interviews, stories, and discussions	**2A.** Person and relational knowledge. Generating the 7Cs: Courageous, Connecting, Curious, Collaborating, Considering, Compromising, and Celebrating
Dewar et al. (2011)	UK Hospital	Qualitative descriptive	Nurses, patients, and relatives	Not applicable	Positive Care Practice Statements	**3A.** Learning about things that matter to people. Relatives' daily rounds enhanced communication and freed up time for nursing care
Jones et al. (2016)	Australia Hospital	Qualitative descriptive	171 nurses	Not applicable	Post-it notes	**2A.** Culture, teamwork, understanding, connections, experience, and nurses' social and family situation **2B.** Competing work and family demands **3A.** Contribution of senior staff, leaders, and team **3B.** Procedural care
MacArthur et al. (2017)	UK Hospital	Qualitative, longitudinal	42 nurses	Leadership in Compassionate Care	Interviews, observations, meetings,	**1.** High level of programme adoption linked to positive outcomes and vice versa

Reference	Country Setting	Design	Sample	Education	Data collection	Key Findings [a]
				Programme	research, and conference	**2A.** Engagement with the programme **3A.** Practice development, Senses Framework, facilitation skills, groundwork with teams, and leadership
Masterson et al. (2014)	UK Hospital and other settings	Qualitative descriptive	111 nurses	Enabling Compassionate Care in Practice Programme	Group discussions and written and verbal comments	**1.** Increased knowledge, understanding, and application of compassionate care principle. Increased confidence to lead and get in touch with nursing values. Positive changes made in practice. Nursing skills such as quality improvement
O'Driscoll et al. (2018)	UK NHS and University	Mixed-method	2,242 nurses (quantitative) 9 nurses (qualitative)	Compassion in Practice Vision and Strategy	Online survey and telephone interviews	**1.** Senior management significantly more aware of strategy **2A.** Perception of positive achievement of strategy among senior staff. Strategy improves patient care **2B.** Strategy insulting and time wasting
Smith et al. (2014)	UK University	Qualitative descriptive	8 nurses and educators	Not applicable	Collages and notes	**1.** Need to support educators in supporting students. Opportunity for educators to engage in leadership training
Winch et al. (2015)	Australia Hospital and University	Mixed-method	39 nursing educators	Compassion Café	Open-ended questions	**1.** Content relevant to work situation, appropriate to background, useful for needs, and ideas were new **2A.** Useful concepts and participant empowerment
Zubairu et al. (2017)	UK NHS trusts	Mixed-method	258 nurses (quantitative) 13 nurses	Care Maker Programme	Questionnaire and telephone interviews	**1.** Feeling proud, adopting 6Cs, and increased job satisfaction **2A**. Sense of belonging to a wider community **2B.** Lack of networking opportunities

Reference	Country Setting	Design	Sample	Education	Data collection	Key Findings [a]
			(qualitative)			**3B.** Lack of resources, time, and support to fulfil role

ENGAGE: engaged by your senior team, nurtured by your manager, glad to come to work, acknowledged by your senior team, guided by your manager, and empowered to improve patient care; NHS: National Health Service.

[a] Findings presented according to review questions:

1. What is the impact of compassionate care education programmes on participants?
2. What programme characteristics have led to:

A. Positive outcomes
B. Negative outcomes

3. In the implementation of compassionate care programmes, what are the:

A. Facilitators
B. Barriers

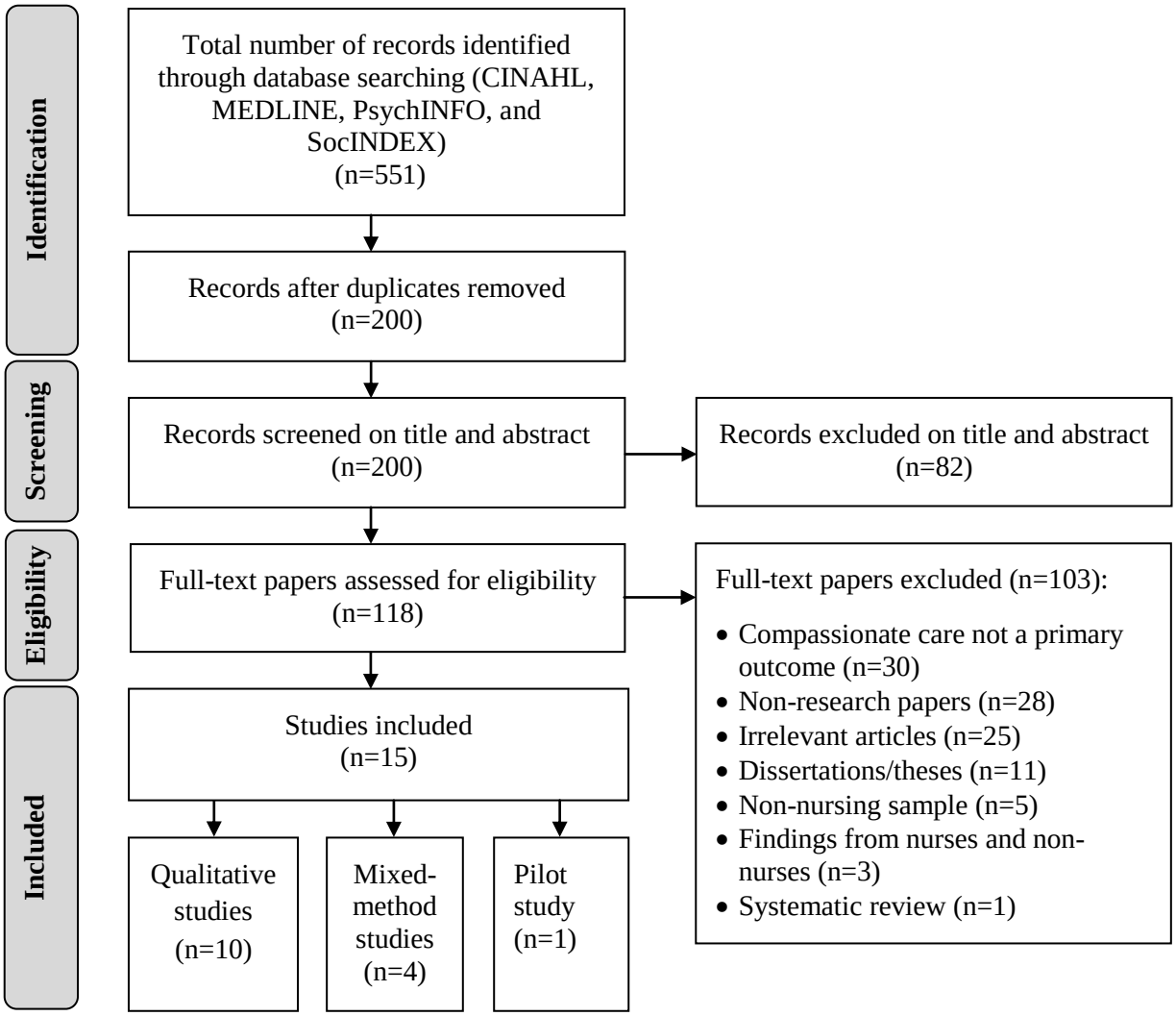

Figure 1. PRISMA flow diagram (Moher et al., 2009)