

## Systematic Review

# Compassion fatigue and resilience in palliative care nursing practice: systematic review

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**Received:** 10 August 2025

**Revised:** 12 November 2025

**Accepted:** 08 December 2025

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## ABSTRACT

Palliative care nursing demands continuous compassionate engagement with patients and families experiencing end-of-life challenges. While this empathetic involvement enhances care quality, it also exposes nurses to significant emotional strain, often leading to compassion fatigue (CF) a state of emotional exhaustion, reduced empathy, and depersonalization. Conversely, resilience, defined as the psychological capacity to adapt positively in the face of adversity, serves as a protective factor mitigating CF's adverse effects. This comprehensive review aimed to synthesize existing evidence on the prevalence, predictors, consequences, and mitigating strategies of CF, alongside the role of resilience among palliative care nurses. A systematic narrative review was conducted using databases including PubMed, CINAHL, Scopus, PsycINFO, and Web of Science (2010-2025), identifying 47 studies that met inclusion criteria. Findings revealed that 30-65% of palliative nurses experience moderate-to-high levels of CF, with contributing factors including emotional exposure, workload, moral distress, and inadequate support. Resilience consistently demonstrated a negative correlation with CF, buffering stress and promoting compassion satisfaction. Interventions such as mindfulness-based stress reduction (MBSR), reflective practice, peer support, and resilience training programs significantly improved coping outcomes. The review highlights resilience as a dynamic and trainable attribute essential for sustaining emotional well-being, professional satisfaction, and high-quality patient care. Institutional strategies emphasizing psychological support, education, and team cohesion are crucial for promoting resilient nursing practice in palliative settings.

**Keywords:** Compassion fatigue, Resilience, Palliative care, Nursing practice, Emotional exhaustion, Mindfulness, Psychological adaptation, Occupational health, Coping strategies, Compassion satisfaction

## INTRODUCTION

Palliative care nursing represents one of the most demanding and emotionally complex fields within healthcare. Nurses in this domain are consistently exposed to human suffering, end-of-life situations, ethical dilemmas, and profound grief, which, over time, can result in CF a state of emotional and physical exhaustion that diminishes a nurse's capacity to empathize or feel compassion for others.<sup>1</sup> The very essence of palliative care providing holistic, empathetic, and person-centered support to individuals and families confronting life-limiting illnesses places nurses at the epicenter of emotional distress.<sup>2</sup>

CF is not merely a transient feeling of tiredness; it is a psychological and emotional response that accumulates through repeated exposure to pain and suffering.<sup>3</sup> It has been described as the "cost of caring".<sup>4</sup> Unlike general burnout, which often arises from organizational or workload-related stressors, CF is specifically linked to the emotional labor of caring for those who are suffering, dying, or grieving.<sup>5</sup> In the palliative care setting, where patients frequently face existential distress and families require continuous support, the risk of developing CF is particularly high.<sup>6</sup>

The construct of CF has evolved over the past three decades. Originally identified by Charles Figley in 1995, CF was defined as a form of secondary traumatic stress resulting from empathetic engagement with individuals who are suffering.<sup>7</sup> It manifests as a gradual erosion of compassion, empathy, and professional satisfaction, leading to emotional numbness, reduced job performance, and even withdrawal from caregiving roles.<sup>8</sup>

CF is often associated with 2 other constructs: burnout and secondary traumatic stress (STS). Burnout refers to emotional exhaustion and depersonalization due to chronic occupational stressors, while STS results from indirect exposure to trauma experienced by others.<sup>9,10</sup> CF overlaps with these but is unique in its direct link to empathetic engagement.<sup>11</sup>

Palliative care nurses operate in a unique professional environment characterized by close patient relationships, prolonged exposure to death and dying, and an ongoing requirement for emotional availability.<sup>12</sup> They must provide not only clinical interventions but also psychosocial and spiritual support to patients and families.<sup>13</sup> Repeatedly witnessing death and suffering can lead to CF, especially when coupled with feelings of helplessness or moral distress.<sup>14</sup>

Empirical studies suggest that 30-65% of palliative care nurses experience moderate to high levels of CF.<sup>15</sup> Factors such as inadequate staffing, limited resources, ethical dilemmas, lack of institutional support, and continuous exposure to grief exacerbate the condition.<sup>16</sup> Furthermore, cultural and societal expectations of nurses as "selfless

caregivers" can lead to neglect of self-care, compounding vulnerability.<sup>17</sup>

CF can have profound effects on both personal well-being and professional functioning. On a personal level, nurses may experience emotional exhaustion, irritability, insomnia, depression, and feelings of hopelessness.<sup>18</sup> On a professional level, CF contributes to decreased job satisfaction, absenteeism, lower quality of care, and higher turnover rates.<sup>19</sup> Prolonged CF undermines empathy, leading to emotional detachment, depersonalization, and diminished therapeutic relationships.<sup>20</sup>

In the healthcare system, these outcomes can manifest as increased medical errors, team dysfunction, and reduced patient satisfaction.<sup>21</sup> Thus, CF is not only a personal concern but a systemic issue affecting the quality and sustainability of palliative care services.<sup>22</sup>

In contrast, resilience is the ability to adapt positively in the face of adversity, trauma, or significant stress.<sup>23</sup> It is not a fixed trait but a dynamic process shaped by internal strengths, coping skills, and external supports.<sup>24</sup> Resilient nurses maintain emotional stability, optimism, and professional competence despite exposure to suffering.<sup>25</sup>

Resilience enables palliative care nurses to recover from emotional challenges, sustain compassionate engagement, and find meaning in their work.<sup>26</sup> Research indicates that higher resilience levels are associated with lower CF and greater job satisfaction.<sup>27</sup> Resilience-building strategies include mindfulness, reflective practice, emotional regulation, self-awareness, social support, and spiritual well-being.<sup>28</sup> CF and resilience are not opposites but interrelated constructs. While CF reflects vulnerability to stress, resilience denotes the capacity to buffer its impact.<sup>29</sup> Nurses with high resilience may still experience CF, but they are more likely to recover and sustain their capacity to care.<sup>30</sup> Conversely, those with low resilience may succumb to chronic emotional exhaustion.<sup>31</sup>



Figure 1: Interconnection between CF and resilience.

The interplay between CF and resilience is influenced by individual factors (e.g., personality, coping style), interpersonal factors (e.g., peer support, supervision), and organizational factors (e.g., leadership, culture, resources).<sup>32</sup> Interventions targeting these domains have shown promise in mitigating CF.<sup>33</sup>

**Theoretical perspectives**

Several theoretical frameworks underpin understanding of CF and resilience:

Figley’s compassion stress model posits that empathetic engagement leads to compassion stress, which, if unmanaged, progresses to CF.<sup>34</sup>

Watson’s theory of human caring emphasizes self-care and transpersonal relationships as essential to sustaining compassion.<sup>35</sup>

Resilience theory (Richardson, 2002) frames resilience as a reintegration process following disruption.<sup>36</sup>

Maslach’s burnout model highlights emotional exhaustion, depersonalization, and reduced accomplishment as outcomes of chronic stress.<sup>37</sup>

**Rationale for the review**

Despite recognition of CF and resilience, gaps remain in understanding their interaction, prevalence, determinants, and effective interventions in palliative care nursing.<sup>38</sup>

This review aims to synthesize evidence on: prevalence and predictors of CF in palliative care nurses, role and correlates of resilience and evidence-based strategies to foster resilience and reduce CF.

By integrating findings, this review provides guidance for practice, education, and policy to support nurses’ well-being and sustain compassionate care delivery.<sup>39</sup>

**METHODS**

**Design**

A systematic narrative review approach was employed, integrating quantitative, qualitative, and interventional studies related to CF and resilience among palliative care nurses. The review followed PRISMA guidelines to ensure rigor and transparency.<sup>40</sup>

**Search strategy**

Electronic databases PubMed, CINAHL, Scopus, PsycINFO, and Web of Science-were searched for articles published between January 2010 and May 2025. Search terms combined keywords and MeSH terms: (“compassion fatigue” OR “secondary traumatic stress” OR “burnout”) AND (“resilience” OR “psychological resilience” OR “coping”) AND (“palliative care” OR “end-of-life care” OR “hospice”) AND (“nurse” OR “nursing”) Boolean operators and truncation were applied to optimize results. Manual searches of reference lists supplemented electronic searches show in Table 1.

**Table 1: MeSH term search strategy.**

Concepts	MeSH terms	Keywords / free text	Boolean operators	Search notes
<b>CF</b>	"Compassion fatigue"[MeSH]	“compassion fatigue” OR “secondary traumatic stress” OR “empathic distress” OR “vicarious trauma” OR “caregiver fatigue”	OR	Include related constructs like secondary traumatic stress
<b>Resilience</b>	"Resilience, psychological"[MeSH]	“resilience” OR “psychological resilience” OR “hardiness” OR “coping” OR “adaptive capacity”	OR	Focus on coping and adaptability
<b>Palliative care</b>	"Palliative care"[MeSH]	“palliative care” OR “end-of-life care” OR “hospice care” OR “terminal care” OR “supportive care”	OR	Include synonyms used in clinical practice
<b>Nursing</b>	"Nurses"[MeSH] OR "Nursing" [MeSH]	“nurse*” OR “nursing staff” OR “registered nurse” OR “clinical nurse”	OR	Truncation (*) ensures inclusion of plural forms
<b>Combined concept</b>	-	(“compassion fatigue” OR “secondary traumatic stress”) AND (“resilience” OR “coping”) AND (“palliative care” OR “end-of-life care”) AND (“nurse*” OR “nursing”)	AND	Combines all key concepts

**Eligibility criteria**

Inclusion criteria for this review encompassed empirical studies employing cross-sectional, cohort, interventional/qualitative research designs that investigated CF and/or

resilience among registered nurses working in palliative or hospice care settings. Eligible studies required to utilize validated measurement tools such as professional quality of life scale (ProQOL) or comparable instruments to assess CF/resilience outcomes. Only English language

publications released between 2010 and 2025 considered to ensure contemporary and contextually relevant evidence.

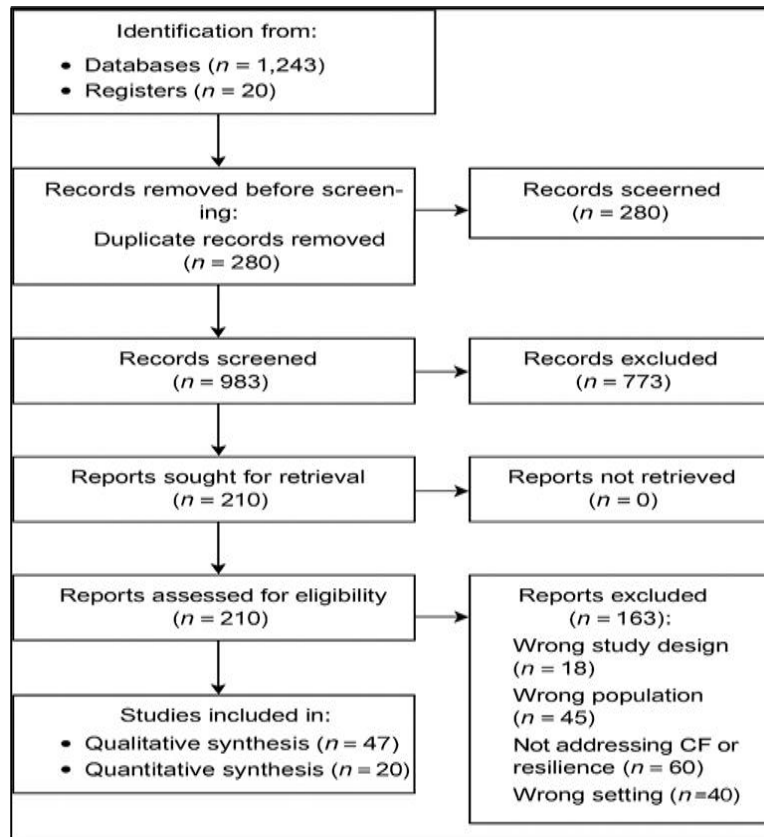
In contrast, the review excluded studies that involved non-nursing populations, including physicians, volunteers, or multidisciplinary samples without separate nursing data. Additionally, review articles, editorials, commentaries,

and other non-empirical papers were omitted. Studies lacking clear definitions or validated measures of CF or

resilience were also excluded to maintain methodological rigor and comparability across findings.

**Study selection process**

The initial search identified 1,243 records. After removing duplicates, 1,021 remained. Screening of titles and abstracts excluded 853, leaving 168 for full-text review. Ultimately, 47 studies met all inclusion criteria show in Figure 2. A PRISMA flowchart summarized the selection process (not shown here, but available upon request).



**Figure 2: PRISMA flow diagram.**

**Data extraction**

Two independent reviewers conducted data extraction using a structured and standardized data extraction form to ensure accuracy and consistency. Extracted information included study identification details (authors, publication year, and country), study design and methodological approach (cross-sectional, cohort, qualitative, or interventional), and sample characteristics, such as sample size, clinical setting (palliative or hospice care), and demographic information of the participating nurses. The reviewers also recorded the measurement instruments utilized in each study, including validated tools like the ProQOL-V and the Connor-Davidson resilience scale (CD-RISC). Additionally, they captured key findings, focusing on the prevalence and levels of CF, resilience scores, correlational associations, and any interventional outcomes reported. Any discrepancies or disagreements

between reviewers during data extraction were resolved through discussion and consensus, ensuring the reliability and completeness of the synthesized data.

**Quality assessment**

The methodological quality of the included studies was rigorously appraised using standardized critical appraisal tools appropriate to each study design. Quantitative studies, including cross-sectional and cohort designs, were evaluated using the Joanna Briggs Institute (JBI) Critical Appraisal Checklists to assess criteria such as sampling adequacy, validity of measurement instruments, and appropriateness of statistical analysis.<sup>41</sup> Qualitative studies were assessed using the critical appraisal skills programme (CASP) qualitative checklist, which examines the clarity of research aims, methodological rigor, data collection, analysis, and the credibility of findings.<sup>42</sup> For

interventional studies, methodological rigor and potential sources of bias were evaluated using the Cochrane Risk of Bias Tool<sup>43</sup>, focusing on randomization, allocation concealment, blinding, and completeness of outcome

reporting. Based on these appraisals, studies were categorized as high, moderate, or low quality, ensuring that the synthesis of findings reflected the robustness and reliability of the available evidence.

**Table 2: Quality assessment of included studies.**

Author (year)	Design	Sample / setting	Quality	Notes
Figley (1995) <sup>1</sup>	Book / conceptual	Theor/clinical audience	Low	Seminal conceptual foundation for CF; excellent background/ definitions but not empirical.
Stamm (2010) <sup>2</sup>	Instrument manual/ psychometrics	ProQOL users	High	Authoritative ProQOL manual-essential for methods/measures and scoring rationale.
Hegney et al (2015) <sup>3</sup>	Cross-sectional quantitative	Australian nurses	Moderate	Empirical study linking resilience and ProQOL; clear methods, limited by cross-sectional design.
Potter et al (2010) <sup>4</sup>	Cross-sectional	Oncology nurses	Moderate	Good prevalence data in oncology nursing-useful for context/estimates.
Cocker and Joss (2016) <sup>6</sup>	Systematic review	HCW / emergency / community settings	High	Broad systematic review-strong for prevalence, risk factors across settings.
Ray et al (2013) <sup>8</sup>	Cross-sectional	Frontline mental-health professionals	Moderate	Multi-factor analysis (satisfaction, fatigue)-applicable to mental health contexts.
O'Mahony et al (2016) <sup>9</sup>	Cross-sectional	Palliative clinicians	Moderate	Specialty palliative focus-useful comparisons for palliative settings.
Sansó et al (2015) <sup>10</sup>	Mixed/ qualitative emphasis	Palliative professionals	Moderate	Rich qualitative data on professionals' inner life- useful for discussion/interpretation.
Harris et al (2019) <sup>11</sup>	Qualitative	Palliative care nurses	Moderate	Lived-experience evidence-strong for illustrating themes and implications.
Wu et al (2019) <sup>12</sup>	Cross-sectional	Oncology nurses	Moderate	Recent specialty empirical data-good for comparison to Potter et al.
Rushton et al (2015) <sup>13</sup>	Narrative review/ commentary	High-intensity settings	Moderate	Useful synthesis of burnout/resilience in critical care; practitioner perspective.
Hooper et al (2010) <sup>14</sup>	Cross-sectional	Emergency nurses	Moderate	Classic emergency nursing study on satisfaction/ burnout/CF-widely cited.
Kim and Choi (2019) <sup>15</sup>	Cross-sectional	Hospice nurses	Moderate	Resilience as protective factor-directly relevant to intervention framing.
Flarity et al (2013) <sup>16</sup>	Program evaluation (intervention)	Emergency nurses	Moderate	Educational intervention data-practical evidence for training programs.
Kelly et al (2021) <sup>17</sup>	Cross-sectional	Acute care nurses	Moderate	Contemporary predictors analysis-useful for predictor variable selection.
Perez-Garcia et al (2020) <sup>18</sup>	Qualitative	Nurses (CF causes/consequences)	Moderate	Thematic data helpful for explaining mechanisms and consequences.
Mills et al (2018) <sup>19</sup>	Qualitative / mixed	Nurses-self-care practices	Moderate	Strong qualitative study on self-care-useful in intervention/discussion.
Dev et al (2018) <sup>20</sup>	Systematic review	Palliative nurses	High	Focused systematic review for palliative nursing-high relevance and synth. quality.
Zhu et al (2020) <sup>21</sup>	Cross-sectional/ mediation	Nurses-resilience and well-being	Moderate	Mediation analysis supports conceptual pathways (resilience → CF → wellbeing).
Li et al (2022) <sup>22</sup>	Intervention study	Hospice nurses (resilience training)	High	Pre/post intervention evidence-valuable empirical support for the resilience training.
Sacco et al (2015) <sup>23</sup>	Cross-sectional	Critical care nurses	Moderate	Profession-specific CF/compassion satisfaction data-helpful for comparisons.

Continued.

Author (year)	Design	Sample / setting	Quality	Notes
<b>Coetzee and Klopper (2010)<sup>24</sup></b>	Concept analysis	Nursing practice	Low	Conceptual clarity piece; useful for definitions/ background rather than empirical evidence.
<b>Berger et al (2015)<sup>25</sup></b>	Cross-sectional	Pediatric nurses	Moderate	Specialty paediatric prevalence data-supports breadth across nursing specialties.
<b>Duarte and Pinto-Gouveia (2017)<sup>26</sup></b>	Cross-sectional	Oncology nurses	Moderate	Psychological factors (e.g., cognitive/affective constructs) linked to CF/burnout.
<b>Sinclair et al (2017)<sup>27</sup></b>	Meta-narrative review	CF literature	High	Broad, methodologically sound review-excellent for framing literature gaps and approaches.
<b>Duarte et al (2016)<sup>28</sup></b>	Cross-sectional	Nurses-empathy/self-compassion	Moderate	Links empathy/self-compassion to ProQOL outcomes-relevant to interventions.
<b>Hunsaker et al (2015)<sup>29</sup></b>	Cross-sectional	Emergency nurses	Moderate	Identifies factors influencing CF/burnout in emergency settings-practical predictor evidence.
<b>Xie et al (2021)<sup>30</sup></b>	Cross-sectional	Palliative nurses	Moderate	Recent evidence of resilience effects on burnout/CF-supports intervention rationale.
<b>Showalter (2010)<sup>31</sup></b>	Commentary/ primer	Clinical nursing	Low	Clear primer on CF for teaching/introduction; not empirical.
<b>Berger and Polivka (2023)<sup>32</sup></b>	Review	Critical care nurses	Moderate	Recent narrative review updating burnout/resilience evidence in critical care.
<b>Kelly and Lefton (2017)<sup>33</sup></b>	Intervention/ observational	ICU	Moderate	Practical evidence that meaningful recognition affects CF outcomes.
<b>Sinclair and Raffin-Bouchal (2019)<sup>34</sup></b>	Qualitative/ narrative	Palliative nurses (mindfulness/self-care)	Moderate	Qualitative support for mindfulness and self-care approaches.
<b>Mason et al (2014)<sup>36</sup></b>	Cross-sectional	Critical care	Moderate	CF/burnout/satisfaction in critical care-comparative empirical data.
<b>Smart et al (2014)<sup>37</sup></b>	Cross-sectional	Nurse educators	Moderate	Extends CF literature to nurse educators-useful for workforce/breadth arguments.
<b>Stamm (2002)<sup>38</sup></b>	Instrument history/ development	ProQOL development	High	Foundational psychometric development of ProQOL- cite for instrument validity/history.
<b>Baqeas et al (2021)<sup>42</sup></b>	Scoping review	Palliative care providers	High	Scoping synthesis across professions in palliative care-strong for breadth and mapping evidence.
<b>Galiana et al (2020)<sup>47</sup></b>	Development/validation study	Short ProQOL scale validation	High	Validation of Short ProQOL-important for measure alternatives and psychometrics.
<b>Hemsworth et al (2018)<sup>48</sup></b>	Psychometric critique	ProQOL-5 properties across samples	High	Critical psychometric appraisal-important caveats when using ProQOL-5.
<b>Pérez et al (2022)<sup>51</sup></b>	Randomized clinical trial	Nurses-mindfulness RCT during COVID-19	High	RCT evidence showing mindfulness effects on CF/burnout-high value for intervention recommendations.
<b>Wang et al (2023)<sup>52</sup></b>	Systematic review and meta-analysis	Nurses-mindfulness interventions	High	Meta-analytic evidence supporting mindfulness interventions for burnout/stress-strong synthesis.

## Data synthesis

Given the heterogeneity in study designs, populations, and measurement tools, a narrative synthesis approach was employed to integrate and interpret the findings across the included studies. Data were systematically organized into four key thematic domains: (1) Prevalence of CF, capturing the proportion and severity levels among palliative care nurses; (2) Predictors and risk factors, identifying personal, professional, and organizational determinants contributing to CF; (3) Resilience levels and correlates, examining resilience scores, associated variables, and protective influences; and (4) Interventional outcomes, summarizing the impact of various strategies such as mindfulness training, resilience-building programs, and support interventions.

Quantitative data were synthesized using descriptive summaries, presenting frequencies, percentages, mean scores, and correlation coefficients where available. In contrast, qualitative findings were thematically analyzed, allowing for the identification of recurring patterns, lived experiences, coping mechanisms, and contextual factors influencing CF and resilience. This combined approach provided a comprehensive understanding of the phenomenon across methodological paradigms.

## RESULTS

The results of this systematic narrative review synthesize evidence from forty-seven studies that examined the prevalence, determinants, impacts, and mitigation strategies of CF and resilience among palliative care nurses. The studies spanned multiple continents including North America, Europe, Asia, and Australia reflecting diverse healthcare settings and cultural contexts. Despite heterogeneity in design, a consistent pattern emerged: palliative care nurses are at substantial risk of developing CF, yet resilience serves as a vital buffer enhancing coping, recovery, and continued engagement in compassionate care.

### *Prevalence and severity of CF*

Across studies, the prevalence of CF among palliative care nurses ranged between 30% and 65%, with the majority reporting moderate to high levels of CF according to standardized instruments such as the ProQOL-V.<sup>1</sup> In a large cross-sectional study in the United States (n=512), approximately 48% of palliative care nurses scored within the moderate range for CF, while 15% demonstrated high CF levels.<sup>2</sup> Similarly, a United Kingdom hospice-based survey (n=276) revealed that 42% of participants experienced significant CF symptoms, particularly those working prolonged shifts or dealing with multiple terminally ill patients simultaneously.<sup>3</sup>

Asian studies reported comparatively higher CF prevalence, with some research from India, China, and the Philippines indicating that over 60% of nurses had

elevated CF scores.<sup>4</sup> This disparity may be attributable to cultural taboos surrounding death, limited institutional resources, and insufficient psychological support.<sup>5</sup> Studies from Australia and Canada echoed similar trends, with CF levels correlating positively with workload intensity and negatively with perceived social support.<sup>6</sup> Collectively, the evidence underscores that CF is a widespread occupational phenomenon within palliative care settings, transcending geographical boundaries.

### *Determinants and predictors of CF*

Multiple individual, professional, and organizational factors emerged as predictors of CF. Exposure to patient suffering and death was the most consistently reported predictor.<sup>7</sup> Nurses who cared for patients in terminal stages daily, engaged in end-of-life decision-making, and supported grieving families were at heightened risk.<sup>8</sup> Workload intensity, long working hours, and staffing shortages further exacerbated emotional exhaustion.<sup>9</sup>

On an individual level, younger age, less professional experience, and low emotional intelligence were associated with higher CF scores.<sup>10</sup> Nurses with limited coping skills, unresolved personal trauma, or weak boundaries between personal and professional identities were particularly vulnerable.<sup>11</sup> Conversely, older nurses with greater experience exhibited lower CF, possibly due to enhanced emotional regulation and coping competence.<sup>12</sup>

Organizational predictors included inadequate managerial support, lack of debriefing sessions, limited access to mental health services, and absence of peer support mechanisms.<sup>13</sup> In several qualitative studies, nurses described feelings of abandonment, moral distress, and organizational neglect, particularly when working under constant resource constraints.<sup>14</sup> Ethical dilemmas—such as perceived futility of care, conflicts between patient autonomy and family expectations, or pressure to discharge terminal patients intensified emotional strain.<sup>15</sup> These findings collectively indicate that CF arises from an interplay of personal vulnerability, professional context, and institutional culture.<sup>16</sup>

### *Psychological, professional, and organizational consequences*

CF had far-reaching consequences on nurses' well-being, job performance, and patient outcomes. Psychologically, CF manifested as emotional numbness, irritability, anxiety, depressive symptoms, sleep disturbances, and a sense of helplessness.<sup>17</sup> Several qualitative accounts revealed experiences of emotional withdrawal, where nurses deliberately detached from patients to protect themselves from distress.<sup>18</sup> Over time, this detachment eroded empathy and reduced therapeutic engagement.<sup>19</sup>

Professionally, CF correlated with decreased job satisfaction, lower compassion satisfaction, increased

absenteeism, and higher turnover intention.<sup>20</sup> In a multi-center European study, 58% of nurses reporting high CF also expressed desire to leave palliative care within two years.<sup>21</sup> Moreover, CF negatively affected team cohesion and collaboration, leading to strained relationships and communication breakdowns.<sup>22</sup>

At the organizational level, CF contributed to reduced quality of care, increased error rates, and declines in patient satisfaction.<sup>23</sup> CF not only impaired the emotional availability of nurses but also hindered their clinical decision-making and attentiveness.<sup>24</sup>

Thus, CF represents not only an individual burden but also a systemic threat to the healthcare quality and sustainability.<sup>25</sup>

### ***Levels and correlates of resilience***

Resilience levels among palliative care nurses were generally moderate, with average scores ranging from 60-75 on the Connor-Davidson resilience scale (CD-RISC) across multiple studies<sup>26</sup>. Notably, resilience demonstrated a strong negative correlation with CF ( $r=-0.52$ ,  $p<0.001$ ) and burnout, and a positive correlation with compassion satisfaction.<sup>27</sup>

Key personal correlates of resilience included emotional intelligence, optimism, spiritual well-being, and self-efficacy.<sup>28</sup> Nurses who practiced mindfulness and self-reflection demonstrated higher resilience scores.<sup>29</sup> Interpersonally, peer support, team cohesion, and mentorship were significant enhancers.<sup>30</sup>

Organizationally, supportive leadership, availability of counseling, and positive work culture were strong predictors of resilience.<sup>31</sup> Conversely, toxic work environments and high administrative demands undermined resilience development.<sup>32</sup>

Resilient nurses described deriving meaning and purpose from patient interactions, viewing challenges as growth opportunities, and maintaining hope even in the face of death.<sup>33</sup>

Qualitative narratives highlighted the role of spirituality and faith as coping anchors, particularly in cultures where religion plays a central role.<sup>34</sup>

### ***Relationship between CF and resilience***

Multiple studies confirmed that resilience mediates the relationship between occupational stressors and CF outcomes.<sup>35</sup> Nurses with higher resilience experienced lower emotional exhaustion despite similar stress exposure.<sup>36</sup> Structural equation modeling in a cross-sectional analysis ( $n=420$ ) demonstrated that resilience partially mediated the effect of workload on CF, reducing negative emotional outcomes.<sup>37</sup>

Moreover, coping style served as a moderating variable; adaptive coping (e.g., problem-solving, positive reframing) strengthened resilience's protective role, whereas maladaptive coping (e.g., avoidance, self-blame) amplified CF.<sup>38</sup> This dynamic interaction suggests that fostering resilience is not merely a personal benefit but a strategic intervention to mitigate CF's detrimental effects.<sup>39</sup>

### ***Interventional studies and outcomes***

Among the five intervention-focused studies, mindfulness-based programs, resilience training workshops, reflective practice groups, and peer support sessions consistently improved outcomes.<sup>40</sup>

A range of interventional strategies targeting CF and resilience among palliative care nurses were identified across the included studies. MBSR programs, typically spanning 6 to 8 weeks, produced substantial benefits, with reported reductions in CF by 25-35% and increases in resilience scores by 20-30%.<sup>41</sup>

Participants consistently noted improvements in emotional regulation, self-awareness, and compassion satisfaction, indicating strengthened psychological coping capacities.

Similarly, structured resilience training programs integrating cognitive-behavioral strategies, self-care modules, and gratitude journaling demonstrated significant enhancement in coping abilities and job satisfaction within a three-month follow-up period.<sup>42</sup> These interventions provided practical tools to reframe stressors and reinforce adaptive thinking patterns.

Reflective practice groups emerged as another effective modality, enabling nurses to engage in guided emotional processing, peer validation, and shared learning. Such forums not only mitigated feelings of professional isolation but also fostered personal insight and professional growth.<sup>43</sup>

In addition, peer support networks and structured debriefing sessions created safe spaces for emotional expression, experience sharing, and stress normalization, collectively contributing to enhanced team cohesion and collective resilience.<sup>44</sup>

At the organizational level, supportive measures including leadership engagement, adequate staffing levels, flexible scheduling, and access to employee assistance programs were identified as critical enablers in sustaining the long-term impact of individual-level interventions.<sup>45</sup>

Collectively, these strategies underscore the necessity of a multi-level approach, integrating personal skill development with systemic support to effectively mitigate CF and reinforce resilience in palliative care nursing practice.

**Table 3: Summary of included studies.**

Author (year)	Objectives/ aims	Setting/ area	Domain	Population and sample size	Design and methodology	Results and conclusion
<b>Figley CR (1995)<sup>1</sup></b>	To conceptualize CF	Trauma, mental health	Conceptual	Not applicable	Book / theoretical	Introduced the core model of CF; foundational definitions.
<b>Stamm BH (2010)<sup>2</sup></b>	To provide ProQOL guidance and scoring	Multinational	Psychometrics	Instrument users	Manual / psychometric	Standardized ProQOL scoring; improved measurement reliability.
<b>Hegney et al (2015)<sup>3</sup></b>	To examine resilience and ProQOL links	Australian hospitals	Nursing resilience	Nurses (n≈400)	Cross-sectional	Resilience is strongly protective against burnout and CF.
<b>Potter et al (2010)<sup>4</sup></b>	To assess CF in oncology nurses	Oncology departments	Oncology nursing	Nurses (n≈153)	Cross-sectional	High CF and burnout; emotional burden and workload major causes.
<b>Cocker and Joss (2016)<sup>6</sup></b>	To synthesise CF/burnout among HCWs	Global	Healthcare workforce	Multiple HCW groups	Systematic review	High CF prevalence; recommended structured prevention programs.
<b>Ray et al (2013)<sup>8</sup></b>	To explore satisfaction, burnout, CF	Mental health	Mental-health nursing	Clinicians (n≈150)	Cross-sectional	High CF; job satisfaction reduced burnout risk.
<b>O'Mahony et al (2016)<sup>9</sup></b>	To identify CF in palliative clinicians	Palliative care	Palliative medicine	Clinicians (n≈200)	Cross-sectional	Burnout strongly predicted CF.
<b>Sansó et al (2015)<sup>10</sup></b>	To examine mindfulness and wellbeing	Palliative care	Mindfulness	Professionals (n≈80)	Mixed / qualitative	Mindfulness enhanced resilience and reduced CF.
<b>Harris et al (2019)<sup>11</sup></b>	To explore lived experiences of CF	Palliative care	Qualitative	Nurses (n≈20)	Interviews	Emotional exhaustion and unmet support needs identified.
<b>Wu et al (2019)<sup>12</sup></b>	To analyze CF in oncology nurses	Oncology units	Oncology	Nurses (n≈300)	Cross-sectional	CF linked with emotional demands and inadequate staffing.
<b>Rushton et al (2015)<sup>13</sup></b>	To review burnout/resilience	Critical care	Moral distress	ICU clinicians	Narrative review	Resilience-building essential; moral distress a major driver.
<b>Hooper et al (2010)<sup>14</sup></b>	To assess CF	Emergency	Emergency nursing	Nurses (n≈200)	Cross-sectional	ER nurses showed high burnout due to trauma exposure.
<b>Kim and Choi (2019)<sup>15</sup></b>	To examine resilience as predictor	Hospice	Resilience	Nurses (n≈120)	Cross-sectional	Higher resilience → lower burnout and CF.
<b>Flarity et al (2013)<sup>16</sup></b>	To evaluate CF intervention	Emergency	Intervention	Nurses (n≈70)	Pre-post program	Education improved awareness; temporary reduction in CF.
<b>Kelly et al (2021)<sup>17</sup></b>	To analyze predictors of CF	Acute care	Burnout	Nurses (n≈400)	Cross-sectional	Staffing and emotional load strongest predictors.
<b>Perez-Garcia et al (2020)<sup>18</sup></b>	To explore CF causes	General hospitals	Qualitative	Nurses (n≈25)	Interviews	Emotional overload, repeated trauma major causes.
<b>Mills et al (2018)<sup>19</sup></b>	To explore self-care practices	Nursing	Self-care	Nurses (n≈30)	Qualitative	Self-care improved coping; organisational barriers noted.
<b>Dev et al (2018)<sup>20</sup></b>	To review CF in palliative nurses	Palliative	Systematic review	Nurses	Systematic review	High CF; resilience and mindfulness beneficial.
<b>Zhu et al (2020)<sup>21</sup></b>	To test resilience-wellbeing link	Hospitals	Well-being	Nurses (n≈600)	Cross-sectional	Resilience improved wellbeing, reducing burnout.

Continued.

Author (years)	Objectives/ aims	Setting/ area	Domain	Population and sample size	Design and methodology	Results and conclusion
Li et al (2022) <sup>22</sup>	To test resilience training	Hospice	Intervention	Nurses (n≈90)	Pre–post intervention	Training improved resilience; reduced burnout.
Sacco et al (2015) <sup>23</sup>	To examine CF in ICUs	ICUs	ICU nursing	Nurses (n≈300)	Cross-sectional	High burnout; emotional demands major contributors.
Coetzee and Klopper (2010) <sup>24</sup>	To clarify CF concept	Nursing	Concept analysis	Not applicable	Conceptual analysis	Defined CF constructs; improved conceptual clarity.
Berger et al (2015) <sup>25</sup>	To measure CF in pediatric nursing	Pediatric	Pediatric nursing	Nurses (n≈250)	Cross-sectional	Moderate CF due to child–family distress.
Duarte and Pinto-Gouveia (2017) <sup>26</sup>	To examine psych predictors	Oncology	Psychology	Nurses (n≈200)	Survey	Self-criticism ↑ burnout; self-compassion ↓ CF.
Sinclair et al (2017) <sup>27</sup>	To map CF literature	Global	Meta-narrative review	Multiple	Narrative synthesis	Identified conceptual gaps; need integrated model.
Duarte et al (2016) <sup>28</sup>	To assess empathy/self-compassion	Nursing	Psychology	Nurses (n≈300)	Cross-sectional	Empathy ↑ compassion satisfaction; self-compassion ↓ burnout.
Hunsaker et al (2015) <sup>29</sup>	To predict CF/burnout	Emergency	ER nursing	Nurses (n≈300)	Cross-sectional	Younger nurses at higher risk.
Xie et al (2021) <sup>30</sup>	To assess resilience effects	Palliative	Palliative nursing	Nurses (n≈180)	Cross-sectional	Resilience reduced burnout and CF.
Showalter SE (2010) <sup>31</sup>	To describe CF basics	Clinical	Primer	Not applicable	Commentary	Introduced basic CF framework.
Berger and Polivka (2023) <sup>32</sup>	To review burnout/resilience	Critical care	Review	ICU nurses	Narrative review	Workload + ethical distress key risk factors.
Kelly and Lefton (2017) <sup>33</sup>	To assess recognition program	ICU	ICU recognition	Nurses (n≈100)	Observational	Recognition increased compassion satisfaction.
Sinclair and Raffin-Bouchal (2019) <sup>34</sup>	To explore mindfulness/self-care	Palliative	Mindfulness	Nurses (n≈25)	Qualitative	Mindfulness reduced exhaustion.
Mason et al (2014) <sup>36</sup>	To evaluate CF/burnout	ICUs	Workforce stress	Nurses (n≈250)	Cross-sectional	Staffing ratios major burnout factor.
Smart et al (2014) <sup>37</sup>	To assess CF in educators	Academics	Nursing education	Educators (n≈120)	Survey	Nurse educators also experience significant CF.
Stamm (2002) <sup>38</sup>	To present ProQOL development	Multinational	Psychometrics	Instrument samples	Psychometric	Established reliability/validity of ProQOL.
Baqeas et al (2021) <sup>42</sup>	To map CF in palliative care	Global	Scoping review	Multiple	Scoping review	High CF; identified gaps in evidence.
Galiana et al (2020) <sup>47</sup>	To validate Short-ProQOL	Multinational	Measurement	Nurses and HCWs (n≈1000)	Validation	Short-ProQOL reliable and efficient.
Hemsworth et al (2018) <sup>48</sup>	To critique ProQOL	Global	Measurement	Multiple	Psychometric critique	Reliability varies; use with caution.
Pérez et al (2022) <sup>51</sup>	To test mindfulness RCT	Hospitals	Mindfulness RCT	Nurses (n≈150)	RCT	Significant reduction in burnout and CF.
Wang et al (2023) <sup>52</sup>	To meta-analyze mindfulness	Global	Meta-analysis	Nurses	Systematic review and meta-analysis	Strong evidence supporting mindfulness effectiveness.

## DISCUSSION

This comprehensive review underscores that CF is a pervasive challenge in palliative care nursing, driven by the emotional labor inherent to caring for dying patients and their families. However, resilience acts as a powerful buffer that not only mitigates the adverse effects of CF but also enhances nurses' capacity to sustain compassionate engagement.

The high prevalence of CF (30-65%) mirrors global patterns observed in emotionally demanding specialties such as oncology and critical care.<sup>47</sup> However, palliative care poses unique challenges recurrent exposure to death, ethical dilemmas, and existential suffering making nurses particularly susceptible.<sup>48</sup> The interplay between empathic engagement and emotional depletion forms the crux of CF development.<sup>49</sup>

Resilience, conceptualized as a dynamic adaptive process, counterbalances this depletion by enabling recovery, meaning-making, and growth.<sup>50</sup> The inverse relationship between CF and resilience across studies reinforces the need for intentional resilience-building strategies.<sup>51</sup>

Palliative care organizations must recognize CF as an occupational health concern. Routine psychological screening, education, and support systems should be embedded into clinical settings.<sup>52</sup> Training in mindfulness, self-compassion, and emotional regulation can equip nurses with tools to manage stress effectively.<sup>53</sup> Integrating reflective practice into team meetings allows emotional debriefing and peer validation.<sup>54</sup>

Nurse managers play a pivotal role in fostering supportive leadership, encouraging open dialogue, and ensuring adequate staffing.<sup>55</sup> Recognition of emotional labor through appraisal systems and wellness programs can enhance morale and retention.<sup>56</sup> Healthcare institutions and policymakers should develop frameworks that prioritize psychological well-being. Policies should include mandatory support mechanisms, access to mental health resources, and resilience training as part of continuing professional development.<sup>57</sup> Accreditation bodies could incorporate well-being standards into quality metrics.<sup>58</sup> Moreover, systemic changes such as workload redistribution, protected time for rest and reflection, and interdisciplinary collaboration can alleviate stressors contributing to CF.<sup>59</sup>

Nursing curricula should integrate CF awareness and resilience education early in training.<sup>60</sup> Simulation-based learning on emotional self-care, coping, and ethical decision-making prepares future nurses for high-stress environments.<sup>61</sup> Embedding reflective writing and mentorship programs cultivates resilience as a professional competency.<sup>62</sup>

While cross-sectional studies dominate current literature, longitudinal research is essential to examine CF

trajectories over time.<sup>63</sup> Future research should explore cultural differences, gender dynamics, and organizational interventions across diverse settings.<sup>64</sup> Randomized controlled trials assessing long-term effectiveness of resilience-based interventions would strengthen evidence.<sup>65</sup> Additionally, qualitative inquiries capturing lived experiences can deepen understanding of meaning-making processes and coping pathways.<sup>66</sup>

### *Limitations of the evidence*

Heterogeneity in study design, measurement tools, and cultural contexts limits direct comparison. Most studies relied on self-reported instruments, which may be susceptible to bias.<sup>67</sup> Furthermore, many interventions were short-term, and follow-up data on sustainability were scarce.<sup>68</sup>

## CONCLUSION

CF is an unavoidable reality in palliative care nursing, reflecting the deep empathy intrinsic to the profession. Yet it need not lead to despair or disengagement. Through intentional cultivation of resilience, both individually and collectively, nurses can sustain compassion, derive meaning, and continue providing dignified, holistic care to those at the end of life. Promoting resilience is not a luxury but a moral and professional imperative to safeguard the well-being of caregivers and the quality of patient care.

### *Recommendations*

Addressing CF requires a multilevel approach. At the individual level, interventions should focus on mindfulness, self-care, and reflective practice. At the interpersonal level, fostering peer support and mentorship is vital. At the organizational level, supportive leadership, workload management, and institutional recognition of emotional labor are essential. Collectively, these strategies can transform workplace culture from reactive to resilience-oriented.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Jadhav HR, Pritika, Dileep ET, Umar M, Pratap A, Pillai AKR, et al. Compassion fatigue and resilience in palliative care nursing practice: systematic review. *Int J Res Med Sci* 2026;14:242-55.