

# Adaptation and continuous learning: integrative review of coping strategies of palliative care professionals

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## Abstract

**Background:** Coping is essential to manage palliative care professionals' challenges. The focus has been on the effects of coping mechanism; however, little is known about coping itself in palliative care.

**Aim:** To synthesise evidence of coping strategies in palliative care professionals, and how different strategies play roles over time.

**Design:** Systematically conducted integrative review.

**Data sources:** PubMed; CINAHL; Medline; PsycINFO and B-ON were searched (1996–2021) combining 'coping' AND 'palliative care'. A predefined data extraction sheet was developed to report data. Two researchers performed constant comparative analysis using Nvivo®.

**Results:** Thirty-one studies were included. Four main strategies with recurrent reference to time were found: (a) proactive coping, involving activities to achieve self-confidence and control situations and emotions; (b) self-care based coping, including self-protection and self-awareness activities, with behavioural disconnection; (c) self-transformation coping, involving activities to accept limits; and (d) encountering deep professional meaning, is a coping mechanism based on meaning, frequently considering the deepest meaning of work. The dynamic and influencing factors were training, team interaction, professional motivation and family. They were usually protective factors, though sometimes they represented risk factors. The emotional burden associated with healthcare and systemic stressors were always risk factors. An explanatory model describes a complex and dynamic process, in which everyday strategies and more introspective strategies are combined.

**Conclusions:** The model showed a process of adaptation and learning to persevere in palliative care. It changes over time under factors and strategies, and evolves in a personal and professional transformation, parallel to the working life. It would be worth assessing coping in healthcare professionals who chose to leave palliative care and to investigate the reasons they did so and their coping mechanisms.

## Keywords

Coping, palliative care, emotional demand, emotional adjustment, emotional regulation, professional development, end-of-life care, integrative review, review

### What is already known about the topic?

- Coping is essential to manage the challenges that palliative care professionals face in their daily clinical work and most well-known explanations focus on emotion or problem-based coping.
- Many of the studies about coping tend to focus on its effect and consequences.
- The last review about coping in palliative<sup>1</sup> care used a dichotomous approach for influential factors (risk or protective), professional and personal strategies.

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**What this paper adds?**

- Coping can include a variety of strategies from proactive coping, self-care based coping, self-transforming coping and encountering deep professional meaning.
- Specific training, healthcare team, professional motivation and family were found to be sometimes protective and other times risk factors. Emotional burden and the systemic or administrative factors always appear as risk factors.
- Throughout a dynamic adaptation and learning process over time, coping strategies and influencing factors become intertwined; impacting on professional and personal development throughout the career.

**Implications for practice, theory or policy**

- Palliative care professionals coping strategies evolve and change, being intrinsically related to a progressive and greater response capacity with respect to emotionally demanding situations.
- Coping mechanisms in palliative care imply a personal and professional development, extending beyond the management of emotions and problems, or the separation between personal and environment aspects.
- The professional development is a central pillar in training on providing healthcare to others and can be promoted through training self-awareness.
- The coping process seemed to be linked to the development of professional careers in palliative care.

**Background**

Working with individuals approaching the end of life can be a personal and professional challenge.<sup>2</sup> Healthcare professionals are required to develop coping strategies. Coping is defined as the set of cognitive and behavioural strategies developed by individuals to face internal and/or external demands of the relationship between the individuals and the environment.<sup>3,4</sup> Individuals make a first assessment of the potential stressors and, if they consider them stressful, a second assessment is performed in order to consider what they can do.<sup>3</sup>

Folkman et al.<sup>3</sup> and Antoniazzi et al.<sup>5</sup> proposed a transactional coping model based on coping mechanisms focused on the problems and emotions, with an emphasis on both processes and personality traits. In this model, the individuals make an effort to change their emotional states associated with stress, and try to perform activities to confront the situation that generated stress so that it can be overcome.<sup>3,5</sup> Thus, emotion-focused coping can facilitate problem-based coping by reducing emotional stress, and, conversely, problem management can decrease emotional stress.

This first proposal has evolved. Antoniazzi et al.<sup>5</sup> recognised that other authors added coping mechanisms focused on interpersonal relationships, in which the individuals seek the support of others in their social circle. Even Park and Folkman<sup>6</sup> added meaning-based coping to the transactional coping model. These authors suggested that, when faced with possible stressful events, the individuals make an assessment of the meaning of the situation, and the congruence or not with their own beliefs and purposes (global meaning). Subsequently, they apply a coping strategy focused on the meaning to relieve stress.<sup>6</sup>

Vachon<sup>1</sup> has made important contributions in the field of coping strategies and palliative care. This author

performed a literature review and described the coping mechanisms of palliative care professionals as being personal coping strategies (e.g. physical activity) or organisational coping mechanisms (e.g. regular meetings). Likewise, Vachon enunciated a list of stressors, grouping them into environmental (e.g. work role) or personal (e.g. personality). This personal or organisational grouping fits in with the person-environment model that this author used.<sup>7,8</sup> This model affirms that there is occupational stress when there is imbalance between the professionals' resources/demands and the demands/resources of the work environment.<sup>7,8</sup> In the literature, many factors have been determined as stressors for palliative care professionals. Frequent exposure to death, lack of time, heavy workloads and communication difficulties have been mentioned.<sup>9</sup> The ineffectiveness of coping mechanisms and a possible feeling of helplessness arising from emotional responses that include pain, depression and guilt, uncertainty and the awareness of not being able to offer a cure have also been mentioned.<sup>9</sup>

Despite the mentioned stressors, comparative studies that assessed palliative care professionals and those from other healthcare areas have observed low levels of stress or burnout in the former.<sup>1,2,10-13</sup> It may seem that, in comparison, palliative care professionals do not have large burnout problems. However, some studies have indicated that between 24% and 38% of palliative care physicians in different countries suffered from burnout,<sup>13-16</sup> which is a warning sign.<sup>15</sup> In recent years, the focus has been on the results or effects of coping mechanisms; however, little is known about coping itself, and less about coping mechanisms in palliative care professionals. There have been changes in the field of palliative care. It has spread and obtained certain acknowledgment as a field. It is worth mentioning that there are physicians and nurses with significant professional experience. Understanding how the

**Table 1.** Search strategy.

Database	Concepts and combinations			
PubMed	'Coping' (Title; Abstract)	AND	'Palliative care' (Title; Abstract)	NOT 'Caregiver' NOT
Medline (WoS)	'Coping' (Title; Abstract)	AND	'Palliative care' (Title; Abstract)	Child* NOT 'Patient'
PsycINFO/ESBCO	'Coping' (Title; Abstract)	AND	'Palliative care' (Title; Abstract)	
Cinahl	'Coping' (Title; Abstract)	AND	'Palliative care' (Title; Abstract)	
B. on	'Coping' (Title; Abstract)	AND	'Palliative care' (Title; Abstract)	

Limits were: English, Spanish, Portuguese language; published between January 1996 and September 2019.

coping mechanisms of these professionals' function can help promote initiatives to encourage or teach coping strategies. It is necessary to update the state of the evidence from that approach of personal and organisational coping strategies,<sup>1</sup> and to consider the possible evolution of coping strategies throughout the professional healthcare provided to patients with advanced or terminal illnesses; carried out by palliative care professionals during their professional careers. The aim was to synthesise evidence of coping strategies in palliative care professionals, and how different strategies play roles over time.

### Primary objective

The main objective of the present study was to assess the scientific evidence about coping mechanisms of physicians and nurses in palliative care, in order to understand the different coping strategies used by healthcare providers when caring for patients with advanced diseases or at the end of life.

### Secondary objectives

The secondary objectives were to determine the factors that influence these healthcare professionals' coping mechanisms, and characterise the possible evolution of coping strategies, over time and in each professional.

### Design

The present study is an integrative review conducted according to the method proposed by Whittemore and Knafl<sup>17</sup> This type of review is the broadest type of research review method as allows including experimental and non-experimental research to understand more fully a particular phenomenon. It makes it possible to include diverse methodologies and varied perspectives on a topic. It allows integrating quantitative, qualitative and mixed-method designs. The integration was conducted considering current recommendations<sup>18</sup> that will be explained throughout the integrative review phases.<sup>17</sup>

### Identification of the problem

It is common to talk about stressors and coping strategies, but little is known about how they are integrated and

developed, or how they evolved when dealing with demanding clinical situations. Therefore, these four literature review questions arise: (1) How do palliative care physicians and nurses cope with emotional, existential, and/or spiritual demands, when caring for end-of-life patients?; (2) What factors influence this coping processes, in a negative or positive sense?; (3) What coping strategies do these palliative care professionals use? and (4) How do these strategies evolve? Understanding coping mechanisms and strategies involved will promote a better understanding of how coping skills are developed. The questions required combining qualitative and quantitative evidence.<sup>18</sup>

### Literature search

The search in the scientific literature was systematically conducted in CINAHL, Medline, PubMed, PsycINFO/EBSCO and B-ON databases. The search strategy was completed following the iterative approach proposed by Zwakman et al.<sup>19</sup> Pearl growing and reference tracking were performed. Vachon's<sup>1</sup> work was considered a 'pearl', and those publications that cited it were reviewed.

Two keywords were combined with Boolean operators: 'Coping' AND 'Palliative Care', in titles and abstracts. Medical subject headings (MeSH) terms were not used. Thus, there was a more inclusive and objective-oriented approach. For example, 'coping' as a MeSH term includes concepts not related to the subject of study (e.g. chemical coping in athletes) (Supplemental Appendix 1). The search was narrowed (Table 1) and limited from January 1996 to September 2019, based on the bibliographic review conducted by Vachon.<sup>1</sup> This search was updated up to 1 June 2021, following reviewers' suggestion. The same string equation was used but adding not Covid-19, as the focus of the review was on palliative care professionals' coping during normal working life. The articles considered were those published in English, Spanish or Portuguese (Table 1). All the references of the articles included in the review were also assessed, tracking the references backwards and forwards (citation tracking).

### Selection criteria

The inclusion criteria were: (1) Studies that described the coping of physicians and/or nurses within the palliative

care context; (2) Projects carried out in any type of palliative care services (home, hospital and support); and (3) Studies with any type of methodological design (quantitative, qualitative or mixed).

Studies with the following features were excluded: (1) Studies focused on health professionals such as psychologists or other health professionals. Psychologists have a training process that enables them in a particular way for professional coping strategies; other professionals are not so exposed; (2) Validation studies of scales or other instruments for measuring coping and/or professional stress; and (3) Studies focused on coping mechanisms of children, patients, relatives or students.

The article eligibility stage was carried out independently by two researchers focusing on the titles and abstracts according to inclusion and exclusion criteria. As mentioned in the introduction, there was an emphasis on studying the 'final result of coping', such as burnout or stress levels. Therefore, if the central subject of the studies were 'stress' or 'burnout', they were excluded, unless the topics 'coping' or 'coping strategies' were present in the results and in the discussions. In addition, the systematic literature review<sup>20</sup> and two theoretical reviews<sup>21,22</sup> identified were excluded. Their reference list was checked to identify potential new articles to add. However, none was added as the articles were already included in the review or; were too old or did not fulfil inclusion criteria.

### Data quality assessment

Based on Whitemore and Knaff's<sup>17</sup> argument quality appraisal of included evidence was not considered essential. Structured data extraction allowed having a quality idea. No study was eliminated based on its quality.

### Data analysis

A data extraction sheet was developed taking into account the consolidated criteria for reporting qualitative research (COREQ),<sup>23</sup> as among the included articles there were more with qualitative design. The guideline was modified to systematically extract data for all types of study designs. For example, at the 'study design' domain; the theoretical framework was registered and if there was one coping framework that shaped the study it was registered too. Likewise, within the subdimension of data collection, if the study was quantitative or mixed-method it was extracted and registered the type of tool used. The data extraction sheet included the following sections: journal, country, year, title, objectives, design, research team and reflexivity, coping framework, context, participants and samplings, data collection/instruments, analysis (type, validation and rigor), results (positive or negative influencing factors, coping strategies and their evolution) and conclusions. The sheet promoted to systematically extract the data. The data were recorded in Microsoft Excel®.

Verbatim citations, as well as the most descriptive and the most interpretive results were considered data. One researcher performed the data extraction, consulting the second researcher in case of doubts.

The NVivo12® software was used to organise and manage the data from the original studies. A constant comparative analysis was performed, comparing and categorising the data, through abductive reasoning<sup>24</sup> (inductive and explanatory or interpretive). This procedure allowed the development of more abstract themes and theoretical categories that described latent patterns.<sup>25–27</sup> Two researchers independently reviewed the codes and discussed code regrouping until consensus was reached. A data-based convergent synthesis design was used to integrate qualitative and quantitative evidence.<sup>18,28</sup> In the case of quantitative studies, we considered the ideas and interpretations of the reported results. These were integrated through the analysis on the categories that make sense. The review results are presented together. The quantitative data was reported specifying if the relationships were or not statistically significant; as shown in the results section. The categories were added by hierarchical classification with an organised conceptual structure, thus answering the research questions and meeting the objectives of the present study, discriminating the factors that influenced the coping processes and strategies that physicians and nurses had developed.

### Data presentation

The data were presented through the PRISMA<sup>29</sup> flow chart, a summary of the studies included in the review, and representative figures of the results obtained by inductive analysis.

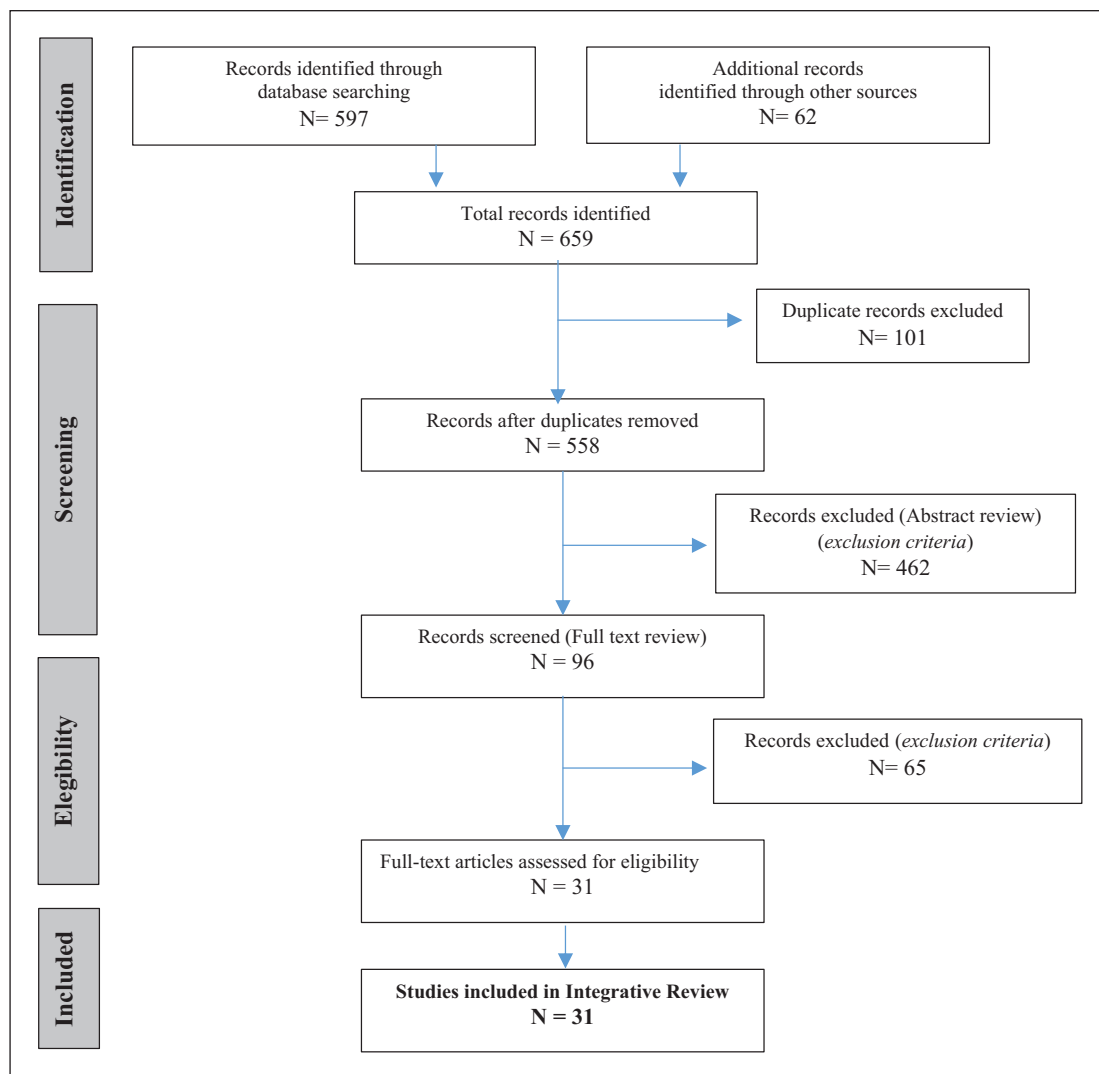
## Results

Thirty-one articles were finally selected (Figure 1).

### Characteristics of the studies

The studies selected had been conducted in: United States ( $n = 7$ ); Canada ( $n = 4$ ); United Kingdom ( $n = 4$ ); Australia ( $n = 2$ ); Spain ( $n = 3$ ); and Portugal ( $n = 2$ ). Brazil, China, India, Japan, Malaysia, New Zealand, Singapore, Sweden, South Africa, Malaysia, The Netherlands and Taiwan had one article. The number of publications, except for 2015, was distributed almost evenly over the years.

Of the 31 articles, 16 used qualitative methodology. Nine articles used generic qualitative designs,<sup>30–38</sup> five used grounded theory,<sup>39–43</sup> one phenomenology,<sup>44</sup> and the last one ethnography.<sup>45</sup> On the other hand, eleven studies were quantitative (descriptive and/or correlation studies),<sup>13,46–55</sup> four used mixed methodology (quantitative and qualitative),<sup>11,12,56,57</sup>



**Figure 1.** PRISMA flow chart from the search strategy.

Most studies had been conducted exclusively in palliative care/hospice services ( $n = 20$ ).<sup>2,13,30,32–39,42–46,48–50,53–57</sup> One in a hospital,<sup>51</sup> two specifically in hospital oncology services,<sup>40,52</sup> and one with nurses who had provided care to end-of-life patients; though without specifying the services.<sup>34</sup> There were four studies that compared palliative care services with other services such as emergencies,<sup>11,12</sup> haematology and oncology<sup>40,52</sup> (Table 2).

### *Coping strategies of health professionals in palliative care*

Healthcare professionals use a diversity of proactive and thoughtful activities, in order to meet the challenges posed by the process of providing care to others. Activities occur sequentially and evolve in a complex manner. Studies have indicated that ‘time’ and ‘experience’ had been recurrently mentioned. Inductive and interpretive

analyses indicated coping strategies, understood as a set of varied activities that tend to be used in the same way, and configure styles of action in the face of challenges. These styles are not watertight compartments. Healthcare professionals combine them according to their needs and evolution in the face of challenges. The coping strategies observed were: (a) Proactive coping (doing things proactively); (b) Self-care based coping (taking care of oneself); (c) Self-transformation coping (adaptation); and (d) Encountering deep professional meaning (experiencing the deep meaning of their work).

### *Proactive coping*

This modality is action-oriented coping. It groups together the set of activities in which the professionals adopt ‘behaviours’ based on facing the situations in a proactive manner. It is characterised by the search for

Table 2. Studies included in the review.

Author(s)/Country	Title	Aim	Design	Setting
Payne et al. <sup>11</sup> United Kingdom	'A comparative study of death anxiety in hospice and emergency nurses'	The purpose of the study was to compare levels of death anxiety between A & E nurses and palliative care nurses, and to relate these to self-reported coping responses	Mixed: quantitative (comparative study y qualitative (content analysis)	Hospice and emergency nurses
Peters et al. <sup>12</sup> Australia	'Emergency and palliative care nurses' levels of anxiety about death and coping with death: A questionnaire survey'	Describe a both emergency department nurses and palliative care nurses experience anxiety about regular patient deaths and how do nurses in these units perceive they cope with exposure to frequent patient death	Quantitative survey	Emergency departments and palliative care
Koh et al. <sup>13</sup> Singapore	'Burnout, psychological morbidity and use of coping mechanisms among palliative care practitioners: A multi-centre cross-sectional study'	Study the prevalence of burnout and psychological morbidity among palliative care practitioners in Singapore and its associations with demographic and workplace factors as well as the use of coping mechanisms	Quantitative: multi-centre, cross-sectional	Palliative care
Ablett and Jones <sup>30</sup> United Kingdom	'Resilience and well-being in palliative care staff: A qualitative study of hospice nurses' experience of work'	Describe aspects of the nurses work that are relevant to their resilience and ability to continue to work in palliative care	Qualitative: analysis interpretative	Hospice
Newton and Waters <sup>31</sup> United Kingdom	'Community palliative care clinical nurse specialists' descriptions of stress in their work'	Analyse stories of community palliative care clinical nurse specialist (CPCNSs) stress in the course of their work to discover the meaning of stress for them.	Qualitative: Interpretive thematic analysis	Community palliative care
Beng et al. <sup>32</sup> Malaysia	'The experiences of stress of palliative care providers in Malaysia: a thematic analysis'	Explore the experiences of stress in 20 palliative care providers of University Malaya Medical Centre in Malaysia	Qualitative: analysed thematically	Palliative care
Perez et al. <sup>33</sup> United States	'Promoting resiliency among palliative care clinicians: stressors, coping strategies, and training needs'	Explore common stressors, coping strategies, and training needs among Palliative care clinicians	Qualitative: interpretive thematic analysis	palliative care
Zambrano et al. <sup>34</sup> Australia	'The experiences, coping mechanisms, and impact of death and dying on palliative medicine specialists'	Research on the experiences, coping mechanisms, and impact of death and dying on the lives of palliative medicine specialists is limited	Qualitative: analysed thematically	Palliative care
Morais et al. <sup>35</sup> Brazil	'Cuidados paliativos: enfrentamiento de los enfermeros de un hospital privado en la ciudad del Rio de Janeiro'	To highlight the nurses' understanding of Palliative Care, to identify the main challenges encountered by nurses who care for patients outside the therapeutic possibility and to detect the confrontation of these nurses in dealing with this clientele	Qualitative: exploratory, descriptive	Palliative care
Chan et al. <sup>36</sup> Hong Kong	'Impact of death work on self: existential and emotional challenges and coping of palliative care professionals'	Understand the self-competence of palliative care professionals in facing death, dying, and bereavement, we aimed in this study to explore the impact of death work on the self of these professionals and how they perceive and cope with the challenges of self in death work	Qualitative: interpretive thematic analysis	Palliative care
Smith et al. <sup>37</sup> Africa	'Experiences of work-related stress and coping among palliative care staff in South Africa: a qualitative study'	To explore the experiences of work-related stress and coping among a multidisciplinary group of 12 palliative care staff	Qualitative: inductive thematic analysis	Hospice
Tan et al. <sup>38</sup> Malaysia	'The experiences of well-being of palliative care providers in Malaysia'	To explore the experiences of well-being of palliative care providers in Malaysia	Qualitative: social constructionism	Palliative care
Mota Vargas et al. <sup>39</sup> Spain	'The transformation process for palliative care professionals: The metamorphosis, a qualitative research study'	Analyse the professional trajectory of palliative care workers over time and the factors which influence this trajectory	Qualitative: grounded theory	Palliative care
Ekedahl and Wengström <sup>40</sup> Sweden	'Nurses in cancer care- coping strategies when encountering existential issues'	Research is to study the coping processes of registered nurses working with terminally ill and dying cancer patients	Qualitative: grounded theory	Hospital Department of Oncology
Peterson et al. <sup>41</sup> United States	'Where do nurses go for help? A qualitative study of coping with death and dying'	This research examines the resources that nurses use when coping with the death of a patient	Qualitative: grounded theory	University of Wisconsin-Milwaukee
DiTullio and MacDonald <sup>42</sup> United States	'The struggle for the soul of hospice: Stress, coping, and change among hospice work'	(1) To describe occupational stress as it manifests itself in the daily lives of hospice workers; (2) to identify the methods employed by these workers to ameliorate its symptoms; and, ultimately, (3) to explore ways to strengthen and normalize these coping mechanisms within the hospice organization	Qualitative: grounded theory	Hospice
Shimoinaba et al. <sup>43</sup> Australia	'Nurses' resilience and nurturance of the self'	Explore the nature of nurses' resilience and the way it is developed	Qualitative: grounded theory	Palliative care
Huang et al. <sup>44</sup> Taiwan	'The transformation process in nurses caring for dying patients'	Explore the transformative process that occurs in nurses because of the spiritual suffering and conflict associated with caring for dying patients	Qualitative: phenomenological	Hospice

(Continued)

**Table 2. (Continued)**

Author(s)/Country	Title	Aim	Design	Setting
Sinclair <sup>45</sup> Canada	'Impact of death and dying on the personal lives and practices of palliative and hospice care professionals'	Explore the impact of death and dying on the lives of key leaders and frontline professionals in palliative and hospice care – individuals who arguably provide society and health care practitioners with the most authoritative discourse on end of life and its effect on life in general.	Qualitative: ethnography	Palliative care and hospice
Desbiens and Fillion <sup>46</sup> Canada	'Coping strategies: emotional outcomes and spiritual quality of life in palliative care nurses'	Evaluate the association between individual coping strategies, emotional outcomes (distress and vigour), and spiritual quality of life of palliative care nurses who are confronted with the stress of multiple bereavement	Quantitative: correlational study	Palliative care
Sansó et al. <sup>57</sup> Spain	'Palliative care professionals' Inner life: exploring the relationships among awareness, self-care, and compassion satisfaction and fatigue, burnout, and coping with death'	Understanding of the factors associated with professionals' inner life, through the assessment of an adapted version of Kearney and Kearney's awareness model of self-care	Quantitative: cross-sectional online survey	Palliative care
Dean <sup>48</sup> Canada	'Occupational stress in hospice care: Causes and coping strategies'	Findings from an investigation of hospice nurses' responses to difficult or demanding work-related situations. The study was carried out both to identify causes of stress and to identify areas where greater staff support was needed.	Quantitative (descriptive and comparative) Systematic literature review	Hospice
Collier <sup>49</sup> United States	'Stress and coping in hospice care'	Assess baseline work-related quality of life and coping in a cohort of outpatient hospice care professionals as well as the relationship between each individual's coping responses and their work-related quality of life.	Quantitative cross-sectional survey	Hospice
Kulbe <sup>50</sup> United States	'Stressors and coping measures of hospice nurses'	Research on stress and coping mechanisms, a survey of hospice nurses was conducted using a revised version of the Duffy and Jackson (1996) questionnaire	Quantitative: survey	Hospice
Martins et al. <sup>51</sup> Portugal	'Coping strategies of nurses in terminal ill'	Identify coping strategies used by nurses and the influence of socio-demographic and psychological variables in this choice	Quantitative: non-experimental, correlational and descriptive study	Hospital
Gama et al. <sup>52</sup> Portugal	'Personal determinants of nurses' burnout in end of life care'	Identify socio-demographic, professional exposure to dying, training degree and personal factors relevant to burnout dimensions in nurses coping with death issues.	Quantitative: correlational study	Medicine, oncology/haematology and palliative care
Evans et al. <sup>53</sup> United States	'Coping strategies used in residential hospice settings: Findings from a national study'	Explore professional caregivers' coping strategies for dealing with the deaths of patients in residential hospices in the United States (66-item Folkman and Lazarus Ways of Coping Questionnaire (WCQ))	Quantitative: Descriptive and analytical	Hospice
Sansó et al. <sup>54</sup> Spain, Brazil e Argentina	'Palliative care professionals' Inner lives: cross-cultural application of the awareness model of self-care'	This study was to offer evidence on the generalizability of the awareness model of self-care across three care systems under particular idiosyncrasy	Quantitative: cross-sectional studies	Palliative care
Dijkhooorn et al. <sup>55</sup> Netherlands	'Healthcare professionals' Work-related stress in palliative care: a cross-sectional survey'	To get insight into the experienced work-related stress among healthcare professionals providing palliative care in the Netherlands and their strategies and needs in relation to maintaining a healthy work-life balance.	Quantitative: cross-sectional online survey	Palliative care
Harris <sup>56</sup> United States	'Ways of coping: understanding workplace stress and coping mechanisms for hospice nurses'	Explores the availability and adequacy of workplace resources in order to recommend how organizations can assist in the coping process.	Mixed: quantitative and qualitative. Descriptive and correlations. Content analysis	Hospice
Bruneau and Ellison <sup>57</sup> United Kingdom	'Palliative care stress in a UK community hospital: evaluation of a stress-reduction programme'	Quantify the work-related stress of nurses providing palliative care in a community hospital; Explore how well these nurses coped with stress; Evaluate the impact of a dedicated stress-reduction programme	Mixed: quantitative and qualitative. Descriptive and Correlation, analyses thematically	NHS community hospital

self-confidence, and control of the situations and one's own emotions, in order to face the problems as well as possible. It includes three main types of activities in which healthcare professionals: (a) bear a responsibility towards themselves, their patients, and families as an active coping strategy<sup>21,30,38,44,45,49,51,53</sup>; (b) plan and organise their work, so that they can gain self-confidence and focus on it<sup>13,21,32,34,40,42,49,51,53,56</sup>; and (c) manage the situations by controlling aspects related to their practice, themselves, and their emotions.<sup>21,30,41,43,45,48,51,53</sup>

### *Self-care based coping*

This coping mechanism is awareness that considers the protection itself. Healthcare professionals frequently use intentional strategies to protect themselves, repeating activities that are progressively developed. These main activities are developed at three levels. At the first level, the professionals promote self-knowledge,<sup>20,38,39,43,54</sup> trying to know themselves better, thus promoting an emancipator/liberating reflection.<sup>11,20,32,36,39,43–45</sup> At the second level, they perform self-care activities, disconnect from work, and use their free time to rest and perform hobbies and activities to 'nourish' themselves. Healthcare professionals have mentioned a variety of activities for this purpose, such as: painting; music; travelling; relaxation; gardens or contact with nature.<sup>39,55</sup> There were also other individual activities to 'nourish' from, for example, meditation or religious resources. Activities such as coexistence and meals with friends, family, teammates<sup>13,32,36,38,39,41–44,46,47,49,50,55,56</sup> have also been mentioned as a source of support and care. Using emotional support activities has been statistically related to quality of life.<sup>49</sup> At the third level, the professionals perform a behavioural disengagement. They temporarily apply this strategy to protect themselves, putting work aside, so they do not take it home and do not think about it.<sup>21,35,38–42,49–51,56</sup> In addition, they detach themselves emotionally from their patients, through a psychological separation from recently deceased patients.<sup>32,39–41</sup>

### *Self-transforming coping*

It is a coping mechanism based on self-transformation. It groups together the set of activities in which the professionals evolve by accepting their personal and professional limits. This action takes place through a process of continuous reflection, over time, reviewing and sometimes reformulating values and meanings in life. It includes four main types of activities in which the professionals:

- accept limits, as persons, and recognise the need to maintain professional boundaries,<sup>13,32,33,37,38,40,42,43</sup> overcome initial frustrations,<sup>39,44</sup> consider that it is

not their fault that the patients are ill, and recognise their own limits.<sup>20,21,39</sup>

- accumulate experience over time, professional maturity, greater training, and resilience<sup>12,30,31,35,37–39,44–46,51</sup>;
- look for balance and harmony in their personal lives, seeking a healthy balance between work and life<sup>30,31,35,39,42–45,49,56</sup>;
- review values of life, with (re)meaning of death, accepting it as natural<sup>11,30,32,34,36,38–41,43,45–47,52</sup> and confronting their own deaths. There has also been a renewal of the meaning of life.<sup>11,36,38–41,44–46,52</sup> Coping strategies based on meaning and purpose in life were statistically related to better scores in the burnout dimensions.<sup>52</sup>

### *Encountering Finding deep professional meaning*

This is a coping mechanism aimed at finding deep meaning in what healthcare professionals do. They experience the deep meaning of their work, find job satisfaction and grow professionally. Activities in this coping style include: feeling an external professional (re)appreciation; having sense of achievement and meaning of the work performed<sup>30,34,43,44,46</sup>; and the feeling that the healthcare they provide makes the difference.<sup>30,34,38</sup> Patients and family members value and validate the healthcare these professionals provide,<sup>30,38,41,43,44,51</sup> which makes them feel satisfied and fulfilled at work.<sup>30,39,41,44,47,51</sup> They reformulate their actions<sup>13,30,44,46,49</sup> adopting open attitudes<sup>37,38,44</sup> that lead them to have realistic expectations,<sup>13</sup> find a sense of coherence,<sup>30</sup> and face challenges cognitively.<sup>30,46</sup> Positive reinterpretation has been statistically associated with professional and spiritual quality of life.<sup>46</sup>

In summary, the four coping strategies include different activities that, in a dynamic continuum and evolving, can range from 'common day-to-day' activities to more introspective ones, which are combined. The latter allow deeper self-knowledge, learning, and growth that transform and train healthcare professionals. These strategies are used according to the different influencing factors present in each situation.

### *Factors that influence coping strategies of healthcare professionals*

The factors that influence coping strategies are very varied. They include characteristics of the professionals and/or circumstances associated with work and caring for others. Most of these factors can influence positively or negatively, suggesting that they are dynamic. Sometimes, they become protective (resources), and, other times, risk factors, depending on the context and how the professionals experience them.



Training and healthcare team acquire special relevance in the dynamic factors group. Thus, feeling well trained is a source of greater security and confidence. These healthcare professionals feel better prepared, even to face the death of the patients.<sup>12,32,36,38,45,54,56,57</sup> Proper training also encourages self-control<sup>44</sup> and improves individual coping skills.<sup>57</sup> Training is positively and statistically related to greater satisfaction resulting from compassion.<sup>47</sup>

On the other hand, if there is lack of training, healthcare professionals feel ill-prepared to deal with patients' cases, feeling mentally and emotionally unprepared.<sup>33</sup> This factor includes the lack of knowledge and/or understanding of the philosophy among the team members. This fact creates disagreements with respect to the treatment goals, considering more aggressive or invasive options.<sup>48,50,57</sup> Even the lack of training of other healthcare professionals is a risk factor, given that they do not understand or value their work.<sup>32,33,50</sup> They are considered a second-class form of medicine, which makes them feel isolated and be seen as 'freaks'.<sup>39</sup>

The healthcare team becomes a protective factor when it creates a favourable work environment,<sup>30–32,39,40,46,48</sup> supports colleagues,<sup>30,31,34,38,40,42,43,46,48,49,51,55</sup> shares experiences,<sup>11,30–32,38–41,43,44,48,49,55</sup> and has good management.<sup>31,40,48,49</sup> On the contrary, it is a risk factor when it is a source of stress. This situation can result from interpersonal stress, lack of communication and limits, difficulty in responding to changes, support problems within the team, and few opportunities to share experiences and feelings.<sup>11,30,32,33,39,40,42,50,57</sup> The same fact occurs with personal characteristics, which are quite static. Aspects such as temperament, age, being married, sex, previous personal experience, personality and philosophy of life<sup>12,13,30,39,46,51,57</sup> seemed to be protector factors. On the other hand, problems resulting from coping with death or dysfunctional behaviours (addiction) seemed to represent risk factors.<sup>43,49</sup>

Professional motivation is also influential. It protects when the following aspects are present: there is love and passion for the work performed<sup>13,31,38</sup>; the professionals have a vocation for palliative care<sup>11,30,31,38,39,45</sup>; there is an active and unequivocal desire to work in this field<sup>31,38,39,42</sup>; and these professionals do not find their job particularly stressful.<sup>48</sup> However, it is a risk factor if there are discrepancies between individuals' expectations, the clinical reality, and the expectations of the team members. It is also a risk if the initial enthusiasm fades; if they have not found balance; or if there is a perception of not having done enough.<sup>31–33,36,56</sup>

The families of professionals are protective if they provide support, but they can be a risk factor.<sup>37,38,44–46</sup> Patient families can also be both risk factors and protective. These families entail challenges, shocking emotional experiences,<sup>35,36,39–41,44,45,47</sup> and associated negative feelings.<sup>13,31,36,42,47,50–53,56</sup>

There are two factors that seemed to be only risky: (1) the emotional burden associated with providing healthcare for patients with shocking emotional experiences<sup>11,32,39,42,45</sup> and associated negative feelings<sup>13,31,42,45–49,51</sup>; and (2) the presence of systemic or administrative stressors. The latter are due to institutional policies or malfunction of the system, administrative issues, and poor working conditions, including too much workload or staff turnover, and difficulty in managing time.<sup>33,39,40,42,48,50,57</sup>

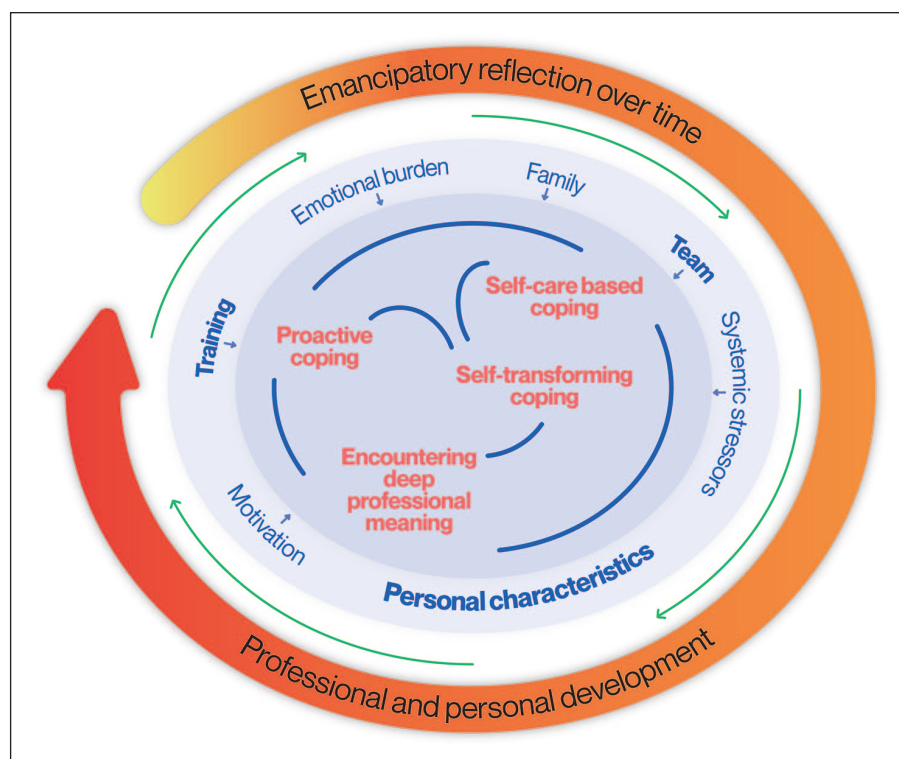
### *Coping process model in palliative care*

The interpretive and conceptual analysis carried out inductively indicated a model of coping strategies in palliative care that was a process of personal and professional development over time. As explained below, coping mechanisms of healthcare professionals evolve over time.

Throughout a dynamic adaptation and learning process over time, coping strategies and influencing factors become intertwined. Faced with stressful events, healthcare professionals implement coping strategies by means of different activities. Sometimes, the combination of activities also entails combinations of coping strategies. The results of the different studies assessed allowed inferring that there were coping strategies developed in a proactive and intentional way and, at the same time, there were strategies that resulted from experience, training, and professional maturity. The different combinations imply more or less introspection, which promotes greater or lesser learning and development in the coping process, reflected in the impact of job challenges on palliative care professionals. There was interdependence between influencing factors and coping strategies. It was observed that there was coalescence between all of them.

For example, there were cases in which these healthcare professionals talked with their colleagues and shared experiences. This is a concrete activity that promotes a strategy to enable these professionals to reassess themselves and their professional meaning. They can apply this strategy if the team is a protective factor. However, if the team becomes a risk factor, the professionals do not share with their colleagues and take the responsibilities as an active confrontation strategy. In addition, different professionals can use the same activities in different ways. For example, some professionals go out for a walk. This activity allows them to disconnect from work. On the other hand, professionals can go out for a walk to deliberately reflect and gain perspective about their work. Coping strategies may change as the professionals evolve, and the combinations also vary according to influencing factors, some of which are changing and others are static (e.g. personal characteristics).

In this evolution, the professionals carry out a learning process, combining various coping strategies, which transform them personally and professionally. This evolution,



**Figure 2.** Coping process model in palliative care professionals.

in turn, makes their coping strategies evolve and change, configuring a coping style intrinsically related to a progressive and greater response capacity with respect to emotionally demanding situations.<sup>39,47,54</sup>

The coping is a diachronic process of responses to influencing factors that involve the use and development of different coping strategies. These strategies can evolve in introspection throughout the professional career, thus leading to personal and professional development (Figure 2).

## Discussion

The present literature review indicated that the coping mechanisms of palliative care professionals were more complex and dynamic than what has been indicated so far.<sup>1</sup> These professionals used and combined different coping strategies. The strategies described functioned at different levels of introspection and were dynamic. Proactive coping included activities in search of trust and control,<sup>21,30,48,51,53</sup> focusing more on action and empowerment. It approached the perspective of Folkman and Lazarus with a focus on the problems and their resolution.<sup>3,4,6</sup> When facing the problems, the individuals make an effort to change the situation that exists between the environment and themselves minimising stressors. Coping mechanism based on self-care has been described as a progressive strategy applied through self-knowledge,

while developing self-care activities and behavioural disengagement.

This coping mechanism is intentionally targeted at self-protection. The inability to separate oneself from work and/or having a restricted social support network were regarded as greater risks of developing compassion fatigue.<sup>39,58</sup> The fact that these professionals protect themselves does not mean a less compassionate practice, since it is necessary to know oneself in order to be compassionate and protect oneself.<sup>59,60</sup> Self-knowledge is essential for self-care by providing the additional possibility of finding regeneration within the work environment and clinical activities (i.e. establishing healing connections).<sup>61</sup> A study<sup>62</sup> that implemented a 10-week of mindfulness training revealed a perceived improvement in self-care, the integration of conscious disruptions into work routines, a reduction in rumination and anxiety generated in contact with the patient, as well as an improvement in connection interpersonal skills. An improvement in team communication was also identified.

Kearney and Weininger<sup>61</sup> stated that self-care was not so much about managing stress and harm limitations, but finding ways to remember and stay engaged at the workplace with the wholeness that already exists. This is in line with more recent work<sup>47,54,63</sup> If we are not aware of our own needs, we cannot be available to help others with theirs<sup>63,64</sup> This approach partly coincides with that of Vachon,<sup>20</sup> who affirmed that personal coping strategies,

such as developing a sense of competence, having control over the activities, and finding pleasure from work, are not enough; the individuals need something more in the long term. Developing a self-care plan can be an effective strategy<sup>65</sup> and the Self-Care Matters resource can guide the health professional through his/her own self-care planning process.<sup>64</sup>

The present review revealed that there was coping based on self-transformation as a consequence of a process of continuous reflection and emancipation. This finding suggests a different coping model from the one based on the regulation of emotions and the management of problems that generate suffering,<sup>66</sup> or from the one based on personal and organisational strategies.<sup>6</sup> This review suggests that these healthcare professionals accept their limits, reformulate their values, and renew the meaning in life. This aspect was not included in the conceptual model proposed by Folkman et al.<sup>3</sup> Saunders<sup>67</sup> highlighted the need for self-reflection and self-care in palliative care professionals, in order to maintain the joy of performing a vocational profession. This resonates with the more recent concept of total care, representing a continuum beginning with care and compassion for oneself, extending to care and compassion for others<sup>32,38</sup>

The importance of setting limits is perceived in the 'dynamics of the wounded healer'. While the physicians continue doing everything they can to solve patients' problems and alleviate their suffering, the wounded healers do so with the awareness of not being omnipotent, accepting the vulnerability and limits as a source of competence to help the others. The wounded healers realise that patients have innate abilities within themselves to heal physically, psychologically and spiritually. Therefore, they make efforts to awaken that innate potential in the patients, without being 'hurt'.<sup>9,68</sup> This aspect is reminiscent of the last phase of 'deep compassion' in the Harper-based model, which has been criticised for describing a time-limited process for each phase (i.e. depression 6–9 months) and an end point.<sup>66,68,69</sup> The model is based on American healthcare professionals caring for dying patients.<sup>68</sup> However, our analysis did not indicate an end point, but a continuous evolutionary process.

Another coping strategy, that we called 'encountering deep professional meaning' has also been observed. It is a cycle of personal growth and constant (re)appreciation of the caring process,<sup>58</sup> and the professional approach in a search for meaning. This concept supports the recommendation of Antoniazzi et al,<sup>5</sup> including the search for global and situational meaning as a thoughtful and active coping strategy. It should be considered that this 'search for meaning' in the explanatory model includes two areas: rethinking the professional sense, and reconsidering oneself and own values. The model shows that the two strategies are important, but also the other ones explained. This

aspect should be taken into account when considering Pargament's model, which focuses on the existential dimension, mentioning the mechanisms of clinging to the meaning that one gives, and changing the meaning when it is no longer valid.<sup>40</sup>

The coping strategies found may recall the division between 'personal coping strategies' and 'environmental strategies'.<sup>20</sup> We did not use these terms, because the results did not support this distinction. Systemic stressors were observed in our review<sup>30,33,42,48,50,56</sup>; however, they were not addressed, because there were no coping strategies at this level of work context. Collaborative work relationships, support groups, and administrative policies have been mentioned as strategies of this type,<sup>20</sup> within a person-environment fit approach to stress.<sup>70</sup> The support of colleagues has been mentioned, but as personal relationships with co-workers, that is, as personal and individual strategies more than organisational ones or institutional philosophies.<sup>71–73</sup> If the emphasis of the decade on healthy work environments is taken into account, the fact that labour resources for facing the challenges were not found is striking.<sup>74–76</sup> It would be worth promoting coping strategies and combating workplace stress, developing quality workplace resources that consider the person-environment relationship,<sup>47</sup> and, at the same time, build coping strategies that decrease administrative stress and promote rotation or self-care initiatives such as art-therapy for professionals.<sup>71–73</sup>

The present review indicated that the factors influencing the coping mechanisms can vary and range from being protective to risk factors and vice versa; in line with the situations, activities or resources. These results convey a different view compared to the more dichotomous approach proposed by Vachon,<sup>77</sup> who grouped coping mechanisms into two categories, that is, risk or protective factors. Lazarus<sup>78</sup> stated that these mechanisms are something subjective that depend on whether the individuals perceive the situations as potentially dangerous events for their psychological well-being or not. Our analysis showed that the perception of the factors was not only subjective, but also changing, and there could be interrelations between them. It is worth considering the stressors that should be decreased, but also the protectors that should be promoted. It was observed that teamwork, training or patients' families can change and be protective or stressful. Even some personal characteristics such as motivation and vocation for palliative care vary.<sup>2,68</sup> Motivation and vocation gained greater relevance together with training in the present review than in the study conducted by Vachon.<sup>20</sup> This is in line with positive effects showed on compassion satisfaction or pleasure in one's work. This result could be due to the emphasis on the necessary training and professional choice targeted at providing healthcare to patients with advanced diseases

in recent years.<sup>67,68</sup> The emotional burden – associated with caring for the patients – and systemic stressors remain as stressor factors<sup>20</sup>; although the ambiguity of the role as stressors was not observed.

The proposed model indicated that coping mechanisms were iterative and transformative processes, and not just resolution of emotions or problems. The influencing factors vary, the coping strategies combine and evolve and, in turn, palliative care professionals develop personally and professionally. This model covers a knowledge gap between the factors, the different confrontations, and the results of the coping strategies. Until now, negative results have been emphasised (i.e. burnout, increased mood and sleep disturbances in healthcare providers); however, positive results were present (i.e. professional satisfaction). Personal and professional development occurs over time, resulting from emancipatory reflection, a sense of achievement, job satisfaction, acquisition of greater personal and professional maturity and resilience. In his works on moral resilience, Frankl<sup>79</sup> affirmed that the true existential meaning derived from three sources, namely: (1) achievements and creative activities such as solving a problem or creating something; (2) experiencing something or someone inspiring, such as the beauty of nature, love for a spouse or family, or the value of a friend; and (3) accepting the inescapable value in inevitable suffering. We can choose within ourselves to make sense of each situation, which helps us to be morally resilient. In our analysis, it was observed that, in the coping processes, the professionals made this development trajectory in the evolution of their skills and competence. The G.R.A.C.E.<sup>80</sup> is a process that has been developed to offer nurses and others a practice to enable them to respond more compassionately and with greater clarity and ethical grounding as they endeavour to find a compassionate path through complex clinical situations. The process can enable nurses to understand and focus on specific and integrated elements, ideally allowing compassion and resilience to emerge in the relationship between nurse and patient, nurse and nurse, inter-professional team members, and nurse and family caregivers. p.124<sup>7</sup>

This coping mechanism approach is consistent with studies on the career path of palliative care professionals, which had observed different stages towards greater professional development and maturity. These studies also suggested that these healthcare professionals experienced situations of emotional impact that they should address in order to be able to successfully perform their professional activities.<sup>39,44</sup> Remen<sup>81</sup> said that burnout happens as grief is not done and hearts become filled with loss and there is no room left to care. Addressing the experienced emotional situations is a ‘professional trajectory’ of transformation or metamorphosis.<sup>39</sup> Those studies briefly mentioned some activities that they had used,

such as development of communication skills, and reassessment and adaptation of their strategies.<sup>38,39,44</sup>

The impact of the COVID-19 pandemic brought unprecedented challenges to palliative care providers, recognizing a greater need for self-care practice.<sup>82</sup> It has increased mood and sleep disturbances on healthcare workers,<sup>83</sup> and concerns about risk of infection coupled with limitations in personal protective equipment.<sup>82</sup> It would be interesting to explore if their common coping mechanisms are applicable to this situation or palliative care professionals have developed different coping mechanisms.

### *Implications for practice*

These healthcare professionals learn to take care of themselves while taking care of others. The model showed that coping mechanisms in palliative care extend beyond the management of emotions and problems,<sup>84</sup> and beyond the disengagement of personal aspects from the environment.<sup>51</sup> It is a learning process over time, in which influencing factors, coping strategies and personal and professional development are interrelated. This development is probably the most central pillar in training on providing healthcare to others. The degree of self-awareness can be trained with practices oriented to the development of attention, allowing better management of emotions and greater emotional balance.<sup>65</sup> This is a factor that makes a difference between ‘suffering’ and ‘enjoying work’.<sup>85</sup>

As Balint<sup>86</sup> suggests, health professionals are the most powerful medicine for patients, emphasising the importance of personal and professional aspects. The effectiveness of the healthcare process for end-of-life patients and their families will depend on providing healthcare ‘without getting burned’, and, to that end, harmony and personal balance is necessary. If these health professionals manage to establish a deep relationship, in which the bond is healing for both the patients and themselves, they will achieve deep personal satisfaction and an expanded perception of reality and participation in the transmutation of others’ suffering. This practice is not only non-exhausting, but a source of satisfaction and personal growth, which promotes self-care activities performed by the health professionals during the therapeutic processes.<sup>2</sup>

### *Limitations of the study*

One limitation was that, in the literature reviewed, it was not possible to find studies addressing palliative care professionals who had abandoned the activity, as well as the coping strategies they used. No denial or escape strategies have been observed. In fact, they were mentioned in a single study as the least used by the health professionals.<sup>51</sup> As Collier<sup>49</sup> concluded, adaptive responses are more frequent than maladaptive ones in palliative care. Even

so, the cases of professionals who have not been able to continue performing in palliative care would provide a complementary vision that might contribute to the understanding of coping mechanisms in this area. Another limitation is not including the global impact and ongoing nature of the COVID pandemic that happened after starting this review. It goes beyond the review aim, and has posed new challenges to palliative care professionals during COVID, distorting normal work.

## Conclusions

Coping mechanisms are evolutionary processes, in which there is interdependence between influencing factors (protective and risky) and coping strategies. It was observed that there was a systemic coalescence or fusion between all of them. There were coping strategies developed proactively, intentionally, and, at the same time, resulting from greater experience, training and professional maturity. Resilience takes a central value. Time is a variable that influences personal and professional development and, consequently, coping strategies. The coping process seemed to be linked to the development of professional careers in palliative care. The complexity of the phenomenon and the link of coping strategies to factors and/or circumstances and the development of the professional careers are areas to be explored, particularly assessing professionals with more years of experience in this area.

## Author contributions

Conception or design of the review: PS, AB, CC and MA. PS, MA conducted the search strategy. PS, AB, CC and MA feedback on analysis and contributed to the development of the paper. All authors read and approved the final manuscript.

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## Data management and sharing

Further data are not publicly deposited by and may be available upon request to the authors.

## Supplemental material

Supplemental material for this article is available online.

## References

1. Vachon ML. Staff stress in hospice/palliative care: a review. *Palliat Med* 1995; 9: 91–122.
2. Sansó NM. *Afrontamiento ante la muerte en profesionales de cuidados paliativos: variables moduladoras y consecuencias*. PhD thesis, Universitat de les illes Balears, Spain, 2014.
3. Folkman S, Lazarus RS, Dunkel-Schetter C, et al. Dynamics of a stressful encounter: cognitive appraisal, coping, and encounter outcomes. *J Pers Soc Psychol* 1986; 50: 992–1003.
4. Dias EN and Pais-Ribeiro JL. O modelo de coping de Folkman e Lazarus: aspectos históricos e conceituais. *Revista Psicologia e Saúde* 2019; 11: 55–66.
5. Antoniazzi AS, Dell’Aglia DD and Bandeira DR. O conceito de coping: uma revisão teórica. *Estud Psicol* 1998; 3(2): 273–294.
6. Park CL and Folkman S. Meaning in the context of stress and coping. *Rev Gen Psychol* 1997; 1: 115–144.
7. French J, Rodgers W and Cobb S. Adjustment as person-environment fit. In: Coelho GV, Hamburg DA and Adams E (eds) *Coping and adaptation*. New York, NY: Basic Books, 1974, pp.316–333.
8. Harrison R. Person-environment fit and job stress. In: Cooper CL and Payne R (eds) *Stress at work*. New York: Wiley, 1979, pp.175–205.
9. Kearney MK, Weininger RB, Vachon MLS, et al. Self-care of physicians caring for patients at the end of life. *JAMA* 2009; 301: 1155–1164.
10. Martins Pereira S, Teixeira CM, Carvalho AS, et al. Compared to palliative care, working in intensive care more than doubles the chances of burnout: results from a nationwide comparative study. *PLoS One* 2016; 11: e0162340.
11. Payne SA, Dean SJ and Kalus C. A comparative study of death anxiety in hospice and emergency nurses. *J Adv Nurs* 1998; 28: 700–706.
12. Peters L, Cant R, Payne S, et al. Emergency and palliative care nurses’ levels of anxiety about death and coping with death: a questionnaire survey. *Australas Emerg Nurs J* 2013; 16: 152–159.
13. Koh MY, Chong PH, Neo PS, et al. Burnout, psychological morbidity and use of coping mechanisms among palliative care practitioners: a multi-centre cross-sectional study. *Palliat Med* 2015; 29: 633–642.
14. Reddy SK, Yennu S, Tanco K, et al. Frequency of burnout among palliative care physicians participating in a continuing medical education course. *J Pain Symptom Manag* 2020; 60: 80–86.e2.
15. Dunwoodie DA and Auret K. Psychological morbidity and burnout in palliative care doctors in Western Australia. *Intern Med J* 2007; 37: 693–698.
16. Graham J, Ramirez AJ, Cull A, et al. Job stress and satisfaction among palliative physicians. *Palliat Med* 1996; 10: 185–194.
17. Whittemore R and Knaf K. The integrative review: updated methodology. *J Adv Nurs* 2005; 52(5): 546–553.
18. Noyes J, Booth A, Moore G, et al. Synthesising quantitative and qualitative evidence to inform guidelines on complex interventions: clarifying the purposes, designs and outlining some methods. *BMJ Glob Health* 2019; 4: e000893.

19. Zwakman M, Verberne LM, Kars MC, et al. Introducing PALETTE: an iterative method for conducting a literature search for a review in palliative care. *BMC Palliat Care* 2018; 17: 82–89.
20. Vachon ML. Caring for the caregiver in oncology and palliative care. *Semin Oncol Nurs* 1998; 14: 152–157.
21. Lambert V and Lambert C. Nurses' workplace stressors and coping strategies. *Indian J Palliat Care* 2008; 14: 38–44.
22. Huggard J. Debriefing: a valuable component of staff support. *Int J Palliat Nurs* 2013; 19: 212–214.
23. Tong A, Sainsbury P and Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007; 19: 349–357.
24. Bryant A and Charmaz K. *The SAGE handbook of grounded theory*. London: SAGE, 2007.
25. Chapman A, Hadfield M and Chapman C. Qualitative research in healthcare: an introduction to grounded theory using thematic analysis. *R Coll Physicians Edinb* 2015; 45: 201–205.
26. Glaser B and Strauss AL. *The discovery of grounded theory: strategies for qualitative research*. London: Aldine Transaction, 1995.
27. Pandit N. The creation of theory: a recent application of the grounded theory method. *Qual Rep* 1996; 2: 1–15.
28. Hong QN, Pluye P, Bujold M, et al. Convergent and sequential synthesis designs: implications for conducting and reporting systematic reviews of qualitative and quantitative evidence. *Syst Rev* 2017; 6: 61.
29. Liberati A, Altman DG, Tetzlaff J, et al. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: explanation and elaboration. *Explanation and Elaboration BMJ* 2009; 339: b2700.
30. Ablett JR and Jones RS. Resilience and well-being in palliative care staff: a qualitative study of hospice nurses' experience of work. *Psychooncology* 2007; 16: 733–740.
31. Newton J and Waters V. Community palliative care clinical nurse specialists' descriptions of stress in their work. *Int J Palliat Nurs* 2001; 7: 531–540.
32. Beng TS, Chin LE, Guan NC, et al. The experiences of stress of palliative care providers in Malaysia: a thematic analysis. *Am J Hosp Palliat Med* 2015; 32: 15–28.
33. Perez GK, Haime V, Jackson V, et al. Promoting resiliency among palliative care clinicians: stressors, coping strategies, and training needs. *J Palliat Med* 2015; 18: 332–337.
34. Zambrano SC, Chur-Hansen A and Crawford GB. The experiences, coping mechanisms, and impact of death and dying on palliative medicine specialists. *Palliat Support Care* 2014; 12: 309–316.
35. Morais END, Conrad D, Mattos EMD, et al. Cuidados paliativos: enfrentamento dos enfermeiros de um hospital privado na cidade do Rio de Janeiro – RJ/palliative care: coping nurses in a private hospital in the city of Rio de Janeiro – RJ. *Rev Pesqui Cuid Fundam* 2018; 10: 318–325.
36. Chan WC, Tin AF, Wong KL, et al. Impact of death work on self: existential and emotional challenges and coping of palliative care professionals. *Health Soc Work* 2016; 41: 33–41.
37. Smith P, Vasileiou K and Kagee A. Experiences of work-related stress and coping among palliative care staff in South Africa: a qualitative study. *S Afr J Psychol* 2020; 50: 425–437.
38. Tan SB, Lee YL, Tan SN, et al. The experiences of well-being of palliative care providers in Malaysia: a thematic analysis. *J Hosp Palliat Nurs* 2020; 22: 407–414.
39. Mota Vargas R, Mahtani-Chugani V, Solano Pallero M, et al. The transformation process for palliative care professionals: the metamorphosis, a qualitative research study. *Palliat Med* 2016; 30: 161–170.
40. Ekedahl M and Wengström Y. Nurses in cancer care-coping strategies when encountering existential issues. *Eur J Oncol Nurs* 2006; 10: 128–139.
41. Peterson J, Johnson M, Halvorsen B, et al. Where do nurses go for help? A qualitative study of coping with death and dying. *Int J Palliat Nurs* 2010; 16: 432, 434–432, 438.
42. DiTullio M and MacDonald D. The struggle for the soul of hospice: stress, coping, and change among hospice workers. *Am J Hosp Palliat Care* 1999; 16: 641–655.
43. Shimoinaba K, O'Connor M, Lee S, et al. Nurses' resilience and nurturance of the self. *Int J Palliat Nurs* 2015; 21: 504–510.
44. Huang CC, Chen JY and Chiang HH. The transformation process in nurses caring for dying patients. *J Nurs Res* 2016; 24: 109–117.
45. Sinclair S. Impact of death and dying on the personal lives and practices of palliative and hospice care professionals. *CMAJ* 2011; 183: 180–187.
46. Desbiens JF and Fillion L. Coping strategies, emotional outcomes and spiritual quality of life in palliative care nurses. *Int J Palliat Nurs* 2007; 13: 291–299.
47. Sansó N, Galiana L, Oliver A, et al. Palliative care professionals' inner life: exploring the relationships among awareness, self-care, and compassion satisfaction and fatigue, burnout, and coping with death. *J Pain Symptom Manag* 2015; 50: 200–207.
48. Dean RA. Occupational stress in hospice care: causes and coping strategies. *Am J Hosp Palliat Care* 1998; 15: 151–154.
49. Collier E. Stress and coping in hospice care. *DNP scholarly projects* 2019; 17. <https://repository.belmont.edu/dnpscholarlyprojects/17> (accessed 30 May 2021).
50. Kulbe J. Stressors and coping measures of hospice nurses. *Home Healthc Nurse* 2001; 19: 707–711.
51. Martins MC, Chaves C and Campos S. Coping strategies of nurses in terminal ill. *Soc Behav Sci* 2014; 113: 171–180.
52. Gama G, Barbosa F and Vieira M. Personal determinants of nurses' burnout in end of life care. *Eur J Oncol Nurs* 2014; 18: 527–533.
53. Evans WM, Bibeau DL and Conley KM. Coping strategies used in residential hospice settings: findings from a national study. *Am J Hosp Palliat Care* 2001; 18(2): 102–110.
54. Oliver A, Galiana L, Simone G, et al. Palliative care professionals' inner lives: cross-cultural application of the awareness model of self-care. *Healthcare* 2021; 9(1): 8.
55. Dijkhoorn AFQ, Brom L, van der Linden YM, et al. Healthcare professionals' work-related stress in palliative care: a cross-sectional survey. *J Pain Manag* 2021; 62: e38–e45.

56. Harris L. *Ways of coping: understanding workplace stress and coping mechanisms for hospice nurses*. PhD thesis, University of Pittsburgh, United States, 2012.
57. Bruneau BM and Ellison GT. Palliative care stress in a UK community hospital: evaluation of a stress-reduction programme. *Int J Palliat Nurs* 2004; 10: 296–304.
58. Figley CR. Compassion fatigue: psychotherapists' chronic lack of self care. *J Clin Psychol* 2002; 58: 1433–1441.
59. Vachon MLS. Attachment, empathy and compassion in the care. *Grief Matters* 2016; 19: 20–25.
60. Mills J, Wand T and Fraser JA. Exploring the meaning and practice of self-care among palliative care nurses and doctors: a qualitative study. *BMC Palliat Care* 2018; 17: 63.
61. Kearney M and Weininger R. Whole person self-care: self-care from the inside out. In: Hutchinson TA (ed.) *Whole person care*. New York: Springer, 2011, pp.109–125.
62. Orellana-Rios CL, Radbruch L, Kern M, et al. Mindfulness and compassion-oriented practices at work reduce distress and enhance self-care of palliative care teams: a mixed-method evaluation of an “on the job” program. *BMC Palliat Care* 2017; 17: 3.
63. Adams M, Chase J, Doyle C, et al. Self-care planning supports clinical care: putting total care into practice. *Prog Palliat Care* 2020; 28(5): 305–307.
64. Sanchez-Reilly S, Morrison LJ, Carey E, et al. Caring for oneself to care for others: physicians and their self-care. *J Support Oncol* 2013; 11: 75–81.
65. Palliative Care Australia. Self-care matters: a self-care planning tool. <https://palliativecare.org.au/resources/self-care-matters> (2020, accessed 16 August 2021).
66. Harper B. *Death: the coping mechanism of the health professional*. Greenville: South Eastern University Press, 1977.
67. Saunders C. *Velad conmigo. Inspiración para una vida en cuidados paliativos*. Houston, TX: IAHPC Press, 2011.
68. Fisher M. How do members of an interprofessional clinical team adjust to hospice care? *Palliat Med* 1996; 10: 319–328.
69. Corr CA. The ‘five stages’ in coping with dying and bereavement: strengths, weaknesses and some alternatives. *Mortality* 2019; 24: 405–417.
70. Edwards JR and Cooper CL. The person-environment fit approach to stress: recurring problems and some suggested solutions. *J Organ Behav* 1990; 11: 293–307.
71. Safrai MB. Art therapy in hospice: a catalyst for insight and healing. *Art Ther* 2013; 30: 122–129.
72. S Potash J, Hy Ho A, Chan F, et al. Can art therapy reduce death anxiety and burnout in end-of-life care workers? A quasi-experimental study. *Int J Palliat Nurs* 2014; 20: 233–240.
73. Huet V. Case study of an art therapy-based group for work-related stress with hospice staff. *Int J Art Ther* 2017; 22: 22–34.
74. Burton J. *WHO healthy. Workplace framework and model: background and supporting literature and practice*. Geneva, WHO Headquarters, 2010.
75. Johansson G, Sandahl C and Andershed B. Authentic and congruent leadership providing excellent work environment in palliative care. *Leadersh Health Serv* 2011; 24: 135–149.
76. Kramer M, Schmalenberg C and Maguire P. Nine structures and leadership practices essential for a magnetic (healthy) work environment. *Nurs Adm Q* 2010; 34: 4–17.
77. Vachon MLS. *Occupational stress in the care of the critically ill, the dying and the bereaved*. Washington, DC: Hemisphere, 1987.
78. Lazarus R. *Psychological stress and the coping process*. New York, NY: McGraw-Hill, 1966.
79. Frankl V. *El Hombre en busca de sentido*. 12 ed. Barcelona: Editorial Herder, 1991.
80. Halifax J. G.R.A.C.E. For nurses: cultivating compassion in nurse/patient interactions. *J Nurs Educ Pract* 2013; 4: 209–228.
81. Remen RN. *Kitchen table wisdom: stories that heal*. New York: Riverhead Books, 2006.
82. Mills J, Ramachenderan J, Chapman M, et al. Prioritising workforce wellbeing and resilience: what COVID-19 is reminding us about self-care and staff support. *Palliat Med* 2020; 34: 1137–1139.
83. Pappa S, Ntella V, Giannakas T, et al. Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: a systematic review and meta-analysis. *Brain Behav Immun* 2020; 88: 901–907.
84. Lazarus R and Folkman S. *Stress, appraisal and coping*. New York, NY: Springer, 1984.
85. Benito Oliver E, Rivera-Rivera P, Yaeger Monje JP, et al. Presencia, autoconciencia y autocuidado de los profesionales que trabajan con el sufrimiento. *Apuntes De Bioética* 2020; 3: 72–88.
86. Balint M. *The doctor, his patient and the, illness*. 2nd ed. Edinburgh: Churchill Livingston Publications, 2000.