



The Prevalence of Compassion Fatigue among Critical Care and Emergency Care Nurses: A Systematic Review

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ABSTRACT

Critical care and emergency care settings can contribute to Compassion Fatigue among nurses because of the severely sick nature of patients, the complication of their care needs, and the increased possibility of complications leading to deterioration in the health condition of patients, including death. Some would describe these units as emotionally challenging due to the frequent experience of death. The present study aims to review the literature systematically to identify published articles reporting the prevalence rates of compassion fatigue among critical care and emergency care nurses. The following electronic databases were included in the searches: The Cochrane Library, PubMed, Web of Science, CINAHL plus, Google Scholar, Research Gate, Scopus and MEDLINE were searched up to December 31st, 2021. The inclusion criteria for the selection of the studies were: availability of full text, electronic nursing records, indicated compassion fatigue as a measure in the study, examined critical care nurses or emergency care nurses as sample. The exclusion criteria for the selection of studies were: designs other than an original article, review articles: Systematic reviews and/or meta-analysis, articles with nursing students. Systematically 23 studies were reviewed in this study. Out of 23 studies 9 [39%] were conducted in Asian countries [Jordan, India, China, South Korea, Saudi Arabia, Iran and Turkey], 8 [35%] were conducted in American countries [USA], 4 [17%] were conducted in European countries [Spain, Portugal and Ireland] and 2 [9%] were conducted in Australia. Regarding the methods of included studies, fifteen had a cross sectional design, five had a descriptive design and three had survey design. Among emergency care unit nursing studies, half of the studies clearly suggested that the emergency care nurses have high levels of compassion fatigue. Few studies suggested that they have moderate levels of compassion fatigue and one study indicate moderate to low level of compassion fatigue. The results of systematic review among critical care unit nursing studies, nearly half of the studies found that critical care nurses have moderate levels of compassion fatigue. Some of the studies found high prevalence of compassion fatigue among critical care nurses and few studies found that low level of compassion fatigue.

Key Words: *compassion fatigue, emergency care nurses, critical care nurses, prevalence, systematic review.*

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INTRODUCTION

Compassion precisely means “to suffer together.” Among emotion researchers, compassion is defined as the feeling that arises when you are confronted with another’s suffering and feel motivated to relieve that suffering.

Compassion is not the same as empathy or altruism, although the concepts are related. While empathy refers more generally to our ability to take the perspective of and feel the emotions of another person, compassion is when those feelings and thoughts include the desire to help. Altruism, in turn, is the kind, selfless behaviour frequently produced by feelings of compassion, although one can feel compassion without acting on it, and altruism isn’t always motivated by compassion [1].

Compassion is a feeling or emotion, which produces an internal drive to help others [2]. However, an accumulation of the negative drivers that produce compassion from the individual in any range of circumstances (namely the work environment, related to relationships, or from care giving activities) can result in compassion fatigue (CF) [3].

Compassion fatigue is commonly understood as emotional, physical, and spiritual exhaustion from “witnessing and absorbing the problems and suffering of others” when working with traumatized individuals [4].

Compassion fatigue may be especially apparent among critical care nurses [5]. who care for individuals with life-threatening conditions to which many surrender. In this systematic review of paper, critical care nurses are categorized as those providing care to critically ill or unstable patients due to injury, surgery or life-threatening diseases across a various range of care settings including intensive care units (surgical and medical ICUs), cardiac care units (CCUs), and burns units.

Human attachment may become inevitable for critical care nurses working closely with their patients and family members. Therefore, the incidence of sudden death or major loss may have a negative impact on critical care nurses in the form of an accumulation of negative feelings, which, over time, may contribute to the development of Compassion Fatigue [6, 7]. The development of these negative emotions in nurses can result in feelings of helplessness at being unable to halt the deteriorating health of patients and the subsequent heightened feeling of death anxiety [8, 9]. These intense feelings may result in an emotional overextension leading to stress and Compassion Fatigue.

Emergency Department(EDs) nurses are exposed to life and death situations and have intense and occasionally violent interactions with the public. Emergency Departments (EDs) nurses are on the frontline of an extremely challenging healthcare system and frequently experience higher levels of stress because of increased patient volumes and acuties. Additionally, caring for complex patients in a demanding and fast-paced environment, and the fact that insurance reimbursement is now linked to patient satisfaction scores, contribute to the Emergency Department nurse feeling overwhelmed. These factors will put them at risk for developing compassion fatigue [10].

The Emergency Department environment increases a nurse's tendency to occupational trauma. This occupational trauma includes repeated exposure to those suffering from abuse, injury, and death. Many Emergencies Department nurses mistakenly practice 'self-neglect', putting the needs of others before their own [11].

Compassion fatigue is the psycho-emotional distress that originates because of long-term self-sacrifice along with continued exposure to problematic situations. Compassion fatigue leaves a person with significantly reduced feelings of compassion toward another's suffering. [12].

Compassion fatigue "refers to the stress, strain, and weariness of caring for others who are suffering from a medical illness or psychological problem [13]. Risk factors are thought to be related to intense and lengthy contact with patients, use of self, and stress exposure [14]. The development of compassion fatigue can be related to individual factors regarding their personality, work responsibilities, and processes of engaging with others, as well as macro-level environmental and social factors [15]. For example, when nurses feel a lack of control and significant difficulty addressing the demands of their work, this can result in compassion fatigue [16].Compassion fatigue can have emotional, intellectual, physical, social, spiritual, and professional consequences for nurses [17]. Nurses those who were experiencing compassion fatigue report symptoms such as physical exhaustion, difficulty sleeping, feelings of ineffectiveness, purposeful emotional isolation from patients, and negative effects on their personal lives [18].

Compassion fatigue was first reported by Joinson in the year 1992 to describe "the loss of ability to nurture" among emergency nurses. After years of development, it has now been broadly applied to a diverse range of helping professionals, including nurses, who work with traumatized and suffering individuals [19]. A series of literature has explained the definition of compassion fatigue; the most frequently cited definition is "a state of exhaustion and dysfunction as a result of prolonged exposure to compassion stress and all that it evokes" [20].

It is vital that Compassion Fatigue be addressed in its initial stages, as it can permanently modify the nurse's ability to provide safe, quality care.

Critical care and emergency care settings can contribute to Compassion Fatigue among nurses because of the severely sick nature of patients, the complication of their care needs, and the increased possibility of complications leading to deterioration in the health condition of patients, including death. Some would describe these units as emotionally challenging due to the frequent experience of death.

Nurses in critical care units and emergency units may consequently witness human hardship and complex care needs more frequently compared to nurses in other areas of care.

Due to the importance of this aspect of healthcare to critical care and emergency care nurses, this integrative literature review has been conducted to shed light on the available evidence regarding the prevalence of Compassion Fatigue among nurses working in these settings. The findings to emerge from the review of the literature are also used to identify the gaps in our clinical understanding of Compassion Fatigue and the directions for future research.

Given the significance of this topic, the present study aims to review the literature systematically to identify published articles reporting the prevalence rates of compassion fatigue among critical care and emergency care nurses.

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MATERIAL AND METHODS

This systematic review was conducted following PRISMA recommendations (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)

Eligibility criteria

The inclusion criteria for the selection of the studies were:

- availability of full text
- electronic nursing records
- indicated compassion fatigue as a measure in the study
- publication language was in English
- examined critical care nurses or emergency care nurses as sample (registered nurses or licensed practical nurses)
- used observational studies (cross-sectional study, descriptive & survey)
- used the ProQOL, STSS and IESR as validated instruments for measuring compassion fatigue symptom

The exclusion criteria for the selection of studies were:

- designs other than an original article
- a language other than those described in the inclusion criteria.
- review articles: Systematic reviews and/or meta-analysis
- articles with nursing students
- did not have the full text available
- were low quality study

Information sources

We completed a preliminary search of The Cochrane Library, PubMed and CINAHL databases to determine suitable keywords and index terms and found that there was no similar systematic review had been previously published. The following electronic databases were included in the searches: The Cochrane Library, PubMed, Web of Science, CINAHL plus, Google Scholar, Research Gate, Scopus and MEDLINE were searched up to December 31st, 2021. Additionally, the references of related studies were manually screened to find other studies.

Search strategy

A systematic and complete search of the literature was completed using databases with full text articles available to authors using the keywords "compassion fatigue", "critical care nurses", "emergency care nurses". Additionally, Boolean operators were used as conjunctions to combine or eliminate keywords in this search. This resulted in more intensive and fruitful results and saved time and effort by eliminating inappropriate papers that must be scanned before discarding. The operators used in this search were as follows: AND, and OR, as well as the truncation tools of each database. Additional literature was recognized through the review of the reference lists of journal articles retrieved during the review process.

Selection process

The search and study selection process were conducted by two members of the research team, working independently, to confirm the reliability of the process. If they disagreed about the inclusion or else of a paper, a third member of the research team was checked. The selection process involved an initial reading, of the title and abstract. The papers initially selected were then read in full, and those considered as suitable for inclusion were then subjected to a critical reading to detect possible methodological bias. From the papers finally selected, backward and forward citation checking was then performed

RESULTS

Study selection

The search was performed up to December 31st, 2021. A total of 745 studies were identified from the 8 databases such as Cochrane Library, PubMed, Web of Science, CINAHL plus, Google Scholar, Research Gate, Scopus and MEDLINE. Finally, a total of 23 articles were included in the systematic review. Figure. 1 shows the flowchart of the study screening and selection process.

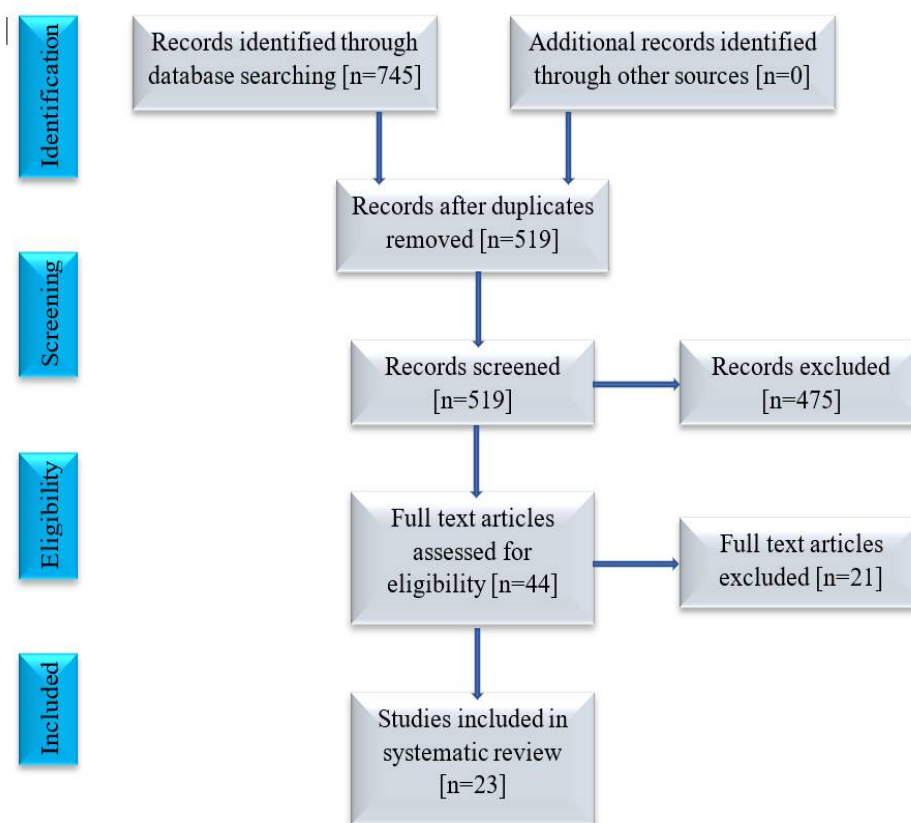


Figure 1. A flowchart of the study screening and selection processes

Study characteristics

The aim of the study was to review the literature systematically to identify published articles reporting the prevalence rates of compassion fatigue among critical care and emergency care nurses.

Systematically 23 studies were reviewed in this study. Out of 23 studies 9 [39%] were conducted in Asian countries [Jordan, India, China, South Korea, Saudi Arabia, Iran and Turkey], 8 [35%] were conducted in American countries [USA], 4 [17%] were conducted in European countries [Spain, Portugal and Ireland] and 2 [9%] were conducted in Australia. Regarding the methods of included studies, fifteen had a cross sectional design, five had a descriptive design and three had survey design. The samples of the studies included in this review has been taken mainly from two departments, a total of 12 studies were included in critical care unit and 11 were from the emergency care unit.

Article number	Study title	Country	Year	Design	Sample	Instrument	Results
1/21	Compassion fatigue among nurses working on an adult emergency and urgent care unit	Porto, Portugal.	May to July 2017	quantitative, descriptive and cross-sectional study	A convenience sample from a population of 93 nurses was selected, participating 87 nurses	The Professional Quality of Life Scale (ProQOL5)	Based on the cut-off points, it was verified that 59% of the nurses have a high level of compassion fatigue and 20% have a low level. The study revealed the presence of medium and high levels of compassion fatigue in the sample studied. In addition,

							the results show that compassion fatigue is related to personal factors such as age, gender, professional experience and leisure activities.
2/22	Compassion satisfaction and compassion fatigue in Australian emergency nurses: A descriptive cross-sectional study	Melbourne, Australia	2019	cross-sectional observational descriptive study	All permanently employed registered nurses and enrolled nurses working in one of the two emergency departments were invited to participate in the study (approximately 235 staff).	The Professional Quality of Life Scale (ProQOL5)	Compassion Fatigue is measured by two independent subscales: Burnout and Secondary Traumatic Stress. Results revealed low levels of Burnout for 22.3%; average levels for most participants (76.7%) and none recorded high levels. These low to average scores proved similar to those for stress. Scores for Secondary Traumatic Stress showed almost one-third (31.4%) reported low levels, two-thirds (68.6%) had average levels and none had a high level.
3/23	Burnout and Compassion Fatigue in Emergency Care Nurses: Factors that influence development	Republic of Ireland	2018	A non-experimental correlation design	non-probability purposive sampling was employed. The sample (N=70) were recruited through the INMO (Irish Nurses and Midwives Organisation) website which invited Participants to complete an online-survey.	The Professional Quality of Life Scale (ProQOL5)	Overall results of this study revealed average to moderate levels of compassion fatigue among this group of ED nurses. The demographic characteristics such as age and night shifts worked per month had a negative influence on the development of compassion fatigue. Pearson's correlations coefficients found a significant relationship between the amount of night shifts worked per month and compassion fatigue.
4/24	Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses	United States	2014	No experimental, descriptive, and predictive study.	A purposive sampling was used to recruit the total 1,000 ED nurses in this study.	The Professional Quality of Life Scale (ProQOL5)	Overall results of this study revealed average to low levels of Compassion fatigue among this group of ED nurses. Demographic and work-related characteristics, such as age, educational background, and

							years as a nurse, influenced the prevalence of Compassion fatigue among ED nurses. The low level of manager support was a significant predictor of higher levels of Compassion fatigue among emergency department nurses
5/25	Compassion Satisfaction, Burnout, and Secondary Traumatic Stress Among Critical Care Nurses in Iran	East Azarbayjan a north-western province of Iran	May 2016 to January 2017	A cross-sectional, descriptive survey	The study sample size (n = 397) was calculated using G Power program 3.1 (Franz Faul, Universität Kiel, Germany) at the significance level of .05.	Professional quality of life (ProQOL)	The findings indicate high levels of CF with the majority of respondents scoring in the average or higher level of BO and STS. High risk levels of burnout and secondary traumatic stress existed among 42% and 96% of participants, respectively. The STS level of nurses who were working in NICU was less than that of nurses working in CCU and ICU, which may be due to the stressful and sensitive environment of CCU and ICU.
6/26	Compassion fatigue, burnout and compassion satisfaction among emergency nurses: A path analysis	Shanghai, China.	2020	A descriptive, cross-sectional study	Convenience sample was generated of 445 participants working in the emergency departments of six hospitals in Shanghai, China, between July and September 2020	The Professional Quality of Life Scale was designed by Stamm (2005)	Compassion fatigue was negatively moderately correlated with physical and mental health status (all p < .001). A positive weak correlation was found between compassion fatigue and turnover intention (p = .008).
7/27	Compassion Satisfaction, Secondary Traumatic Stress, and Burnout among Nurses Working in Trauma Centers: A Cross-Sectional Study	South Korea	2019	A Cross-Sectional Study	The sample size was determined using G-power 3.1.9.4 software for regression analysis sample size was 214	The Professional Quality of Life Scale (ProQOL5)	The mean scores for compassion satisfaction, secondary traumatic stress, and burnout were 32.36 ± 5.76, 25.79 ± 5.34, and 27.28 ± 4.47, respectively. 50.7% and 59.8% were in the moderate or high groups for secondary traumatic stress and burnout, respectively. There was a positive correlation between secondary

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							traumatic stress and burnout.
8/28	Perceived health, perceived social support and professional quality of life in hospital emergency nurses	Andalusia, Spain	2018	A descriptive, cross-sectional study	The number of nurses necessary to carry out the study had to be 222, in the end a sample of 253 was obtained.	The Professional Quality of Life Scale (ProQOL)	The mean compassion fatigue score was 20.79 (SD = 7.99). 5.1% of the participants obtained low compassion fatigue values, 32.4% obtained medium compassion fatigue values, and 62.5% obtained high compassion fatigue values.
9/29	Secondary traumatic stress among emergency nurses: Prevalence, predictors, and consequences	Jordan.	January to August 2017.	A descriptive correlation design	A convenience sampling technique was used to collect data from 202 ER nurses from eight emergency departments.	Secondary Traumatic Stress Scale (STSS)	In the current study, 94% of the participants scored greater than or equal to 28 on the STSS indicating that most of nurses experienced STS in various degrees. More than half of them experience high to severe STS symptoms. Mean score of STSS was 46 (SD = 12.45).
10/30	A National Survey of Secondary Traumatic Stress and Work Productivity of Emergency Nurses Following Trauma Patient Care	United States	2021	A cross-sectional survey design	A systematic random sample of emergency nurses (N = 255) completed the Impact of Events Scale-Revised.	Impact of Events Scale-Revised (IES-R)	Two hundred fifty-five emergency nurses returned fully completed surveys, of which the majority was female (n = 206 of 239, 86.2%) and White (n = 231 of 254, 90.9%). The mean IES-R score for the sample was 19.1 (SD 16.4, range 0 to 70), indicating mild secondary traumatic stress. About a third of the respondents reported high secondary traumatic stress (n = 97, 38.0%)
11/31	Prevalence of secondary traumatic stress among emergency nurses	Southern California, United States	2009	Exploratory comparative design	67 emergencies nurses from three general community hospitals in California	Secondary Traumatic Stress Scale (STSS)	In this sample 85% reported at least 1 STS symptom in the past week. Very concerning is the fact that 33% of the sample met the criterion for a diagnosis of STS. The high prevalence of STS in this sample indicates that large numbers of emergency nurses maybe experiencing the negative effects of STS. Increased understanding of

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							the concept of STS or CF, including its identifying symptoms, potential coping strategies, and organizational interventions that may increase nurses' abilities to manage or prevent STS, is needed.
12/32	Secondary traumatic stress among emergency nurses: a cross-sectional study	Western region of Ireland	February 2013	A cross-sectional study	all registered nurses (n = 105) working in three emergency departments attached to public teaching hospitals in the Western region of Ireland were invited to complete the study's questionnaire in February 2013.	Secondary traumatic stress scale (STSS)	The results of this study suggest that nurses in Irish emergency departments experience high levels of STS. The scores for STS reported here are higher than those reported by emergency department nurses and oncology nurses in the US. The majority were staff nurses (78/74.3%), followed by clinical nurse managers (CNMs) (21/20%). Only four (3.8%) were pediatric nurses, and two (1.9%) represented advanced nurse practitioners (ANPs).
13/33	Coping strategies as moderating factors to compassion fatigue among critical care nurses	Amman, Jordan.	April and December 2017.	A cross-sectional design	Candidates eligible to participate in this study were nurses working in critical care units and emergency departments and a total of 228 nurses were selected.	The Professional Quality of Life Scale (ProQOL5)	The results of the study shows that the nurses had low to average compassion fatigue.
14/34	Compassionate Fatigue among Nurses Working in Critical Care Areas	Kerala, India	2019	A cross-sectional study	A sample size of 50 staff nurses working in critical care units and emergency units were selected through purposive sampling.	The Professional Quality of Life Scale (ProQOL5)	The present study result showed that 75% of staff nurses working in critical care area had average, 24.2% had low and 0.8% had high compassion fatigue. The Compassion fatigue (secondary traumatic stress) also showed the same type of findings with mean score 28.4 and 25.13 with a "t" value 3.19 respectively, showing a highly significant finding (p=0.002)

15/3 5	Compassion fatigue in critical care nurses and its impact on nurse sensitive indicators in Saudi Arabian hospitals	Saudi Arabia	2018	A descriptive study design	A sample size of 321 full-time nurses who have worked for at least one year in the critical care unit or emergency department.	The Professional Quality of Life Scale (ProQOL5)	This study found that most nurses fell into the 'average' level category for each of the three scales (i.e., CS/BO/STS) used to measure CF. Given that nearly one in five nurse participants reported having very low CS, however, the conclusion drawn was that critical care nursing units in Saudi Arabia may represent fertile ground for the development of CF among nurses working in these units
16/3 6	Compassion Fatigue in Critical Care Nursing and Development of an Educational Module	North Dakota, United States	2015	A descriptive, exploratory study	A convenience sample from the target population of all critical care registered nurses invited to Participate and a total of 58 registered nurses were participated in this study.	The Professional Quality of Life Scale (ProQOL5)	Overall, the level of compassion fatigue was low as measured by the burnout and secondary traumatic stress subscales. The overall compassion satisfaction was low as well. Young (18-35 years old), less experienced nurses reported significantly higher compassion fatigue than older (36 years old and up), more experienced nurses.
17/3 7	Personal characteristics, coping strategies, and resilience impact on compassion fatigue in critical care nurses: A cross-sectional study	Saudi Arabia.	2014	A cross-sectional study	All participants (n=321) were nurses with at least 12 months critical care experience and were full-time staff currently working in a critical care department and working rotating 24 h shifts	The Professional Quality of Life Scale (ProQOL5)	The results show both demographic and workplace structural elements, such as length of work shift, education level, and nationality, were all significant factors in resilience to compassion fatigue among Saudi critical care nurses, whereas factors of age and sex were not significant. Nearly 20% of the participants reported having very low compassion satisfaction, which would indicate the presence of a fertile ground for the development of compassion fatigue and also reveals

							that 80.4 % of sample is having average level of secondary stress syndrome.
18/38	Assessing the Degree of Compassion Satisfaction and Compassion Fatigue Among Critical Care, Oncology, and Charge Nurses	California, US	2018	A cross-sectional survey design	This study includes 48 study participants	The Professional Quality of Life Scale (ProQOL)	Charge nurses had higher secondary traumatic stress (STS) than direct care nurses. Nurses with less than 10 years of experience had lower CS than experienced nurses. Higher levels of burnout (BO) and STS were reported among charge nurses, whereas less direct care nurses had average to high BO and STS ratings.
19/39	Compassion Fatigue and Burnout of Critical Care Nurses	southeast United States.	2016	A quantitative research design	A convenience sample of 34 nurses were asked to participate in this study.	The Professional Quality of Life Scale (ProQOL)	Low burnout was reported by 41.67% of participants, while 58.33% of participants reported an average level of burnout. Low secondary post-traumatic stress was reported by 87.5% of participants, with 12.5% reporting an average level of secondary post-traumatic stress. The results from this study validated the presence of average compassion fatigue among critical care nurses.
20/40	Compassion Fatigue in Nebraska Medicine ICU Nurses	Nebraska, United States.	July 2021 through August 2021	A cross-sectional survey	The study consisted of 64 registered nurses who were employed at Nebraska Medicine, in Omaha, Nebraska.	The Professional Quality of Life Scale (ProQOL)	There is no difference between the Compassion Fatigue and Compassion Satisfaction levels (mild, moderate, severe) between the Intensive Care Units at Nebraska Medicine. The majority of the results were mild (Compassion Fatigue) and (Compassion Satisfaction) levels.
21/41	Compassion fatigue: A Study of critical care nurses in Turkey	Northwest of Turkey	December 2015 and February 2016	A descriptive, cross-sectional study	The sample of the study consisted by total of 69 nurses who were working at adult intensive care units and volunteer to participate in the study	The Professional quality of life (ProQOL R-IV)	As a result of the study, it was seen that more than half of intensive care nurses were found to be at risk for compassion fatigue. Findings show that critical care nurses

							were at high risk (52.7%) and low risk (47.3%) for Compassion Fatigue. Besides, the most important factors affecting the compassion fatigue were found as age, much working hours and years of experience of working in intensive care
22/4 2	Compassion satisfaction and fatigue: A cross-sectional survey of Australian intensive care nurses	Australia	Eight weeks in 2015	A survey designs.	Purposive criterion sampling was used to obtain a participant sample of 117 registered nurses	The Professional Quality of Life Scale version 5 (PROQOL5)	Our analysis revealed that overall, these Critical Care Nurses reported 'average' levels of compassion satisfaction and burnout, and 'low' levels of STS (according to PROQOL guidelines). This study also shows that years of practice, tenure, educational level and place of work significantly influenced compassion satisfaction and fatigueless experienced nurses had lower compassion satisfaction and appeared more vulnerable to burnout than nurses who were older, with longer tenure and more nursing experience.
23/4 3	Predictors of Compassion Fatigue and Compassion Satisfaction in Acute Care Nurses	southwest of United States	A 3-week period in May 2013.	A cross-sectional electronic survey design	A total of 491 direct care registered nurses completed this survey.	The Professional Quality of Life Scale (ProQOL)	This study found that nurses in the "Millennial" generation (ages 21-33 years) were more likely to be experiencing higher levels of burnout and STS and lower levels of CS than their counterparts in the "Baby Boomer" (ages 50-65 year). This study also demonstrates that the younger generations of nurses are experiencing burnout and STS, potentially contributing to their leaving the positions and possibly the profession

DISCUSSION

To our knowledge, no previous systematic review has been performed regarding the prevalence rates of compassion fatigue among critical care and emergency care nurses.

Among emergency care unit nursing studies, half of the studies clearly suggested that the emergency care nurses have high levels of compassion fatigue. Few studies suggested that they have moderate levels of compassion fatigue and one study indicate moderate to low level of compassion fatigue. Furthermore, demographic characteristics such as age, educational background and professional experience influenced the prevalence of Compassion fatigue among emergency care nurses. Also, one study indicated that night shifts worked per month had a negative influence on the development of compassion fatigue.

The results of systematic review among critical care unit nursing studies, nearly half of the studies found that critical care nurses have moderate levels of compassion fatigue. Some of the studies found high prevalence of compassion fatigue among critical care nurses and few studies found that low level of compassion fatigue. Moreover, two studies in USA found that nurses in the “Millennial” generation (ages 21–33 years) were more likely to be experiencing higher levels compassion fatigue than their counterparts in the “Baby Boomer” (ages 50–65 year).

In addition, one study emphasized on the compassion fatigue level of nurses who were working in NICU was less than that of nurses working in CCU and ICU, which may be due to the stressful and sensitive environment of CCU and ICU. Besides, the most important factors affecting the compassion fatigue were found as age, length of work shift, education level and years of experience of working in intensive care. Further, one study in Australia shows that less experienced nurses had lower compassion satisfaction and appeared more vulnerable to compassion fatigue than nurses who were older, with longer tenure and more nursing experience.

LIMITATIONS

Some limitations of this study should be acknowledged. Only studies with critical care nursing and emergency care nursing sample were included because their work and daily tasks are different from other healthcare professionals. Finally, the studies aim was mainly focused on prevalence rates of compassion fatigue because it is an important growing problem among nurses in critical care units and emergency care units due to the characteristics of the patients. Moreover, the studies included are all cross-sectional and descriptive, which accounts for their low level of evidence (although this design is usually considered appropriate for prevalence studies).

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This research received no external funding.

Competing interest

The authors declare no competing interest.

Ethical approval

Ethical approval for this study was not required because it involved neither experimentation nor patient involvement in active data collection

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