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Preventing Compassion Fatigue among Nurses

A Literature Review

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Bachelor's Thesis
September 2017
Social Services, Health, and Sport
Degree Program in Nursing

Jyväskylän ammattikorkeakoulu
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Description

Author(s) Febrian, Lita	Type of publication Bachelor's thesis	Date September 2017 Language of publication: English
	Number of pages 32	Permission for web publication: x
Title of publication Preventing Compassion Fatigue among Nurses A Literature Review		
Degree programme Degree Programme in Nursing		
Supervisor(s) Garbrah, William & Sinivuo, Riikka		
Assigned by		
Abstract <p>Compassion was one of the key concepts of being a nurse. This trait, however, exposed nurses to the risk of developing compassion fatigue which has been linked to decrease productivity, increase turnover rate, and low quality of life, all of which led to negative impact toward patient's safety and satisfaction. With global nursing shortage and negative effects compassion fatigue has on nursing workforce, it was important to recognize and prevent compassion fatigue.</p> <p>The study aimed to find out the available method that were used to prevent compassion fatigue among nurses from the existing studies. The purpose was to provide information how nurses can prevent compassion fatigue and to raise awareness on this issue.</p> <p>A literature review was conducted using the following databases: CINAHL, PubMed, Academic Search Elite, and OVID. From the seven articles that were analyzed, three themes were developed based on the research question: self-care, social connection, and support from organization. They were equally important in preventing compassion fatigue and complement each other. The review demonstrated the need for further study to better understand the level of compassion fatigue among nurses in certain areas or countries, which could generate studies on its prevention in a wider work setting and different culture.</p>		
Keywords/tags (subjects) nurse, compassion fatigue, prevention		
Miscellaneous -		

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1 Introduction

Compassion is one of the key concepts of being a nurse. It is defined as sympathetic consciousness of others' distress together with a desire to alleviate it (Merriam-Webster, n.d.). Nurses who are compassionate do their best to mitigate, alleviate, or remove patients' suffering by giving both therapeutic action and personal kindness while caring for a person (Pembroke, 2016). This trait, however, exposes nurses to the risk of developing compassion fatigue which has been linked to poor quality of care among nurses, increased staff turnover rate, decreased productivity, and low quality of life, all of which lead to negative impact toward patient's safety and satisfaction, as well as the nurses themselves. (Bao & Taliaferro, 2015) Compassion fatigue could happen to any nurses at any stage of their career in any types of health care setting although the levels are different. (Hinderer, et al., 2014; Tummers, Groeneveld, & Lankhaar, 2013) With global nursing shortage (WHO, 2010) and negative effects compassion fatigue has on nursing workforce, it is important to recognize and prevent compassion fatigue.

This paper aims to find out the available methods that are used to prevent compassion fatigue among nurses from the existing studies. The purpose is to provide information how nurses can prevent compassion fatigue and to raise awareness on this issue.

2 Compassion Fatigue in Nursing

2.1 Definition of Compassion Fatigue and Related Concepts

Compassion fatigue is often thought to be the cost of caring. It is a relatively new term that was first used in nursing context by Joinson in 1992 to describe the "loss of ability to nurture" that she noted in some nurses in emergency department. (Boyle, 2011;

Joinson, 1992) Reviewing different relevant articles, Pembroke offered the following definition: “compassion fatigue is the state of significant depletion or exhaustion of the nurse’s store of compassion, resulting from repeated activation over time of empathic and sympathetic responses to pain and distress in patients and in their loved ones” (Pembroke, 2016). Since first introduced, compassion fatigue has been associated with burnout and secondary traumatic stress disorder (STSD) in which these terms are used interchangeably throughout the literature (Sorenson & Hamilton, 2016) while other researchers argued that these are different and should not be used synonymously (Coetzee & Klopper, 2010).

In a broader perspective, burnout is classified as symptoms of overpowering, invasive stress that dominates and interfere the ability to function, as we become angry, ineffective, apathetic, and depressed. These elements of burnout could occur in any work setting, compassion fatigue, however, was exclusively linked to certain people: nurses, ministers, counsellors, and others in caregiving profession. (Joinson, 1992) From nursing standpoint, burnout and compassion fatigue differ in which burnout was triggered by reactional response to work environment: conflicts with managers/colleagues, salary dissatisfaction, or long working hours. Compassion fatigue, on the other hand, stems from emotional engagement and relational connections nurses have with their patients or family member. Burnout usually progresses overtime and may cause withdrawal and decreased empathic response, while compassion fatigue, with its more acute onset, may result in continued endurance where the nurse tries harder to give even more to the patient in need. Both may lead to the decision to leave the profession. (Boyle, 2011)

Compassion fatigue and STSD share similarity in such that they both rise from contact with patients or family members. In STSD the cause is due to prolonged exposure to

traumatic events and stories of others, for example nurses working in emergency department who constantly deal with accidents, acute health problems and near-death situation. Compassion fatigue, on the other hand, is caused by the prolonged, intense, and continuous care of patients, use of self, and exposure to stress. (Coetzee & Klopper, 2010) Compassion fatigue may develop among nurses in any working environment including ICU, medical-surgical wards or long-term care, although the levels are different. (Hinderer, et al., 2014; Tummers, Groeneveld, & Lankhaar, 2013)

2.2 Implications of Compassion Fatigue in Nursing Care

Compassion fatigue is known to compromise quality of care as it has direct negative impact towards patient's safety and satisfaction, as well as the nurses themselves in various aspects. Compassion fatigue is linked to poorer quality of care, increased turnover rate, decreased productivity, and lower professional quality of life for the nurses. (Bao & Taliaferro, 2015)

The emotional exhaustion involved in intense caring environment may leave a nurse feeling irritable, restless, and unable to focus and engage with patients. Compassion fatigue can further result in feelings of inadequacy and lower self-esteem which then lead to a negative attempt to cope such as lashing out, bullying and assaultive behavior toward co-workers. (Sorenson M. , 2015, p. 642) Todaro-Franceschi further explained that workplace incivility or bullying can be both a symptom as well as contributing factor of compassion fatigue and burnout. She exhibits some signs that may manifest from compassion fatigue (and burnout). The signs are behaviour changes, such as depression, anger, irritability, substance abuse, and disrupted sleep patterns; feelings, such as apathy, numbness, high self-expectations, low self-esteem, and less ability to feel joy; and physical changes, such as chronic fatigue, exhaustion (physical, mental, or both), hypertension, frequent headaches, and GI complaints.

(Todaro-Franceschi, 2012) It is important to note that the signs are not exhaustive and highly individualized. It is also often go unnoticed by those experiencing it, that it remains an indefinable aspect of nurses' work until its consequences can be linked to more concrete outcomes. (Boyle, 2011)

3 Staying or Leaving Nursing Career

3.1 Nursing Job Motivation

Despite being the largest group of health care provider in practically all countries, shortage of nurses is also reported worldwide, especially in developing countries (WHO, 2010). Nursing shortage is not new and the demand keeps on increasing due to aging populations, increasing population growth rates, and a growing burden of chronic and non-communicable diseases. On the other hand, the supply is restricted because of aging nursing workforce, inadequate funding to support new recruits, and growing interest of alternative career for women. (ICN, 2006)

The high demand of nurses is one of the reason behind increasing interest in entering nursing career. One of the strongest motives for entering nursing career is altruism reason or the 'genuine interest', i.e. the autonomous motives for choosing a career (Jirwe & Rudman, 2011). Similar motive is commonly found in different nursing literature and reported as an important motivation to become a nurse. These are for example the intention to care and help others, wide range of possible work tasks and area, desire to work with people, and to make a difference. (Eley, Eley, Bertello, & Rogers-Clark, 2012; Whittock & Leonard, 2003)

A small study in UK suggested several reasons for staying in the nursing job. The main one was job contentment or job satisfaction, which indicated that nurses enjoy looking

after patients and feel satisfied seeing them recover. The nurses in the study also mentioned work environment as their motivation. Although staying reasons were individual, nurses can be influenced by the ability of ward managers to provide positive and supportive ward culture. Group cohesion and support from colleagues and management greatly reinforces their desire to stay in the job. Being recognized for the work they do and being able to maintain balance between work and private life contributed these nurses to remain working. Recognition could be in form of the level of pay and public perception about their job. (Wilson, 2006) However, it should be noted that these reasons for staying could also easily be the reasons for leaving the job, which is discussed in the next section. Looking at a slightly different angle, a review on leadership practice suggested that transformational or relational type of leadership resulted in greater intention to stay as compared to task-focused or autocratic leadership style. Transformational leadership is a management style where the leader empowers and inspires and works *with* the subordinates. (Cowden, Cummings, & Profetto-McGrath, 2011)

3.2 Challenges in Nursing Job

The nursing shortage addressed at the beginning of the previous section, leads to stressful working environment among the remaining staff. Stress in nurses, as in other professions, is linked to negative outcomes for the nurses themselves as well as for the clients. Nursing stress is an important issue to address because it can affect the nurses' health, the quality of care they provide, and their desire to remain in nursing. The loss of highly trained staff can increase difficulties in delivering evidence-based practice, maintaining patient's safety and providing high quality of care. (Farquharson, et al., 2013) This vicious cycle between nursing shortage and stress is one of the reasons that drive nurses to leave their job.

A review of broad range studies identified factors related to intention to leave into two main themes: organizational and individual factors. Within organizational factors, the issues were work environment that appeared in form of lack of resources, staff shortage, lack of autonomy, and lack of development opportunities for professional growth. (Chan, Tam, Lung, Wong, & Chau, 2013) The similar concerns were found in a study on long-term care units in Netherland which listed work pressure, leadership, development and career opportunities, working atmosphere, and organizational vision (Tummers, Groeneveld, & Lankhaar, 2013). As for the individual factors, Chan et. al. (2013) recognized three subthemes to be associated with intention to leave: low job satisfaction, burnout, and demographic factors. Demographic factors include age, gender, marital status, type of shift and unit worked, years of experience, and level of education. Being single and working evening/night shifts tend to increase the intention to leave. The review found inconsistent findings regarding age and work experience. Among young nurses in Finland, three themes were found to be associated with intention to leave: poor practice environment, lack of support, orientation and mentoring, and the idea of nursing as 'second best' or serendipitous career choice (Flinkman & Salanterä, 2015).

The sections above showed that although nurses consist of individuals, nursing workforce is a collective body and crisis in the profession are faced by all of them. The problem is not only shortage of nurses, but there are also issues with recruitment, retention, productivity, work environment, and many others that contribute to a crisis that is manifesting in instances of individuals and collective compassion fatigue, moral distress, and burnout. On the other hand, nurses also have the collective opportunity together. (Todaro-Franceschi, 2012, ss. 9-10) The idea that being compassionate can lead to negative outcomes if not carefully looked after, is the reason that initiates this literature review.

4 Aim, Purposes, and Research Question

The aim of this study is to find out the available methods that are used to prevent compassion fatigue among nurses from the existing studies. The purpose is to provide information how nurses can prevent compassion fatigue and to raise awareness on this issue.

Research question:

What are the available methods to prevent compassion fatigue among nurses?

5 Methodology

5.1 Literature Review

To answer the above research question, a literature review is conducted with carefully documented process. Literature review as research methodology is suitable because it is a comprehensive study and it interprets current literature that relates to this certain topic. Literature review aims to update the readers with current literature on certain topic and provide summaries for the topic. Healthcare professionals have the duty to be up to date with development and research about their practice. However, it is simply impossible to read, appraise and process the vast amount of literature available. This is where literature review becomes particularly useful and important. Literature review helps practitioners to avoid getting misled if they only read one report on certain topic. When an adequate evidence is reviewed, and presented in systematic way, academic judgment can be viewed as a whole big picture, instead of coming from one small piece of published information. (Aveyard, 2014, pp. 2-9; Bettany-Saltikov, 2012, p. 11)

5.2 Literature Search

A preliminary search on academic databases showed plenty of publications on the issue of preventing compassion fatigue among healthcare professionals in general and nurses in particular. However, reviews that present analysis and summary on preventing compassion fatigue among nurses were not found. This study provided a summary so that readers could obtain answer from different angles and sources without having to go through the literature one by one.

To maintain consistency and minimize bias, a protocol was established before the actual search was conducted. Publications used for this study should fall within the criteria (Table 1).

Articles are primary research papers on preventing compassion fatigue among nurses
Articles published in English
Articles published within 2010-2017
Articles available in full text for JAMK students

Table 1 Inclusion criteria

Articles that did not fulfill the above inclusion criteria were automatically excluded. Databases used to find potentially relevant studies were: CINAHL with full text, PubMed, Academic Search Elite, and OVID. These databases were selected because they provided reliable and high quality collections of medical research, particularly in nursing as recommended by different sources including JAMK's school library. (Shields, 2013, p. 298; Bettany-Saltikov, 2012, p. 10; Smith & Dixon, 2009, p. 70) Even though

there is a high possibility of overlapping between databases, using several reliable databases reduce the chance of missing studies (Smith & Dixon, 2009, p. 70). The following search terms were used: “compassion fatigue”, “prevention”, “method” and “nursing”. The terms “prevention”, “method”, and “nursing” were truncated into “prevent*”, “method*” and “nurs*” respectively. The terms and truncation were chosen so that relevant and important studies were found and not missed.

The data collected from the above databases was then extracted according to the inclusion criteria by utilizing PRISMA (preferred reporting items for systematic reviews and meta-analyses) flow diagram (Liberati, et al., 2009). Figure 1 showed the literature search process, which resulted in seven full-text articles to be reviewed.

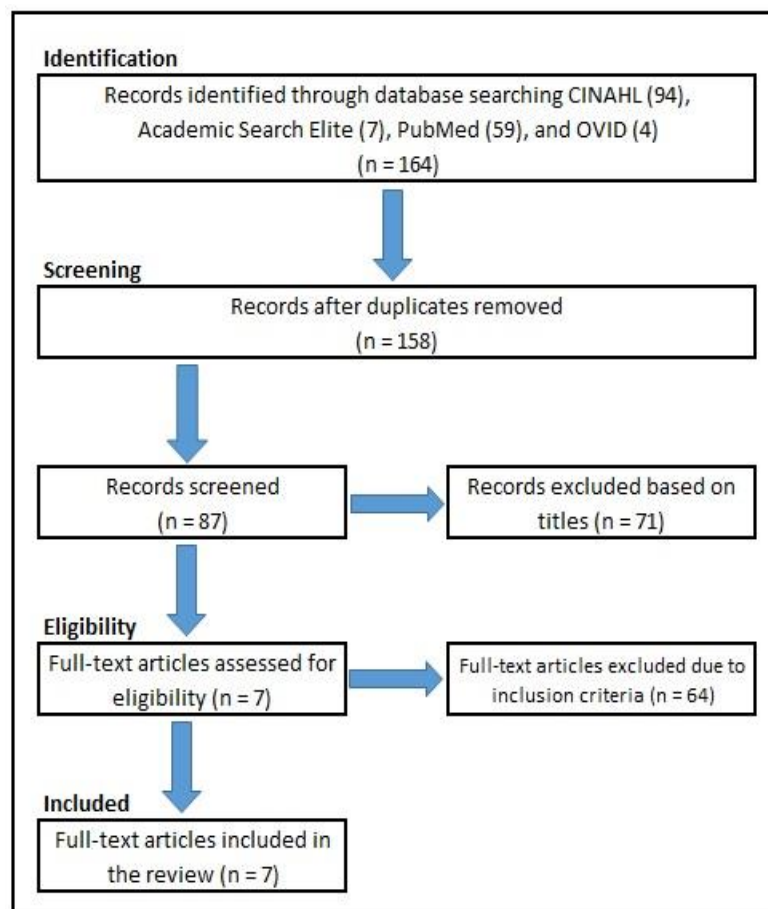


Figure 1 Flow of information through the different phases of systematic review

5.3 Data Analysis

When the literature search was done, articles were read so that as much details as possible is known. Familiarization is important before more detailed critical appraisal is performed. Critical appraisal is a structured process of examining research paper to find its relevance, strengths and weaknesses/limitation. (Aveyard, 2014)

At this stage, the literature to be reviewed have been gathered. As the papers were read, an Excel spreadsheet was filled to summarize the information on the articles, such as author/s, year of publication, titles, methodology of the studies, and main findings. (Cronin, Ryan, & Coughlan, 2008) Detailed analysis of the reviewed articles is listed in Appendix 1 found at the last section of this paper.

Results from each paper were summarized to address the research question. The aim is to gather different studies and produce fresh interpretation that is more substantial than reading individual papers separately. To do this, the result or discussion section of the paper was read and coded based on the main findings. From here, themes were developed by grouping similar category together (Figure 2). Papers were re-checked to make sure that the themes fit to the assigned code. (Aveyard, 2014)

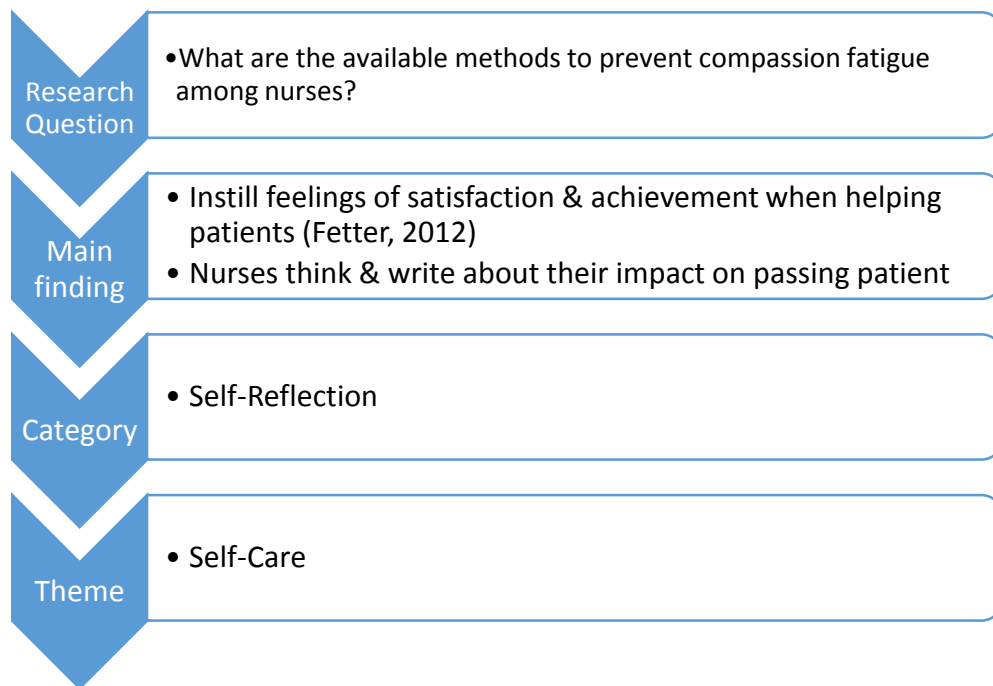


Figure 2 Example of theme development

6 Results

From the data analysis, several methods to manage compassion fatigue were found. Those methods are categorized and grouped into three themes: self-care, social connection, and support from organizations. Table 2 gives readers a perspective of what the themes contain, with more detailed explanations given afterwards.

Self-Care	Social Connection	Support from organization
Acknowledgement as the first step in combating CF (Houck)	Relationship with patient/family (Wenzel, Fetter)	Provide positive workplace that values staff (Drury)
Holistic self-care, personal & professional work-life balance, & self-validation (Houck, Drury, Potter, Wenzel)	Team strength, social support at work, chance to discuss memories of passing patients together, knowing they're not alone (Wenzel, Potter, Fetter)	Debriefing/counseling session with mental health nurse or clerics - pastor, priest (Houck, Wenzel, Drury)
Individual strongholds/resilience, intentionality (Wenzel, Drury, Potter, Zadeh)		Allowing nurses to use break time for stress-reducing interventions (Anderson, Drury, Zadeh)
Self-reflection (Fetter, Wenzel, Potter)		Provide nurses with resources like educational opportunities, professional bereavement management, resiliency empowerment, wellness program (Houck, Wenzel, Potter, Drury, Zadeh, Fetter)

Table 2 Themes derived from reviewed articles

6.1 Self-care

Self-care is indicated in almost all articles. Houck (2014) suggested that recognizing and acknowledging the problem is the first step towards solving it. Nurses are encouraged to recognize the impact of compassion fatigue on themselves and patients, and then develop positive and supportive relationship among themselves that will help this recognition process, and in turn will prevent compassion fatigue from progressing.

Holistic self-care sees a person as a whole – mind, body, and spirit. Houck's educational intervention argued that self-care and work-life balance is important in preventing and combating cumulative grief and compassion fatigue (Houck, 2014). Other authors supported this argument by suggesting variety of activities that are refreshing, rejuvenating, and satisfying as the nurses' coping resources. They include pursuing hobbies, self-pampering, finding peace in religion and faith, recognizing personal and work stress and being taught coping technique, and self-validating so nurses are confident to work and live with integrity rather than pursuing acceptance and validation. Self-care underscores the importance of refueling and restoring energy and passion for professional caregiving, which can be as simple as having adequate sleep, rest and nutrition. (Houck, 2014; Drury, Craigie, Francis, Aoun, & Hegney, 2014; Potter, et al., 2013; Wenzel, Shaha, Klimmek, & Krumm, 2011)

Nurses' individual stronghold and resilience is also highlighted by different authors. In their study, Drury et. al. (2014) concluded that it is resilience that keep nurses stay in the workforce. Potter et. al. (2013) gives the idea of living intentionally as one part of their compassion fatigue resiliency program. Living intentionally emphasizes the importance of developing and following professional calling of doing their best and living by their professional values. Participants in their study prepared their own covenant of how they work and live. Another method to promote resiliency is to ask nursing staff to create a pocket-sized collage as a reminder to emphasize strength and coping mechanism (Wenzel et. al., 2011).

Self-reflection may be developed for example by providing time to think and write about passing patients. Writing journals reminds nurses of the impact they had on patients, which in turn will inspire feeling of satisfaction and achievement while giving care. (Fetter, 2012) Interestingly, being busy and not having enough time to think and

reflect was considered as beneficial and supportive for some nurses (Wenzel, et. al., 2011).

6.2 Social connection

The connection here include relationship within healthcare team, between nurses and their social life outside work e.g. family, friends, and relationship with patients and their family.

All seven studies mentioned the importance of debriefings and dialogues within healthcare team. Nurses benefited from sharing similar situations together and discussing the events allowed them to reduce collective stress. Fetter (2012) described a method implemented in an oncology unit using a remembrance tree with patient's names & obituaries placed on the board. The tree acknowledged the passing of the patients in communal area where staff can discuss memories of the patient together. This project aimed to help nurses find peace and closure. Further, teambuilding activities were also suggested to promote staff wellness. This will provide a forum for staff to discuss patient-staff interactions and difficulties in caregiving process (Zadeh, Gamba, Hudson, & Wiener, 2012). A knitting initiative was introduced which aimed to help nurses debrief over and discuss stressful situations with their colleagues (Anderson & Gustavson, 2016). Potter et. al. (2013) and Wenzel et. al. (2011) discussed that nurses in their resiliency and professional bereavement program, respectively, found it particularly helpful when they learned that they were not alone and that 'someone else was in the same situation', which highlighted even more the advantages of dialogue within healthcare team.

Some studies considered positive support nurses received from patients and their families. The relationship could be challenging for example when faced with patients' expectations and finding balance between being empathetic and supportive with being realistic of the treatment outcomes, especially when care is shifted from curative to palliative. Despite this, nurses found that relationship with patient helped put their work into perspective while at the same time they received support from their close associations with patients and families (Wenzel et. al., 2011). Fetter (2012) went further by suggesting nurses to send their written journals to patients' families and allow time to participate with families in end-of-life care.

6.3 Support from organization

Support provided by the hospital or unit where nurses work was a helpful resource, an argument agreed by all reviewed articles. One of them was debriefing session with pastoral member or mental health nurse (Houck, 2014; Drury et. al., 2014; Wenzel, 2011). However, this was individually determined because not everyone found the opportunities to be helpful. Having to book appointment and scheduling was another flaw of this approach. (Wenzel, 2011)

Drury et. al. (2014) suggested organization to provide workplace that values their staff as one of the method to promote individual resiliency. The authors also advised employers to allow nurses to use their allotted break time for stress reducing activities, such as debriefing and reassessing, knitting, or participating in remembrance tree discussion (Anderson & Gustavson, 2016; Drury et. al., 2014; Zadeh et. al., 2012)

Studies suggested the organization to support nurses by providing resources that are proven to be effective in preventing compassion fatigue from arising. They are for example: educational resources that are available during any working shift (Drury et. al., 2014; Houck, 2014), professional bereavement management (Wenzel et. al., 2011), compassion fatigue resiliency program (Potter et. al., 2013), wellness program (Zadeh et. al., 2012), and bereavement support program (Fetter, 2012).

7 Discussion

7.1 Ethical Consideration

This study was performed in the most ethically acceptable and responsible manner to ensure integrity and avoid misconduct. Research complied with the guidelines from 'Responsible conduct of research and procedures for handling allegations of misconduct in Finland' (Finnish Advisory Board on Research Integrity, 2012) and 'Ethical Principles for JAMK University of Applied Sciences' (JAMK, 2013).

According to the European Science Foundation, research misconduct includes fabrication, falsification, and plagiarism. The foundation defined the following: "Fabrication involves making up results and recording them as if they were real; Falsification involves manipulating research processes or changing or omitting data; Plagiarism is the appropriation of other people's material without giving proper credit." (ESF, 2011) Good practice in publishing the review was applied and accuracy was maintained. Plagiarism and bias were avoided by acknowledging somebody else's work with proper citation and by including all relevant works found based on the previously planned method (Wager & Wiffen, 2011).

Careful data analysis, references available for cross check, and guidance from thesis supervisors ensured that this review is valid and reliable, and none of the misconduct was done deliberately. Critical appraisal verified that reviewed papers do not violate the rules.

According to the ESF, research misconduct also included misrepresentation of interests, breach of confidentiality, and lack of informed consent and abuse of research subjects or materials (ESF, 2011). All studies in this review used nurses as their research subjects and all researchers declared that they had acted in accordance to research ethics. Consent was obtained from the participants who had been fully informed about the research and that they could withdraw their involvement at any stage of the study. Permission was also received from the relevant organizations where the studies were conducted. (Oliver, 2010, p. 28) Relevant information about funding was declared by all researchers with 5 studies declared that they received no financial support for the publication and 2 studies disclosed their source of funding.

7.2 Limitations

During the study process, there were situations that may limit this literature review. The fact that terms such as compassion fatigue, burnout, and STSD were used interchangeably within literatures and despite the inclusion criteria, the results of the study may overlap between those three. As only English full text articles available for JAMK students was reviewed, it was highly possible that important and relevant papers written in other languages or not available full text were missed.

7.3 Discussion of the result

The literature review showed balanced findings between the three themes of self-care, social connection and organizational support. They are equally important in preventing compassion fatigue and complement each other. For example, all studies mention the importance of sharing sessions within healthcare team. Workplace can provide a supportive environment that encourages proper debriefings, regular breaks, peer support, or assessing and changing workload/shifts (Mathieu, 2007) although sharing itself is self-voluntary and individually determined (Wenzel, 2011).

There were correlations between how compassion fatigue prevention and the reasons nurses stay or leave their career. The themes developed here corresponded with motivation and challenges in nursing job as explained in chapter 3 were similar, i.e. there were individual and organizational factors. This supported the argument that although nurses consisted of individuals, nursing workforce was a collective body and crisis and success in the profession were faced by all of them. Nurses have the collective opportunity together to prevent individual and collective compassion fatigue. (Todaro-Franceschi, 2012)

Most of the studies in this review were done in oncology nursing setting (5 studies), only one in pediatric ward and one studied nurses in emergency department, ICU, HDU, and medical ward. This was an unexpected finding because preliminary background study found that compassion fatigue could happen to any nurses in any types of health care setting although the levels are different. (Hinderer, et al., 2014; Tummers, Groeneveld, & Lankhaar, 2013) The fact that 6 studies were conducted in USA and 1 in Australia was considered as a significant shortcoming. With cultural differences and international migration, it was possible that certain methods were not suitable in other countries. The findings trigger an opportunity for future studies to

better understand compassion fatigue. Further research to study the level of compassion fatigue among nurses in certain area or countries could be performed which then could generate studies on its prevention in a wider work setting and different culture.

7.4 Conclusion

This study reviewed seven publications to learn about the available methods to prevent compassion fatigue among nurses. The analysis revealed several methods that were grouped into three themes: self-care, social connection, and support from organization. They were equally important in preventing compassion fatigue and complement each other. Nurses have the collective opportunity together to prevent individual and collective compassion fatigue.

References

- Anderson, L., & Gustavson, C. (2016). The Impact of a Knitting Intervention on Compassion Fatigue in Oncology Nurses. *Clinical Journal of Oncology Nursing, 20*(1), 102-104.
- Aveyard, H. (2014). *Doing a Literature Review in Health and Social Care : A Practical Guide 3rd Ed.* Maidenhead, England: McGraw-Hill Education. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=e000xww&AN=697591&site=ehost-live>;
- Bao, S., & Taliaferro, D. (2015). Compassion Fatigue and Psychological Capital in Nurses Working in Acute Settings. *International Journal for Human Caring, 19*(2), 35-40.
- Bettany-Saltikov, J. (2012). *How to do a Systematic Literature Review in Nursing: A step-by-step guide.* Open University Press.
- Boyle, D. A. (2011). Countering Compassion Fatigue: A Requisite Nursing Agenda. *Online Journal of Issues in Nursing, 16*(1). doi:10.3912/OJIN.Vol16No01Man02
- Chan, Z., Tam, W., Lung, M., Wong, W., & Chau, C. (2013). A systematic literature review of nurse shortage and the intention to leave. *Journal of Nursing Management, 21*, 605-613.
- Coetzee, S., & Klopper, H. (2010). Compassion fatigue within nursing practice: a concept analysis. *Nursing and Health Sciences, 12*, 235-243. doi: 10.1111/j.1442-2018.2010.00526.x

- Cowden, T., Cummings, G., & Profetto-McGrath, J. (2011). Leadership practices and staff nurses' intent to stay: a systematic review. *Journal of Nursing Management, 19*, 462-477.
- Cronin, P., Ryan, F., & Coughlan, M. (2008). Undertaking a literature review: a step-by-step approach. *British Journal of Nursing, 17*(1), 38-43.
- Drury, V., Craigie, M., Francis, K., Aoun, S., & Hegney, D. (2014). Compassion satisfaction, compassion fatigue, anxiety, depression and stress in registered nurses in Australia: Phase 2 results. *Journal of Nursing Management, 22*(4), 519-531.
- Eley, D., Eley, R., Bertello, M., & Rogers-Clark, C. (2012). Why did I become a nurse? Personality traits and reasons for entering nursing. *Journal Of Advanced Nursing, 68*(7), 1546-1555. doi:10.1111/j.1365-2648.2012.05955.x
- ESF. (2011). *The European Code of Conduct for Research Integrity*. European Science Foundation. Retrieved March 15, 2017, from http://archives.esf.org/index.php?eID=tx_nawsecuredl&u=0&g=0&t=1489625453&hash=4bfb3166d9420b0e9b2e75d9eb7bf3688c3eb723&file=/fileadmin/be_user/CEO_Unit/MO_FORA/MOFORUM_ResearchIntegrity/Code_Conduct_ResearchIntegrity.pdf
- Farquharson, B., Bell, C., Johnston, D., Jones, M., Schofield, P., Allan, J., . . . Johnston, M. (2013). Nursing Stress and Patient Care: real-time investigation of the effects of nursing tasks and demands on psychological stress, physiological stress, and job performance: study protocol. *Journal of Advanced Nursing [serial online], 69*(10), 2327-2335. doi:10.1111/jan.12090

- Fetter, K. (2012). We Grieve Too: One Inpatient Oncology Unit's Interventions for Recognizing and Combating Compassion Fatigue. *Clinical Journal of Oncology Nursing, 16*(6), 559-561.
- Finnish Advisory Board on Research Integrity. (2012). *Responsible conduct of re-search and procedures for handling allegations of misconduct in Finland*. Retrieved from http://www.tenk.fi/sites/tenk.fi/files/HTK_ohje_2012.pdf
- Flinkman, M., & Salanterä, S. (2015). Early career experiences and perceptions - a qualitative exploration of the turnover of young registered nurses and intention to leave the nursing profession in Finland. *Journal of Nursing Management, 23*, 1050-1057. doi:10.1111/jonm.12251
- Hinderer, K., VonRuoden, K., Friedmann, E., McQuillan, K., Gilmore, R., Kramer, B., & Murray, M. (2014). Burnout, Compassion Fatigue, Compassion Satisfaction, and Secondary Traumatic Stress in Trauma Nurses. *Journal of Trauma Nursing, 21*(4), 160-169.
- Houck, D. (2014). Helping Nurses Cope with Grief and Compassion Fatigue: An Educational Intervention. *Clinical Journal of Oncology Nursing, 18*(4), 454-458.
- ICN. (2006). *The Global Nursing Shortage: Priority Areas for Intervention*. Geneva, Switzerland: International Council of Nurses.
- JAMK. (2013). *Ethical Principles for JAMK University of Applied Sciences*. Retrieved from <https://www.jamk.fi/globalassets/tietoa-jamkista--about-jamk/esittely/ethical-principles-20130513.pdf>
- Jirwe, M., & Rudman, A. (2011). Why choose a career in nursing. *Journal of Advanced Nursing, 68*(7), 1615-1623. doi:10.1111/j.1365-2648.2012.05991.x
- Joinson, C. (1992). Coping with compassion fatigue. *NURSING, 22*(4), 116-121.

- Liberati, A., Altman, D., Tetzlaff, J., Mulrow, C., Gøtzsche, P., Ioannidis, J., . . . Moher, D. (2009). The PRISMA Statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: explanation and elaboration. *British Medical Journal*, *339*(b2700).
- Mathieu, F. (2007). Running of Empty: Compassion Fatigue in Health Professionals. *Rehab & Community Care Medicine*, *4*, pp. 1-7. Retrieved from Compassion Fatigue Solutions and Project Development.
- Merriam-Webster. (n.d.). *Merriam-Webster*. Retrieved June 9, 2017, from <https://www.merriam-webster.com/dictionary/compassion>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). *PRISMA Flow Diagram*. doi:10.1371/journal.pmed1000097
- Mongan-Rallis, H. (2014, November 21). *Guidelines for writing a literature review*. Retrieved February 27, 2017, from Education Department, University of Minnesota, Duluth: <http://www.duluth.umn.edu/~hrallis/guides/researching/litreview.html>
- Oliver, P. (2010). Research and the respondents: ethical issues before the research commences. In *The Student's Guide to Research Ethics* (2nd ed.). McGraw-Hill Education.
- Pembroke, N. (2016). Contribution from Christian ethics and Buddhist philosophy to management of compassion fatigue in nurses. *Nursing & Health Sciences*, *18*, 120-124. doi:10.1111/nhs.12252
- Potter, P., Deshields, T., Berger, J. A., Clarke, M., Olsen, S., & Chen, L. (2013). Evaluation of a Compassion Fatigue Resiliency Program for Oncology Nurses. *Oncology Nursing Forum*, *40*(2), 180-187.

- Shields, N. (2013). Everything You Wanted to Know about Systematic Reviews but Were Afraid to Ask. In P. Liamputtong (Ed.), *Research Methods in Health* (pp. 295-307). Melbourne, VIC: Oxford University Press.
- Smith, L., & Dixon, L. (2009). Systematic Reviews. In J. Neale (Ed.), *Research Method for Health and Social Care* (pp. 63-77). Palgrave Macmillan.
- Sorenson, C., & Hamilton, R. (2016). Understanding Compassion Fatigue in Healthcare Providers: A Review of Current Literature. *Journal of Nursing Scholarship*, 48(5), 456-465. doi:10.1111/jnu.12229
- Sorenson, M. (2015). Stress and Coping. In P. Potter, A. Perry, P. Stockert, & A. Hall, *Essentials for Nursing Practice* (8th ed., pp. 637-653). St. Louis, Missouri: Elsevier Mosby.
- Todaro-Franceschi, V. (2012). *Compassion Fatigue and Burnout in Nursing: Enhancing Professional Quality of Life*. Springer Publishing Company.
- Tummers, L., Groeneveld, S., & Lankhaar, M. (2013). Why do nurses intent to leave their organization? A large scale analysis in long-term care. *Journal of Advanced Nursing*, 69(12), 2826-2838. doi:10.1111/jan.12249
- Wager, E., & Wiffen, P. (2011). Ethical issues in preparing and publishing systematic reviews. *Journal of Evidence-Based Medicine*, 4(2), 130-134. doi:10.1111/j.1756-5391.2011.01122.x
- Wenzel, J., Shaha, M., Klimmek, R., & Krumm, S. (2011). Working Through Grief and Loss: Oncology Nurses' Perspectives on Professional Bereavement. *Oncology Nursing Forum*, 38(4), E272-E282.
- Whittock, M., & Leonard, L. (2003). Stepping outside the stereotype. A pilot study of the motivations and experiences of males in the nursing profession. *Journal of Nursing Management*, 11, 242-249.

- WHO. (2010, May). Wanted: 2,4 million nurses, and that's just in India. *Bulletin of the World Health Organization*, 88(5), pp. 321-400. Retrieved from <http://www.who.int/bulletin/volumes/88/5/10-020510/en/>
- Wilson, C. (2006). Why stay in nursing. *Nursing Management*, 12(9), 24-32.
- Zadeh, S., Gamba, N., Hudson, C., & Wiener, L. (2012). Taking Care of Care Providers: A Wellness Program for Pediatric Nurses. *Journal of Pediatric Oncology Nursing*, 29(5), 294-299.

Appendix 1 List of reviewed articles

Author/s, (year), country	Study design	Sample	Title	Method	Main findings
Wenzel, J; Shaha, M; Klimmek, R; Krumm, S (2011), US	Qualitative study	34 nurses from inpatient & outpatient adult & pediatric oncology	Working through Grief and Loss: Oncology Nurses' Perspectives on Professional Bereavement	Focus groups held to identify challenges on work related bereavement, support during grief & loss, and interpersonal support	Nurses reported the following to be facilitators of support: individual stronghold (faith, sport), team strength (debriefing, dialogue), & patient/family relationship. However these may not be always helpful for everyone.
Fetter, K (2012), US	Interventional study	Nurses working in oncology ward	We Grieve Too: One Inpatient Oncology Unit's Interventions for Recognizing and Combating Compassion Fatigue	bereavement support program: - a remembrance 'tree' with patients' obituaries - journal writing about patients - participate with family in end-of-life care	Bereavement intervention helped bring some peace & closure among nurses, improve their ability to recognize & talk about their thoughts
Zadeh, S; Gamba, N; Hudson, C; Wiener, L (2012), US	Interventional study	pediatric nurses in inpatient, outpatient hospital, & outpatient clinic	Taking Care of Care Providers: A Wellness Program for Pediatric Nurses	10 specific topics of wellness program developed based on nurses' requests and implemented with hands-on activities, interactive discussion, traditional didactic teaching, reading materials, and case studies.	Wellness Program incorporated different aspects that participants found effective in enhancing their working skill such as individual resilience, psychosocial, psychiatric, and ethical aspects, as well as specific team need, e.g. pain and palliative team work.

Author/s, (year), country	Study design	Sample	Title	Method	Main findings
Potter, P; Deshields, T; Berger, JA; Clarke, M; Olsen, S; Chen, L (2013), US	descriptive pilot study	13 oncology nurses in outpatient infusion center	Evaluation of a Compassion Fatigue Resiliency Program for Oncology Nurses	Five-week program of five 90-minute sessions on compassion fatigue resiliency, consist of small group activities designed to promote resiliency through self-regulation, intentionality, self-validation, connection, and self-care	Long-term benefits were realized from the program (evaluation up to 6months later). Participants were positive with their ability to apply and benefit from resiliency techniques, both personally and professionally. Relaxation exercise to achieve self-regulation during perceived threat and chronic stress to be the most helpful. Learning that they were not alone also found particularly helpful.
Drury, V; Craigie, M; Francis, K; Aoun, S; Hegney, D (2014), AUS	Qualitative study	10 nurses from their previous study, 1 teaching hospital in ED, ICU, HDU & medical ward	Compassion satisfaction, compassion fatigue, anxiety, depression, and stress in registered nurses in Australia: Phase 2 results	individual semi-structured interview and focus group	- model of resilience, rather than compassion satisfaction, would enable nurses to remain in nursing workforce and provide higher quality patient care - individuals' resilience method include personal & work-bases support

Author/s, (year), country	Study design	Sample	Title	Method	Main findings
Houck, D (2014), US	Educational intervention	34 nurses from inpatient & outpatient oncology, palliative care, & medical-surgical wards	Helping Nurses Cope with Grief and Compassion Fatigue: An Educational Intervention	Intervention based on recommendation from current literature on cumulative grief & CF. The program was divided into 3 one-hour sections: <ul style="list-style-type: none"> - Cumulative Grief & Compassion Fatigue (grief acknowledgement & strategies for survival) - Holistic Self-Care (importance of self-care & work-life balance) - Spiritual Self-Care (self-awareness & meditation to practice self-healing whenever needed) 	Nurses appreciated the focus on self-care and realized the need to prioritize emotional health. They felt less isolated in the grieving process and were more likely to ask for help when needed.
Anderson, L; Gustavson, C (2016), US	Interventional study	39 nurses, >1y experience, direct care, hemato-/oncology	The Impact of a Knitting Intervention on Compassion Fatigue in Oncology Nurses	In 6 weeks, participants were taught to knit by instructors during breaks or after dealing w/ difficult situation in the hopes that they gain therapeutic benefits of knitting	<ul style="list-style-type: none"> - knitting intervention may help managing stress & combatting CF - it provides opportunity to process difficult work situation