Stream 05. Health Management and Organisation
Refereed Delivered
Competitive

What is compassion fatigue?
What does it mean for personal care workers in aged care?

Claire Hutchinson
School of Health Sciences, University of South Australia, Adelaide, Australia
Email: claire.hutchinson@unisa.edu.au

Megan Corlis
Director of Research and Development, Helping Hand Aged Care, Adelaide, Australia
Email: mcorlis@helpinghand.org.au

Christina Stothard
School of Psychology, University of Adelaide, Adelaide, Australia
Email: christina.stothard@adelaide.edu.au

Julie Goods
Director, Workforce, Helping Hand Aged Care, Adelaide, Australia
Email: jgoods@helpinghand.org.au

Gerrit JM Treuren
Centre for Workplace Excellence, School of Management, University of South Australia Business School, University of South Australia, Adelaide, Australia
Email: gerry.treuren@unisa.edu.au

Stream 05. Health Management and Organisation
Refereed Delivered
Competitive

What is compassion fatigue?
What does it mean for personal care workers in aged care?

ABSTRACT

Compassion fatigue (CF) in the aged care sector is likely to increase with demographic change, declining government per-capita funding and the introduction of competition-based funding mechanisms. This paper reviews the CF literature before reporting on a pilot study into the particular characteristics of CF among personal care workers in aged care. The *consequences* of CF are well understood but less uncertain about the *nature* and *origin* of CF. Little is understood about appropriate employee- and organisational management strategies. Much less is known about the CF of personal care workers in aged care. The pilot study reveals several distinct characteristics of personal care worker CF. This paper outlines the main features for a research agenda to address these gaps.

Keywords: aged care, compassion fatigue, burnout, secondary traumatic stress, eldercare

> *Sometimes it can be very sad. And I think sometimes that sadness can be overwhelming…. you think, oh I don't want to do this again today. And you know I think probably if this is your third death in a row by then you've become weary of it* (Interview 4).

Joinson (1992) first used the term *compassion fatigue* (CF) to name the phenomenon of nurses losing empathy for their patients. Since then, considerable research has investigated the phenomenon in occupational groups such as nurses, doctors, palliative care workers and social workers thought to be likely to suffer from CF (see for example, Conrad & Keller-Guenther, 2006; Melvin, 2012; Potter, Deshields & Rodriguez, 2013; Sanso et al., 2015; Wagaman, Geiger, Shockley & Segal, 2015). This literature has revealed the widespread damage of CF to employee quality of life and work performance (Bride, Radley & Figley, 2007; Cocker & Joss, 2016; Duffy, Avalos & Dowling, 2015; Figley, 1995; Mathieu, 2007; Orlovsky, 2006; Radley & Figley, 2007, Yang & Kim, 2012), to patient service and satisfaction (Crocker & Joss, 2016; Keidel, 2002), and to organisational outcomes, such as accident rates, absenteeism and turnover (Bride, Radley & Figley, 2007; Cocker & Joss, 2016; Figley, 1995; Jenkins & Warren, 2012; Mathieu, 2007; Radley & Figley, 2007; Sung, Seo, & Kim, 2012).

The CF of aged care workers, however, has been largely missing from this literature. Having grown by 5% since 2012, the Australian aged care sector employed over 366,000 people in 2016, with

241,000 employed in direct care roles in residential facilities and community-based home care (Mavromaras et al., 2017), and is likely to continue to grow as the Australian population ages (ABS, 2016; Productivity Commission, 2011). Of these, about 70% are personal care workers who work alongside Registered and Enrolled Nurses in providing hands-on care. The combination of labour shortages as the National Disability Insurance Scheme absorbs current and potential aged care employees, declining real per-capital funding, and the onset of consumer-directed care is likely to lead to increased employee work intensification. Increased work intensification, in turn, increases the risk of the form of CF that is based on employee stress and burnout. CF will soon become a mainstream management problem for a socially important and politically sensitive industry, and a priority human resource challenge for organisational management. As will be outlined later, the CF of aged care employees is likely to have some differences to those occupational groups that are more thoroughly researched.

This paper outlines a research agenda to identify the extent and character of CF in the aged care sector so that aged care organisations can better design appropriate HR strategies for the prevention and minimisation of CF. This paper first presents a review of the CF literature with a focus on the conceptualisation of CF, how CF has been measured and the factors leading to CF. We also present findings from some compassion fatigue intervention studies and examine how successful these have been in reducing CF in the short and long term. We then discuss the particular challenges facing aged care workers and present the findings of a small pilot study investigating the experiences of CF amongst aged care workers (n=6). Similarities and differences with the experiences of other healthcare professionals reported in the literature are discussed and a research agenda for a broader investigation of compassion fatigue amongst aged care workers proposed.

COMPASSION FATIGUE: CONCEPTUALISATION AND MEASUREMENT

CF is understood to “reduce [...] our capacity or our interest in bearing the suffering of others” (Figley, 2002: 1433), and constitutes a “deep physical, emotional, and spiritual exhaustion accompanied by acute emotional pain” (Pfifferling & Gulley, 2000: 39), “a heavy heart, a debilitating weariness brought on by repetitive, empathic responses to pain and suffering of others” (LaRowe, 2005: 21). The literature has burgeoned with CF conceptualised in various ways, as ‘compassion fatigue' or as burnout, vicarious trauma, and secondary traumatic stress (Najjar, Davis, Beck-Coon & Doebbeling, 2009; Nimmo & Haggard, 2013). One consequence is the plethora of scales measuring different aspects of CF - such as symptoms of trauma, cognitive distortions, psychological distress and burnout (Bride, Radley & Figley, 2007).

In a literature that struggles to differentiate the definition of CF from the manner of its creation, CF is understood to arise in one of three ways. First, following Joinson (1992), CF is understood to be the result of erosion of an employee's empathy following prolonged exposure to the suffering of others. Cotezee and Klopper's (2010: 237) study of CF amongst nurses describe CF as "the final result of a progressive and cumulative process that is caused by prolonged, continuous, and intense contact with patients, the use of self and exposure to stress. Compassion fatigue is a state where the compassionate energy that is expended by nurses has surpassed their restorative process, with recovery power being lost." Similar to burnout and sharing substantial variance (Meadors et al., 2010), researchers have found that CF and burnout are different constructs (Thompson, Amatea & Thompson, 2014; Yoder, 2010).

The second perspective sees CF as the consequence of employee exposure to the trauma experienced by others. In this understanding, the causes of CF are triggered by events and situations experienced by their clients, rather than the result of a gradual wearing down: "a secondary traumatic stress reaction resulting from helping, or desiring to help, a person suffering from traumatic events" (Abenbroth & Flannery, 2006: 347). These researchers see the symptomology of CF as almost identical to that of post-traumatic stress disorder, except that in CF, the employee only indirectly experiences the trauma. Figley (2002: 1435) describes CF as "a state of tension and preoccupation with the traumatized patients by re-experiencing the traumatic event, avoidance/numbing of reminders persistent arousal (e.g. anxiety) associated with the patient. It is a function of bearing witness to the suffering of others."

The third perspective sees CF as the result of both processes unfolding over time, "the convergence of secondary traumatic stress and cumulative burnout, a state of physical and mental exhaustion caused by a depleted ability to cope with one's everyday environment" (Cocker & Joss, 2016: 618). This can be seen most clearly in the work of Stamm (2002, 2010), resulting in the most widely used measure of CF - the Professional Quality of Life scale (ProQOL-CSF-R-III). This measure is based on a model which conceptualises CF as resulting from the combination of the burnout and traumatic-event-based approaches. In this model, CF can occur as a result of burnout, from traumatic events, and from both. Stamm's framework also recognise the existence of *compassion satisfaction*, which is conceptualised as the personal satisfaction derived from providing care for people, which can act to dampen the negative effects of CF.

Prevalence of CF

Much of the research on CF has taken place with nurses (see for example, Romano et al, 2013; Sheppard, 2015; Yoder, 2010) working within areas of high risk of CF, such as oncology (Potter et al. 2013), paediatrics (Meyer, Li, Klaristenfeld& Gold, 2015), hospice and palliative care (Abendroth & Flannery, 2006; Alkema, Linton & Davies, 2008; Keidel, 2002), and emergency departments (Duffy et al., 2015; Flarity, Gentry & Mesnikoff, 2013; Hunsaker, Chen, Maughan & Heaston, 2015). Other healthcare groups studied include social workers (Harr, 2013; Leon, Altholz & Dziegielewski, 1999; Simon, Pryce, Roff & Klemmack, 2005; Wagaman et al, 2015), medical health practitioners (Dasan, Gohil, Cornelius & Taylor, 2015), mental health counsellors (Thompson et al, 2014), and domestic violence support service providers (Kulkarni, Bell, Hartman & Herman-Smith, 2013). We could find no papers which specifically investigate CF amongst aged care workers, although there were studies of burnout amongst nurses working in aged care (e.g. Juthberg, Eriksson, Norberg & Sundin, 2010).

The literature suggests that CF can vary substantially and within between occupational groups even within the same organisation. Yang and Kim's (2012) review found that the incidence of nurse CF varied between specialism. CF was highest in trauma and psychiatric units and lowest in public health clinics and general medical wards. Van Mol et al's (2015) review of CF studies on CF, burnout and secondary traumatic stress among one specialism (intensive care) but different professional groups (nurses, doctors, social workers, chaplains) found that CF, as measured by the ProQOL scale, varied from 7.3% to 40% and severe burnout from 1.2% to 23%. Hooper et al's (2010) ProQOL study of emergency nurses found 86% of their sample had moderate to high levels of CF. Cho and Jung's (2014) study found 72% of oncology nurses reported moderate to high levels of CF.

Factors influencing CF

The literature has identified a variety of personal and situational factors leading to CF. Jenkins and Warren (2012) found intense and continuous exposure to patient suffering, stressful environments, and high emotional demands were associated with nurse CF. Several studies highlighted personal factors, and in particular, employee self-awareness and self-care as predictors of CF (Alkema et al., 2008; Keidel, 2000; Payne, 2001; Sanso et al., 2015). Van Mol et al's (2015) review of CF amongst intensive care professionals (nurses and physicians) identified a range of job characteristics (high workload intensity, repetitive tasks with low control), personal factors (low levels of resilience, low job satisfaction), and organisational factors (inadequate rest periods, poor managerial support) as factors preceding CF. Yang and Kim's (2012) review of 36 nursing CF studies identified a broader range of factors. These included (i) personal factors (such as age, education level, life demands and self-care), (ii) work-related factors (caring for trauma patients, work hours, work overload, job insecurity, satisfaction with pay and conditions), (iii) psychological factors (work stress, anxiety, empathy and spirituality), (iv) support factors (organisational support, social support and personal resources), and (v) coping factors (coping resources and strategies e.g. escape, confrontation, isolation from others).

The findings presented here suggests that, while there may be some common factors of CF across healthcare workers, contextual factors such as type of healthcare worker, and healthcare setting may each result in different combinations of risk factors for particular groups. This also suggestions that interventions aimed at reducing CF also need to take into account the combination of risk factors associated with specific groups of workers, and that successful interventions amongst one group of healthcare workers may not be successfully replicated for other groups of workers.

Personal and organisational responses to CF

The literature examining prevention and remediation emphasises employee self-care, seeking to assist the employee in better coping with the stressors associated with CF, with a much smaller literature dealing with the role of organisational managements in designing job and work processes to minimize the incidence of CF and to improve employee recovery. Yang and Kim's (2012) and Cocker and

Joss’s (2016) reviews of CF intervention studies found that most interventions focused on personal strategies and self-care; these typically included meditation, yoga, mindfulness, music therapy, and building resilience and developing coping skills. Only seven of the thirteen studies in Crocker and Joss’s (2016) review found significant reductions in CF post-intervention.

A smaller literature examines the strategies at the team or organizational level, looking at the work environment, team building, building social support, job rotations, and bereavement interventions in the workplace (Bellieni et al, 2012; Fetter, 2012; Goetz et al, 2012; Liu et al, 2012, 2013; Merlani et al, 2011; Raggio & Malacarne, 2007; Rochefort & Clark, 2012).

The Aged Care Sector & Compassion Fatigue

Earlier sections suggest that CF varies considerably between and within occupational groups. To date, aged care workers have been largely missing from the CF literature and therefore present an unquantified and potentially substantial risk to the stakeholders of aged care: the elderly and their families, care workers and the organisations that provide aged care. This is especially the case given that aged care workers share many of the conditions associated with CF risk in other healthcare populations, such as high workload intensity, high employee emotional engagement within the work context, dealing with challenging behaviour, and lack of meaningful recognition (Jenkins & Warren, 2012; Van Mol et al, 2015; Yoder, 2010). Personal care workers develop deeper, and more long-term, personal relationship with patients over time, compared to other occupational groups. These patients usually become increasingly unwell, with patient deaths occurring constantly. A quarter of all Australian deaths occur in residential care (Broad, Gott, Kim, Boyd, Chen & Connolly, 2013). We aim to begin to address this gap in the literature by presenting the findings from a small interview study exploring aged care workers experiences of CF within one South Australian aged care organisation.

METHOD

One South Australia aged care service provider has been increasingly concerned about CF amongst aged care workers and instigated a small (n=6) semi-structured interview study to explore aged care workers experiences of CF, and what personal or organisational resources they have been able to access to reduce CF. Participation in this study was voluntary and was conducted in paid work time.

The study was approved by the organisation's Director of Research and Development. The findings presented in this paper represents secondary analysis of interview data provided in the form of written de-identified transcripts. The data was analysed by the first author (Hutchinson) and codes generated using content analysis. A priori codes were established for areas of interest (e.g. experiencing of CF, personal resources, organisational resources) but the coding was flexibility enough to include the generation of new codes based on topics raised by participants. Initial codes were reviewed and verified by the last author (Treuren).

RESULTS

In reflecting on their own experiences of CF, the personal care workers employed by the aged care provider were able to describe feelings of exhaustion, burnout and depleted; like their compassion was *'wearing out"* (Interview 5) or "*fading"* (Interview 1):

> *We [are] dealing with elderly people in the last stages of their life, you deal with a lot of emotions and they go through quite a few traumas and changes. And I think you become sort of hardened to their emotional needs* (Interview 4).

These feelings of CF were perceived as caused by providing care for extended periods:

> *After some time working in residential aged care, especially in dementia care, you could actually feel that that compassion that you have felt for years has been fading* (Interview 1).

Participants identified that CF can affect co-workers as well:

> *I have on a few occasions. And I sometimes I think oh they were a little harsh, or a little hard…. Sometimes you know I feel a bit sad because I think sometimes some of my co-workers are a bit harsh. And you know sometimes I think oh if that was my mum and dad I would be really upset* (Interview 4).
>
> *Some carers…I've actually seen that some carers raise their voice* (Interview 1).

Another participant believed that compassion fatigue was linked to avoidance strategies on the part of aged care workers, explaining how CF can lead to reduced quality of care and increased absenteeism:

> *You deal with the workload then you know you feel like compassion fatigue and then you feel like not coming to work. So you take the day off for sick leave* (Interview 1).

Furthermore, participants found it challenging to 'switch off' from their work when they went home:

> *You can't switch that off. You just can't. I mean I just went on holidays and I was on my holidays thinking about residents and wondering how they are, oh its eleven o'clock she'd been doing this or that. You can't help it* (Interview 6).

> *You find yourself thinking about the people that you care for, and worrying about them. You think to yourself that you, that you know that you shouldn't leave it at work. You find yourself out of hours thinking about those people, and sometimes wishing you could do more for them...you still think on my days off you think about them and weekends you think about them* (Interview 3).

The aged care workers identified factors they associated with CF. Some of these factors were similar to the factors identified in studies of other occupational groups. For example, similar to the nursing CF studies, the aged care workers identified high workloads, staff shortages and use of agency staff as factors that created burden upon aged care workers and were associated with experiences of compassion fatigue:

> *It's really hard out there on the floor….cause you're in a set time period where you have to get everybody in bed and you want to focus on people that really need it but on the other hand you can't sit there and hold their hands… you have to keep moving and it's you're always on the go. And it's very frustrating…..It's being split in fifty thousand directions. It is very, very draining* (Interview 2).

> *Sometimes that we don't have our regular staff working and we've got lots of agency staff coming. That they are not familiar with the routine that they never worked in these place or in the area. And we find it very difficult for [the organisation's] regular staff. It means that there is more workload on their shoulders* (Interview 1).

> *You're going around in circles getting nowhere. You get frustrated ….Your mind's going a million miles an hour trying to remember things you have to do and the bells are going like crazy* (Interview 5).

Participants pointed out factors that were specific to aged care. Participants also noted that some residents were very demanding and over time, these demands would diminish compassion for those residents. Our participants expressed frustration that attention was not allocated on the basis of need but rather personal demands:

> *Some residents [being] very demanding makes you feel tired and sometimes burnt out mentally…. They are still mobile, they still can do lots of things for themselves…they think they are in the hotel with five stars and we have to jump up every time they, you know, ring the bell …. because of these demanding residents we don't have enough time to spend with those who are in a greater need for our assistance. And then I feel bad about that. That's the feeling I think when my compassion start to fade* (Interview 1).

> *I suppose it's yeah the emotional games the attention seeking, the over-demanding.* (Interview 5).

Relatedly, some participants associated their experience of CF to the demands of patients with dementia:

> *[the patient] says the same things every day…they obviously don't realise they're saying the same things over and over and over again. And I think you have to treat it as if it's the first time every time you've heard it (Interview 4).*

A key difference between the work of aged care workers and those of other healthcare professionals studied in the CF literature is the length of time over which they provide care to patients. Aged care workers develop relationships with clients over time that may last for weeks, months or even years. Furthermore, unlike in many of the hospital settings previously studied by CF researchers, patients of aged care workers do not usually improve their health and return home. Instead, patients decline over time and often die in residential homes. This was emotionally challenging for the care workers:

> *You're always with the residents. So you get to know them, you build a rapport with them… and you become friends with them….You deal with a lot of people dying. I'm a very emotional person … I normally have a bit of a cry* (Interview 2).
>
> *I've been moved to another section but it does make me realise how emotionally attached I'd become without realising it and you can't avoid it* (Interview 6).

Not only do aged care workers have to deal with their own grief when residents die but they also reported that they have to deal with the grief of others, such as family members, other residents and co-workers:

> *Last night I had a person pass away on me…. so it was very emotional for us. But we had to be strong for the other residents, but it does put a strain on us and makes more tired and you want to go home but you have to be here and be strong for everyone else* (Interview 2)
>
> *They [the other residents] can feel really sad because they knew them very well but then they think oh god I hope it's not my turn next. And then you have to deal with that then as well, worrying you know, about their own death. And that, that can be very emotional* (Interview 4).

Participants reported swapping shifts and moving to different locations in the organisation as a way of preventing them from getting too attached to residents:

> *I reckon moving around a lot more, so you not suck in the same place for so long….watching anyone deteriorate. You want to keep on the go, have fresh starts everywhere. I suppose if you don't spend so much time with a single person you won't get so attached to them and it won't hit you as hard as if you did know them* (Interview 2).

Other participants reporting practicing emotional rather than physical distancing:

> *I don't allow myself to get close enough to them for it to affect me emotionally* (Interview 5).
>
> *Some of them [care workers] have hardened up over years because you need to, and because I've just started I'm not at that point yet… It's just a wall, bit of protective layering … [I] don't have those tools yet. It does take a while* (Interview 6).

Sometimes, an employee has to cope with both the emotional and physical toll of a patient's decline:

> *When I come to work I was pretty happy…and then we got told that she was on her last legs…Then all of the moods started to change. You're trying to concentrate on that single person but then again you have to try and spread your workload out to everybody else. But you find yourself trying, focussing more on that person. You just go in there like every five minutes to check on them. And it's very draining and at the end of the day you sort of walk around dragging your feet and you just don't know where you are and your heads in the clouds pretty much so…* (Interview 1).

Participants reported a range of self-care strategies to wind down after work. These included reading, walking, music, time alone, painting and talking to family or friends:

> *I like reading, I like you know taking long walks and I like just listening to the music and singing in a choir too you know. Just have a little time to myself* (Interview 1).
>
> *Most shifts after I've finished I go and have a coffee and read a paper. That's how I switch off. I have to. Because, and I know my husband is like, you know, oh you're late home again. But I have to do that* (Interview 3).

Though the organisation had an employee assistance program, only one of the participants had used this (for a non-work related matter). Instead, some participants reported that they relied on informal debriefing with co-workers:

> *I suppose I talk about it, we do talk you know amongst ourselves us staff... we sort of discuss it with each other and I think that works very well* (Interview 4).

However, other participants reported that they would like to be able to debrief but had either not found anyone they felt comfortable talking to, or had not found anyone that was willing to debrief with them:

> *Otherwise a lot of other people here won't talk with you, so it's pretty hard to find who to talk to and who not to* (Interview 2).
>
> *It would be good if we had, you know, a stable RN (Registered Nurse) and someone who's involved who, you know, could talk about it with us* (Interview 4).
>
> *It would be good to have somewhere to go to just to talk through things that you've experienced* (Interview 3).

For some there was a sense that, given the role, they *should* be able to cope with patient death. This may explain why so few of the participants appeared to seek organisational resources for their experiences of grief on the job:

> *I know I wouldn't really go to counselling here. It's, it's a sign of, well not probably not a sign of weakness, it's…. because [if] you go to counselling every time someone dies there'd be a lot of counselling sessions. So I suppose you just have to try and deal with it yourself* (Interview 2).

One participant reported that the organisation used several strategies to help employees cope with their CF. For example, staff at her location being permitted to take a day's leave after the death of a patient they were close to, and additional staff ('floaters') were employed during peak times to reduce workload intensity on other staff:

> *They're introducing new shifts, and they actually get floaters to help, especially in the morning. Which is really good you know, so they're [Management] aware of this you know. And they're doing the best they could you know, to prevent to avoid that* (Interview 1).

DISCUSSION AND A RESEARCH AGENDA FOR THE AGED CARE SECTOR

The previous section suggests that personal care workers in aged care experience CF predominantly as a combination of fading compassion due to repeated caring over long periods (Cotezee & Klopper, 2010), and as a result of the trauma of patient deaths (Abenbroth & Flennery, 2006) and dealing with the grief of other residents and co-workers. From the discussion of participants' own experiences, as well of those of their co-workers, prevalence of CF seemed high. However, it should be noted that workers who saw themselves as experiencing high CF might be more likely to volunteer to participate in the study. Some factors influencing perceptions of CF were similar to those found in other studies, such as high workloads, sometimes exacerbated by working with agency staff, inadequate rest breaks (Van Mol et al., 2015) and lack of social support (Yang & Kim, 2012).

As we expected, the aged care workers developed strong, personal relationship with residents over extended periods. This is notably different from healthcare worker-patient relationships in other healthcare environments in which CF has been studied. Coping strategies for dealing with the deaths of residents' deaths included avoidance strategies (taking shifts elsewhere) as well as emotional numbing or distancing. Participants reported self-care strategies but a lack of willingness to seek support in the workplace. Cultural norms within the occupational group encourage employees to accept responsibility for their experience of CF and to be self-sufficient in processing and addressing these experiences. Typically, the employees seek to implement their own coping mechanisms, in some cases supported by management policy (granting one-off leave days, appointing 'floating' staff, for example), and in some cases, thwarted by the way work is carried out (scheduling, work allocation, for example). Further research would clarify this account of care worker CF.

We are still left uncertain, however, about (i) the proportion of the workforce experiencing CF, and the characteristics of the CF they experience; (ii) the types of self-care strategies used; and the effectiveness of these strategies; (iii) the role of organisational policies in supporting or thwarting employee self-care; (iv) whether the organisational can make further changes to their organisational

We therefore propose a research agenda for CF in the aged care sector that addresses the following research questions:

- How prevalent is CF amongst aged care workers? Are there differences between aged care workers working in the residential vs. community sectors (a group who do similar work to residential workers, but on their own in the homes of patients)? Are there demographic differences that those who experience CF and those who do not?
- What are aged care workers experiences of CF and how are they different from those of other healthcare workers? Is CF the result of a gradual erosion of compassion, or prompted by specific trauma?

- What job-related factors are associated with CF amongst aged care workers? How can employees, work teams and organisations do to minimise the incidence of CF?
- What personal, team and organisational strategies are effective in combating CF amongst aged care workers? What organisational practices assist employees in coping with CF? What practices hinder employee self-care? How can organisational practices be changed to reduce the incidence of CF?

With greater understanding of CF experiences in the aged care sector, tailored interventions can be developed and evaluated for this sector. Given the size of this sector in Australia and its continued growth, addressing CF is important for ensuring quality care for elderly Australians as well as ensuring the health and well-being of this growing workforce.

References

Abendroth, M., & Flannery, J. (2006). Predicting the risk of compassion fatigue: A study of hospice nurses. *Journal of Hospice & Palliative Nursing, 8*(6), 346-356.

Alkema, K., Linton, J. M., & Davies, R. (2008). A study of the relationship between self-care, compassion satisfaction, compassion fatigue, and burnout among hospice professionals. *Journal of Social Work in End-of-Life & Palliative Care, 4*(2), 101-119.

Australian Bureau of Statistics (ABS). (2016). Australian Demographic Statistics, Dec 2015 (3101.0). Canberra, released 23rd June.

Bellieni, C. V., Righetti, P., Ciampa, R., Iacoponi, F., Coviello, C., & Buonocore, G. (2012). Assessing burnout among neonatologists. *The Journal of Maternal - Fetal & Neonatal Medicine, 25*(10), 2130-2134.

Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring compassion fatigue. *Clinical Social Work Journal, 35*(3), 155-163.

Broad, J. B., Gott, M., Kim, H., Boyd, M., Chen, H., & Connolly, M. J. (2013). Where do people die? An international comparison of the percentage of deaths occurring in hospital and residential aged care settings in 45 populations, using published and available statistics. *International Journal of Public Health, 58*(2), 257-267.

Cho, H. J., & Jung, M. S. (2014). Effect of empathy, resilience, self-care on compassion fatigue in oncology nurses. *Journal of Korean Academy of Nursing Administration, 20*(4), 373-382.

Cocker, F., & Joss, N. (2016). Compassion fatigue among healthcare, emergency and community service workers: A systematic review. *International Journal of Environmental Research and Public Health, 13*(6), 618.

Coetzee, S. K., & Klopper, H. C. (2010). Compassion fatigue within nursing practice: A concept analysis. *Nursing & Health Sciences, 12*(2), 235-243.

Conrad, D., & Kellar-Guenther, Y. (2006). Compassion fatigue, burnout, and compassion satisfaction among Colorado child protection workers. *Child Abuse & Neglect, 30*(10), 1071-1080.

Dasan, S., Gohil, P., Cornelius, V., & Taylor, C. (2015). Prevalence, causes and consequences of compassion satisfaction and compassion fatigue in emergency care: a mixed-methods study of UK NHS Consultants. *Emergency Medicine Journal, 32*(8), 588-594.

Duffy, E., Avalos, G., & Dowling, M. (2015). Secondary traumatic stress among emergency nurses: a cross-sectional study. *International Emergency Nursing, 23*(2), 53-58.

Fetter, K. L. (2012). We grieve too: One inpatient oncology unit's interventions for recognizing and combating compassion fatigue. *Clinical Journal of Oncology Nursing, 16*(6), 559.

Figley, C. R. (1995). Compassion fatigue: Toward a new understanding of the costs of caring. In C. Figley (Ed.), *Compassion Fatigue: Coping with Secondary Stress Disorder in those who threat the traumatised*. Bristol, UK: Brunner/Mazel.

Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self-care. *Journal of Clinical Psychology, 58*(11), 1433-1441.

Flarity, K., Gentry, J. E., & Mesnikoff, N. (2013). The effectiveness of an educational program on preventing and treating compassion fatigue in emergency nurses. *Advanced Emergency Nursing Journal, 35*(3), 247-258.

Goetz, K., Beutel, S., Mueller, G., Trierweiler-Hauke, B., & Mahler, C. (2012). Work-related behaviour and experience patterns of nurses. *International Nursing Review, 59*(1), 88-93.

Harr, C. (2013). Promoting workplace health by diminishing the negative impact of compassion fatigue and increasing compassion satisfaction. *Social Work and Christianity, 40*(1), 71-88.

Hooper, C., Craig, J., Janvrin, D. R., Wetsel, M. A., & Reimels, E. (2010). Compassion satisfaction, burnout, and compassion fatigue among emergency nurses compared with nurses in other selected inpatient specialties. *Journal of Emergency Nursing, 36*(5), 420-427.

Hunsaker, S., Chen, H. C., Maughan, D., & Heaston, S. (2015). Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. *Journal of Nursing Scholarship, 47*(2), 186-194.

Jenkins, B., & Warren, N. A. (2012). Concept analysis: Compassion fatigue and effects upon critical care nurses. *Critical Care Nursing Quarterly, 35*(4), 388-395.

Joinson, C. (1992). Coping with compassion fatigue. *Nursing, 22*(4), 116-120.

Juthberg, C., Eriksson, S., Norberg, A., & Sundin, K. (2010). Perceptions of conscience, stress of conscience and burnout among nursing staff in residential elder care. *Journal of Advanced Nursing, 66*(8), 1708-1718.

Keidel, G. C. (2002). Burnout and compassion fatigue among hospice caregivers. *American Journal of Hospice and Palliative Medicine, 19*(3), 200-205.

Kulkarni, S., Bell, H., Hartman, J. L., & Herman-Smith, R. L. (2013). Exploring individual and organizational factors contributing to compassion satisfaction, secondary traumatic stress, and burnout in domestic violence service providers. *Journal of the Society for Social Work and Research, 4*(2), 114-130.

LaRowe, K. D. (2005). *Breath of relief: Transforming Compassion Fatigue into Flow*. Boston, Mass: Acanthus Publishing.

Leon, A. M., Altholz, J. A., & Dziegielewski, S. F. (1999). Compassion fatigue: Considerations for working with the elderly. *Journal of Gerontological Social Work, 32*(1), 43-62.

Liu, K., You, L. M., Chen, S. X., Hao, Y. T., Zhu, X. W., Zhang, L. F., & Aiken, L. H. (2012). The relationship between hospital work environment and nurse outcomes in Guangdong, China: a nurse questionnaire survey. *Journal of Clinical Nursing, 21*(9-10), 1476-1485.

Mathieu, F. (2007). Running on empty: Compassion fatigue in health professionals. *Rehab & Community Care Medicine, 4,* 1-7.

Mavromaras, K., Knight, G., Isherwood, L., Crettenden, A., Flavel, J., Karmel, T. et al (2017) The Aged Care Workforce, 2016, a report by the National Institute of Labour Studies, Flinders University report for Australian Government Department of Health.

Meadors, P., Lamson, A., Swanson, M., White, M., & Sira, N. (2010). Secondary traumatization in pediatric healthcare providers: Compassion fatigue, burnout, and secondary traumatic stress. *OMEGA - Journal of Death and Dying, 60*(2), 103-128.

Melvin, C. S. (2012). Professional compassion fatigue: what is the true cost of nurses caring for the dying. *International Journal of Palliative Nursing, 18*(12), 606-611.

Merlani, P., Verdon, M., Businger, A., Domenighetti, G., Pargger, H., & Ricou, B. (2011). Burnout in ICU caregivers: a multicenter study of factors associated to centers. *American Journal of Respiratory and Critical Care Medicine, 184*(10), 1140-1146.

Meyer, R. M., Li, A., Klaristenfeld, J., & Gold, J. I. (2015). Pediatric novice nurses: examining compassion fatigue as a mediator between stress exposure and compassion satisfaction, burnout, and job satisfaction. *Journal of Pediatric Nursing, 30*(1), 174-183.

Najjar, N., Davis, L. W., Beck-Coon, K., & Doebbeling, C. C. (2009). Compassion fatigue. A review of the research to date and relevance to cancer-care providers. *Journal of Health Psychology, 14*(2), 267-277.

Nimmo, A., & Huggard, P. (2013). A systematic review of the measurement of compassion fatigue, vicarious trauma, and secondary traumatic stress in physicians. *Australasian Journal of Disaster & Trauma Studies, 1,* 37–44.

Orlovsky, C. (2006). Compassion fatigue. *Prairie Rose, 75*(3), 13.

Payne, N. (2001). Occupational stressors and coping as determinants of burnout in female hospice nurses. *Journal of advanced nursing, 33*(3), 396-405.

Pfifferling, J.-H., & Gilley, K. (2000). Overcoming compassion fatigue. *Family Practice Management, 7*(4), 39-39.

Potter, P., Deshields, T., & Rodriguez, S. (2013). Developing a systemic program for compassion fatigue. *Nursing Administration Quarterly, 37*(4), 326-332.

Productivity Commission. (2011). *Caring for Older Australians,* Report No. 53, Final Inquiry Report, Canberra.

Radey, M., & Figley, C. R. (2007). The social psychology of compassion. *Clinical Social Work Journal, 35*(3), 207-214.

Raggio, B., & Malacarne, P. (2007). Burnout in intensive care unit. *Minerva Anestesiologica, 73*(4), 195-200.

Rochefort, C. M., & Clarke, S. P. (2010). Nurses' work environments, care rationing, job outcomes, and quality of care on neonatal units. *Journal of Advanced Nursing, 66*(10), 2213-2224.

Romano, J., Trotta, R., & Rich, V. L. (2013). Combating compassion fatigue: An exemplar of an approach to nursing renewal. *Nursing Administration Quarterly, 37*(4), 333-336.

Sansó, N., Galiana, L., Oliver, A., Pascual, A., Sinclair, S., & Benito, E. (2015). Palliative care professionals' inner life: exploring the relationships among awareness, self-care, and compassion satisfaction and fatigue, burnout, and coping with death. *Journal of Pain and Symptom Management, 50*(2), 200-207.

Sheppard, K. (2015). Compassion fatigue among registered nurses: Connecting theory and research. *Applied Nursing Research, 28*(1), 57-59.

Simon, C. E., Pryce, J. G., Roff, L. L., & Klemmack, D. (2006). Secondary traumatic stress and oncology social work: Protecting compassion from fatigue and compromising the worker's worldview. *Journal of Psychosocial Oncology, 23*(4), 1-14.

Stamm, B. (2002). *Research information on the ProQOL-CSF-R-III.* Available at: http://www.isu.edu/~bhstamm/testsProQOL_psychometric.htm.

Stamm, B. F. (2010). The Concise ProQOL Manual   Retrieved from http://www.proqol.org/uploads/ProQOL_Concise_2ndEd_12-2010.pdf

Sung, K., Seo, Y., & Kim, J. H. (2012). Relationships between compassion fatigue, burnout, and turnover intention in Korean hospital nurses. *Journal of Korean Academy of Nursing, 42*(7), 1087-1094.

Thompson, I. A., Amatea, E. S., & Thompson, E. S. (2014). Personal and contextual predictors of mental health counselors' compassion fatigue and burnout. *Journal of Mental Health Counseling, 36*(1), 58-77.

Van Mol, M. M., Kompanje, E. J., Benoit, D. D., Bakker, J., & Nijkamp, M. D. (2015). The prevalence of compassion fatigue and burnout among healthcare professionals in intensive care units: a systematic review. *PloS One, 10*(8), e0136955.

Wagaman, M. A., Geiger, J. M., Shockley, C., & Segal, E. A. (2015). The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. *Social Work, 60*(3), 201-209.

Yang, Y.-H., & Kim, J.-K. (2012). A literature review of compassion fatigue in nursing. *Korean Journal of Adult Nursing, 24*(1), 38-51.

Yoder, E. A. (2010). Compassion fatigue in nurses. *Applied Nursing Research, 23*(4), 191-197.