





Compassion Fatigue in Out of Home Care Workers: A Systematic Review

Tessa Benveniste, Damien R Smith, Charlotte C Gupta, Stephanie E Chappel (1), and Madeline Sprajcer (1)

Appleton Institute, School of Health, Medical and Applied Sciences, Central Queensland University, Adelaide, South Australia, Australia

ABSTRACT

Evidence suggests that providing out-of-home care to children is associated with high levels of compassion fatigue, possibly due to various work-related factors. This review examined the existing literature to determine the extent to which out of home care work results in compassion fatigue. To do so, it established which out of home care settings compassion fatigue has been measured in, how, and what factors contribute to developing compassion fatigue in this work. The study conducted a comprehensive search of five electronic databases (CINAHL, MEDLINE, PsycINFO, PubMED, and CENTRAL) for full-text articles examining compassion fatigue in out-of-home care workers caring for children aged 0–18 years. Out of the 2,759 articles initially identified, 14 articles were included. Studies were assessed against the Joanna Briggs Institute (JBI) Critical Appraisal Checklists for risk of bias. The findings suggest that compassion fatigue is prevalent in various out-of-home care settings and has been measured using validated quantitative and qualitative measures. Out of home care workers caring for children reported symptoms consistent with compassion fatique, but a range of protective factors were also identified that may reduce its negative impact. This review highlights the need for further research in this area, using larger sample sizes and including a more comprehensive range of out-of-home care workers, settings, and countries.

KEYWORDS

Compassion fatigue; secondary traumatic stress; residential care workers; foster carers; out of home care workers

Practice Implications

- Compassion fatigue has been investigated in foster carers but very few studies on workers in residential care facilities
- Despite the high levels of compassion fatigue identified in Out of Home Care Workers, few studies included interventions to improve outcomes in this population

CONTACT Tessa Benveniste at t.benveniste@cqu.edu.au D Appleton Institute, School of Health, Medical and Applied Sciences, Central Queensland University, 44 Greenhill Road, Wayville, SA, Adelaide, South Australia 5034,

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- Further investigation into protective factors against compassion fatigue needed, e.g. staff supervision and emotional support programs
- Higher levels of job satisfaction were associated with lower levels of compassion fatigue, thus should be cultivated within residential care

Introduction

It is conservatively estimated that worldwide approximately 2.7 million children, aged from 0 to 17 years, are in a form of government residential care (Cappa et al., 2022). While there are various terms for residential care used across different countries and this has often evolved over time (Ainsworth & Thoburn, 2014), a consistency is that many of these children have been removed from their parents or guardians as a result of maltreatment, neglect or abuse (Australian Institute of Health and Welfare, 2020). Care options in the Australian context typically include kinship care, where children are placed with other family members, or out of home care, which can include foster care (where they are placed in the carer's own home) or residential care (where paid carers look after children in designated houses or facilities) (Hiles Howard et al., 2015; Leloux-Opmeer et al., 2017). Residential treatment or youth detention facilities may also be a care option if the child has severe mental health needs or has been sentenced to a period of detention due to criminal offending (Zelechoski et al., 2013). In Australia, over 46,000 children are currently in some form of out of home care (Australian Institute of Health and Welfare, 2021). Of these children, over 16,000 have been placed in foster care and a further ~ 3,000 into residential care (Australian Institute of Health and Welfare, 2021). Given the increasing number of children who are being placed into out of home care there is an associated increase in need for out of home care workers (OHCW). Organisations must therefore encourage staff retention and minimize turnover. However, there are a range of work-related factors that make staff retention difficult, including the psychological impact of the working environment (Purdy & Antle, 2022).

Out of home care workers often provide care to children who have experienced trauma (Hughes, 2004). As a result of this trauma, these children can manifest overt aggressive and anti-social behaviors or can have symptoms consistent with anxiety and depression, which the people caring for them are subsequently exposed to (Li et al., 2019). As a result of the vicarious trauma that the OHCW are exposed to by their role, compassion fatigue and associated concerns, such as secondary traumatic stress, are a significant risk for this population (Papovich, 2020; Reinhardt, 2016). Evidence suggests that residential treatment facility workers, similar to like other out of home care workers such as residential care workers and foster carers, also have a high risk of developing compassion fatigue (Eastwood & Ecklund, 2008).

Compassion fatigue has been characterized as a form of "empathy based stress," which is closely linked with secondary traumatic stress and vicarious

traumatization (Rauvola et al., 2019). Exposure to trauma (e.g., via working closely with children who have experienced trauma) combined with experiencing empathy can result in these forms of stress (Rauvola et al., 2019). Countertransference can also occur between workers and clients. This is when negative reactions of the care worker may be elicited from projective identifications, the interactions between client and worker, or unresolved issues or traumas for the worker that arise while working with the client (Berzoff & Kita, 2010). While this is an important and associated concept and can co-occur or precede compassion fatigue, it is not explored in this review. The terms compassion fatigue, secondary traumatic stress, and vicarious trauma are often used interchangeably within the literature to reflect the emotional impact of exposure to trauma within the work environment. For the purposes of this review, the term compassion fatigue will be used to encompass compassion fatigue, secondary traumatic stress and vicarious trauma. Individuals experiencing compassion fatigue can have negative physical, emotional and psychological outcomes (de Figueiredo et al., 2014). Physical symptoms can include increased arousal, sleep disturbances, fatigue, change in eating habits, and headaches (Figley, 2013; Gentry, 2002; Showalter, 2010). Psychological symptoms can include anxiety, depression, outbursts of anger, a sense of an inability to perform their job well, and a sense of dread regarding working with the people in their care (Figley, 2013; Gentry, 2002). Despite the impacts of compassion fatigue, research has also demonstrated that "compassion training" - including understanding empathetic distress, self-care and self-compassion practices, alongside emotion regulation and psychological flexibility - has been effective in increasing resilience and protective against the negative impacts of compassion fatigue (Hofmeyer et al., 2020). This has been investigated in residential care workers, with compassion training deemed a promising approach to counteract burnout, anxiety, and depression on OHCWs, helping to improve their functioning and the quality of the care they provide (Santos et al., 2023).

Since compassion fatigue was first identified, research has focused primarily on health care occupations, such as nursing (Cavanagh et al., 2020; Xie et al., 2021). Comparatively, few studies appear to address compassion fatigue in OHCW. A recent review found 40 studies related to the study of compassion fatigue in health care, with just one study on child protection social workers (Sorenson et al., 2016). Similarly, Cocker and Joss (2016) conducted a systematic review, and identified 13 studies that met their inclusion criteria, of which 10 related to nursing (Cocker & Joss, 2016). Research into how the different type of out of home care work settings and their relationship with compassion fatigue has not, as of yet, been reviewed and evaluated. This is despite the increased need for OHCW as the demand for child placements increases, and the concerns in this setting with staff retention. Thus, there is a developing need for compassion fatigue to be better understood in out of home care settings.

This review aims to examine the existing literature to determine the extent to which out of home care work results in compassion fatigue, with the following specific research questions:

- Which out of home care work settings has compassion fatigue been investigated in?
- What methods have been used to measure compassion fatigue in OHCW?
- What factors within out of home care work settings contribute to the development of compassion fatigue?

Methods

Registration and Protocol

This systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Review (PRSIMA) (2020) model and was registered with the International Prospective Register of Systematic Reviews (PROSPERO) on 16 August 2021 (CRD42021273798).

Eligibility Criteria

Studies were required to meet the following criteria for inclusion:

- Examination of compassion fatigue, secondary traumatic stress, or vicarious trauma.
- Population of OHCW, defined as paid care workers, including residential care workers, treatment facility workers, and those providing foster care (in line with a recent scoping review of out of home care (Leloux-Opmeer et al., 2016)), who provided care to children aged 0–17 years.
- No search restrictions were applied to the year of publication, but studies were required to have been published in a peer reviewed journal with the full text available in English.
- Both quantitative and qualitative studies were eligible for inclusion.
- Cross-sectional and experimental studies were eligible for inclusion.

Whilst being intrinsically linked to compassion fatigue, burnout is a symptom, or predictor, of compassion fatigue, and according to Stamm (2005) needs to be measured on its own as well as in conjunction with the other indicators of compassion satisfaction and secondary traumatic stress. Hence studies that specifically focused on burnout without the other compassion fatigue indicators were not included.



Information Sources

Searches were conducted of five electronic databases, including CINAHL, MEDLINE, PsycINFO, PubMED and CENTRAL. Searches were conducted 1 July 2021 to 11 July 2021.

Search Strategy

The search string utilized was ("residential support worker*" OR "residential child care worker*" OR "residential care worker*" OR "institutionalization*" OR "foster parent*" OR "foster care*" OR "foster home care" OR "group home" OR "out of home care*" OR "youth residential care*" OR "youth care facilit*" OR "care facility*" OR "residential care*" OR "residential facilit*" OR "residential") AND ("empath*" OR "secondary trauma* stress" OR "secondary trauma*" OR "vicarious trauma*" OR "compassion fatigue").

Selection Process

Studies returned by the search were extracted into Covidence (Covidence systematic review software, Veritas Health Innovation, Melbourne, Australia. Available at www.covidence.org). A pilot was performed to ensure consistency in inclusion/exclusion of studies. The pilot included the identification of 100 studies using the pre-defined search terms from the electronic database CINAHL, which were subsequently downloaded. Authors (DS, TB, CG, MS) applied the defined inclusion criteria to the titles and abstracts of the pilot studies, verifying that the studies were consistently included or excluded. A subsequent search, utilizing the same search strategy was then conducted through the specified electronic databases from 1 July 2021 to 11 July 2021. Two authors (DS and CG) screened titles and abstracts to identify relevant articles. They worked independently, and without consultation, recording and reviewing the identified studies. Studies included at the title and abstract level were then screened at the full text level by the same screeners. Where the two screeners disagreed, a third screener (MS) was consulted. All screening was conducted with the support of systematic review software Covidence (Veritas Health Innovation, 2021) including noting reasons for exclusion at the full text stage.

Data Collection Process

Details of included studies were exported into Microsoft Excel version 2109 (2016), which was used to store information about study design and methodology, participant demographics and baseline characteristics, and numbers of events or measures of effect.

Data Items

Data extracted from the included studies were recorded in an extraction table, containing the author's details, year of publication, country of origin, type of OHCW, study setting, whether the study was measuring compassion fatigue, secondary traumatic stress or vicarious trauma, the study design, tests or scales used to measure outcomes (for quantitative studies: credible scales and measures such as the Professional Quality of Life Scale (ProQOL), Adverse Child Experience questionnaire (ACE), the Resilience Questionnaire, Self-Care Practices Questionnaire, Secondary Traumatic Stress Scale; for qualitative studies: themes identified from interviews with participants), statistical tests applied to results, demographic details of participants, and the outcomes of each study.

Risk of Bias Assessment

A structured approach to reduce the risk of bias in studies included in this review was achieved by utilizing the Joanna Briggs Institute (JBI) Critical Appraisal Checklists. The 12 cross-sectional studies were assessed utilizing the JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies (Joanna Briggs Institute, 2016) and the JBI Checklist for Quasi-Experimental Studies (Non-Randomised) Experimental Studies (Joanna Briggs Institute, 2020) was completed the one quasi-experimental study. The JBI Critical Appraisal Checklist for Qualitative Research was completed for the one qualitative study.

Synthesis Method

A narrative synthesis and appraisal of the studies were utilized to describe the findings, along with data extraction tables summarizing the statistics and overall quality of studies identified. The use of narrative synthesis was to allow "the story" of the findings in the studies to be told via words and text (Popay et al., 2006) due to the heterogeneity of their methods and settings. Quantitative descriptive analysis was conducted on the included studies. This identified the types of tests and measures that were applied, results from the different studies that measured rates of compassion fatigue, secondary traumatic stress, or vicarious trauma. Qualitative studies were thematically summarized to examine perceptions and issues identified by OHCW caring for children relating to compassion fatigue.

Results

Study Selection

The electronic database search returned 2,759 potential studies with 440 duplicates subsequently removed (Figure 1). The titles and abstracts of the

remaining 2,319 studies were then screened, and a further 2,260 studies were removed as they did not meet the inclusion criteria. The remaining 59 studies were retrieved for full text review with a further 44 studies excluded for the following reasons: not being the correct type of study (n = 22); not measuring compassion fatigue, secondary traumatic stress, or vicarious trauma (n = 16); did not relate to OHCW (n = 4); full text studies could not be located (n = 3). Fourteen studies were included in the final review.

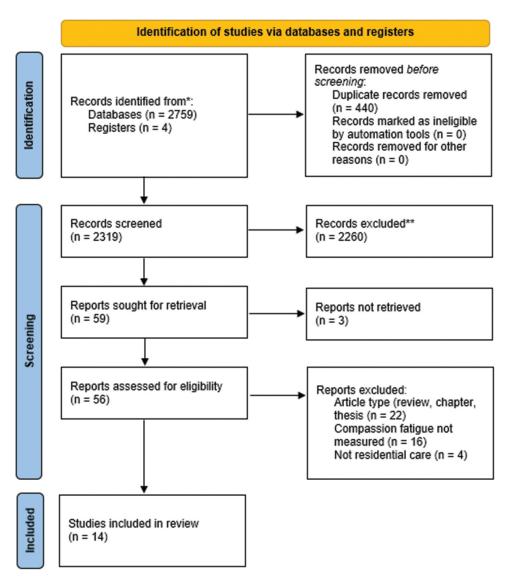


Figure 1. PRISMA (2020) flow diagram.

Quality Assessment

The JBI Critical Appraisal Checklist of cross-sectional studies revealed scores ranging from 28.57% to 71.43% (see Table 1), indicating that these studies are of a weak to moderate quality. The JBI Critical Appraisal Checklist used to analyze the quasi-experimental study revealed a score of 75% (see Table 2), indicating that this study was of moderate quality. The JBI Critical Appraisal Checklist for Qualitative Research indicated that the included qualitative study was of moderate quality (70%) (Table 3). The criteria that make up each JBI Critical Appraisal Checklist can be seen in the Supplementary Materials.

Q1: Which out of home care work settings has compassion fatigue been investigated in?

Table 1. JBI critical appraisal checklist for analytical cross-sectional studies.

				JBI Qu	estions					
Author	1	2	3	4	5	6	7	8	JBI Score	%
Borjanić Bolić (2019)	N	Υ	N	-	N	N	Υ	Υ	3	43
Bridger et al. (2020)	N	Υ	N	-	N	N	Υ	Υ	5	71
Eastwood and Ecklund (2008)	N	Υ	N	-	N	N	Υ	Υ	3	43
Hannah and Woolgar (2018)	Υ	Υ	Υ	-	N	N	Υ	Υ	5	71
Harker et al. (2016)	N	Υ	N	-	N	N	Υ	Υ	3	43
Hiles Howard et al. (2015)	N	Υ	N	-	N	N	Υ	U	2	29
Steen and Berhardt (2023)	Υ	Υ	N	-	N	N	Υ	Υ	4	50
Steinlin et al. (2017)	N	Υ	N	-	N	N	Υ	Υ	3	43
Teculeasa et al. (2023)	N	Υ	N	-	N	N	Υ	Υ	3	43
Whitt-Woosley et al. (2020)	N	Υ	Υ	-	N	N	Υ	Υ	4	57
Whitt-Woosley et al. (2022)	Υ	Υ	N	-	N	N	Υ	Υ	3	43
Zerach (2013)	N	Υ	Ν	-	N	N	Υ	Υ	3	43

Y = yes, N = no, U = unclear, - = not applicable. Higher total scores and percentages are indicative of higher quality documents. Note JBI criterion can be seen in Supplementary Materials.

Table 2. JBI checklist for quasi-experimental studies (non-randomised) experimental studies.

				JBI	Questi	ons					
Author	1	2	3	4	5	6	7	8	9	JBI Score	%
Garwood et al. (2020)	Υ	-	-	N	Υ	Υ	Υ	Υ	Υ	6	75

Y = yes, N = no, u = unclear, - = not applicable. Higher total scores and percentages are indicative of higher quality documents. Note JBI criterion can be seen in Supplementary Materials.

Table 3. JBI critical appraisal checklist for qualitative research.

					JBI Qı	uestion	S					
Author	1	2	3	4	5	6	7	8	9	10	JBI Score	%
McNamara (2010)	Υ	Υ	Υ	N	Υ	N	N	Υ	Υ	Υ	7	70%

Y = yes, N = no, u = unclear, - = not applicable. Higher total scores and percentages are indicative of higher quality documents. Note JBI criterion can be seen in Supplementary Materials.

Study characteristics from the 14 studies included in this review can be seen in Table 4. Out of home care settings included foster care arrangements (n = 6) (Bridger et al., 2020; Hannah & Woolgar, 2018; Harker et al., 2016; Steen & Berhardt, 2023; Teculeasa et al., 2023; Whitt-Woosley et al., 2020), residential care houses (n = 4) (Eastwood & Ecklund, 2008; Garwood et al., 2020; McNamara, 2010; Steinlin et al., 2017), (;), and four studies included mixed settings including foster, residential and boarding houses (Borjanić Bolić, 2019; Hiles Howard et al., 2015; Whitt-Woosley et al., 2022; Zerach, 2013). As outlined in Table 4, studies included in this review identified research on compassion fatigue and its components of secondary traumatic stress or vicarious trauma.

Six studies were conducted in the United States, two were conducted in Australia, two were conducted in the United Kingdom, one study in Romania, and one study was conducted in Israel, Switzerland, and Serbia. Participants across the 14 studies ranged in age from 22 to 73 years. Eight studies contained more than 50% female participants. Marital status was recorded in four studies, with > 59% of participants being married. Education levels were measured in five studies with the proportion of participants with tertiary level qualifications ranging from 35% to 100%. The amount of experience in out of home care was measured in five studies, with years of experience ranging from less than 1 year to over40 years.

Q2: What methods have been used to measure compassion fatigue in OHCW?

The quantitative studies included in this review used psychometrically valid tests to measure compassion fatigue in OHCW (Table 5). Measures used included the Professional Quality of Life (ProQOL) scale (n = 10), Resilience Questionnaire (n = 1), Sense of Coherence (SOC) scale (n = 2), the Group Environment (GES) scale (n = 1), and the Secondary Traumatic Stress Scale (STSS) (n = 3).

Qualitative methodologies were used by two included studies. Garwood et al. (2020) used mixed methods, with questions devised in line with the Sanctuary Model* Assessment that included 3 open-ended questions. Additionally, semi-structured interviews were used by McNamara (2010). These studies assessed compassion fatigue in OHCW before and after a program that was implemented, and results were thematically analyzed.

Q3: What factors influence compassion fatigue in the out of home care work environment?



 Table 4. Study and participant characteristics.

Authors	Country	Setting	Type of Worker	Demographic details	Outcome Measure (s)
Borjanić Bolić	Serbia	Foster and	Mixed sample of care	N = 135	Secondary
(2019)		residential care	workers across	85.9% female	Traumatio
		houses	a variety of	Age range < 35 to >55 yrs	Stress,
			settings	Experience range < 5 to >40 yrs	Vicarious
					Trauma
Bridger et al.	United	Foster homes and	Foster carers	N = 187	Secondary
(2020)	Kingdom	residential care	roster curers	81.3% female	Traumatio
(2020)	Kiligaoili	houses		Age range 23 to 72 yrs	Stress
		nouses		Experience range 2 to 5 yrs	stress
F	LICA	Destal and Leave	Destal and design	N = 57	C
Eastwood and	USA	Residential care	Residential care	:: - :	Compassion
Ecklund		houses	workers	75% female	Fatigue
(2008)				50.9% tertiary qualifications	
				Median age 29 yrs	
Garwood et al.	USA	Residential care	Child welfare staff	<i>N</i> = 164	Secondary
(2020)		houses	including	93% female	Traumatio
			residential care	Age range < 30 to 51+years	Stress
			workers	Experience range < 1 to 15+yrs	
Hannah and	United	Foster home	Foster carers	N = 131	Secondary
Woolgar	Kingdom			77.1% female	Traumatio
(2018)	.5			91.6% > 40 yrs	Stress
(2010)				66.4% married	51.055
				90.1% have children	
				49.6% tertiary/professional	
			5	qualifications	
Harker et al.	Australia	Foster home	Foster carers &	N = 133	Secondary
(2016)			Human service	79.7% female	Traumatio
			professionals	Age range 20 to 64 yrs	Stress
Hiles Howard	USA	Foster home	Mixed sample of	<i>N</i> = 192	Secondary
et al. (2015)			residential care	83.9% female	Traumatio
			workers across	Age range 24 to 71 yrs	Stress
			a variety of	59.3% married	
			settings	60.9% have children	
				100% tertiary qualification	
McNamara	Australia	Residential care	Residential care	N = 12	Vicarious
(2010)	Australia	houses	workers	10 Workers	Trauma
(2010)		Houses	WOIKCIS	2 Supervisors	Hadilla
Steen and	USA	Foster home	Foster carers	2 supervisors N = 47	Secondary
	USA	roster nome	roster carers		
Berhardt				43% female	Traumatio
(2023)				26% 31–45 years old	Stress
				Years as foster parent: $M = 6.8$, SD =	
				7.0	
Steinlin et al.	Switzerland	Residential care	Residential care	N = 319	Secondary
(2017)		houses	workers	61% female	Traumatio
				36% have children	Stress
				Age range 23 to 65 yrs	
				Experience range 0-38 yrs	
Teculeasa et al.	Romania	Foster home	Foster carers	N = 165	Secondary
(2023)				94% female	Traumatio
(2023)				Age $M = 49.4$, SD = 8.03	Stress
				59% high school graduates	
				3 3	Burnout
				58% work experience in child	
				protection services for >10 years	
				20% looking after > 3 children	_
Whitt-Woosley	USA	Foster home	Foster carers	<i>N</i> = 1161	Secondary
et al. (2020)				Age range 22 to 73 yrs	Traumati
				80.5% female	Stress
				83.4% married	Burnout
				34.7% tertiary qualifications	Compassion
				Years' experience: $M = 4.7$, SD = 5.2	Satisfaction
				Children fostered: $M = 11.4$, SD = 26.1	

(Continued)



Table 4. (Continued).

Authors	Country	Setting	Type of Worker	Demographic details	Outcome Measure (s)
Whitt-Woosley et al. (2022)	USA	Foster and residential care houses	Mixed sample of foster parents, child welfare professionals, educators, mental health professionals, health care professionals, and other helping professionals	 N = 550 84% female Age M = 42.77, SD = 10.54 77% married 73% foster parents 36% tertiary qualifications 	Secondary Traumatic Stress Burnout
Zerach (2013)	Israel	Residential care houses, boarding school houses	Residential care workers (RCW) and educational boarding school workers (BSW)	N = 147 (RCWs) 53.1% male 60.5% single 53.8% tertiary qualifications N = 74 (BCW) 44.6% male 78.4% single 60.8% tertiary qualifications	Secondary Traumatic Stress Burnout Compassion Satisfaction

Note: other outcome measures were investigated in the above studies, including burnout, however we are only reporting the measures used to assess secondary traumatic stress, vicarious trauma or compassion fatigue. Tertiary qualifications refer to certificate, undergraduate or graduate studies beyond secondary or high school level.

Work Related Factors

Compassion Satisfaction Seven studies examined the relationship between compassion fatigue and job or compassion satisfaction (defined as positive feelings derived from doing helping work effectively (Thomas, 2013). Compassion satisfaction was primarily measured with the ProQOL, which was utilized in seven studies. Hannah and Woolgar (2018) found a correlation between those with low intent to continue with fostering, compassion fatigue and compassion satisfaction. Similarly, Hiles Howard et al. (2015) found foster carers differed significantly from a normative sample on all ProQOL subscales, with foster carers reporting higher levels of compassion satisfaction, burnout, and compassion fatigue when compared to the normative sample. Teculeasa et al. (2023) suggested that compassion satisfaction, the perceived quality of relationship between foster carer and child, and the perceived closeness in the foster parent-child relationship were protective against compassion fatigue and contributed to lower compassion fatigue scores. No significant differences were found by Zerach (2013) between their sample of residential care workers compared to boarding school workers with respect to compassion fatigue and burnout, however residential care workers reported higher levels of compassion satisfaction than boarding school workers. In foster carers, Whitt-Woosley et al. (2020) found that on average, burnout was not reported in high levels, but high compassion satisfaction was evident in their sample. Bridger et al. (2020) also found higher than relative scores on compassion satisfaction

Table 5. Study design, measurement tools and results.

	Outcome			
Authors	Measure	Study Design	Data Collection Tool(s)	Summary of Results
Borjanić Bolić (2019)	Secondary Traumatic Stress	Cross- Sectional	ProQOL-V TABS	ProQOL-V STS: M = 50, SD = 10 20% of sample scored "Higher than average" TABS VT: M = 50, SD = 10 15% of sample scored "High" on total scale
Bridger et al. (2020)	Secondary Traumatic Stress	Cross- sectional	Mixed Methods Quantitative: ProQOL-V Professional Self-Care Scale Trauma Informed Self-Care Scale	No relationship between access to supervision and VT/5TS Quantitative: ProQOL-V: ProQOL-V: $p < .001$, followed by primary trauma ($\beta = 0.20$, $p < .001$), followed by primary trauma ($\beta = 0.20$, $p < .001$) and compassion satisfaction ($\beta = 0.19$, $p < .01$).
			thy Questionnaire y screen ed questions: (1) What helps you to maintain rellbeing, (2) what support do you most need Carer that is not available?	Empathy, resilience and self-care did not show any direct association with STS Qualitative: Q1 most frequent themes: Time with others (e.g., immediate family), exercise and social support Q2 most frequent themes: No concerns/need for further support, time off/respite and professional support
Eastwood and Ecklund (2008) Compassion Fatigue	Compassion Fatigue	Experimental Research	ProQOL-R-111 Self-Care Practices Questionnaire Demographics Questionnaire	ProQOL: Predictor of CF $-$ BO: ($p < .001$) $M = 18.95$, $SD = 6.80$ Realings of support outside work ($p = .025$) Reading for pleasure ($p < .01$) $M = 3.16$, $SD = 1.56$ Socialization negative correlation with BO: ($p < .05$) Self-perception of stress and BO positively correlated ($p < .001$)
				(Continued)

(Continued)

(s) Summary of Results	ProQOL-V prior to SMA training: STS and age: $(p < .001)$ ≤ 30 age group: $M = 23.28$, SD = 5.84 31–40 age group: $M = 21.84$, SD = 3.47 41–50 age group: $M = 19.14$, SD = 3.66 measuring trauma ProQOL-V: after SMA training: Self-care and level of STS: $(p < .001)$ Workplace TIC and STS: $(p < .001)$ Client TIC and STS: $(p = .005)$ Age-group, time & STS after SMA ≤ 30 age group vs 41–50 age group: $(p < .04)$ ≤ 30 age group vs 51+ age group: $(p = .05)$ Qualitative: Keyt-hamse: (1) increases in knowledge of the impact of training in	the workplace; (2) staff more supportive toward each other; and (3) staff had improved communication ProQOL and STSS correlation STSS: $(p < .01)$ BO: $(p < .01)$ CS: $(p < .01)$ Relationship between CF and intent to continue fostering: STS: $(p = .006)$ STS: Low intent $M = 37.9$, $SD = 6.3$ STS: High intent: $M = 24.7$, $SD = 6.5$ BO: $(p < .001)$ BO: Low intent $M = 19.4$, $SD = 5.4$ CS: $(p = .036)$ CS: Low intent $M = 19.4$, $SD = 5.4$
Data Collection Tool(s)	Mixed Methods: Quantitative: STS Subscale (ProQOL 5) Qualitative: Sanctuary Model® Assessment (SMA) 3 open ended questions from an 18-item "Sanctuary Model® Assessment" questionnaire measuring trauma informed care knowledge	ProQOL STSS
Study Design	Research Research	Cross- sectional
Outcome Measure	Secondary Traumatic Stress	Compassion Fatigue Burnout Compassion Satisfaction Secondary Traumatic Stress
Authors	Garwood et al. (2020)	Hannah and Woolgar (2018)

Table 5. (Continued).

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sults	BO: (p < .001) STS: (p < .001)	<.001) an ACE Scale: (p <.01) 5 5 .30	(Continued)
Summary of Results	Resilience Factor Inventory: High resilience correlated with lower BO: $(p < .001)$ BO: $M = 49.40$, SD = 9.81 High resilience correlated with lower STS: $(p < .001)$ STS: $M = 49.30$, SD = 8.48	ACE: Foster carers scores on ACE Scale: $(p < .001)$ Foster carers $M = 2.18$, $SD = 2.13$ Age $(p < .05)$ Higher Education level scored lower on ACE Scale: $(p < .01)$ Higher education: $M = 1.95$, $SD = 2.00$ Lower education: $M = 2.62$, $SD = 2.32$ Resilience Questionnaire: $M = 12.14$, $SD = 2.24$ GES: Education $(p < .05)$ higher education: $M = 50.21$, $SD = 5.65$ lower education: $M = 50.21$, $SD = 5.65$ lower education: $M = 52.08$, $SD = 6.36$ ProQOL: Difference in STS levels $(p < .001)$ STS participants $M = 24.10$, $SD 5.35$ STS normative sample $M = 13$, $SD = 6.30$ Gender $(p < .01)$ Females: $M = 24.58$, $SD = 4.67$ participants with children $(p < .05)$ Children: $M = 23.46$, $SD = 4.87$ No children: $M = 25.11$, $SD = 5.92$	
Data Collection Tool(s)	ProQOL	ProQOL CS score out of 50 Average score 23 or below BO score out of 50 below 23 reflects positive feelings high score 42 or above STS score out of 50 high score 41 or above Resilience Questionnaire Score out of 60 Developing resilience 0–37 Established resilience 44–48 Exceptional resilience 49–50 GGES Score range 0–9	
Study Design	Cross- sectional	sectional o	
Outcome Measure	Secondary Traumatic Stress Burnout	Secondary Traumatic Stress	
Authors	Harker et al. (2016)	Hiles Howard et al. (2015)	

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Authors	Outcome Measure	Study Design	Data Collection Tool(s)	Summary of Results
McNamara (2010)	Vicarious Trauma	Experimental Research	Semi-structured Interviews	Qualitative findings: Evaluation of the Staff Support and Supervision Program (SSSP) indicates it was relevant to: (1) identifying, (2) managing and (3) improving issues pertaining to STS and VT of staff. Achieved through: (1) professional development and (2) ways in which supervisors respond to staff with symptoms of STS and VT. Results were positive and justify trialing of SSSP in other youth instrince parters.
Steen and Berhardt (2023)	Secondary Traumatic Stress	Cross- sectional	64 question survey Secondary Traumatic Stress Scale (STSS) -17 questions Posttraumatic Growth Inventory (PTGI) -25 questions Help seeking questions ($n=12$)	STS total score: M = 38.23, SD = 10.28 Multiple regression with STS, Age, Race, Sought assistance from God/Spiritual Beings: Age (under 45 or over 45): foster parents over 45 had lower STS scores (p = .017) Race (White or Of Colour): White foster parents had higher STS scores (p = .21) Sought Assistance from God/Spiritual Beings: Seeking assistance from God/Spiritual Beings: Seeking assistance from God/Spiritual Beings: Seeking assistance
Steinlin et al. (2017)	Secondary Traumatic Stress Burnout	cross-sectional	Perceived Collective Efficacy SOC Self-Care Questionnaire Higher the score equals better self-care Physical Wellbeing 0–50 Mental/Emotional/Spiritual Wellbeing 0–50 Professional life/work 0–50 Social life/family 0–50 Questionnaire on Job Satisfaction in Trauma-Sensitive Care Burnout Screening Scale Score >60 indicates burnout	For every definition of the principle of the service of the collective efficacy: $(p < .001)$ Sense of Coherence: STS and Perceived collective efficacy: $(p < .001)$ Sense of Coherence: STS and SOC: $(p < .001)$ Self-Care Questionnaire: STS and self-care (work-related factors): $(p < .001)$ Questionnaire on Job Satisfaction in Trauma-Sensitive Care: STS and support from superiors/participation/transparency: $(p < .001)$ STS and communication and support within team: $(p < .001)$ STS and pleasure doing work: $(p < .01)$ STS and institutional structures and resources: $(p < .001)$ Lower STS symptoms correlated to communication and support within the team: $(p < .05)$ Lower STS symptoms and institutional structures and resources: $(p < .05)$
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Authors	Outcome Measure	Study Design	Data Collection Tool(s)	Summary of Results
Teculeasa et al. (2023)	Compassion Fatigue	cross- sectional	Professional Quality of Life Questionnaire (ProQOL) – 30 questions The quality of foster parent-child relationship – 1 question	ProQOL: BO $M = 16.71$, $SD = 5.29$ STS $M = 19.73$, $SD = 6.14$ Zero order correlations: Positive association between STS and BO $(p < .001)$ High levels of sensitivity to trauma associated with high levels of BO and STS $(p < 0.05)$ Negative correlations between job satisfaction and BO $(p < .001)$ and STS $(p < 0.01)$
Whitr-Woosley et al. (2020)	Secondary Traumatic Stress Burnout Compassion Satisfaction	sectional sectional	STSS Scores Little or no STS < 28 Mild STS 28–37 Moderate STS 38–43 High STS 44–48 Severe STS > 48 ProQOL	STSS: Positive relationship between participants BO and STS: $(p < .001)$ Negative relationship between participants CS and STS: $(p < .001)$ Negative relationship between practical support and STS $(p < .001)$ Negative relationship between emotional support and STS $(p < .001)$ Negative relationship between emotional support and STS $(p < .001)$ ProQOL: CS: $M = 4.236$, SD = 5.9 RO: $M = 3.198$, SD = 5.6
Whitr-Woosley et al. (2022)	Secondary Traumatic Stress Burnout	sectional sectional	21-item STSS for Diagnostic and Statistical Manual of Mental Disorders 30-item Professional Quality of Life: Compassion Satisfaction and Fatigue Scale Version 5 (ProQOL)	PROQUE. BO: $M = 20.99$, SD = 6.02 STSs. $M = 36.55$, SD = 12.45 Pandemic stress, BO, STS: Positive relationship between increased COVID worry and STS ($\rho < 0.00$) Family conflict/violence positive associated with STS ($\rho < 0.00$) and BO ($\rho < 0.00$) Less social support associated with increased STS ($\rho < 0.00$) and BO ($\rho < 0.00$) Less food access associated with increased STS ($\rho < 0.00$) and BO ($\rho < 0.00$) Lever family income/employment associated with increased STS ($\rho < 0.00$) and BO ($\rho < 0.00$)
				and BO (p <0.00)

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Authors	Outcome Measure	Study Design	Data Collection Tool(s)	Summary of Results
Zerach (2013)	Secondary Traumatic Stress Burnout Compassion Satisfaction	Sectional sectional	ProQOL Experiences in Close Relationships Scale 36 item self-report questionnaire measuring attachment and close relationships using 7-point scales. Dimensions: anxiety and avoidance Mean score on each dimension calculated Sense of Coherence (SOC) Scale 29-item self-report scale measuring comprehensibility, manageability, and meaningfulness, and an overall score Score range 29–203 with higher scores reflecting higher SOC. Daily Spiritual Experience Scale 16-item self-report scale to assess perception of the transcendent	ProQOL: Difference in CS between groups: $(p < .05)$ RCWs levels CS: $M = 39.58$, $SD = 5.50$ BSWs levels CS: $M = 37.91$, $SD = 6.51$ No difference between groups for STS or BO Experiences in Close Relationships Scale Difference in attachment-anxiety between groups: $(p < .001)$ RCWs attachment-anxiety: $M = 3.01$, $SD = .94$ BSWs attachment-anxiety $M = 3.32$, $SD = 1.01$ Attachment anxiety predictive of: $STS: (p < .001)$ CS: $(p < .001)$ CS: $(p < .001)$ SOC and $STS: (p < .001)$ SOC and Heierachical Regression of Factors: Interaction between Age/Gender/Traumatic Experience and $STS: (p < .001)$ RCWs higher CS than BSWs: $(p < .001)$
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Table 5. (Continued).

STS = Secondary Traumatic Stress.
VT = Vicarious Trauma.
ProQOL = Professional Quality of Life Scale.
TABS = Trauma and attachment belief scale.
GES = Group Environment Scale.
BO = burnout.
CS = Compassion Satisfaction.



in foster carers, suggesting that this may be mitigating the overall distress levels among their participants.

Job satisfaction was measured with the Questionnaire on Job Satisfaction in Trauma-Sensitive Care (Hannah & Woolgar, 2018), and two Likert scales developed from previous studies were utilized (Steinlin et al., 2017). Participants with low job satisfaction had significantly higher compassion fatigue and burnout scores, and lower compassion satisfaction scores (Hannah & Woolgar, 2018). Steinlin et al. (2017) also identified a correlation between higher job satisfaction (measured by support from employer, communication with peers, pleasure in doing work and, organizational structures and resources) and lower secondary traumatic stress symptoms.

Exposure to Trauma and Violence within Workplace Four studies (Borjanić Bolić, 2019; Hannah & Woolgar, 2018; Steinlin et al., 2017; Whitt-Woosley et al., 2020) collected data on workers' exposure to trauma, either vicariously through the children they provided care to or through threats or acts of violence directed toward them. A significant number of foster carers were exposed to children's trauma, with Whitt-Woosley et al. (2020) finding that 77.8% of foster parents reported distressing thoughts or feelings about their child's trauma for more than 30 days and 25.8% of these foster parents described this distress as moderate to extreme. In the study by Steinlin et al. (2017) approximately 83% of residential care workers reported experiencing an assault or threatening situation during work, which could have resulted in death or injury, and 73% of residential care workers reported having heard or read about at least one traumatic event in the life of a child or adolescent. In foster care settings, Hannah and Woolgar (2018) also found that 48% of carers had been physically hurt or threatened by a young person in their care. Borjanić Bolić (2019) found that residential workers who spent up to half of their working hours directly working with youths in care reported compassion fatigue at higher rates than workers who had longer periods of exposure.

Burnout The relationships between compassion fatigue and burnout were examined in five studies. Whitt-Woosley et al. (2020) found significant relationships between reported levels of burnout and compassion satisfaction in foster carers. In residential care workers, Eastwood and Ecklund (2008) found a relationship between burnout and compassion fatigue. Similarly, Bridger et al. (2020) found compassion fatigue in foster carers was directly and positively predicted by burnout and primary trauma. Hiles Howard et al. (2015) did not report the relationship between burnout and compassion fatigue but did identify that those who were more direct care providers (as compared to indirect care providers) predictably reported less burnout. Zerach (2013) also didn't report the interaction between burnout and secondary trauma, however, did report that males were more likely to report burnout than females.



Other The impact of the COVID-19 pandemic was explored in Whitt-Woosley et al. (2022), who found significant increases in compassion fatigue symptoms including intrusion and alterations in cognition and mood.

Individual Factors

Resilience

Resilience was one of the individual factors investigated in relation to compassion fatigue, however, was only measured in two studies. Hiles Howard et al. (2015) found high levels of supportive factors and resilience were correlated with lower levels of compassion fatigue. Harker et al. (2016) also found higher scores on resilience correlated to lower scores on compassion fatigue. When mindfulness was added to the regression it was found that higher scores on mindfulness were related to lower levels of psychological distress (Harker et al., 2016).

Sense of Coherence Two studies investigated sense of coherence (SoC) in relation to compassion fatigue. SoC is defined as the extent to which one has a pervasive, enduring yet dynamic feeling of confidence that the internal and external environment are predictable, and that there is a high probability that things will work out as well as can reasonably be expected. SoC was found to predict compassion fatigue and burnout, but not compassion satisfaction (Zerach, 2013). Steinlin et al. (2017) also found correlation between sense of coherence and lower compassion fatigue symptoms.

Psychological traits Two studies looked at individual psychological traits of OHCWs in relation to compassion fatigue. For example, attachment anxiety (Zerach, 2013) and thought suppression (Hannah & Woolgar, 2018), were found to significantly impact compassion fatigue levels in residential care workers and foster carers. Attachment anxiety was positively associated with compassion fatigue and negatively related to compassion satisfaction (Zerach, 2013). Higher levels of psychological inflexibility and increased thought suppression were associated with higher compassion fatigue, with thought suppression positively associated with compassion fatigue (Hannah & Woolgar, 2018).

Age Mixed results were evident in relation to the impact of age on compassion fatigue in OHCW. For example, some studies found that younger age was associated with increased compassion fatigue. Steen and Berhardt (2023) found that older foster parents had significantly lower scores on the STSS. Garwood et al. (2020) utilized results from residential care workers on the ProQOL questionnaire comparing participants by age group. They found that compassion fatigue was correlated with age for the under 30 years, 30-40 years, 41-50 years, and over 51-year groups, with younger workers reporting higher levels (Garwood et al., 2020). Harker et al. (2016) also found age was not significantly correlated to compassion fatigue levels. However, Bridger



et al. (2020) found no significant impact of age on compassion fatigue in foster carers.

Gender Just two studies compared outcomes based on gender. Bridger et al. (2020) found that female OHCW reported higher levels of compassion fatigue than male OHCW (Bridger et al., 2020). Similarly, Hiles Howard et al. (2015) found that female OHCW reported higher levels of compassion fatigue than males.

Having their Own Children Two studies also investigated whether workers having their own children impacted compassion fatigue. Hannah and Woolgar (2018) found that workers with their own children had lower levels of compassion fatigue than those workers that did not. However, the only other study that examined this did not find a significant effect (Hiles Howard et al., 2015).

Education Only one study investigated the impact of education and found that overall education was not a significant predictor of compassion fatigue based on scores from the Resilience Questionnaire (Hiles Howard et al., 2015).

Support Strategies

Staff Supervision and Workplace Support Three studies investigated the role of supervision and workplace supports in mitigating the impacts of compassion fatigue. For example, the evaluation of the Staff Supervision and Support Program by McNamara (2010) indicates the program was relevant to identifying, managing, and improving issues pertaining to compassion fatigue of staff at a residential treatment facility. This was achieved through professional development and the ways in which supervisors respond to staff with symptoms of compassion fatigue. The thematic analysis done by Garwood et al. (2020) examined the effect of the Sanctuary Model® Assessment with their findings indicating that changes in staff awareness of the impact of trauma have led to more support across teams, including more one-on-one time and adjustments to how staff approach interactions with each other in the workplace (Garwood et al., 2020). Steinlin et al. (2017) also found that increased communication and support within the team and institutional structures and resources correlated with fewer compassion fatigue symptoms.

Support Outside of Work Support factors outside the work environment were discussed by two studies in relation to protecting against compassion fatigue. Eastwood and Ecklund (2008) found that feelings of being supported outside of work were a protective factor against the negative component of compassion fatigue and burnout. The study by Whitt-Woosley et al. (2020) found that the number of foster parenting resources utilized, and general caregiver support as important to reducing burnout and compassion fatigue symptoms of foster carers. They found that foster carer support was



a significant beneficial factor, as was emotional support, on lowering compassion fatigue levels (Whitt-Woosley et al., 2020).

Self-Care Four studies examined self-care practices of residential care workers and foster carers, and whether that provided a protective measure against compassion fatigue. This was assessed with scales such as the Professional Self-Care Scale, the Trauma Informed Self-Care Measure, and questionnaires devised by the authors themselves. Reading and socialization with family were identified as self-care methods which acted as protective factors against compassion fatigue in residential care workers (Eastwood & Ecklund, 2008). Bridger et al. (2020) found self-care had an indirect effect on reducing compassion fatigue and was correlated with empathy and resilience. Self-care was also assessed in Garwood et al. (2020) where participants who undertook the Sanctuary Model® Assessment outlined how the model facilitated increased self-awareness and encouraged permission for self-care.

Discussion

This systematic review evaluated the evidence addressing compassion fatigue in OHCW. In particular, it focused on which out of home care settings compassion fatigue has been assessed in, how compassion fatigue has been measured, and what factors contribute to compassion fatigue. Findings from this review indicated that compassion fatigue and associated constructs have been investigated in a range of out of home care settings though there was limited evidence available for all settings in comparison to other industries (i.e., only 14studies in total). Compassion fatigue was generally measured via self-report on validated scales, though some studies used non-validated self-report measures. Overall, a range of work-related factors (e.g., job and compassion satisfaction, exposure to trauma and violence, burnout), individual factors (e.g., age, gender), and support strategies (e.g., supervisor support, support outside of work) contributed to compassion fatigue.

Which Out of Home Care Work Settings Has Compassion Fatigue Been Investigated In?

Compassion fatigue (encompassing related terms secondary traumatic stress, or vicarious trauma) were assessed in each type of OHCW included in this review (residential care workers, foster carers and residential treatment workers) and their associated settings. Evidence was spread across a number of countries; however, the majority of studies were undertaken in the United States. The included studies were predominantly from English-speaking countries due to the search restrictions; however, this may also point to higher



concern for OHCW in particular regions. For example, the high rates of children being placed in residential care and foster care in the United States (United States Department of Health and Human Services, 2017), Australia (Australian Institute of Health and Welfare, 2021), and the United Kingdom (GOV.UK, 2022) may have led to these studies being more likely to be conducted.

In conducting this review, it was evident that there is ambiguity surrounding the terms compassion fatigue, secondary traumatic stress, and vicarious trauma. This review suggests that in out of home care settings, the terms compassion fatigue and secondary traumatic stress outweighed the use of vicarious trauma. However, there appeared to be some overlap in the use of these terms across studies.

Although the evidence in this space is limited and should be grown in all settings, foster care settings are currently the higher researched setting (6 out of 14 studies). Four of the studies also did investigate multiple settings and types of workers within the one study. Arguably, workers in residential care settings and residential care treatment facilities (through the nature of design and requirement to care for higher numbers of children per setting), are potentially at higher risk for compassion fatigue (Audin et al., 2018); yet less researched. Prevalence of foster care versus residential care settings may be causing this, but it may be of interest to investigate further.

What Methods Have Been Used to Measure Compassion Fatigue in OHCW?

The scale most used to measure compassion fatigue in OHCW was the ProQOL questionnaire (Stamm, 2005). This scale has been extensively used to measure the components of compassion fatigue, burnout, and compassion satisfaction, has been continually updated, is reliable and valid, and has been translated into other languages (Stamm, 2005). Interestingly, only one study measured resilience. The focus was also largely on the individual, and less so on the residential setting or environment. This is likely due to most studies focusing on foster care, however, could be a key factor in supporting and reducing the impacts of compassion fatigue for OHCW.

What Factors within Out of Home Care Settings Contribute to the Development of Compassion Fatigue?

Work Related Factors

According to Stamm (2005) compassion fatigue comprises high levels of secondary traumatic stress (or vicarious trauma) and burnout with low levels of compassion satisfaction. The development of compassion fatigue occurs for OHCW through prolonged exposure to the traumatic details of the children that they provide care to (Stamm, 2005). Length of time and rate of exposure (to traumatized children) was a significant predictor of secondary traumatic stress (Borjanić Bolić, 2019; Whitt-Woosley et al., 2020). OHCW are at a significant risk of exposure to trauma and violence within the workplace. Extremely high rates of exposure were reported in the studies included and are likely to be reflected in other settings that have not yet been investigated. A larger scale study to investigate the prevalence and nature of the exposure to trauma and violence in these workplace settings may be justified, but more importantly, supporting and providing training and appropriate counseling or responses to OHCWs is essential. As one of the largest groups of OHCW (Australian Institute of Health and Welfare, 2022), foster care providers may be at higher risk than residential care workers, as they would be living in their own environment and will not have the support of other workers. However, this could also be a protective factor, and residential care workers are also expected to work under shift work environments which can also be problematic for a number of additional reasons (e.g., sleep, impacts on home life etc.) (Dorrian et al., 2017). Interventions could potentially look to support workers who have experienced certain rates of exposure to trauma or violence within the workplace or have been working for particular periods of time and may exhibit symptoms of burnout, by intervening prior to workers choosing to remove themselves from the situation by quitting or relocating.

Importantly, while burnout has been conceptualized as a contributing factor to compassion fatigue, and therefore strategies to address burnout will also reduce compassion fatigue, some argue that there are questions remaining about the directionality of the relationship and how much compassion fatigue may contribute to overall burnout. Further understanding and research into the specific needs of those struggling with compassion fatigue could tease this out further.

Several included studies found that higher levels of job satisfaction were also associated with reduced compassion fatigue (Hannah & Woolgar, 2018; Steinlin et al., 2017; Zerach, 2013). This suggests that improving OHCW level of job satisfaction may provide a mitigating effect against the negative effects of compassion fatigue, which in turn may improve intent to remain in this profession, providing stability for children in care. Similarly, Hannah and Woolgar (2018) found that greater intent to continue to work as a foster carer was associated with lower levels of compassion fatigue and burnout, and higher compassion satisfaction scores (Hannah & Woolgar, 2018).

Individual Factors

There was some evidence that certain demographic factors, such as whether OHCW had their own children, age, and gender, may affect compassion fatigue (Garwood et al., 2020; Harker et al., 2016; Hiles Howard et al., 2015). Taken together, this evidence is inconclusive, and therefore may require further investigation as to whether certain groups should be targeted for intervention or protection measures against compassion fatigue. For example,



11 of 14 studies had over 50% female participants suggesting this is a more female dominated industry and it may be worthwhile to target interventions accordingly.

Further investigation into resilience and sense of coherence (which has been linked to health variables including psychological wellbeing, social support, stress, and adaptive coping strategies) (Olsson et al., 2006), in developing protective strategies for OHCW against the impacts of compassion fatigue is also recommended.

Support Strategies

Out of the 14 studies included in this review, only 2 investigated interventions to support OHCW with compassion fatigue (Garwood et al., 2020; McNamara, 2010). Trauma informed care (Kim et al., 2021) and staff supervision and support (Dehlin & Lundh, 2018) had promising results and are evident in the wider literature. This suggests they should both be key components of professional development and ongoing support for OHCWs, but should also be investigated more widely, alongside other strategies. Encouraging OHCW to seek emotional and practical support such as training outside of work (particularly where work environments are not currently providing such things) may also reduce the impacts of compassion fatigue and secondary traumatic stress in this population (Gentry et al., 2004). However, arguably this is too much to ask, and this training and support should be built into their work rather than eating into their free time as well. Self-care has some promising but inconclusive evidence in its effect on compassion fatigue (Eastwood & Ecklund, 2008).

The Staff Support and Supervision Program in McNamara (2010) looked at improving levels of support for workers, and the Sanctuary Model® Assessment (Garwood et al., 2020) was used to determine if increased knowledge in trauma and self-care was effective against compassion fatigue. Both programs provided some insight into the benefits that interventions can have in reducing compassion fatigue (Garwood et al., 2020; McNamara, 2010).

Limitations of Evidence

Out of the fourteen included studies, just two were published prior to 2016. This suggests that research into the impact that out of home care work on compassion fatigue is still in its infancy. As a result, the range of evidence available for this review was limited. After the JBI Checklists were applied, the studies were also assessed as only from weak to moderate quality. As such, we must be cautious in generalizing all results to the broader populations of OHCW. A further issue with the quality of the studies can be seen with the lack of power analyses, which was only reported by two included studies. It is therefore possible that some studies may have been underpowered, further limiting generalizability.



Limitations of Review Process

The review process confirmed that there is significant confusion in terminology across the literature investigating and describing compassion fatigue, such as secondary traumatic stress, vicarious trauma, and burnout, which are often used interchangeably (Salmond et al., 2019). However, according to Stamm (2005) secondary traumatic stress, burnout and compassion satisfaction are separate traits that need to be measured separately. Whilst being intrinsically linked to compassion fatigue, burnout is a symptom, or predictor, of compassion fatigue, and according to Stamm (2005) needs to be measured on its own as well as in conjunction with the other indicators of compassion satisfaction and secondary traumatic stress. Hence, studies that specifically focused on burnout without the other compassion fatigue indicators were not included. This could have excluded studies in which other psychometric tests that measure burnout, such as the Maslach Burnout Inventory (Maslach et al., 1997), that has been previously used to study this component of compassion fatigue in out of home care work settings. Our eligibility criteria were designed to capture both cross-sectional and experimental studies and did not exclude any particular methodologies. While this allowed us to determine how compassion fatigue has been assessed and measured in residential care settings, results reported on experimental studies could be linked to the intervention as opposed to the setting itself. Whilst a thorough and reproducible search strategy was designed for this systematic review, some studies may have been missed if they were contained on databases other than the five that were searched. Furthermore, only full text studies in English were included. Studies in other languages may have provided international context that may have provided further supplemental evidence for this review.

Implications and Future Directions

Despite the high levels of compassion fatigue identified in OHCW, few studies included interventions to improve outcomes in this population. Due to the nature of work being conducted in this setting, and the extremely high rates of exposure to children's trauma, as well as violence toward themselves in the workplace, OHCW are arguably inevitably going to experience compassion fatigue at some point. Therefore, we need to move beyond recording and problematizing these constructs and experiences, toward interventions and protective factors for these vital carers. This is likely due to the nature of out of home care work, with a lack of control over the trauma these workers are exposed to. There is an indication that some interventions, such as those examined in McNamara (2010) and Garwood et al. (2020) may minimize some of the risk of compassion fatigue. These interventions are based on improving OHCW understanding of trauma, communication and support via internal organizational programs or with a program such as the Staff Supervision and Support Program. Early findings suggest that those programs may be beneficial and warrant further study to determine their efficacy in different out of home care settings (Garwood et al., 2020; McNamara, 2010). While this was not the intended focus of our review, future reviews may look to target more experimental studies that have introduced interventions to support OHCW with compassion fatigue.

Compassion fatigue has been identified as a condition that poses a risk to OHCW across the world. With an ongoing need for OHCW, the identification of factors that influence their wellbeing, level of job satisfaction, and intent to continue working in this area is invaluable. This review indicated that, as expected, out of home care work is associated with compassion fatigue, in workers. These outcomes were seen across a range of out of home care settings. However, it appears that there are certain personal and situational factors (e.g., levels of support) which are likely to be protective against compassion fatigue. Furthermore, this review identified that there are a range of validated quantitative and qualitative measures used to identify compassion fatigue and associated psychological outcomes, which will ideally be used to grow this field of research.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Tessa Benveniste (b) http://orcid.org/0000-0002-7189-5118 Charlotte C Gupta http://orcid.org/0000-0003-2436-3327 Stephanie E Chappel (b) http://orcid.org/0000-0001-6559-8929 Madeline Sprajcer http://orcid.org/0000-0002-4966-871X

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