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# Burnout in psychosocial oncology clinicians: A systematic review

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## Review Article

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## Abstract

**Objective.** Few studies have examined burnout in psychosocial oncology clinicians. The aim of this systematic review was to summarize what is known about the prevalence and severity of burnout in psychosocial clinicians who work in oncology settings and the factors that are believed to contribute or protect against it.

**Method.** Articles on burnout (including compassion fatigue and secondary trauma) in psychosocial oncology clinicians were identified by searching PubMed/MEDLINE, EMBASE, PsycINFO, the Cumulative Index to Nursing and Allied Health Literature, and the Web of Science Core Collection.

**Results.** Thirty-eight articles were reviewed at the full-text level, and of those, nine met study inclusion criteria. All were published between 2004 and 2018 and included data from 678 psychosocial clinicians. Quality assessment revealed relatively low risk of bias and high methodological quality. Study composition and sample size varied greatly, and the majority of clinicians were aged between 40 and 59 years. Across studies, 10 different measures were used to assess burnout, secondary traumatic stress, and compassion fatigue, in addition to factors that might impact burnout, including work engagement, meaning, and moral distress. When compared with other medical professionals, psychosocial oncology clinicians endorsed lower levels of burnout.

**Significance of results.** This systematic review suggests that psychosocial clinicians are not at increased risk of burnout compared with other health care professionals working in oncology or in mental health. Although the data are quite limited, several factors appear to be associated with less burnout in psychosocial clinicians, including exposure to patient recovery, discussing traumas, less moral distress, and finding meaning in their work. More research using standardized measures of burnout with larger samples of clinicians is needed to examine both prevalence rates and how the experience of burnout changes over time. By virtue of their training, psychosocial clinicians are well placed to support each other and their nursing and medical colleagues.

## Introduction

Burnout has received increased attention in the medical literature over the last three decades culminating in recent efforts to promote the importance of resilience training and self-care for medical providers (Meier et al., 2001; Kearney et al., 2009; Sanchez-Reilly et al., 2013; Gillman et al., 2015; Back et al., 2016; Rotenstein et al., 2018). Burnout, defined as a "psychological syndrome emerging as a prolonged response to chronic interpersonal stressors on the job" (Maslach and Leiter, 2016, p. 103), is characterized by emotional exhaustion (EE), cynicism, and a sense of ineffectiveness, most commonly measured by the Maslach Burnout Inventory (MBI) (Maslach and Jackson, 1981; Maslach et al., 1997). To date, the majority of research on burnout within medicine in general, and oncology in particular, has focused on nurses and physicians and its impact on provider well-being and the delivery of patient care (Khamisa et al., 2013; Shanafelt et al., 2014a; Ko and Kiser-Larson, 2016; Cañadas-De la Fuente et al., 2018; Pradas-Hernández et al., 2018; Rotenstein et al., 2018). Despite great variability in prevalence rates and marked variation in the definition of terms and assessment



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methods (Rotenstein et al., 2018), the consequences of burnout include poor work–life balance, poor mental and physical health, increased staff turnover and workforce shortages, and increased errors and compromised patient care (Khamisa et al., 2013; Shanafelt et al., 2014a,b; Murali and Banerjee, 2018).

Oncology nursing is considered a profession at risk for high rates of burnout because of the constant emotional stress of caring for ill and dying patients (Davis et al., 2013). A recent systematic review of oncology nurses found that 30% experienced EE, 15% experienced depersonalization (DP) (cynicism), and 35% experienced low personal performance, as measured by the MBI (Cañadas-De la Fuente et al., 2018). Similarly, for oncologists, the demands associated with caring for increasing numbers of cancer patients set within the context of a rapidly changing and complex scientific field, present numerous challenges that have the potential to lead to burnout (Murali and Banerjee, 2018). A large survey examining satisfaction with work–life balance and career plans of oncologists found that 45% of surveyed oncologists were "burned out" based on their scores on the MBI (Shanafelt et al., 2014a). Female oncologists and those who spent more time providing patient care were less likely to be satisfied with their work–life balance (Shanafelt et al., 2014b). Further, burnout and satisfaction with work–life balance were the strongest predictors of an oncologist's intention to reduce their clinical hours and to leave their current role (Shanafelt et al., 2014b).

Ironically, even though psycho-oncology can be considered to be one of the most emotionally challenging aspects of oncological care, research in this area has almost exclusively focused on medical oncology providers. Very few studies have specifically addressed burnout in psychosocial oncology clinicians. The intense nature of the therapeutic relationship with often acutely distressed patients in catastrophic situations could also lead to other emotional consequences for psychosocial oncology clinicians, such as compassion fatigue and secondary trauma. While the terms, burnout, compassion fatigue, and secondary trauma, are sometimes used synonymously, the concepts may be more nuanced. Figley (2002), for example, described compassion fatigue as a type of burnout in psychotherapists and theorized that secondary trauma leads to compassion fatigue. Nonetheless, all can be thought of as "the cost of caring."

Hence, we conducted a systematic review of burnout, compassion fatigue, and secondary trauma in psychosocial oncology clinicians, an understudied population in oncology care. A better understanding of burnout in these clinicians could facilitate the development of practices and interventions to reduce burnout in a diverse group of oncology clinicians, not limited to medical oncology nurses and oncologists. The systematic review proposed the following two questions:

1) What is known about the prevalence and severity of burnout in psychosocial clinicians who work in oncology settings?
2) What factors are believed to either contribute to or protect against burnout in our target population?

We only evaluated empirical studies that addressed burnout in psychosocial clinicians, including psychologists, psychiatrists, social workers, and child life specialists, who work in oncology settings. While our focus was on burnout, we broadened our search to include compassion fatigue, EE, vicarious trauma, and secondary trauma. We discuss the implications of our findings within the context of further research, clinical training and practice, for both current and future psychosocial oncology clinicians.

## Methods

### Protocol and registration

The systematic review protocol was registered with the International Prospective Register of Systematic Reviews (PROPERO) on January 7, 2019, and the registration number is CRD42019118750.

### Eligibility criteria and search strategy

We conducted a systematic literature review examining burnout in psychosocial clinicians in oncology settings. Relevant studies were identified by searching PubMed/MEDLINE (National Library of Medicine), EMBASE (Elsevier; 1974–present), PsycINFO (EBSCO), the Cumulative Index to Nursing and Allied Health Literature (CINAHL, EBSCO), and the Web of Science Core Collection (Clarivate Analytics) on September 7 and 10, 2018. We updated the search on October 3, 2019. Controlled vocabulary terms were included as appropriate and when available. The search strategies were designed and executed by a Harvard Medical School research librarian (PAB). No language limits or year restrictions were applied. Exact searches for each database are shown in Supplementary Appendix 1. This review is reported following the statement of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (Moher et al., 2009).

### Inclusion/exclusion criteria

A study was included if it: (1) quantitatively measured burnout, compassion fatigue, or secondary trauma in psychosocial oncology clinicians. Psychosocial oncology clinicians were defined as social workers, psychologists, psychiatrists, child life specialists, and psychosocial nurses who primarily provide psychosocial care to patients receiving cancer treatment; and (2) was published in English. A study was excluded if it: (1) was published as an abstract only, (2) was a review paper, or (3) had no relevance to our review questions.

Unique records were identified and independently screened for eligibility by three pairs of authors (LN, NAB; ARC, EA; and ACM, TH) and verified by two authors (IMB and WFP). Consensus was reached for any case in which there was disagreement. Using the Covidence systematic review software, Veritas Health Innovation, Melbourne, Australia, three authors (HP, JP, and MY) screened the identified nine studies and extracted the following baseline characteristics from the original articles: lead author, year of publication, study design, clinician type, setting, country, sample size, mean age of sample, assessments used, prevalence of burnout, and factors that contribute to or protect against burnout (Table 1). Methodological quality and risk of bias was assessed for each study as shown in Table 2 using the Joanna Briggs Institute Critical Appraisal Checklist for Studies Reporting Prevalence Data (Munn et al., 2015).

## Results

### Included studies

Seven hundred and eighty-nine records were retrieved by database searching resulting in 504 potential records (Figure 1). Four hundred and sixty-six records were excluded at title and abstract levels. We reviewed 38 articles at the full-text level, and of those, 9 articles met study inclusion criteria.

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**Table 1.** Findings from studies included in systematic review of burnout in psychosocial oncology clinicians

| Author, year | Design | Clinician type | Setting | Country | *N* | Mean age | Measure(s) | Primary results — prevalence of burnout | Secondary results — contributing/ protective factors |
|---|---|---|---|---|---|---|---|---|---|
| Eelen et al. (2014) | Cross-sectional survey — mail | Oncology healthcare workers | Private hospital 72.2%<br>Academic hospital 22.6% | Belgium | *N* = 550<br>Physicians *n* = 77<br>Psychologists *n* = 88<br>Social workers *n* = 72<br>Specialist nurses *n* = 36<br>Nurses *n* = 266<br>Other oncology professionals *n* = 11<br>Female 80.3% | NR "most between 30 and 50 years old" | MBI-Human Services, three subscales: EE, DP, personal accomplishment (PA) | 2% reported all symptoms of burnout.<br>Problematic level of EE: 38.9% of physicians in oncology, 13.8% of psychologists, 20.9% of social workers, 22.2% of specialist nurses, and 20.8% of nurses<br>High level of DP: 27.6% of physicians in oncology, 21.5% of nurses, 16.4% of social workers, 11.6% of psychologists, and 8.3% of specialist nurses<br>Problematic level of PA: 17.6% of nurses, 14.9% of social workers, 9.6% of psychologists, 6.7% of physicians, and 5.7% of specialist nurses<br>Group differences:<br>Physicians show significantly higher mean scores on EE compared with other psychologists, SW, specialist nurses, and nurses.<br>Physicians have significantly higher mean scores on DP compared with psychologists, SW, specialist nurses, and nurses.<br>Nurses have significantly higher mean scores on DP compared with psychologists and specialist nurses. Nurses suffer significantly more from problematic levels of PA compared with physicians and specialist nurses.<br>SW suffer significantly more from problematic levels of PA compared with psychologists and specialist nurses. | |
| Fisackerly et al. (2016) | Cross- sectional survey — online | Certified Child Life Specialists (CCLS) recruited through the Child Life Council's online forum | Various medical specialty units: outpatient, ER, Heme/oncology, acute/general pediatrics, specialty inpatient, ICU/NICU, Radiology, Other (not specified) | USA | *N* = 154<br>Female 98.0%<br>White 93.5% | *M* = 32.35, SD = 8.42 | Professional Quality of Life Scale-5 (ProQOL-5)<br>Does not measure prevalence of conditions, but rather the risk an individual faces for developing in the future: burnout (BO), secondary | No significant differences between the distribution of risk in the normative population and the entire current study sample for BO, STS, and CS. However, risk was higher when working in ICU or heme/oncology units.<br>Mean scores on BO and CS differed significantly based on the last time a CCLS received | Contributing factors:<br>Mean scores for BO were significantly higher for those who did not discuss previous traumatic events compared with those who did have that opportunity.<br>Protective factors: |

(*Continued*)

**Table 1.** (*Continued.*)

| Author, year | Design | Clinician type | Setting | Country | *N* | Mean age | Measure(s) | Primary results — prevalence of burnout | Secondary results — contributing/ protective factors |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | traumatic stress (STS), and compassion satisfaction (CS) | satisfaction from seeing a patient recover. | CS scores were significantly higher for participants who experienced patient recovery daily as opposed to those who had not experienced satisfaction in the past 6 months. Participants with more frequent job satisfaction had significantly lower BO scores than those with less frequent job satisfaction. Debriefing with Child Life staff also related to significantly lower risk for BO. |
| Joubert et al. (2013) | Cross-sectional Quantitative, Qualitative; Thematic analysis of focus group data | Social workers | Specialist cancer hospital | Australia | 16 | NR | Traumatic Stress Institute Belief Scale (TSIBS)<br>ProQOL scale — negative and positive effects of helping others | 0% had clinically significant levels of PTSD<br>50–74% reported experiencing traumatic stress symptoms (e.g., disturbing memories 50%, feeling distant 62%, trouble sleeping 69%, irritable 69%, difficulty concentrating 74%)<br>89% feeling exhaustion<br>68% feeling extreme exhaustion | Contributing factors:<br>68% overwhelmed by the amount of work or size of caseload<br>Protective factors:<br>98% rated highly:<br>• satisfaction with helping<br>• connectedness to others |
| Kadambi and Truscott (2004) | Cross-sectional | Mental health professionals working with either sexual violence, cancer, or general practice<br>Social workers 41.5%<br>Therapist/ counselor 35%<br>Psychologist 12.4%<br>Other | Sexual assault centers, Canadian Hospitals and Cancer Centers including two US, and University Counseling Centers | Canada | Sexual violence *n* = 86<br>Cancer *n* = 64<br>General practice *n* = 71<br>Female = 186 (84.2%)<br>Male = 35 (15.8%)<br>Mean length working = 8.3 years | 42 | TSI<br>MBI-Human Services<br>Impact of Events Scale (IES) — experience of trauma related to work | Only 5% showed elevated levels of traumatic stress<br>Mean scores fell in moderate range for EE<br>Mean scores fell in low range for DP and PA<br>Only 2.3% obtained high scores on both EE and D (=indicating significant burnout)<br>20.8% scored at or above cutoff score (cutoff score = 26) which indicates moderate to severe levels of traumatic stress<br>No significant differences between groups in traumatic stress, vicarious trauma, or burnout. | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Neumann et al. (2018) | Cross- sectional survey — online | Hematopoietic cell transplantation (HCT) Advanced practice providers, nurses, physicians, pharmacists, social workers | HCT inpatient and outpatient | US | *N* = 1541<br>Advanced practice providers = 255<br>Nurses = 763<br>Pharmacist = 95<br>Physician = 330<br>SW = 98<br>Female 81.7% | 13% ages 20–29<br>33% ages 30–39<br>23% ages 40–49<br>22% ages 50–59<br>9% ≥60 | MBI:<br>EE and DP subscales;<br>Moral Distress Scale – Revised (MDS-R) | 40% Overall prevalence of burnout across all disciplines (Burnout threshold EE: $M \geq 27$ and/or DP $M \geq 10$)<br>Pharm had the highest at 53%<br>APP 45%<br>Physicians 41%<br>Nurses 38%<br>Social workers 30% | Contributing factor:<br>The only significant variable for burnout in all disciplines was moral distress.<br>SW had significantly lower scores for moral distress compared with other disciplines and the lowest percentage of burnout, which authors suggest could be reflective of training, expertise, and work that stresses coping skill development. |
| Rasmussen et al. (2016)[a] | Cross- sectional survey — online | Psychologist 44.9%<br>Social worker 31.9%<br>Psychiatrist 7.1%<br>Counselor 3.9%<br>Other allied health 12.2% | Membership of 10 national and international psycho-oncology societies<br>Public setting 81.7%<br>Urban location 74.2%<br>Patient population over 26 years 76.8% | Australia, (1st author) IPOS research committee Institutions in US, Australia, Britain, Canada, and the Netherlands | *N* = 417<br>Female 84.2%<br>Australia/New Zealand 45.9% | 58% 40–59 years | MBI-Human Services Survey (MBI-HSS)<br>EE and DP subscales<br>The Short Version ERI Questionnaire (ERI-S)<br>Work and Meaning Inventory (WAMI) | EE:<br>Low: *n* = 196 (54.3%)<br>Average: *n* = 92 (25.5%)<br>High: *n* = 73 (20.2%)<br>DP:<br>Low: *n* = 303 (83.9%)<br>Average: *n* = 34 (9.5%)<br>High: *n* = 24 (6.6%) | Contributing factors:<br>the ERI model accounted for 33% of variance in EE: effort and overcommitment were positively related to EE; those reporting greater effort and higher overcommitment experienced greater EE.<br>Protective factors:<br>meaningful work significantly predicted both EE and DP. |
| Shinan-Altman et al. (2018) | Cross-sectional survey | Social work 50.6%<br>Psychologist 26.5%<br>Nurse 22.9% | Membership in Israeli Psycho-Oncology Association (IPOA)<br>Public setting 91.6%<br>Patient population over 26 years 78.6% | Israel | *N* = 85<br>Female 94.0% | 38.8% 20–39 years<br>44.7% 40–59 years<br>About 30% 30–39 | MBI-Human Services Survey (MBI-HSS)<br>EE and DP subscales<br>Utrecht Work Engagement Scale (UWES) | 16.3% reported high levels of EE<br>2.4% reported high levels of DP<br>Mean levels of EE and DP were 13.89 (SD = 9.97) and 4.9 (SD = 4.19) respectively, which contrary to expectations were significantly lower than mental health occupations' normative scores for EE ($M$ = 16.89, SD = 8.90) and DP ($M$ = 5.72, SD = 4.62) in the MBI-HSS. | Contributing factors:<br>burnout was significantly and positively associated with job demands and overcommitment.<br>Protective factors:<br>burnout was negatively associated with work engagement and perceived value. |

(*Continued*)

**Table 1.** (*Continued.*)

| Author, year | Design | Clinician type | Setting | Country | *N* | Mean age | Measure(s) | Primary results — prevalence of burnout | Secondary results — contributing/ protective factors |
|---|---|---|---|---|---|---|---|---|---|
| Simon et al. (2006) | Cross- sectional questionnaire | Oncology social workers | Membership of the Association of Oncology Social Workers<br>Direct service work 95% | USA — six Southeastern States | *N* = 21<br>Female 95.2%<br>White 95.2% | Range 27–66 years<br>*M* = 48<br>SD = 11 | Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS) — measuring compassion satisfaction, burnout, and STS | Compassion Satisfaction Subscale:<br>*M* = 98.4 (SD = 12.6)<br>Burnout:<br>*M* = 25.9 (SD = 7.4)<br>STS:<br>*M* = 25.0 (SD = 8.5) | Contributing factors: positive relationship between burnout and STS.<br>Protective factors: the ability to separate work from home was significantly negatively correlated with emotional involvement with clients<br>Compassion satisfaction was negatively related to both burnout and STS. |
| Turnell et al. (2016)[a] | Cross-sectional survey — online | Psychosocial oncology clinicians associated with multiple international societies — psychologist, psychiatrist, counselor, and social worker | Membership of 10 national and international psycho-oncology societies<br>Public setting 81.7%<br>Urban location 74.1%<br>Adult patient population 76.8% | Australia (1st author)<br>IPOS research committee | *N* = 417<br>Sub-sample *n* = 254 included profession (therefore, no professional comparisons available)<br>Psychologists 44.9%<br>Social workers 31.9%<br>Psychiatrist 7.1%<br>Female 84.2% | 58.1% aged 40–59 years (Mean age NR) | MBI-HSS EE and DP subscales UWES-9 | 25.5% of sample reported average and 20.2% reported high levels of EE<br>9.5% reported average and 6.6% reported high levels of DP<br>Mean levels of EE and DP were 13.20 (SD = 8.81) and 2.43 (SD = 3.15) respectively, which contrary to expectations were significantly lower than mental health occupations' normative scores for EE (*M* = 16.89, SD = 8.90) and DP (*M* = 5.72, SD = 4.62) | Protective factor: mean level of work engagement was 4.60 (SD = 0.94), which was significantly higher than the norms (*M* = 4.05, SD = 1.19). |

NR – not reported.
[a]Companion papers — same data set.

**Table 2.** Methodological quality, risk of bias, and quality assessment for the nine included empiric studies[a]

| | 1. Sample | 2. Sampling | 3. Sample size | 4. Description | 5. Data analysis | 6. Methods | 7. Measures | 8. Statistical analysis | 9. Response rate |
|---|---|---|---|---|---|---|---|---|---|
| Eelen et al., (2014) | + | + | + | + | – | + | + | + | + |
| Fisackerly et al., (2016) | + | + | – | + | ? | + | + | + | ? |
| Joubert et al., (2013) | + | + | + | – | + | + | + | + | N/A |
| Kadambi and Truscott (2004) | + | + | + | + | + | + | + | + | – |
| Neumann et al., (2018) | + | + | + | + | + | + | + | + | + |
| Rasmussen et al., (2016) | + | + | + | + | + | + | + | + | ? |
| Shinan-Altman et al., (2018) | + | + | + | + | + | + | + | + | + |
| Simon et al., (2006) | + | + | + | + | + | + | + | + | ? |
| Turnell et al., (2016) | + | + | + | + | ? | + | + | + | ? |

+ yes; – no; ? unclear; N/A not applicable.
[a]Contents for this table were guided by the "Critical Appraisal Checklist for Studies Reporting Prevalence Data" from Munn et al. (2015).

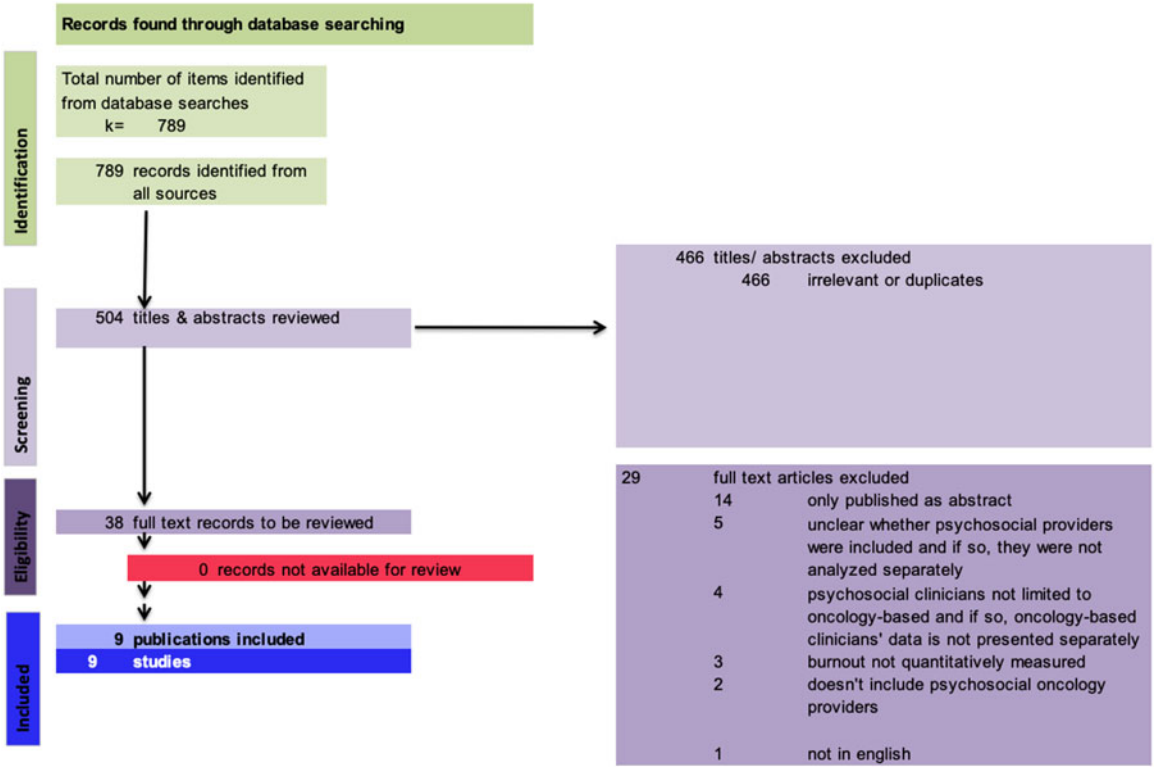


**Fig. 1.** Flowchart of the screening and eligibility evaluation phases. *Note*. This flowchart has been modeled after: Moher et al. (2009).

## Description of studies

All nine studies were cross sectional, and two were companion papers using the same sample of participants (Rasmussen et al., 2016; Turnell et al., 2016). Several countries were represented including the US, Australia, Belgium, Canada, and the Netherlands.

## Risk of bias and quality assessment

According to the Critical Appraisal Checklist for Studies Reporting Prevalence Data (Munn et al., 2015), all nine studies met criteria 1 (i.e., the sample was appropriate to address the target population) and 2 (i.e., study participants were appropriately sampled). One of the studies did not meet criteria 3 (i.e., sample size was adequate). All studies met criteria 6–8, as valid methods were used for the identification of the condition (e.g., burnout); the condition was measured appropriately; and there were appropriate statistical analyses. Adequacy of response rate (criteria 9) was irrelevant or unknown in five studies but was adequate in three of the studies. Overall, quality assessment revealed a generally low risk of bias and high methodological quality as shown in Table 2.

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**Table 3.** Measures and subscales used in each of the nine included empiric studies

| | MBI[a] | TSIBS/TSI[a] | ProQOL/(5)[a,b] | IES[a] | CFS[a,c] | UWES-9[d] | ERI-S[d] | MDS-R[d] | WAMI[d] | JCQ[d] |
|---|---|---|---|---|---|---|---|---|---|---|
| Eelen et al., (2014) | EE DP PA | – | – | – | – | – | – | – | – | – |
| Fisackerly et al., (2016) | – | – | ProQOL-5 – BO CS[d] STS | – | – | – | – | – | – | – |
| Joubert et al., (2013) | – | TSIBS | ProQOL – BO CS[d] CF | – | – | – | – | – | – | – |
| Kadambi and Truscott (2004) | EE DP PA | TSI | – | IES | – | – | – | – | – | – |
| Neumann et al., (2018) | EE DP PA | – | – | – | – | – | – | MDS-R | – | – |
| Rasmussen et al., (2016)[e] | EE DP | – | – | – | – | – | ERI-S | – | WAMI | – |
| Shinan-Altman et al., (2018) | EE DP | – | – | – | – | UWES-9 | ERI-S | – | – | DA PD CS[#] |
| Simon et al., (2006) | – | – | – | – | BO CS[d] STS | – | – | – | – | |
| Turnell et al., (2016)[e] | EE DP | – | – | – | – | UWES-9 | | – | | DA PD CS[#] |

Subscales used: EE, emotional exhaustion; DP, depersonalization; PA, personal accomplishment; BO, burnout; CS, compassion satisfaction; CF, compassion fatigue; STS, secondary traumatic stress; DA, decision authority; PD, psychological demands; CS[#], coworker support.
[a]Primary measures of burnout, traumatic stress, and compassion fatigue.
[b]ProQOL-5 is the current version of the ProQOL (www.proqol.org).
[c]According to Nimmo and Huggard (2013), the CFS (also abbreviated as CFST) was re-developed and re-named the ProQOL.
[d]Secondary measures of factors associated with burnout.
[e]Companion papers — used same sample.

## *Description of samples*

Of the identified nine studies, five exclusively evaluated burnout (or a related construct) in samples of psychosocial oncology clinicians, including psychologists, social workers, allied health workers, and nurses who provided psychosocial care (Simon et al., 2006; Joubert et al., 2013; Rasmussen et al., 2016; Turnell et al., 2016; Shinan-Altman et al., 2018). Of note, work role was initially omitted from the questionnaire used in two of these studies (Rasmussen et al., 2016; Turnell et al., 2016), which meant that work role was only available for half of the sample. A sixth study included only child life specialists who worked in various pediatric medical settings (Fisackerly et al., 2016), and a further two studies sampled a mix of providers including psychosocial clinicians, physicians, and nurses who worked in an oncology medical setting (Eelen et al., 2014; Neumann et al., 2018), the latter also including pharmacists (Neumann et al., 2018). The ninth study examined burnout and trauma in a sample of mental health clinicians who worked in three different settings, only one setting being oncology (Kadambi and Truscott, 2004).

Study sample sizes ranged from 16 (Joubert et al., 2013) to 1,541 (Neumann et al., 2018), although in the larger study, only 98 of 1,541 were psychosocial clinicians, namely social workers. In total, this review includes 678 psychosocial clinicians whose work role was reported; counting once the sample that was the basis of two studies (Rasmussen et al., 2016; Turnell et al., 2016). Mean age was only reported in three studies: 32.35 years (SD = 8.42) (Fisackerly et al., 2016), 42 years (Kadambi and Truscott, 2004), and 48 years (SD = 11) (Simon et al., 2006). Of the remaining six studies, five studies provided age ranges of the participants (Rasmussen et al., 2016; Turnell et al., 2016; Shinan-Altman et al., 2018) where the majority of participants were between 40 and 59 years of age, and one study did not report the age of the participants (Joubert et al., 2013).

## *Measures used*

Ten validated measures were used in the studies reported in this systematic review as shown in Table 3. Three measures assessed the prevalence of burnout or a related construct as defined in this protocol and included the MBI–HSS, the TSIBS, and the IES. Two measures assessed both burnout and compassion satisfaction — the Professional Quality of Life Scale (ProQOL) and the Compassion Fatigue and Satisfaction Self-Test for Helpers (CFS or CFST), the latter according to Nimmo and Huggard (2013) was re-developed and re-named the ProQOL, where the ProQOL-5 is the current version (www.proqol.org). Four of the nine studies also measured constructs related to burnout using five different measures (Rasmussen et al., 2016; Turnell et al., 2016; Shinan-Altman et al., 2018; Neumann et al., 2018).

## *Prevalence and severity of burnout, traumatic stress, and compassion fatigue in psychosocial oncology clinicians*

### *Burnout*

Burnout was measured by the MBI in six of the nine studies (Kadambi and Truscott, 2004; Eelen et al., 2014; Rasmussen et al., 2016; Turnell et al., 2016; Shinan-Altman et al., 2018; Neumann et al., 2018). Two of these studies used the same sample of clinicians (Rasmussen et al., 2016; Turnell et al., 2016). The MBI comprises three subscales — EE, DP, and personal accomplishment (PA). Three of the six studies reported data on all three subscales (Kadambi and Truscott, 2004; Eelen et al., 2014; Neumann et al., 2018), while the other three reported data on EE and DP only (Rasmussen et al., 2016; Turnell et al., 2016; Shinan-Altman et al., 2018).

Eelen et al. (2014) using the Dutch version of the MBI, compared various groups of oncology professionals in Belgium, including psychologists, social workers, physicians, and nurses. They found that 2% of the entire sample reported all symptoms of burnout with physicians having significantly higher mean scores on EE and DP than psychologists, social workers, specialist nurses, and nurses. However, social workers reported significantly lower levels of PA compared with psychologists or specialist nurses. They concluded that the risk of burnout was associated with profession, with psychologists and specialist nurses being less at risk of burnout compared with physicians.

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In a Canadian study, Kadambi and Truscott (2004) found that only 2.3% of their sample of mental health professionals met the criteria for significant burnout as indicated by high scores on both EE and DP of the MBI. Specifically, the mean scores fell in the middle range on the EE subscale and the low range for DP. They found no differences on levels of burnout between professionals providing counseling to different client populations (sexual violence, psycho-oncology, and general practice). For PA, the participants' mean scores fell within the low range, indicating a low sense of PA in their work.

Neumann et al. (2018), in a US study of a mixed sample of hematopoietic cell transplant professionals including physicians, pharmacists, advanced practice professionals, and social workers, found that overall the prevalence of burnout was 40% with significant differences across disciplines. Pharmacists had the highest prevalence of burnout with 53% meeting criteria, followed by 45% for advanced practice professionals, 41% for physicians, 38% for nurses, and 30% for social workers.

In the same sample of 417 international psychosocial oncology health professionals reported in two studies in this review (Rasmussen et al., 2016; Turnell et al., 2016), 20.2% of the sample endorsed high EE and 6.6% high DP. The mean levels of EE and DP were 13.20 (SD = 8.81) and 2.43 (SD = 3.15), respectively, which were significantly lower than mental health occupations' normative scores for EE ($M = 16.89$, SD = 8.90) and DP ($M = 5.72$, SD = 4.62) reported in the MBI-HSS manual.

Shinan-Altman et al. (2018), in a survey of members of the Israeli Psycho-oncology Association (IPOA) including social workers, psychologists, and nurses who provided psychological care, found that 16.3% and 2.4%, respectively, reported high levels of EE and DP. Specifically, the means for EE and DP were 13.89 (SD = 9.97) and 4.9 (SD = 4.19), which were also significantly lower than the corresponding means reported in the MBI-HSS manual.

The Professional Quality of Life Scale (ProQOL and ProQOL-5) was used in two studies (Joubert et al., 2013; Fisackerly et al., 2016). This scale provides measures of the negative and positive effects of helping others who experience suffering and trauma (Joubert et al., 2013). The ProQOL includes subscales for burnout, compassion fatigue, and compassion satisfaction. Joubert et al. (2013), in their sample of 16 oncology social workers, found that 89% reported feeling exhausted from their work in the helping profession with 68% stating that they experienced extreme exhaustion. Further, 68% of the sample said that they felt overwhelmed with the size of their caseload. Despite these high levels of stress, 98% of participants rated the items "satisfaction from helping" and "connectedness to others" highly.

### *Traumatic stress and compassion fatigue*

Two studies assessed traumatic stress using either the Traumatic Stress Institute Belief Scale (TSIBS) (Joubert et al., 2013), the TSI (Kadambi and Truscott, 2004), or the IES (Kadambi and Truscott, 2004). A third study examined the impact of secondary traumatic stress (STS) resulting from working in oncology using the CFS (Simon et al., 2006).

The TSIBS was used by Joubert et al. (2013) and examined the experience and management of vicarious trauma of a small sample of social workers from a specialist cancer hospital in Australia. A descriptive analysis of the scores revealed that none of the participants had clinically significant levels of post-traumatic stress disorder. The findings indicated that 50–74% of participants reported experiencing traumatic stress symptoms, categorized as intrusive thoughts, avoidance, numbing, and heightened arousal. Fifty percent said they had experienced repeated disturbing memories, thoughts, or images of a stressful experience; 50% said they avoided thinking about or talking about a stressful experience; 62% reported feeling distant or cutoff from other people; and 74% reported concentration difficulties.

Kadambi and Truscott (2004) used both the TSI and the IES in their study of predominantly Canadian mental health professionals who worked in sexual assault centers, cancer centers (including two US centers), or university counseling centers to assess traumatic stress. They found no significant differences in assessed levels of vicarious trauma or traumatic stress symptoms between the professionals providing counseling in the three different settings. They concluded that the majority of participants in their study did not appear to be experiencing symptoms of traumatic stress or burnout with only 5% of the sample endorsing elevated levels of traumatic stress.

Simon et al. (2006) in an exploratory pilot study of 21 social workers of whom 20 were female and 95% worked in direct patient care, used the CFS, which is designed to measure the potential for compassion satisfaction, burnout, and STS. The results indicated that the subscale scores for each were statistically correlated with one another. There was a positive relationship between burnout and STS ($r = 0.46$, $P < 0.05$), and compassion satisfaction was negatively related to both burnout and STS ($r = -0.75$, $P < 0.001$; $r = -0.44$, $P < 0.05$, respectively). Further, 90% of participants rated themselves as very empathic to their clients, with 52% reporting that their emotional involvement with clients was "average." The ability to separate work from home was negatively correlated with emotional involvement with clients ($r = -0.47$, $P < 0.03$); 38% of participants rated their ability to separate work from home as average and 53% as better than average.

Two other studies also examined compassion fatigue and compassion satisfaction within helping professions using the ProQOL-5 (Fisackerly et al., 2016) and the ProQOL (Joubert et al., 2013). In a US sample of 154 Certified Child Life Specialists (CCLS) of whom 98% were female and who had worked as a CCLS for an average of 7.35 years, Fisackerly et al. (2016) used the ProQOL-5 to measure the risk the clinicians had for developing burnout or secondary traumatization stress in the future. The ProQOL-5 does not measure the prevalence of these conditions. Of the sample, within the past seven days, 54.5% had been exposed to patients who had been traumatized and 12% had dealt with a patient death. No significant differences were found between the sample and the normative population data reported in the manual for the risk of burnout, secondary traumatization stress, or compassion satisfaction.

## *Factors believed to contribute to or protect against burnout related to caring*

Several factors related to the cost of caring that appear to protect against the risk of developing burnout out or secondary traumatization stress were identified. In Fisackerly et al.'s (2016) study, these were:

### *Exposure to patient recovery*

Mean scores on both compassion satisfaction and burnout differed significantly based on the last time the CCLS saw a patient recover. The compassion satisfaction scores were higher for those participants who experienced patient recovery daily compared with those participants who had not experienced satisfaction from a patient's recovery in the past 6 months ($F(5,148) = 3.65$, $P < 0.01$).

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### Job satisfaction

Frequency of perceived job satisfaction also had an effect on burnout; participants with greater job satisfaction had lower burnout scores than those with less frequent job satisfaction ($F(5,148) = 2.29$, $P < 0.05$).

### Discussing traumas

Debriefing with child life staff was also related to a lower risk of burnout ($t(151) = 4.02$, $P < 0.05$). Mean scores for burnout were significantly higher for those participants who did not discuss previous traumatic events, such as patient deaths, ($M = 53.65$, SD = 10.82) compared with those who did discuss previous events ($M = 48.71$, SD = 9.28).

Five additional measures also assessed factors that are associated with burnout and were reported in the studies below. These factors are categorized as moral distress, engagement and job demands, and meaning.

### Moral distress

Moral distress was measured in one study using the MDS-R (Neumann et al., 2018). The results indicated that scores for moral distress were significantly different across disciplines with pharmacists having the largest percentage in the "high score" category followed by nurses. Physicians and social workers had significantly lower scores than advanced practice providers, nurses, and pharmacists, and physicians had significantly higher scores than social workers. Social workers had the largest percentage in the "low score" category and the lowest mean. Moral distress was the only significant variable in all disciplines that predicted burnout.

### Engagement and job demands

The Utrecht Work Engagement Scale (UWES-9) was used in two studies (Turnell et al., 2016; Shinan-Altman et al., 2018), where high levels of work engagement are associated with positive physical and mental health, productivity, and creativity. Shinan-Altman et al. (2018) found that burnout was significantly and positively associated with job demands ($r = 0.69$, $P < 0.0001$) and overcommitment ($r = 0.34$, $P < 0.01$), and negatively associated with work engagement and perceived value ($r = -0.31$, $P < 0.01$). As such, the higher the job demands and overcommitment, and the lower the work engagement and perceived value, the higher the burnout.

Turnell et al. (2016) found that higher levels of job resources predicted higher levels of work engagement. The mean level of work engagement was 4.60 (SD = 0.94), which was significantly higher than the norms ($M = 4.05$, SD = 1.19) (as cited in Turnell et al. 2016). The sample endorsed lower means of burnout compared with those of mental health norms, leading the authors to hypothesize that receiving professional supervision, which was reported by 57.1% of the sample, might act as a buffer in mitigating distress.

The short version ERI Questionnaire (ERI-S) based on the effort-reward imbalance model was used in two studies (Rasmussen et al., 2016; Shinan-Altman et al., 2018). This scale measures effort, rewards, and overcommitment. In Rasmussen et al.'s (2016) study, the ERI model was only partially supported as a useful framework for examining burnout in psychosocial oncology clinicians, accounting for 33% of the variance in EE. Effort and overcommitment were positively related to EE; those reporting greater effort and higher overcommitment experienced greater EE. Higher effort and lower reward were both found to be significantly associated with great EE, though not DP. In the second study, Shinan-Altman et al. (2018) used the overcommitment scale of the ERI-S and found that burnout was significantly and positively associated with overcommitment. They concluded that future research needs to strengthen positive factors that mitigate burnout, such as perceived value and work engagement.

Two studies used subscales of the Job Content Questionnaire (JCQ) to measure different aspects of the demands of a job (Turnell et al., 2016; Shinan-Altman et al., 2018). Three subscales were used in both studies: decision authority (DA), psychological demands (PDs), and coworker support (CS). Shinan-Altman et al. (2018) found that burnout was significantly and positively associated with job demands and overcommitment, and negatively associated with work engagement and perceived value. Turnell et al. (2016) found that higher levels of job demands predicted greater burnout.

### Meaning

Rasmussen et al. (2016) also explored the impact on burnout of self-reported meaningful work characterized by work that is both significant and positive, and focused on growth and purpose rather than pleasure. Meaningful work was assessed by the Work and Meaning Inventory (WAMI), which incorporates three subscales: positive meaning in work, meaning-making, and greater good motivation, where higher scores indicate greater meaning. In their study, meaningful work significantly predicted both EE and DP but only accounted for 2% more of the variance above the ERI model. The authors concluded that burnout interventions aimed at increasing clinicians' sense of self-efficacy may be most effective when implemented with changes at the organizational level, such as lessening workplace stressors and increasing rewarding opportunities (Rasmussen et al., 2016).

## Discussion

The findings of this systematic review suggest that psychosocial oncology clinicians are not at increased risk of burnout compared with other health care professionals working in oncology and those working in mental health. Although the data are quite limited, there is consistency across the few studies that do exist. Given the emotional intensity of psychosocial oncology, this conclusion may seem surprising. However, many factors could contribute to these observations.

This review identified six specific aspects of work that appear to be associated with less burnout: (1) exposure to patient recovery, (2) discussing traumas, (3) meaning, (4) less moral distress, (5) job engagement and less job demands, and (6) job satisfaction. Job satisfaction, engagement, and demands are general factors that vary with any position, but the other job aspects may have a more favorable profile in psychosocial oncology. Given a major focus of the work is maximizing quality of life, psychosocial oncology clinicians may have greater exposure to improvement in the issues they are treating, such as anxiety and depression, compared with oncologists caring for patients with advanced cancers. They are also probably less likely to encounter frequent moral distress around their treatment decisions, even though they may sometimes have to hospitalize a patient against their will or report suspected child or elder abuse to authorities. The training that psychosocial clinicians typically receive, involves intensive study, supervision, and self-reflection about managing difficult emotions and complicated psychosocial situations. This might often include debriefing or discussing traumatic situations with a supervisor or

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colleague(s). Finally, finding meaning in caring for patients is something that psychosocial clinicians frequently cite as an important part of their work.

### Limitations

We believe that more research is needed using standardized measures of burnout with larger samples of psychosocial clinicians to examine both prevalence rates and how the clinician experience of burnout might change over time, especially as the majority of participants in these studies were middle aged. The nine studies included in this review were published between 2004 and 2018. The findings indicate that the empiric literature is very limited, undermined by great variability, including the definition of terms, sample sizes, sample composition, and the psychometric measures and subscales used, making comparisons difficult. While the MBI-HSS was used in the majority of the studies to assess burnout, it should be noted that the authors have eliminated cutoff scores in the current version of the MBI manual (4th edition), due to a lack of diagnostic validity (www.Mindgarden.com). Instead, new research is focused on examining patterns along the burnout–engagement continuum. The variability in terminology might have also led to some relevant studies not being identified through our search strategy, despite including the terms burnout, compassion fatigue, vicarious trauma, and secondary trauma.

### Clinical implications

While this systematic review revealed that to date, there is limited knowledge about burnout in psychosocial oncology clinicians, it appears that there is a great opportunity to incorporate insights about protective factors into training and staff support at the organizational, multidisciplinary team, and individual level to help lessen the likelihood of burnout in clinicians and staff alike (Kearney et al., 2009; Sanchez-Reilly et al., 2013; Back et al., 2016; Muriel et al., 2018; Morris et al., 2019).

At the organization level, in addition to tackling the issue of job demands, a clear statement endorsing the importance of self-care is needed along with regular structured opportunities for education and mentoring, such as Schwartz Rounds (https://www.theschwartzcenter.org/programs/schwartz-rounds).
Team-based strategies, incorporating both formal and informal opportunities to debrief, create a safe place where clinicians can express and process their thoughts and feelings about how they have been affected by caring for their patients or their deaths (Muriel et al., 2018). Similarly, ensuring protected time to remember those patients who have died is another strategy for teams that can be incorporated into scheduled multidisciplinary team meetings (Morris et al., 2019). Individual strategies include receiving regular supervision in formal supervision, and formal or informal peer supervision, maintaining clear yet flexible boundaries, especially between work and home, challenging unhelpful or unrealistic thinking patterns about job role and expectations, and developing ways to "grieve" for patients, such as writing sympathy cards or making condolence calls (Worden, 1991; Morris and Block, 2012; Merel et al., 2015; Muriel et al., 2018).

## Conclusions

While more research is needed, psychosocial oncology clinicians may not be at increased risk for burnout compared with other oncology and mental health professionals. This, however, does not mean that burnout is non-existent. Some aspects of the work may be protective, and this review identified associated factors. Psychosocial oncology clinicians are in a unique position to support both their medical colleagues and each other by drawing on the aspects of their training and practice that appear to protect against burnout.

**Supplementary material.** The supplementary material for this article can be found at https://doi.org/10.1017/S147895152000084X.

**Conflict of interest.** None.

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