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Robin R. Whitebird
*University of St. Thomas, Minnesota*

Stephen E. Asche

Gretchen L. Thompson

Rebecca Rossom

Richard Heinrich

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# Stress, Burnout, Compassion Fatigue, and Mental Health in Hospice Workers in Minnesota

Robin R. Whitebird, PhD, MSW,[1] Stephen E. Asche, MA,[1] Gretchen L. Thompson, MDiv,[2] Rebecca Rossom, MD, MSCR,[1] and Richard Heinrich, MD[3]



## Abstract

***Background:*** Working in hospice care is a highly challenging yet rewarding profession. However, the challenges of working with dying patients and their families can overwhelm even the most highly dedicated professional, leading to burnout, compassion fatigue, anxiety, and depression.
***Objective:*** The aim of this study was to better understand how stress affects the mental health of hospice workers in terms of burnout and compassion fatigue and how they cope with these issues.
***Methods:*** Data for this study are from Compassion Fatigue and You, a cross-sectional survey of hospice staff from across Minnesota. We surveyed 547 hospice workers throughout Minnesota to better understand the overall mental health of staff, including levels of stress, burnout, and compassion fatigue, and how they cope with these issues. The study was conducted in 2008 and 2009 through a private, not-for-profit research institute affiliated with a large Midwestern health plan.
***Results:*** Hospice staff reported high levels of stress, with a small but significant proportion reporting moderate-to-severe symptoms of depression, anxiety, compassion fatigue, and burnout. Staff reported managing their stress through physical activity and social support, and they suggested that more opportunities to connect with coworkers and to exercise could help decrease staff burnout.
***Conclusions:*** Poor mental health places staff at risk for burnout and likely contributes to staff leaving hospice care; this is a critical issue as the profession attempts to attract new staff to meet the expanding demands for hospice care.

## Introduction

Working in hospice care has been described as both a highly challenging and a highly rewarding profession; for many health care professionals their work in hospice is viewed as much more than a job.[1] Over time, however, the challenges of working with patients diagnosed with terminal illness and their families can take a toll on even the most highly dedicated professionals, potentially leading to burnout, compassion fatigue and increased symptoms of anxiety and depression.

Concerns regarding stress and burnout in end-of-life care work are not new,[2–6] and have presented challenges for hospice programs regarding retaining staff and attracting new professionals to the field. Although significant attention has focused on stress and burnout, less attention has been placed on the overall mental health of those working in hospice care, including issues of depression, anxiety, and compassion fatigue, as well as on how staff copes with the pressures associated with work in end-of-life care.

The stress of working with so many people and their families in life's most difficult transition is often considered a pivotal factor in burnout in the profession.[1,7–9] Stress can evolve from workplace issues as well as from relationships that staff members develop with the patients and families they serve. Helping families at the end of life can be a highly charged situation with significant emotional demands, and this type of stress can have considerable personal consequences including anxiety and depression.[10] Stress that staff experience when caring for patients and families is often associated with a lack of emotional support and in difficulty dealing with the suffering at end of life.[4,11]

Working with patients and families who are traumatized by their experience of dying and grief may also place some

[1]HealthPartners Institute for Education and Research, Minneapolis, Minnesota.
[2]Allina Home Care and Hospice, Minneapolis, Minnesota.
[3]HealthPartners Hospice of the Lakes, Bloomington, Minnesota.
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staff at risk for a type of secondary trauma: a form of psychological distress termed "compassion fatigue" that can result in symptoms of hyperarousal, avoidance, and reexperiencing highly charged situations.[3,6,12–16] In contrast, burnout is believed to be related to professional/occupational factors (rather than personal relationships) such as workload, control, reward, community, fairness, and values; it can result in emotional exhaustion, depersonalization, and feelings of reduced personal accomplishments.[7,12] Alkema and colleagues[16] in their work on burnout and compassion fatigue among hospice professionals found these two constructs overlapped, representing similar responses to differing environmental stressors, burnout representing a response to occupational stress and compassion fatigue a more personal emotional response to traumatic stress.

To gain a better understanding of how stress may be affecting the mental health of hospice workers, including issues of burnout and compassion fatigue, as well as how they cope with these issues, we surveyed hospice workers throughout Minnesota.



## Methods

Data for this study are from Compassion Fatigue and You, a cross-sectional survey of hospice staff from across Minnesota. The survey focused on areas of stress, burnout, compassion fatigue, and mental health as well as coping strategies. The study was conducted in 2008 and 2009 through a private not-for-profit research institute affiliated with a large Midwestern health plan.

### *Participants*

The study team worked with the staff of a local nonprofit organization that serves as a resource to hospice providers to identify medium- to large-size hospice programs with caseloads (daily census) of more than 75 patients. The directors of 15 programs that met the criteria were contacted and invited to participate; 13 programs agreed. Study investigators attended a staff meeting at each organization to present information about the study and answer questions. Following the meeting the investigator distributed study packets to each staff mailbox. The packets included: an introductory letter, a frequently asked questions sheet about the study, the anonymous study survey, a five-dollar "cup of coffee on us" incentive for completing the study, and a postage-paid return envelope. Study surveys were distributed only once to prevent duplicate responses. The local institutional Review Board reviewed and approved the study protocol.

### *Survey measures*

The study survey collected data on participants' demographics, general health status, social support, job satisfaction, symptoms of anxiety and depression, compassion fatigue, burnout and stress, and coping strategies.

General health status was measured using the Short Form-12 Health Survey Version 2 (SF-12), a short-form version of the Short-Form 36 Health Survey (SF-36), which is one of the most widely used standardized measures of health throughout the world.[17] The SF-12 is a 12-item standardized measure that provides a physical health composite score (PCS-12) and a mental health composite (MCS-12) score (range 0–100 scale, mean = 50). The SF-12 has an alpha reliability of 0.89. When compared with the SF-36, it demonstrates good validity ($R^2 = 0.91$) and has been used extensively in survey research.[18]

Symptoms of anxiety were measured using the Generalized Anxiety Disorder (GAD-7) Scale, a brief seven-item (each item scored 0 to 3) measure for assessing symptoms of anxiety that has been used in both clinical and research settings and demonstrates good reliability (Cronbach's $\alpha = 0.92$) and validity (correlation $r = 0.72$ with the Beck Anxiety Inventory).[19] The scale is scored 0 to 21, with scores 0 to 9 indicating minimal-mild, 10 to 14 moderate, and 15 to 21 severe anxiety.

Depression was measured using the Patient Health Questionnaire 8 (PHQ8), a shortened version of the PHQ9 questionnaire based on the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition* (DMS-IV) criteria for major depression; it has eight items (score for each item 0–3, range 0–24). A score of 0 to 4 indicates no depression, 5 to 9 mild, 10 to 14 moderate, 15 to 19 moderately severe, and 20 to 24 severe depression. The PHQ8 has been shown to be highly correlated with the PHQ9 ($r = 0.997$) and is a reliable measure of symptoms of depression (Cronbach's $\alpha = 0.86$–$0.89$).[20,21]

Compassion fatigue and burnout were measured using scales from the Professional Quality of Life Assessment R-III Scale (ProQOL-RIII) developed by Stamm.[22] The ProQOL is composed of three scales with10 items each (each item scored 0 = never to 5 = always; total score range 0–50) that do not yield a composite score; we used the scales for compassion fatigue/secondary trauma and burnout. Average scores were established for each scale based on previous studies; the scales were not designed to be diagnostic. Alpha reliabilities for these subscales are 0.80 for compassion fatigue and 0.72 for burnout.[22]

Social support was measured using a short-form version of the Medical Outcomes Social Support Survey (MOS). The short-form version (MOS6) includes a measure from each aspect of social support: tangible support, affection, positive interaction, informational support, and two items for emotional support. The MOS6 (each item scored 0 = none of the time, to 4 = all of the time; range 0–24) has been shown to have good construct validity and reliablity (with $\alpha$ coefficients ranging from 0.75 to 0.86 for each aspect of social support).[23] Perceived stress was measured using a one-item global assessment rating of perceived stress (item score range 0–10, 5 = moderate stress; higher scores reflect greater stress). Single-item global stress ratings have been found to demonstrate good reliability and validity.[24,25]

Job satisfaction was measured with a single-item question asking how satisfied participants were with their work in hospice care. Response items were based on a rating scale of 1 = extremely dissatisfied to 5 = extremely satisfied.

We assessed coping strategies by asking participants about activities they engaged in to reduce work-related stress. A list of 12 activities was provided (physical activity; relaxation exercises; seeking social support from family, friends, or coworkers; meditation; comfort-eating; drinking alcohol; and seeking support though counseling) with additional space to list other activities. Participants were also asked about support, changes, or resources that would be helpful to reduce stress. A list of 11 options was provided along with space for listing other suggestions.

### *Statistical analysis*

Survey scales are scored according to scale authors' instructions. Individual survey items and scales were summarized with descriptive statistics (proportions, means, and standard deviations [SDs]).

## Results

We invited 931 staff members to participate in the study from 13 hospice programs across Minnesota. We received 557 completed surveys for a response rate of 60%; 10 surveys contained incomplete data and were removed from analysis for a total sample size of 547. Study participants were predominately female (92%), white (96%), and college graduates (74%) (see Table 1). The mean age of participants was 48.5 years (range 20–81 years), with 11% under the age of 35. They lived in a range of urban and rural locations, with 46% in urban/suburban, 20% in rural, and 34% in mixed settings.

Respondents represented a variety of occupations within hospice care including nurses, social workers, home health aides, and administrative staff. The majority were working full-time, with approximately one-third reporting more than 40 hours per week (see Table 2). The median length of time working in hospice care was 6 years (range 1–30 years), and 46% reported being in their current position for more than 5 years. The majority (78%) was satisfied or extremely satisfied with their work, but 18% of respondents reported they were searching for work outside of hospice care.

Table 1. Participant Demographics (n = 547)

| *Characteristic* | % (n) |
|---|---|
| Age, *mean* (SD) | 48.5 (10.9) |
| Gender | |
| Male | 8.3 (45) |
| Female | 91.7 (496) |
| Race | |
| Asian | 0.4 (2) |
| Black | 1.5 (8) |
| Native American | 0.7 (4) |
| Hispanic/other | 1.5 (8) |
| White | 95.9 (517) |
| Education | |
| High school or less | 5.0 (27) |
| Some college/tech school | 21.5 (116) |
| College degree | 51.9 (280) |
| Advanced degree | 21.7 (117) |
| Reported Income ($) | |
| <30,000 | 27.4 (138) |
| >30,000 to <50,000 | 36.6 (184) |
| >50,001 to ≤75,000 | 22.5 (113) |
| >75,001 | 13.5 (68) |
| Setting | |
| Urban/suburban | 45.8 (243) |
| Rural | 20.0 (106) |
| Mixed | 34.3 (182) |
| Occupation | |
| Registered nurse or nurse Practitioner | 32.6 (173) |
| Licensed practical nurse | 4.7 (25) |
| Social worker | 11.5 (61) |
| Home health aide | 18.5 (98) |
| Management/administrative | 15.7 (83) |
| Chaplain/bereavement | 9.2 (49) |
| Volunteer coordinator/other | 6.5 (35) |

Table 2. Work Length and Satisfaction of Study Participants (n = 547)

| *Total hours per week worked* | % (n) |
|---|---|
| ≤30 | 24.6 (132) |
| 31–40 | 42.7 (229) |
| 41–50 | 25.9 (139) |
| >41 | 6.7 (36) |
| Years in current position | |
| <2 | 23.5 (123) |
| 2 to <5 | 31.0 (162) |
| 5 to <10 | 22.8 (119) |
| 10+ | 22.8 (119) |
| Satisfaction with hospice work | |
| Extremely satisfied | 42.7 (232) |
| Satisfied | 44.2 (241) |
| Neutral | 9.5 (52) |
| Dissatisfied/extremely dissatisfied | 3.7 (20) |

Table 3 presents the self-reported mental health scores for respondents. Overall mental health was slightly below average relative to the norms for this scale (mean 46.1, SD 9.9). The mean score for depression was 4.8 (SD 4.4), indicting the majority of respondents had either no symptoms or minimal symptoms of depression. Of respondents, 15% scored above the cutoff score of ≥10 indicating mild-to-moderate depression; 3% of these respondents were in the moderate-to-severe range (cutoff score >15). The score for anxiety demonstrated a similar distribution with 14.7% above the cutoff score of ≥10 indicating moderate anxiety, but with a slightly higher percentage (4.4%) scoring above the cutoff score of ≥15 indicating moderately severe-to-severe anxiety.

Mean scores for compassion fatigue and burnout are also presented in Table 3. Results indicate higher levels of burnout than compassion fatigue in staff, although the average scores on the ProQOL-RIII indicate that staff members have less symptoms of burnout or compassion fatigue than average based on norms for this scale. On further analysis, scores for compassion fatigue and burnout were also found to be strongly correlated ($r = 0.69$). Compassion fatigue and burnout were also moderately correlated with anxiety ($r = 0.52$ for compassion fatigue and $r = 0.56$ for burnout) and with depression ($r = 0.48$ for compassion fatigue and $r = 0.51$ for burnout).

Table 3. Participants' Self-Reported Mental Health (n = 547)

| *Mental health scale* | *Mean* | *SD* | *Possible range* |
|---|---|---|---|
| Overall mental health | 46.1 | 9.9 | 0–100 |
| Depression | 4.8 | 4.4 | 0–24 |
| Generalized anxiety | 4.8 | 4.4 | 0–21 |
| Compassion fatigue | 9.9 | 6.6 | 0–50 |
| Burnout | 13.9 | 7.2 | 0–50 |
| Stress | 5.3 | 2.2 | 1–10 |
| Social support | 18.1 | 5.2 | 0–24 |

For overall mental health and social support, higher scores indicate healthier outcomes. For all other scales, a higher score indicates poorer outcomes.

SD, standard deviation.

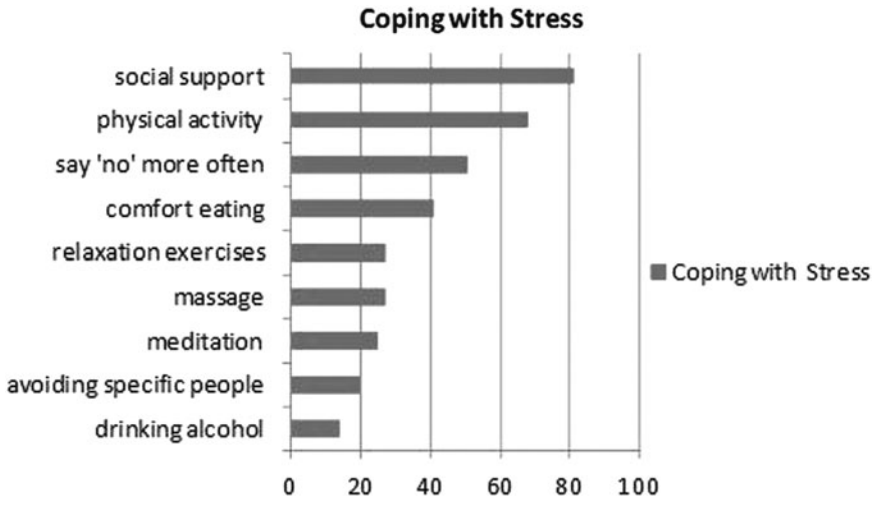


**FIG. 1.** Hospice workers' reports of stress management techniques.



Sixty percent of respondents reported moderate-to-high levels of stress (indicated by scores of ≥5), with 19.6% reporting very high stress (scores of 8–10). Participants indicated they had high levels of social support in their lives with 50% reporting high and 25% reporting very high levels of social support (see Table 3). Participants reported seeking social support (81%), physical activity (68%), and saying "no" more often (51%) as the activities they engaged in most frequently to reduce stress (see Fig. 1). They also rated more opportunities to connect with coworkers and convenient opportunities to exercise as the most important suggestions for reducing work-related stress and burnout (see Table 4).

## Discussion

Our survey of hospice staff from across Minnesota found the majority reported high levels of good overall mental health, with a smaller proportion reporting symptoms of burnout, compassion fatigue, and moderate-to-severe anxiety and depression. Although overall mental health was good for most staff, stress was also moderate-to-very high in a majority of staff (60%). They managed their stress through physical activity and social support, with a majority reporting very high levels of social support in their lives. Staff highlighted the importance of both social support and physical activity in managing stress and suggested that more frequent opportunities to connect with coworkers and convenient opportunities to exercise could help decrease staff burnout.

Table 4. Participants' Suggestions on Reducing Work-Related Stress and Burnout (n = 547)

| *Suggestions* | % (n) |
|---|---|
| Organizational changes | |
| More opportunities to connect with coworkers | 49.0 (268) |
| Changes to organization structure | 33.6 (184) |
| Reduce case load | 32.7 (179) |
| Reduced travel time | 22.3 (122) |
| Permission to take leave of absence | 19.0 (104) |
| Self-care opportunities | |
| Convenient opportunities to for exercise | 39.7 (217) |
| Training in relaxation | 22.5 (123) |
| Meditation training | 16.1 (88) |
| Support groups for grief or stress | 15.9 (87) |

The results of our survey indicate that although stress remains a significant issue for hospice staff, it is not necessarily a pivotal factor that inevitably leads to poorer mental health or burnout. Whereas staff in our study reported high levels of stress, only a small proportion reported moderate-to-severe symptoms of depression, anxiety, compassion fatigue, or burnout. This is similar to reviews of literature on stress in hospice that found that although high levels of stress were identified as a problem in the early days of hospice care, later studies showed levels consistent with, or lower than, other health care settings.[2,26] Recognition of the potential for burnout and compassion fatigue due to the nature of hospice work may have encouraged the development of more robust organizational supports to help allay the stress inherent in working with the dying.[2]

Social support appears to be a vital factor in keeping stress to a manageable level. Although staff in our study reported moderate-to-high levels of stress, they also reported very high levels of social support and identified social support as a key coping mechanism in managing stress. Ablett and Jones[27] in their work on resilience and well-being in palliative care staff similarly identified social support and good social networks as a key elements of coping. Having a personal support system is believed to help prevent burnout and be an important factor in maintaining personal and professional life balance.[1,15] Social support has long been associated with good mental health in the general population.

Although the hospice workers surveyed for this study reported high levels of stress, they also reported high levels of satisfaction with their current positions. This is similar to other studies that have looked at stress and burnout in hospice work and found that workers overall appeared to be satisfied and found meaning in their work, which act as protective factors to stress they experience.[5,9,26] Respondents had a number of suggestions for reducing work-related burnout that focused on organizational changes and self-care

opportunities. Addressing organizational issues related to stress may be especially important around this new era of change in health care related to the Affordable Care Act.

This study presents a cross-sectional picture of hospice workers across the state of Minnesota, and in that respect is limited by representing only a snapshot in time in the long trajectory of a professional career in hospice. The study focused only on medium-to-large hospice programs with higher caseloads, so is not representative of smaller hospice programs. Although the data are limited in these respects, they do provide important information about the overall mental health of hospice workers in Minnesota.

Although most of the hospice staff in our survey had relatively good mental health, it is important to note that a small but notable proportion of staff also reported high levels of depression, anxiety, compassion fatigue, and burnout. Identifying and helping staff who are struggling with mental health concerns remains an important task for hospice organizations, not only for staff retention, but also for maintaining high-quality patient care. Ongoing staff assessment by supervisors for increasing stress and the onset of compassion fatigue will allow for earlier intervention or appropriate referrals for help and assistance. Finding ways to support staff, providing opportunities for engagement with coworkers, and providing supportive self-care opportunities may alleviate some of the chronic stress staff experience.

Poor mental health places staff at risk of burnout and likely contributes to staff leaving hospice care. This is becoming a more critical issue as the profession attempts to attract new staff to meet the expanding demands for hospice care. End-of life care in general is expected to grow at a rapid rate over the next 2 decades, as baby boomers enter their senior years and life expectancy continues to increase. For hospice organizations meeting this increased demand, this requires meeting the needs of their staff so they are able to continue to provide high-quality end-of-life care for the patients and families they serve.



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## Author Disclosure Statement

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Address correspondence to:
*Robin R. Whitebird, PhD, MSW*
*HealthPartners Institute for Education and Research*
*PO Box 1524, MS#21111R*
*Minneapolis MN 55440-1524*

*E-mail:* robin.r.whitebird@healthpartners.com