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# Compassion Satisfaction and Compassion Fatigue Among Critical Care Nurses

**Abstract**
BACKGROUND Although critical care nurses gain satisfaction from providing compassionate care to patients and patients' families, the nurses are also at risk for fatigue. The balance between satisfaction and fatigue is considered professional quality of life.

OBJECTIVES To establish the prevalence of compassion satisfaction and compassion fatigue in adult, pediatric, and neonatal critical care nurses and to describe potential contributing demographic, unit, and organizational characteristics.

METHODS In a cross-sectional design, nurses were surveyed by using a demographic questionnaire and the Professional Quality of Life Scale to measure levels of compassion fatigue and compassion satisfaction.

RESULTS Nurses (n = 221) reported significant differences in compassion satisfaction and compassion fatigue on the basis of sex, age, educational level, unit, acuity, change in nursing management, and major systems change.

CONCLUSIONS Understanding the elements of professional quality of life can have a positive effect on work environment. The relationship between professional quality of life and the standards for a healthy work environment requires further investigation. Once this relationship is fully understood, interventions to improve this balance can be developed and tested.

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# Compassion Satisfaction and Compassion Fatigue Among Critical Care Nurses

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Background Although critical care nurses gain satisfaction from providing compassionate care to patients and patients' families, the nurses are also at risk for fatigue. The balance between satisfaction and fatigue is considered professional quality of life.
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Results Nurses (n = 221) reported significant differences in compassion satisfaction and compassion fatigue on the basis of sex, age, educational level, unit, acuity, change in nursing management, and major systems change.
Conclusions Understanding the elements of professional quality of life can have a positive effect on work environment. The relationship between professional quality of life and the standards for a healthy work environment requires further investigation. Once this relationship is fully understood, interventions to improve this balance can be developed and tested. (*Critical Care Nurse*. 2015;35[4]:32-44)

**Nurses who work at the bedside of critically ill patients witness marked human suffering.** The nurses provide compassionate care to patients who experience illnesses and events that are often sudden, disfiguring, and life threatening. Although nurses obtain professional satisfaction from their work, their repeated exposure to the aftermath of critical illness puts them at high risk for compassion fatigue, a phenomenon with signs and symptoms similar to those of posttraumatic stress disorder.[1]

**CE** Continuing Education

This article has been designated for CE credit. A closed-book, multiple-choice examination follows this article, which tests your knowledge of the following objectives:

1. Differentiate between compassion satisfaction and compassion fatigue
2. Identify factors that contribute to compassion fatigue
3. Discuss the relationship between compassion satisfaction and healthy work environments

†Deceased.

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This phenomenon, known as compassion fatigue, was first described by Joinson[2] in 1992 as a type of burnout specific to caregivers who help trauma patients. Although in health care the term *trauma* generally refers to patients who sustain organ and tissue damage caused by blunt or penetrating injury,[3] the American Psychiatric Association[4(p830)] refers to a traumatic stressor as "any event (or events) that may cause or threaten death, serious injury, or sexual violence to an individual, a close family member, or a close friend." Thus, patients with organ failure, stroke, sepsis, and other life-threatening illnesses also experience trauma. Of crucial importance, although patients are the primary persons affected by trauma, patients' caregivers, including nurses and health care providers, may experience secondary effects related to the resulting anguish.[5]

Initial research on the measurement of compassion fatigue in the helping professions was published by Figley[1] and Stamm.[6] In studies of the reasons employees remain in their role as caregivers despite high levels of compassion fatigue, findings indicated that the employees also gain a sense of compassion satisfaction, which is defined as the positive feelings derived from helping others through traumatic situations.[6-8] The cumulative experience of both compassion fatigue and compassion satisfaction is described as professional quality of life (ProQOL).[9] As conceptualized by Stamm,[6] a sustainable ProQOL is achieved by maintaining a healthy balance between the positive and negative aspects of caring. Compassion satisfaction is the sum of all the positive feelings a person derives from helping others. As stated earlier, compassion fatigue was first described as a form of burnout, which is defined as a cumulative state of frustration with a person's work environment that develops over a long time. Burnout remains a component of compassion fatigue in this model. The second component of compassion fatigue, secondary traumatic stress, is a feeling of despair caused by the transfer of emotional distress from a victim to a caregiver that often develops suddenly. In the presence of secondary traumatic stress, the caregiver is empathizing with the victim.[9-11] Although the elements of compassion fatigue are related, secondary traumatic stress is an effect of experiences with specific types of patients, whereas burnout is an effect of environmental stressors and is not unique to health care providers.[12] According to the ProQOL model, a caregiver's level of burnout and secondary traumatic stress contribute to his or her experience of compassion fatigue.[9-11] Ideally, the balance between compassion fatigue and compassion satisfaction should be achieved in the workplace and beyond, emphasizing the importance of a positive work-life balance.[9-11]

In 2005 the American Association of Critical-Care Nurses[13] published 6 standards for establishing and maintaining a healthy work environment (HWE). These standards challenge health care leaders to critically evaluate the state of the environment and to provide clear, measurable methods for improving working conditions. Numerous studies[14-17] have established that compared with nurses working in a less stressful environment, nurses working in overly stressful conditions are more prone to mental and physical exhaustion, causing more missed days of work and higher rates of attrition. In addition, patient satisfaction and, more important, patient safety, are directly linked to nurses' job satisfaction.[13,18] Thus, nurse leaders are compelled to evaluate and improve nurses' work environment. This evaluation should include an assessment of environmental risk factors for compassion fatigue and resources available for staff who may manifest signs and symptoms of this phenomenon.[10-12,19]

## Objectives and Purpose

The prevalence of compassion fatigue and compassion satisfaction has been explored in many populations of caregivers, including social workers and emergency,


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medical-surgical, cardiovascular, pediatric, oncology, and hospice nurses, but rarely in critical care nurses.[18,20-27] The primary purpose of our study was to establish the prevalence of compassion satisfaction and compassion fatigue in adult, pediatric, and neonatal critical care nurses at a large Magnet-designated academic medical center in western New York State. A secondary purpose was to describe the demographic, unit, and organizational factors that may contribute to both compassion satisfaction and compassion fatigue in these nurses.

## Methods

### Participants and Setting

This cross-sectional study was conducted in a 739-bed tertiary care, academic medical center in late 2010. The sample population was drawn from all critical care nurses (registered nurses and licensed practical nurses) working in single-acuity units (intensive care patients only) and mixed-acuity units (intensive care patients, progressive care patients, and general care patients in the same unit). The 9 targeted units included 3 adult intensive care units (ICUs; medical, surgical, and cardiovascular), 3 adult mixed ICUs and progressive care units (PCUs; 1 medical and 2 surgical), 1 pediatric ICU, 1 pediatric mixed-acuity unit (ICU, PCU, and general care patients), and 1 neonatal ICU. Critical care nurses were invited to participate in the survey if they were 18 years or older and were employed full-time, part-time, or per diem in 1 of the 9 targeted units.

It is crucial to note that the patient's caregivers, including nurses and health care providers, may experience secondary effects related to the anguish that results from critical illness.

### Instruments

A demographic questionnaire and the ProQOL, version 5, survey were used in the study.[9] Permission to use the ProQOL instrument was granted via the website of the tool's author. The ProQOL survey consists of 3 subscales (compassion satisfaction, burnout, and secondary traumatic stress) used to measure compassion satisfaction and compassion fatigue. Of the 3 subscales, 2 (burnout and secondary traumatic stress) are components of compassion fatigue, whereas compassion satisfaction is a stand-alone measure. Previous testing[9] indicated acceptable levels of internal consistency reliability for each of the subscales; the Cronbach $\alpha$ was 0.88 for compassion satisfaction, 0.75 for burnout, and 0.81 for secondary traumatic stress. As recommended by Stamm,[9] selected items from the instrument were individualized for application to the target audience of the study reported here. Specifically, the terms *help* and *helper* were replaced with the terms *care for* and *caregiver*, respectively. Also, the phrase *trauma victims* was replaced with *patients and families*. Additionally, the surveys were transcribed to an electronic platform for ease of distribution.

### Procedures

The study was approved by the medical center's institutional review board. The medical center's nurse leaders and clinical research representatives granted permission for electronic distribution of the survey to critical care nurses who met the inclusion criteria. An invitation to participate with a link to the online survey was sent via institutional e-mail, with a reminder e-mail 2 weeks later. Nurses were assured that their responses would be anonymous and that no participant identifiers would be collected. Nurses were informed that participation was voluntary and that completion of the survey constituted their willingness to participate in the study. The embedded link directed participants to a separate website for completion of the survey, which included instructions to enroll in a password-protected online platform where the nurses could receive a certificate of completion redeemable for a $2.50 beverage coupon.

### Data Analysis

Data were downloaded from the online survey platform into a spreadsheet and then uploaded and analyzed by using SPSS, version 17.0 (IBM SPSS). A nominal significance level ($\alpha \leq .05$) was established a priori. Nurse, unit, and organizational characteristics were described by using descriptive measures. Correlations with Cronbach $\alpha$ were used to examine the internal consistency reliability of the ProQOL scale in the sample. After reverse coding of selected items, raw data were converted to *t* scores as indicated in the ProQOL manual.[9] The use of *t* scores produced a standardization of each subscale in which the scale mean equaled 50, with a standard deviation of 10. Analysis of variance with post hoc comparisons via the Scheffé test was used to compare mean scores for each subscale according to nurse, unit, and organizational characteristics. Standardized *t* scores

were also converted to categorical levels (low = 22 or less, average = 23-41, and high = 42 or more) according to Stamm's scoring thresholds.[9] Because of an inadvertent omission of 1 item on the secondary traumatic stress subscale (I find it difficult to separate my personal life from my life as a caregiver), the thresholds were algebraically modified to reflect the revised total items. Each categorical level subscale was then analyzed by using cross tabulations with $\chi^2$ values.

## Results

The number of nurses who responded to the survey was 221 (38% participation rate); highest percentages were from the neonatal (30%) and pediatric (16%) ICUs. Demographic characteristics are presented in Table 1. Consistent with the nurse demographics of the hospital, the majority of the sample were female (94.6%) and had a bachelor's degree (71.0%). The Cronbach $\alpha$ values for the 3 subscales of the ProQOL instrument used were 0.91 for compassion satisfaction, 0.45 for burnout, and 0.73 for secondary traumatic stress. Generally speaking, participants scored within the average range for all 3 ProQOL subscales; however, group and individual findings in the compassion satisfaction and compassion fatigue measures differed significantly.

### Compassion Satisfaction

#### Group Mean Compassion Satisfaction Score

Comparison of nurse, unit, and organizational characteristics revealed significant group differences in mean compassion satisfaction for 4 variables: sex, age, unit acuity, and change in nursing management (Table 2). Compared with male nurses (n = 11), female nurses (n = 199) reported significantly higher compassion satisfaction scores: $F_{1,208} = 4.5$; $P = .04$. Additionally, differences in mean compassion satisfaction differed significantly according to nurses' age: $F_{5,204} = 2.4$; $P = .04$. Post hoc comparisons revealed that nurses 40 to 49 years old had significantly lower compassion satisfaction ($P = .03$) than did nurses in other age groups. Mean compassion satisfaction also differed significantly according to unit acuity level: $F_{2,205} = 6.3$; $P = .002$. Post hoc comparisons revealed that nurses working on single-acuity units had significantly higher compassion satisfaction ($P = .007$) than did nurses working on mixed-acuity units. Finally, compared with nurses who had no change in nursing management in the preceding year, nurses who had a recent change in management had significantly lower mean compassion satisfaction scores: $F_{1,191} = 9.9$; $P = .002$.

**Table 1** Sample demographics (n = 221)

| Variable[a] | No. (%)[b] |
|---|---|
| Sex | |
| Female | 209 (94.6) |
| Male | 11 (5.0) |
| Missing | 1 (0.5) |
| Age, y | |
| 20-29 | 93 (42.1) |
| 30-39 | 40 (18.1) |
| 40-49 | 47 (21.3) |
| ≥50 | 38 (17.2) |
| Missing | 3 (1.4) |
| Nursing unit type | |
| Adult ICU | 44 (19.9) |
| Adult ICU/PCU | 62 (28.1) |
| Pediatric ICU | 33 (14.9) |
| Pediatric cardiac center | 8 (3.6) |
| Neonatal ICU | 63 (28.5) |
| Missing | 11 (5.0) |
| Unit tenure, y | |
| <1 | 35 (15.8) |
| 1-3 | 71 (32.1) |
| 4-6 | 33 (14.9) |
| 7-10 | 19 (8.6) |
| 11-15 | 23 (10.4) |
| 16-20 | 13 (5.9) |
| >20 | 23 (10.4) |
| Missing | 4 (1.8) |
| Nursing experience, y | |
| <1 | 21 (9.5) |
| 1-3 | 58 (26.2) |
| 4-6 | 33 (14.9) |
| 7-10 | 15 (6.8) |
| 11-15 | 27 (12.2) |
| 16-20 | 21 (9.5) |
| >20 | 43 (19.5) |
| Missing | 3 (1.4) |
| Clinical role of nurse | |
| Level I | 19 (8.6) |
| Level II | 117 (52.9) |
| Level III | 28 (12.7) |
| Senior level III | 25 (11.3) |
| Level IV (nurse leader) | 18 (8.1) |
| Level V (nurse manager) | 3 (1.4) |
| Missing | 11 (5.0) |
| Highest educational degree | |
| Associate | 37 (16.7) |
| BS/BSN/BA | 157 (71.0) |
| MS/MSN/other master's | 20 (9.0) |
| Missing | 7 (3.2) |

Abbreviations: BS/BSN/BA, bachelor's degree; ICU, intensive care unit; PCU, progressive care unit; MS/MSN/other master's, master's degree.
[a] Missing indicates that response was left blank or respondent selected "decline to answer."
[b] Because of rounding, not all percentages total 100.

**Table 2** Mean differences in compassion satisfaction (n = 221)

| Variable[a] | Compassion satisfaction *t* score, mean (SD) | n | *P*[b] |
|---|---|---|---|
| Sex | | | |
| Male | 43.8 (7.6) | 11 | .04 |
| Female | 50.3 (10.0) | 199 | |
| Missing | | 11 | |
| Age, y | | | |
| 20-29 | 49.5 (8.5) | 89 | |
| 30-39 | 49.3 (11.2) | 38 | |
| 40-49 | 47.9 (11.0) | 44 | .03 |
| ≥50 | 54.7 (9.6) | 37 | |
| Missing | | 13 | |
| Acuity level | | | |
| Single | 51.7 (9.5) | 133 | .007 |
| Mixed | 47.7 (10.4) | 66 | |
| Missing | | 22 | |
| Nursing management change | | | |
| Yes | 47.7 (10.7) | 96 | .002 |
| No | 52.2 (9.0) | 97 | |
| Missing | | 28 | |

[a] Missing indicates that response was left blank or respondent selected decline to answer. For acuity level, single indicates intensive care unit; mixed indicates intensive care unit/progressive care unit or intensive/progressive/general care unit.
[b] Significant according to Scheffè post hoc comparisons.

### Individual Levels (Low, Average, High) of Compassion Satisfaction

Comparison of nurse, unit, and organization characteristics revealed significant differences in levels of compassion satisfaction for 3 variables: education, age, and unit acuity (Figure 1). The relationship between level of compassion satisfaction and highest level of education completed was significant: $\chi^2_4$ (n = 205) = 16; $P$ = .003. The overwhelming majority of the nurses within this sample reported average (57%) or high (43%) levels of compassion satisfaction. High levels of compassion satisfaction were more likely among nurses with an associate's degree (56%) or a master's degree (58%) than among nurses with a bachelor's degree (38%). The relationship between level of compassion satisfaction and age was also significant: $\chi^2_6$ (n = 208) = 20.7; $P$ = .002. That is, high levels of compassion satisfaction were more likely (73%) to be reported among nurses 50 years or older than among their younger colleagues (34%-42%). Additionally, a significant relationship existed between level of compassion satisfaction and unit acuity, $\chi^2_2$ (n = 199) = 6.4; $P$ = .04. That is, high levels of compassion satisfaction were more likely to be reported by nurses working on single-acuity units (ie, caring solely for ICU patients; 56%) than by nurses working on mixed-acuity units (ie, caring for ICU, PCU, and general care patients; 35%).

## Compassion Fatigue

### Group Mean Compassion Fatigue Scores

Comparison of nurse, unit, and organization characteristics revealed significant group differences in mean compassion fatigue for 4 variables: age, unit acuity, management change, and major system or practice change (Table 3). For age groups, significant differences occurred in mean burnout scores ($F_{5,201}$ = 3.2; $P$ = .008) and

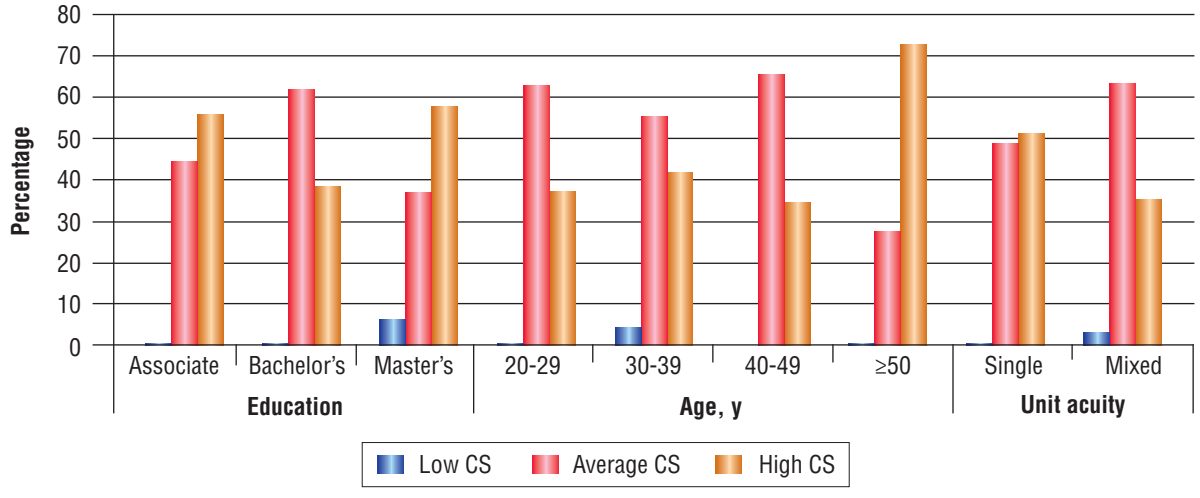


**Figure 1** Levels of compassion satisfaction (CS) according to $\chi^2$ test: low = 22 or less; average = 23-41; high = 42 or more.

## Table 3 Mean differences in compassion fatigue (n = 221)

| Variable[a] | Burnout | | | Secondary traumatic stress | | |
|---|---|---|---|---|---|---|
| | *t* score, mean (SD) | n | *P*[b] | *t* score, mean (SD) | n | *P*[b] |
| Age, y | | | | | | |
| 20-29 | 50.0 (8.1) | 86 | | 51.2 (10.3) | 90 | .04 |
| 30-39 | 49.4 (10.9) | 39 | | 47.8 (7.8) | 39 | |
| 40-49 | 54.1 (12.7) | 43 | .002 | 53.1 (11.3) | 43 | .01 |
| 50+ | 45.7 (7.8) | 37 | | 45.8 (8.3) | 38 | |
| Missing | | 16 | | | 11 | |
| Acuity level | | | | | | |
| Single | 48.2 (9.7) | 132 | .004 | 48.7 (10.4) | 135 | .01 |
| Mixed | 52.6 (9.9) | 64 | | 52.4 (8.9) | 66 | |
| Missing | | 25 | | | 20 | |
| Nursing management change | | | | | | |
| Yes | 53.1 (10.7) | 93 | | 50.6 (10.5) | 94 | |
| No | 47.7 (8.7) | 97 | | 49.4 (10.0) | 100 | |
| Missing | | 31 | | | 27 | |
| System/practice change | | | | | | |
| Redesign | | | | | | |
| Yes | 51.0 (10.1) | 75 | | 51.9 (10.8) | 74 | .02 |
| No | 49.0 (9.8) | 95 | | 48.3 (9.7) | 99 | |
| Missing | | 51 | | | 48 | |

[a] Missing indicates that response was left blank or respondent selected decline to answer. For acuity level, single indicates intensive care unit; mixed indicates intensive care unit/progressive care unit or intensive/progressive/general care unit.

[b] Significant according to Scheffé post hoc comparisons.

secondary traumatic stress scores ($F_{5,206} = 3.0$; $P = .01$). Post hoc comparisons revealed that nurses 40 to 49 years old had significantly higher burnout ($P = .002$) and higher secondary traumatic stress ($P = .01$) than did nurses in other age groups. Nurses 20 to 29 years old also reported significantly higher levels of secondary traumatic stress ($P = .04$) than did their older colleagues, although the mean burnout scores for the younger nurses did not differ significantly from the scores of other nurses outside that age group. Additionally, significant differences were found between acuity levels for both burnout ($F_{1,194} = 8.6$; $P = .004$) and secondary traumatic stress ($F_{1,199} = 6.2$; $P = .01$). Post hoc comparisons revealed that nurses working on mixed-acuity units had significantly higher burnout ($P = .004$) and secondary traumatic stress ($P = .01$) than did nurses working on single-acuity units. Furthermore, nurses working on a unit with a change in nursing management in the preceding year reported significantly higher levels of burnout ($F_{1,188} = 14.6$; $P < .001$) than did nurses who worked on a unit without a recent management change. Finally, nurses working on a unit with a major system or practice change in the preceding year had significantly higher mean secondary traumatic stress scores ($F_{1,171} = 5.6$; $P = .02$).

**Individual Levels (Low, Average, High) of Compassion Fatigue** Comparison of nurse, unit, and organization characteristics revealed significant differences in levels of burnout for 3 variables: management change, unit, and unit acuity (Figure 2). The relationship between level of burnout and recent change in nursing management was significant: $\chi^2_2$ (n = 190) = 9.0; $P = .01$. Low levels of burnout were more likely among nurses working on a unit without a recent change in nursing management (65%) than among nurses working on a unit with a management change (44%). Level of burnout was also significantly related to the unit on which the nurse was employed: $\chi^2_{16}$ (n = 198) = 28.9; $P = .02$. In this sample of critical care nurses, the majority (57%) reported low levels of burnout. Unit differences are displayed in Figure 2. Further analysis revealed differences in burnout according to unit acuity: $\chi^2_2$ (n = 196) = 8.9; $P = .01$. Low levels of burnout were reported by 64% of nurses working on single-acuity units and 42% of nurses working on mixed-acuity units. Similarly, more nurses from single-acuity units (81%) reported low levels of secondary traumatic stress than did nurses on mixed-acuity units (61%): $\chi^2_1$ (n = 201) = 9.4; $P = .002$ (Figure 3). In addition to

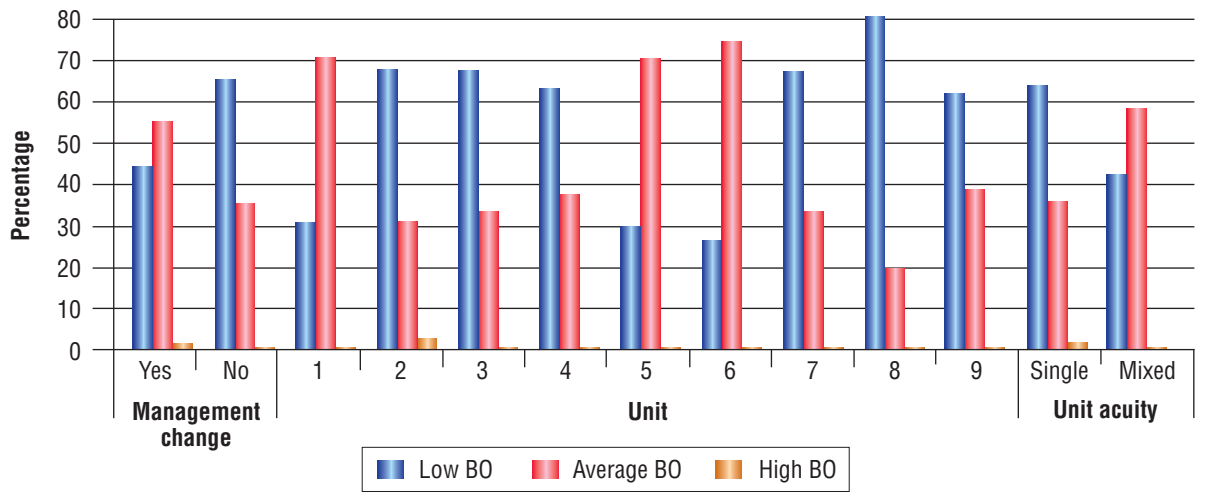


**Figure 2** Levels of burnout (BO) according to $\chi^2$ test: low = 22 or less; average = 23-41; high = 42 or more. Single = intensive care unit (ICU); mixed = ICU/ progressive care unit (PCU) or ICU/PCU/general care unit; 1 = adult surgical, mixed; 2 = neonatal, single; 3 = pediatric, single; 4 = pediatric, mixed; 5 = adult cardiovascular, single; 6 = adult surgical, mixed; 7 = adult medical, single; 8 = adult medical, mixed; 9 = adult surgical, single.

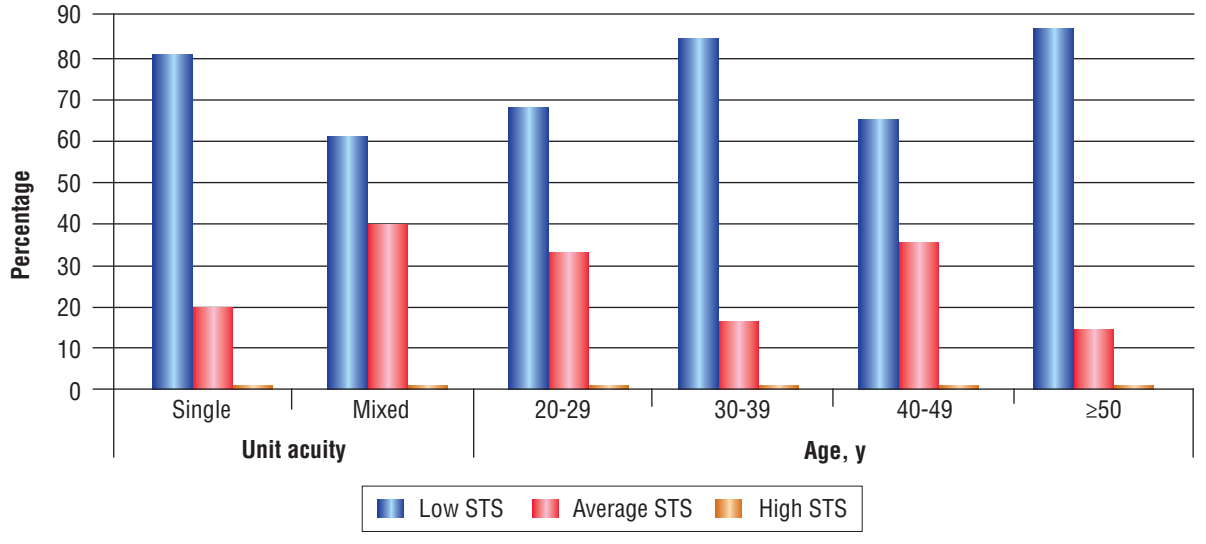


**Figure 3** Levels of secondary traumatic stress (STS) according to $\chi^2$ test: low = 22 or less; average = 23-41; high = 42 or more. Single = intensive care unit (ICU); mixed = ICU/progressive care unit (PCU) or ICU/PCU/general care unit.

unit acuity, level of secondary traumatic stress was significantly related to age: $\chi^2_3$ (n = 210) = 9.1; $P$ = .03. Within this sample, the overwhelming majority (74%) of the nurses reported low levels of secondary traumatic stress; the greatest percentage (87%) was among those 50 years or older.

## Discussion and Implications

The primary aim of this study was to determine the prevalence of compassion satisfaction and compassion fatigue in critical care nurses in an academic medical center. After responses were correlated, with few exceptions, critical care nurses scored within the average range for all 3 subscales. Differences in scores between units were not significant. Therefore, the critical care nurses in this sample have an effective balance in their ProQOL. From an organizational perspective, this finding is positive because no single unit had a high degree of burnout or secondary traumatic stress. Thus, the current

work environment appears to foster a healthy balance, and work environment interventions can be directed to increasing levels of compassion satisfaction rather than to preventing compassion fatigue.

Of the individual demographic factors examined, few significantly affected the degree of compassion satisfaction, burnout, or secondary traumatic stress. The most striking finding suggests that the age of a nurse has a great impact on ProQOL. Nurses 50 years or older scored higher on the compassion satisfaction scale and lower on the burnout and secondary traumatic stress scales than did their younger counterparts. A possible conclusion is that older nurses have more professional and life experience and therefore are better prepared to cope with the challenges of critical care nursing. The relationship between age and ProQOL has been examined by other researchers. Burtson and Stichler[28] found a significant difference in compassion fatigue subscales according to age and nursing experience. Compassion fatigue was negatively correlated with knowledge and skill, whereas knowledge and skill were positively correlated with a nurse's age and experience. Thus, the older and more experienced the nurse, the higher was the degree of knowledge and skill and the lower was the risk for compassion fatigue.

The findings[28] that younger and/or less experienced nurses are at higher risk for compassion fatigue than are their older colleagues is congruent with our findings. Young et al[23] reported that the degree of burnout was higher on a heart and vascular ICU, which had a larger number of older nurses, than on the heart and vascular intermediate care unit, which had a larger number of younger nurses. These researchers[23] concluded that younger nurses might not have been in the profession long enough for signs of burnout to develop. Finally, Potter et al[25] examined the impact of experience on ProQOL. Staff nurses with 6 to 10 years of experience had higher burnout and lower compassion satisfaction scores than did nurses with less experience; nurses with 11 to 20 years of experience had the highest degree of compassion fatigue.[25] Although the findings of these studies[23,25,28] differ, collectively they indicate that differences in age and experience can affect ProQOL, and therefore further study is warranted to fully examine this relationship.

The relationship between highest educational degree and ProQOL scores also implies some differences. Smart et al[12] suggested that increasing the number of nurses with a bachelor's degree in an institution increases the likelihood of improved patient outcomes and can decrease levels of compassion fatigue. In our study, nurses with a bachelor's degree reported lower compassion satisfaction scores than did nurses with associate's or master's degrees; no differences in secondary traumatic stress and burnout were related to educational preparation. One possible explanation is that nurses with bachelor's degrees were undergoing transition at the time of data collection, a finding consistent with the results of other studies.[29,30] Further research is needed to examine the combined relationship of educational preparation and entry into practice. Implications for nurse educators may also be discovered by further investigation into the relationship between educational preparation and ProQOL. Coetzee and Klopper[31] stated that nursing students should be educated about compassion fatigue as well as coping and self-care skills. Adding information about compassion fatigue to undergraduate nursing education may be warranted.

The most striking finding suggests that the age of a nurse has a great impact on ProQOL.

The difference in educational preparation and degree of compassion satisfaction is compelling in light of the current recommendation of the Institute of Medicine[32] for an increase in the number of nurses with a bachelor's degree within the workforce to 80% by 2020. Achieving this goal would likely place many of these bachelor's prepared nurses in critical care areas. Although the addition of more nurses with a bachelor's degree is an important component for altering the current health care environment, further study is needed to examine the full extent of the differences in ProQOL scores among nurses with varied educational preparation.

Finally, significant differences according to sex were noted in the compassion satisfaction and secondary traumatic stress subscales. This finding must be interpreted with caution because of the small proportion of male participants (5%). Hooper et al[18] also discovered a relationship between ProQOL scores and sex. In a sample of emergency, ICU, nephrology, and oncology nurses, females had higher compassion fatigue scores than did males.[18] Similar to our sample, the sample in the study by Hooper et al also had a lower number of male participants (8.3%). Further study is warranted to fully understand sex-based differences as they relate to ProQOL.

Organizational, or system, factors that affect ProQOL in our sample included management change, unit acuity level, and major systems change. For the purposes of analysis, nursing management change was defined as either a change in nurse manager or nurse leader staff within the preceding year. Nurses who reported that their unit had a managerial change within the preceding year scored lower on the compassion satisfaction scale and higher on the burnout scale than did nurses who did not experience such change. This finding is important because it suggests that units with a stable leadership structure have an environment more supportive of compassion satisfaction. Our findings suggest that managerial change is a factor in the development of burnout within a unit and is a potential contributing factor. Therefore, efforts to retain qualified critical care nurses and nurse managers should be emphasized.

As stated earlier, the units included in our study are single- and mixed-acuity units. Nurses in the single-acuity units scored higher on the compassion satisfaction scale and lower on the burnout and secondary traumatic stress scales than did nurses in the mixed-acuity units. This finding is of interest because many of the mixed-acuity units are new to the medical center. The results suggest that challenges in caring for patients with varied acuity levels within the same unit differ from the challenges for nurses in a single-acuity unit. Young et al[23] noted that different acuity levels can affect ProQOL. In a comparison of heart and vascular ICU and intermediate care nurses, the ICU nurses scored higher on the burnout subscale. Young et al[23] proposed that higher acuity, mortality rates, and greater use of technology contributed to these differences. Although this finding is contrary to our results, it does point to a need for future investigation.

Findings suggest that units with a stable leadership structure have an environment more supportive of compassion satisfaction.

For the purposes of our study, a major system or practice change was defined as changes within the unit environment such as the opening or splitting of a unit (unit redesign) within the preceding year. Within that time frame, 3 of the 9 units had undergone unit redesign or were in the process of doing so. The respondents who experienced a systems or practice change scored higher on the secondary traumatic stress scale than did nurses who did not. Because change is a constant within the health care environment, this finding suggests that nurses are at higher risk for compassion fatigue as their work environment evolves. Nurse leaders would be smart to implement support systems to guide staff through these times of evolution.

Professional quality of life and the principles of an HWE are interrelated. The standards of an HWE[13] can influence the degree to which an employee experiences compassion satisfaction and compassion fatigue. For instance, standard 1, skilled communication, focuses on promoting effective communication and multidisciplinary teamwork while eliminating intimidating behavior and mistrust. Such efforts can increase compassion satisfaction and decrease compassion fatigue. Increasing the degree of true collaboration will foster an increase in compassion satisfaction. Further, critical elements within standard 3, effective decision making, will decrease burnout and increase compassion satisfaction as nurses participate in shared governance. A lack of appropriate staffing has a direct link to burnout, whereas appropriate ratios and staffing mix have potential to increase compassion satisfaction. Developing a culture of meaningful recognition can directly influence the degree of compassion satisfaction. When a culture of meaningful recognition is not in place, nurses may feel undervalued, resulting in feelings of compassion fatigue. Finally, authentic leaders can influence compassion satisfaction and compassion fatigue directly. Effective leaders are integral to the development of an HWE; when the standard for authentic leadership is not met, the other standards are adversely affected.[13] To improve the work environment, leaders should promote a culture of caring, recognition, professional development, and debriefing.[10,18] Our findings can be used by organizational leaders to implement changes to improve the work environment. Although future research is needed to investigate the relationship between ProQOL and an HWE, we have identified characteristics that can be considered when changes are implemented. Nurse leaders are encouraged to refer to the ProQOL manual[6] for suggestions to improve scores while also affecting the work environment.

Our findings have implications related to the nurses' workforce within our facility and for transforming the work environment. In the months after our study, an institution-wide employee satisfaction survey was sent out. The findings of the survey were congruent with our results. Consequently, the leadership teams and shared governance councils of each unit have developed and

implemented action plans to address identified areas for improvement. The sustained effects of these efforts will be measured with subsequent employee satisfaction surveys.

## Limitations

The generalizability of our findings may be limited. We focused on determining the prevalence of compassion satisfaction and compassion fatigue in a small sample of critical care nurses. Because of the cross-sectional design, the data could be representative of a bad day, high unit acuity, or any number of additional factors. A longitudinal design might be useful to determine a true reflection of ProQOL within a profession that experiences many fluctuations in day-to-day happenings. In addition, the findings related to the unacceptable reliability of the burnout scale and the low response rate should be interpreted with caution. In addition, the secondary traumatic stress scale had low reliability scores, which may be related to the omission of 1 subscale question and the change in the wording of item 28. Although many studies[18,23,28,31] have indicated similar nurse and organizational differences in ProQOL, others[23,25] had contradictory findings, particularly in relation to nurses' age. A larger, multi-institutional study could be done to further explore these differences. Despite these limitations, our results highlight the importance of ProQOL measurement among critical care nurses and identifies areas for future research.

## Conclusion

Understanding the principles and balance of ProQOL can have a positive effect on the work environment and, ultimately, outcomes of patient care. Nurse leaders can use ProQOL assessment and staff satisfaction scores to measure the effect of work environment interventions. Disseminating information about ProQOL to bedside nurses is particularly important because everyone has a role in improving the work environment. The link between ProQOL and an HWE, as well as workforce characteristics and organizational structures that affect ProQOL, require further confirmatory study to determine true significance. Once the relationships are fully understood, interventions to improve the balance between compassion satisfaction and compassion fatigue can be developed and tested. Critical care nurses most likely have fluctuating levels of compassion satisfaction and compassion fatigue, depending on the population of patients cared for and the nurses' personal circumstances. The goal of interventions may be to modify the factors over which nurses do have influence. Providing nurses with an environment in which they are supported through difficult situations, given accolades for their work, and made to feel that their input is valued in removing or modifying system-based obstacles will remain vitally important. CCN

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Financial Disclosures
None reported.

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# Compassion Satisfaction and Compassion Fatigue Among Critical Care Nurses

## Facts

Although critical care nurses gain satisfaction from providing compassionate care to patients and patients' families, the nurses are also at risk for fatigue. The balance between satisfaction and fatigue is considered professional quality of life.

A demographic questionnaire and the professional quality of life (ProQOL) survey were used in the study. The sample population was all critical care nurses working in single-acuity and mixed-acuity units.

## Study Findings

- Female nurses reported significantly higher compassion satisfaction scores than did male nurses.
- Nurses 40 to 49 years old had significantly lower compassion satisfaction than did nurses in other age groups.
- Nurses working on single-acuity units had significantly higher compassion satisfaction than did nurses working on mixed-acuity units.
- Compared with nurses who had no change in nursing management in the preceding year, nurses who had a recent change in management had significantly lower mean compassion satisfaction scores.
- High levels of compassion satisfaction were more likely among nurses with an associate's degree or a master's degree than among nurses with a bachelor's degree.
- Nurses 40 to 49 years old and nurses working on mixed-acuity units had significantly higher burnout and higher secondary traumatic stress than did nurses in other age groups and nurses working on single-acuity units, respectively.
- Nurses 50 years or older scored higher on the compassion satisfaction scale and lower on the burnout and secondary traumatic stress scales than did their younger counterparts. A possible conclusion is that older nurses have more professional and life experience and therefore are better prepared to cope with the challenges of critical care nursing.
- Our findings suggest that managerial change is a factor in the development of burnout within a unit and is a potential contributing factor.

## Healthy Work Environment Standards

The standards of a healthy work environment can influence the degree to which a nurse experiences compassion satisfaction and compassion fatigue.

- Skilled communication focuses on promoting effective communication and multidisciplinary teamwork while eliminating intimidating behavior and mistrust.
- Increasing the degree of true collaboration will foster an increase in compassion satisfaction.
- A lack of appropriate staffing has a direct link to burnout, whereas appropriate ratios and staffing mix have potential to increase compassion satisfaction.
- Developing a culture of meaningful recognition can directly influence compassion satisfaction. When a culture of meaningful recognition is not in place, nurses may feel undervalued, resulting in compassion fatigue.
- Authentic leaders can influence compassion satisfaction and compassion fatigue directly. When the standard for authentic leadership is not met, the other standards are adversely affected.
- To improve the work environment, leaders should promote a culture of caring, recognition, professional development, and debriefing.
- Understanding the elements of professional quality of life can have a positive effect on work environment. CCN

Sacco TL, Ciurzynski SM, Harvey ME, Ingersoll GL. Compassion satisfaction and compassion fatigue among critical care nurses. *Critical Care Nurse*. 2015;35(4):32-44.

## CE Test

**Test ID C1543: Compassion Satisfaction and Compassion Fatigue Among Critical Care Nurses**

**Learning objectives:** 1. Differentiate between compassion satisfaction and compassion fatigue 2. Identify factors that contribute to compassion fatigue 3. Discuss the relationship between compassion satisfaction and healthy work environments

**1. According to this study, which of the following nurses has the lowest risk of developing compassion fatigue?**
a. New graduate nurse, age 50, works in a mixed acuity intensive care unit (ICU)
b. Nurse, age 29, with 5 years experience, works in a single acuity ICU
c. Nurse age 55, with 30 years experience, works in a single acuity ICU
d. New graduate nurse, age 30, works in a single acuity ICU

**2. According to this study, nurses with a bachelor's degree are at higher risk for which of the following?**
a. Burnout and traumatic stress
b. Compassion fatigue
c. Compassion satisfaction
d. The effect of education was inconclusive

**3. Which of the following best describes the feeling of despair that is caused by transfer of emotional distress?**
a. Traumatic stress
b. Secondary traumatic stress
c. Burnout
d. Compassion fatigue

**4. With respect to compassion satisfaction and compassion fatigue, which of the following can nurse leaders do to improve the work environment?**
a. Decrease the nurse to patient ratio
b. Cultivate a culture of caring and meaningful recognition
c. Survey the nursing staff to determine their needs
d. Recognize the role of each team member

**5. Which of the following should be the primary goal of employee satisfaction surveys?**
a. Allow employees to vent their concerns
b. Address areas for improvement
c. Reduce compassion fatigue
d. Promote system change

**6. Which of the following is an important outcome in maintaining a positive work-life balance?**
a. Compassion satisfaction
b. Healthy work environment
c. Personal satisfaction
d. Patient safety

**7. Nursing staff contribute to a healthy work environment by which of the following?**
a. Recognizing their response to a stressful situation
b. Participating in a shared governance
c. Implementing system change in care delivery
d. Tolerating inappropriate behaviors in a stressful environment

**8. Which of the following best describes how secondary traumatic stress differs from burnout?**
a. Affects all professions regardless of job category
b. Affects only health care providers working with trauma victims
c. Includes environmental stress as well as patient care
d. Is an emotional response based on a specific patient experience

**9. Standards of a healthy work environment that directly influence compassion satisfaction and compassion fatigue include which of the following?**
a. Multidisciplinary teamwork
b. Creating a culture of meaningful recognition
c. Changes in the work environment
d. Changes in management

**10. The ProQOL survey used in this study measured with of the following?**
a. Compassion satisfaction and compassion fatigue
b. Compassion satisfaction and healthy work environment
c. Burnout and secondary traumatic stress
d. Patient safety and healthy work environment

Test answers: Mark only one box for your answer to each question. You may photocopy this form.

| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
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| ❑ b | ❑ b | ❑ b | ❑ b | ❑ b | ❑ b | ❑ b | ❑ b | ❑ b | ❑ b |
| ❑ c | ❑ c | ❑ c | ❑ c | ❑ c | ❑ c | ❑ c | ❑ c | ❑ c | ❑ c |
| ❑ d | ❑ d | ❑ d | ❑ d | ❑ d | ❑ d | ❑ d | ❑ d | ❑ d | ❑ d |

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