

# Quality of Life Indicators in a Stateside Military Hospital

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## Abstract

Hospital workers exposed to war related trauma are susceptible to mental health challenges that develop into traumatic stress and burnout. This study examines satisfaction, burnout and secondary traumatic stress in 481 staff members at Womack Army Medical Center (WAMC), Fort Bragg, NC as measured by the Professional Quality of Life Questionnaire (ProQoL). Results show that compared to national norms, staff at WAMC measured higher levels of compassion satisfaction and lower levels of burnout and compassion fatigue. Additional data compared scores on the ProQOL between staff who had experienced a deployment within the previous 12 months, compared to staff that had not. There was no difference in the scores on the ProQOL for this subgroup. Findings suggest that staff in this Military Treatment Facility (MTF) are relatively satisfied with their work and working conditions.

## INTRODUCTION

Stress symptoms among military hospital workers are relatively under studied despite the fact that hospital staff are considered a highly exposed population.<sup>1-3</sup> This is especially true during times of war, when large numbers of wounded soldiers are admitted to Military Treatment Facilities (MTFs).<sup>4</sup> Casualties of war tend to create additional pressure on hospital staff. To date, no study has been conducted on MTFs hospital staff exposed to large numbers of trauma patients.<sup>5</sup>

Unique to the Operation Iraqi Freedom and Operation Enduring Freedom (OEF/OIF) warfare is the fact that 90% of wounded soldiers survive their injuries; almost half of the wounded are able to return to active duty.<sup>6</sup> Many wounded are treated in the theater of operation and within weeks return to duty. For those unable to return quickly to active duty or those, due to the extent of their injuries, will not return to active duty at all, ambulatory and inpatient hospital care is warranted in either a Veterans Administration hospital or Department of Defense facility.

Womack Army Medical Center (WAMC) is a 128-bed medical center located on Fort Bragg, NC that provides medical services to over 180 000 beneficiaries. Fort Bragg, "the center of the airborne universe," is home to the XVIII Airborne Corps, the 82nd Airborne Division and the US Army Special Operations Command. WAMC is confronted with an increasingly visible wounded warrior population.

And while the clinical and administrative community at WAMC continues to focus their efforts on improving soldier care, this influx of wounded soldiers impacts all hospital staff.<sup>4</sup>

## COST OF CARING

Working with the traumatized— i.e., those wounded in battle— can have both negative and positive influences on those who are responsible for their care. Studies have documented the impact of caring on helping professionals.<sup>7,8</sup> Some researchers suggest that there is a cost to caring that can occur when a clinician is exposed to traumatic events that occur within the lives of their patients. Experiencing the impact of working with the war wounded often creates a constellation of responses— some positive and some negative— from the medical community's immersion in a soldier's suffering.<sup>7</sup> This phenomenon is not unique to those health care professionals working in a war environment. However, when working in a war environment, the potential for burnout and compassion fatigue rises as staff joins empathically with the wounded and their family.

## COMPASSION FATIGUE AND BURNOUT

Burnout and compassion fatigue (CF) are two possible outcomes for those that work with the war wounded. Compassion fatigue is a negative aspect of our work as helpers. CF is to be seen as an expression of a negative feeling driven by fear and work related trauma. It is an outgrowth of hearing some of the most painful and difficult

stories told to helpers by their clients.<sup>9</sup> Burnout differs from compassion fatigue in that compassion fatigue is the direct result of hearing emotionally shocking material from clients; burnout is a problem of the social environment in which people work. Issues such as workload, lack of control, insufficient rewards, unfairness, low pay, etc., all are potential causes of burnout.<sup>10</sup> Burnout is associated with feeling of hopelessness, and difficulties in dealing with work and doing your job effectively. These negative feelings usually have a gradual build up and often reflect the feeling that one's efforts make no difference.<sup>9</sup> Empirical studies of burnout note that it is an especially prevalent condition among the helping professionals.<sup>12</sup>

In a study of disaster response teams, levels of secondary traumatic stress (compassion fatigue), were above levels of 20%.<sup>11</sup> In another study, following the 1995 Oklahoma City bombing, 64.7% of trauma workers noted significant levels of compassion fatigue and 54% of responders to the 9/11 attacks were at moderate to high risk for compassion fatigue.<sup>12</sup>

Conrad and Kellar-Guenter<sup>13</sup> found a positive relationship between burnout and compassion fatigue and found high levels of compassion satisfaction—the pleasure derived from being able to do one's work well—in individuals with low levels of burnout. A study among international aid workers found similar result.<sup>14</sup> These findings support a positive relationship between compassion fatigue and burnout and an inverse relationship between compassion satisfaction and burnout.

### DEPLOYMENT

The Department of Defense reports that nearly one-third of military personnel deployed in OEF/OIF have experienced extended tours and/or repeated deployments and it is assumed that extensions and repeated deployments are likely to continue.<sup>15</sup> Military induced separations create stress due to the exigencies of departure, increased caretaking and household responsibilities for family members that remain at home, disconnected relationships, loss of emotional support, fear and readjustment of roles.<sup>16</sup> Recognizing that the average age of active duty service members is 23 years and that 44% of active duty troops have children many young families have been impacted by the war effort and multiple deployments.<sup>17</sup>

Several studies document the depth and extent of the impact of deployment, anecdotal press and media coverage suggests

that deployment puts a particular strain on military families. In one study, 798 spouses of active duty personnel were assessed. Findings showed that spouses who experienced extensions and/or multiple deployments fared worse on an array of measures. These included mental well-being, household strains and some areas of their jobs; these spouses were more likely to view the Army negatively.<sup>15</sup> Similarly, Eaton in a survey of 940 military spouses found that spouses have similar rates of mental health problems as soldiers.<sup>18</sup> A study of 872 military spouses by Warner and colleagues found that approximately 1 out of every 10 respondents noted symptoms of severe depression and nearly half met the clinical criteria for depression.<sup>19</sup>

Based on the existing literature, it is assumed that the impact of deployments on family members is considerable and thus became a factor to be evaluated in the responses to the ProQoL. Research suggests that it potentially would impact the three domains of measurement within the survey: compassion satisfaction (CS), compassion fatigue (CF) and burnout (BO).

### METHODS

#### INSTRUMENT

The ProQOL is comprised of three 10-item scales— CS, BO and CF. Items are scored on a Likert scale, in which 0 equals “never”, and 5 equals “very often” For each of the three scales, the ten item ratings are totaled to arrive at a score. The ProQOL has good construct validity and is well validated with over 200 articles noted in the peer review literature; the alpha reliabilities of the scale are compassion satisfaction =0.87, compassion fatigue=0.80 and burnout=0.70.<sup>20</sup>

Compassion Satisfaction (on the ProQOL: mean 37, SD 7) measures the pleasure derived from being able to do one's work well. Staff often finds pleasure in helping others through their work. They may feel positive about the work they accomplish with their colleagues, the care and help given to someone in need or the changes they may make for their community. Higher scores on this scale indicate a greater satisfaction in their ability as caregivers. About 25% of people score higher than 41.0 and about 25% of people score below 32.0. A score over 37.0 suggests positive satisfaction.<sup>20</sup>

Burnout (on the ProQOL: mean 22.0, SD 6) is associated with feelings of hopelessness and inefficacy/frustrations related to work. While generally understood, the onset of

these negative feelings may be so gradual that it is not obvious until the feelings become overwhelming. BO can reflect the feeling that the staff's efforts make no difference, or it can be associated with a very high workload or a non-supportive work environment. Generally burnout reflects distress at administrative and work environment concerns. Higher scores on this scale indicate one is at a higher risk for BO. About 25% of people score above 28.0 and about 25% of people score below 19.0. A score of above 23.0 suggests the presence of burnout.<sup>20</sup>

Compassion fatigue occurs when staff is exposed to other people's traumatic experiences. Often, the staff internalizes the patients' trauma. The exposure is secondary; one is not in direct physical danger like a soldier or a humanitarian aid worker. Thus, CF is often called secondary trauma and related to vicarious trauma. Compassion Fatigue symptoms are usually rapid in onset and associated with a particular event. Higher scores above 17.0 on this scale indicate one is at a higher risk for CF. About 25% of people score below 8 and about 25% of people score above 17.0. A score of above 13 suggests compassion fatigue.<sup>20</sup>

The 30 question ProQOL was administered hospital-wide in May 2008. A total of 481 (22%) staff responded. Participants provided demographic information including gender, rank, employment status, skill type and department. Staff was also asked if they or a family member had been deployed within the previous 12 months.

Participant characteristics were compared using means, standard deviation (SD) and confidence intervals (CI). All analyses were performed using SPSS statistical software (version 16, SPSS Inc. Chicago, IL). A P value of <.05 was considered statistically significant.

**RESULTS**

The majority of the respondents were female (73.0%); 16% were soldiers (9.6% officers) and 75.0% were civil service employees (civilians). Table 1 shows respondents by type of work performed. Providers (medical or osteopathic physicians, dentists and mid-wives) accounted for 16.4% of the respondents. Nurses included: Licensed Practical Nurses, Registered Nurses and graduate degree nurses (28.3%). Ancillary related personnel (15.8%) included nurse aides, housekeepers, orderlies, cleaning staff, and maintenance workers as well as skilled staff such as social workers, nutritionists, case managers and other allied health staff. Administrative staff (39.5%) included hospital administrators that manage the hospital, department and

division chiefs, coders, computer technicians, billing clerks for example.

**Figure 1**

Table 1. Staff Classification

Staff	Total	Percent
Administrative	190	39.5%
Ancillary Personnel	76	15.8%
Providers	79	16.4%
Nursing	136	28.3%
Total	481	100.0%

Factor analysis was performed on the ProQOL to determine whether or not the mean scores on the ProQOL<sup>20</sup> matched those of staff at WAMC. On all scales, WAMC staff did better than the established means scores. Table 2 displays mean scores for the three ProQOL scales for the entire WAMC staff. The mean score for CS was 37.3, just slightly above the national average (37.0) for the WAMC staff; the mean score for BO was 17.4 for the WAMC staff, considerably lower than the national average of 23.0; and the mean score for CF for the WAMC staff was 9.2, again considerably lower than the national average of 13.0.

**Figure 2**

Table 2. ProQOL Results

Variable	n	Mean	SD	CI	P	Percentiles		
						25	50	75
Compassion Satisfaction	481	37.3	12.1	(36.2-38.4)	<0.05	33.0	41.0	46.0
Burnout	481	17.4	8.3	(16.6-18.2)	<0.05	12.0	17.0	23.0
Compassion Fatigue	481	9.2	6.0	(8.7-9.8)	<0.05	5.0	8.0	12.3

On the CS scale, the quartile method revealed that 25% of all staff scored higher than 46.0 and about 25% of them scored below 33. On the BO scale, 25% of participants scored 23.0 or higher, 25% scored below 12.0. About 25% of staff in our study scored below 5.0 on secondary traumatic stress and about 25% of them scored above 12.3. On the CF scale, 100% of participants scored below the national norm.

To assess the impact of deployment on CS, BO and CF, respondents were divided between those who had

experienced deployment within the last year and those who had not. Contrary to the literature findings, staff showed negligible score differences between those who had experienced deployments and those who had not. Compassion satisfaction was higher– than the national norm– for respondents that had experienced deployment; burnout and compassion fatigue were both lower than the national norms and lower for respondents who had not experienced deployments.

**Figure 3**

Table 3. ProQOL Results by Deployment

Family Member Deployed	Yes		No		National Mean
	n	Mean	n	Mean	
Compassion Satisfaction	86	38.2	395	37.0	37.0
Burnout	86	15.5	395	17.8	23.0
Compassion Fatigue	86	8.5	395	9.4	13.0

**DISCUSSION**

This study focused on levels of CS, BO and CF among staff in a stateside Military Treatment Facility.

Compassion satisfaction was high for the majority of respondents. This is an important finding as it can mitigate the impact of burnout and compassion fatigue. This finding suggests that the majority of staff are finding their work rewarding and that they find satisfaction with their ability as caregivers and in their ability to make contributions to the lives of others<sup>15</sup>

In the assessment of BO, the majority of respondents (65%) were able to cope, in one way or another, with their work stress and therefore registered low levels of burnout. The remaining 35%, who scored 16 or above on total burnout, could be described as suffering work stress and possible BO. The latter group might need professional psychological help or counseling to assist them with their sufferings.

Physicians, midwives and dentists were more apt to experience BO and CF compared to the rest of the staff. Providers are under increased work pressures. Several of these pressures include: increased patient load, increase in clinical staff deployments; frustrations from using AHLTA, the military's electronic health record system (3rd highest reason military providers are leaving the service) as well as leadership and staff turnover (due in part to deployments).

In the present study, 25% of staff scored higher than 12.3

(the top quartile) on CF. According to Stamm, if the individual’s score on the compassion fatigue/secondary traumatic stress scale is in the top quartile, the staff may want to take some time to think about what may be causing distress to him or her at work, or if there is some other reason for the elevated score.<sup>20</sup> While higher scores do not mean that the staff have a problem, they are an indication that they may want to examine how they feel about their work and work environment. Staff may wish to discuss this with their supervisor, a colleague or a health care professional.

The findings in this study suggest that not every MTF or VA hospital staff will experience changes in their attitude toward work because of the influx of OEF/OIF patients.<sup>21</sup> Surely there are facilities in which this will happen, as the added stress of the traumatized can potentially deplete staff. This study suggests that frequent and timely “check-ins” with staff is needed to assess the impact of their work.

More striking is the finding in this study that deployment does not necessarily impact staff in a negative way. While all indicators in the literature point in that direction,<sup>15-18, 21</sup> some staff will respond differently; this suggests frequent or periodic assessment of staff and their attitude toward their work. One explanation for this finding is that those who work in a military environment are less sensitized to loss in war and understand it as part of the risk of the commitment to serving their country.

**STUDY LIMITATIONS**

The findings in this study have to be considered in light of the facility and may not be applicable to all MTFs. Nevertheless, it can be seen as pointing in the direction of the need for staff assessment, of having a snapshot of staff to be proactive rather reactive.

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