

Soldiers Returning From Deployment: A Qualitative Study Regarding Exposure, Coping, and Reintegration

Lisa A. Brenner

Veterans Integrated Service Network 19 Mental Illness
Research, Education, and Clinical Center, Denver, Colorado,
and University of Colorado Denver, Anschutz Medical Campus

Nazanin Bahraini

Veterans Integrated Service Network 19 Mental Illness
Research, Education, and Clinical Center, Denver, Colorado,
and University of Colorado Denver, Anschutz Medical Campus

Heidi Terrio

Defense and Veterans Brain Injury Center, Fort Carson,
Colorado, and Evans Army Community Hospital, Colorado
Springs, Colorado

Lisa M. Betthauser

Veterans Integrated Service Network 19 Mental Illness
Research, Education, and Clinical Center, Denver, Colorado,
and University of Colorado Denver

Jaimie L. Lusk

Veterans Integrated Service Network 19 Mental Illness
Research, Education, and Clinical Center, Denver, Colorado,
and University of Denver

Ann I. Scher

Uniformed Services University of the Health Sciences

Karen A. Schwab

Defense and Veterans Brain Injury Center, Silver Spring, Maryland,
and Uniformed Services University of the Health Sciences

Purpose/Objective: The purpose of this study was to qualitatively explore exposure to deployment-related physical and/or emotional trauma and associated symptoms among Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) soldiers. Interviews also focused on in-theater- and reintegration-related experiences. **Research Method/Design:** OEF/OIF soldiers ($N = 103$) participated in semistructured interviews, and a qualitative descriptive methodology was used to analyze the data. **Results:** Themes were identified regarding (a) common experiences related to emotional and physical traumas and associated symptoms and strategies for coping and making meaning of experiences and (b) how combat and reintegration experiences affected soldiers' senses of self, relationships with others, and

This article was published Online First July 6, 2015.

Lisa A. Brenner, Veterans Integrated Service Network 19 Mental Illness Research, Education, and Clinical Center, Denver, Colorado, and Departments of Psychiatry, Neurology, and Physical Medicine and Rehabilitation, University of Colorado Denver, Anschutz Medical Campus; Lisa M. Betthauser, Veterans Integrated Service Network 19 Mental Illness Research, Education, and Clinical Center, Denver, Colorado, and Department of Psychology, University of Colorado Denver; Nazanin Bahraini, Veterans Integrated Service Network 19 Mental Illness Research, Education, and Clinical Center, Denver, Colorado, and Departments of Psychiatry and Physical Medicine and Rehabilitation, University of Colorado Denver, Anschutz Medical Campus; Jaimie L. Lusk, Veterans Integrated Service Network 19 Mental Illness Research, Education, and Clinical Center, Denver, Colorado, and Graduate School of Professional Psychology, University of Denver; Heidi Terrio, Defense and Veterans Brain Injury Center, Fort Carson, Colorado, and Evans Army Community Hospital, Colorado Springs, Colorado; Ann I. Scher, Department of Preventive Medicine and Biostatistics, Uniformed Services University of the Health Sciences; Karen A. Schwab, Defense and Veterans Brain Injury Center, Silver Spring, Maryland, and Department of Neurology, Uniformed Services University of the Health Sciences.

The authors have no conflicts of interest to report. This article conforms to applicable governmental regulations and discipline-appropriate ethical standards. Per governmental regulations and the ethical standards described previously, the authors confirm that “In the

conduct of research where humans. . . .”. “In the conduct of research where humans are the subjects, the investigator(s) adhered to the policies regarding the protection of human subjects as prescribed by Code of Federal Regulations (CFR) Title 45, Vol. 1, Pt. 46; Title 32, chap. 1, Pt. 219; and Title 21, chap. 1, Pt. 50 (Protection of Human Subjects).” Writing of this article was supported by U.S. Army Medical Research and Congressionally Directed Medical Research Programs Award W81XWH-08-2-0105 and the Veterans Integrated Service Network 19 Mental Illness Research Education and Clinical Center, located at the Denver VA Medical Center. The views, opinions, and findings contained in this article are those of the authors and should not be construed as official Department of Defense or Department of Veterans Affairs positions, policies, or decisions unless so designated by other documentation. We thank those who facilitated and conducted interviews (Denise Strasser, Maria Devore, Parri Hinton, Colleen Costello, and Joseph Huggins). We appreciate the support of the Defense and Veterans Brain Injury Center. Kathleen Chwalisz provided invaluable feedback regarding initial drafts of the manuscript. We also thank the soldiers who participated, and are grateful for their willingness to describe their lived experiences.

Correspondence concerning this article should be addressed to Lisa A. Brenner, PhD, ABPP, Veterans Integrated Service Network 19 Mental Illness Research, Education, and Clinical Center, Eastern Colorado Health Care System, Denver, CO 80220. E-mail: lisa.brenner@va.gov

functioning. **Conclusions/Implications:** Themes identified support a rethinking of deployment-related mild traumatic brain injury and posttraumatic stress disorder as discrete conditions. Dimensional versus categorical models should be considered. The findings also highlight experiences and potentially meaningful constructs (e.g., moral injury, moral repair) that can be used to inform research and clinical efforts aimed at improving the lives of those who have served.

Keywords: Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF), posttraumatic stress disorder (PTSD), traumatic brain injury (TBI), qualitative, military

Impact and Implications

- Although the literature is replete with articles on mild traumatic brain injury (mTBI) and posttraumatic stress disorder (PTSD) among soldiers who served in Iraq and Afghanistan, most of the data published has been quantitative. Few qualitative articles regarding soldiers' perspectives on these conditions could be identified. This qualitative study was conducted to increase understanding regarding events and symptoms associated with deployment by focusing on soldiers' narratives.
- The study provides support for rethinking the current practice of conceptualizing co-occurring deployment-related mTBI and PTSD as discrete conditions.
- Conceptualizing the clinical manifestation of deployment-related physical and emotional trauma in an integrated manner may help providers to avoid pitfalls associated with differential diagnosis and facilitate treatment of the most distressing symptoms regardless of etiology.

Introduction

Military personnel returning from deployment have been exposed to physical and emotional stressors. Frequently discussed conditions associated with such exposures include mild traumatic brain injury (mTBI) and posttraumatic stress disorder (PTSD). Reported rates of these two conditions are variable and are affected by combat exposure and predeployment experiences (e.g., neurogenetics; neurodevelopment; premorbid intellectual function; medical, neurological, psychiatric, and substance use conditions). Of those deployed to Iraq during a high-conflict period, over 20% reported a history of traumatic brain injury (TBI; Terrio et al., 2009). Rates of PTSD among Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) military personnel and veterans also vary, ranging from 14% to 22% (Maguen, Ren, Bosch, Marmar, & Seal, 2010; Tanielian & Jaycox, 2008). Recent work by Bahraini et al. (2014) highlighted the frequent co-occurrence of mTBI and PTSD among military/Veteran and civilian cohorts. Specifically, among military cohorts, co-occurrence ranged from 12% to 89% depending on the sample size, subpopulations examined, and methods used to diagnose PTSD and TBI history (e.g., symptom questionnaires vs. structured clinical interviews).

Traditionally, each of these conditions—as well as the symptoms associated with it—has been conceptualized as a unique phenomenon related to a discrete event (physical or emotional trauma). To meet criteria for a history of TBI, one must have experienced an external physical force that resulted in a traumatically induced structural injury to the brain or a physiological disruption of brain function, as indicated by medical findings or an acute loss of or alteration in consciousness. The majority of TBIs sustained by military personnel are mild in nature (Terrio et al.,

2009). Those with such injuries frequently report a range of postconcussive symptoms (PCSs; e.g., headaches, memory problems, irritability), with rates of PCSs markedly decreasing between time of injury and postdeployment assessment (Terrio et al., 2009).

Whereas the diagnosis of TBI does not include or require postinjury sequelae, the endorsement of symptoms is integral to the assessment and diagnosis of PTSD, which is a stressor-related disorder secondary to exposure to a psychologically traumatic event (American Psychiatric Association, 2013). Diagnostic criteria include 20 potential symptoms, grouped into four categories: intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity.

Differential diagnosis of mTBI versus PTSD is often difficult. This is related in part to (a) overlapping symptoms, (b) data suggesting that a history of mTBI increases the risk for developing PTSD (Bryant et al., 2010), and (c) the reality that the longitudinal course of OEF/OIF combat-acquired mTBI and/or PTSD is relatively unstudied (Brenner, Vanderploeg, & Terrio, 2009). According to a review of the literature by Betthauser, Bahraini, Krengel, and Brenner (2012) regarding methods to investigate symptoms of mTBI and/or PTSD among OEF/OIF veterans, self-report measures are frequently used despite the fact that they lack the ability to differentiate between the two conditions or to precisely identify which symptoms should be attributed to either condition when they co-occur.

Moreover, to date, the majority of work in the field continues to focus on these often co-occurring conditions as being unique manifestations of different facets of deployment-related trauma. A notable exception is the theoretical work by Walker, Clark, and Sanders (2010), who proposed the diagnosis of *postdeployment multi-symptom disorder* (PMD), which includes, but is not limited to the following symptoms: sleep disturbance, low frustration tolerance/irritability, cognitive problems, fatigue, headaches, chronic pain, affective disturbance, apathy, personality change, substance misuse, psychosocial difficulties, and hypervigilance.

Qualitative data can enrich or complement quantitative finding by focusing on participants' narratives. Such evidence can facilitate terms being redefined or permit new insights into the meaning of injuries and symptoms. Qualitative methodology has been specifically recommended to further understanding of complex medical conditions (Chwalisz, Shah, & Hand, 2008; Iversen, Chalder, & Wessleey, 2007). In specific, as Sandelowski (2000) put it, qualitative descriptive methodology provides a strategy for summarizing "events in the everyday terms of those events" (p. 334) and may be particularly useful in helping researchers obtain "largely unadorned . . . answers" (p. 337) to clinically relevant questions. We conducted in-person semistructured interviews with returned OEF/OIF soldiers. Questions focused on exposure to

events that were potentially physically and/or emotionally traumatic, the course of symptoms following such exposures, and experiences associated with being deployed to a combat zone and reintegration postdeployment.

Method

Participants

After obtaining institutional review board approvals, we recruited 103 participants from three different brigades at three time points spanning a 2-year period from the population of OEF/OIF soldiers during Post-Deployment Health Assessment (PDHA), which generally occurs between 5 and 7 days after a soldier's return to the United States. This project was part of a larger quantitative effort to study the epidemiology, natural history, and prognostic predictors of mTBI. To recruit a diverse sample, a stratified, purposeful maximum variation sampling strategy was used for this qualitative substudy (Patton, 1990). To capture and describe themes, which cut across participants, results from quantitative measures were used to identify participants with and without clinically significant PTSD symptoms and/or probable histories of TBI. Clinically significant PTSD symptoms were defined as a score of 34 or greater on the Posttraumatic Stress Disorder Checklist—Civilian Version (Weathers, Litz, Herman, Huska, & Keane, 1993), with endorsement across symptom clusters. A positive history of TBI was defined as a deployment-related injury identified using a structured clinical interview—namely, the Ohio State University Traumatic Brain Injury Identification Method (Corrigan & Bogner, 2007). The sample included nine soldiers with PTSD, 31 with TBI, 29 with TBI and PTSD, and 34 with neither condition (see Table 1).

Consent and initial interview procedures for the qualitative study mostly occurred on the same day as the larger quantitative study. All qualitative data were collected for the purpose of exploring soldiers' narratives regarding being deployed to a combat zone and reintegration postdeployment. All interviews were audiotaped for later transcription. All interviews were completed prior to analyses.

Materials: Semistructured Interview Protocol

Qualitative interview questions were written to elicit information regarding soldiers' experiences about their own condition(s) and functioning. Areas of particular interest included (a) whether interviewees would attribute symptoms to specific conditions (e.g., mTBI); (b) language they would use to describe their symptoms and experiences; and (c) whether they believed their symptoms affected their psychosocial functioning both in theater and currently, having now returned to the United States. Information regarding the impact of soldiers' injuries or emotional distress was assessed by queries addressing the following: (a) the way they got along with others, (b) the manner in which they completed their job duties, and (c) how these things had changed the way they saw themselves. General questions regarding injuries and emotionally distressing experiences were asked prior to specific questions regarding TBI and/or PTSD. The complete interview protocol is available at http://www.mirecc.va.gov/visn19/research/deployment_related_mtbi.asp.

Table 1
Participant Characteristics

Characteristic	<i>n</i> (%)	<i>M</i> (<i>SD</i>)
Gender		
Male	101 (98)	
Female	2 (2)	
Age (in years)		27.17 (5.94) ^a
Ethnicity		
White	69 (67)	
Black	7 (6.8)	
Hispanic	20 (19.4)	
Asian	1 (1)	
Native American	2 (1.9)	
Pacific Islander	2 (1.9)	
Biracial	1 (1)	
Marital status		
Single	28 (27.1)	
Married	60 (58)	
Separated	10 (9.7)	
Divorced	5 (4.9)	
Education		
High school graduate	44 (42.7)	
GED	15 (14.6)	
Some college	33 (32)	
College graduate	11 (10.7)	
Rank		
E1–E4	53 (51.5)	
E5–E6	41 (39.8)	
E7–E9	2 (1.9)	
O1–O10	7 (6.8)	
Military occupational specialty		
Combat	54 (52.4)	
Combat support	29 (28.2)	
Combat service support	20 (19.4)	
Years on active duty		5.56 (3.88) ^b
Deployment theater		
Iraq	66 (64)	
Afghanistan	37 (36)	

^a Range; 19–47. ^b Range (1–19).

Procedures

Data collection. Because data were obtained during PDHA, the research team had access to a large number of soldiers over a brief period of time. This provided the opportunity to implement a purposeful sampling strategy aimed at facilitating maximum variation to increase diversity among the sample (Patton, 1990); however, multiple interviewers were needed to maximize data capture. Prior to conducting interviews, team members attended training and completed readings regarding qualitative methods. Interviewers also practiced administering the semistructured interview. The first interviews conducted by individuals without prior experience in this area were reviewed by the lead investigator. Feedback was provided, and additional reviews occurred as needed. Review of early interviews suggested that participants were discussing significantly distressing events related to their very recent deployment. To facilitate participant comfort and safety, the principal investigator of the substudy determined that only interviewers with clinical training should conduct the interviews. This reduced the pool from seven to four. In the end, individual interviews with participants were conducted simultaneously over consecutive days, with breaks in between groups of soldiers returning from deployment. All interviews occurred in person and were deidentified, audiotaped, and transcribed.

Data analysis. A qualitative descriptive method (Sandelowski, 2000) was used to analyze data. Length of interviews ranged from approximately 2 min to 96 min, with a mean of 22 min. Transcribed interviews ranged from a minimum of three pages (including interview questions) to 24 pages in length, with a mean of eight pages. Processes were also influenced by hermeneutic philosophy (i.e., the art and science of interpretation). Based on Heideggerian phenomenological qualitative methodology and related step-by-step frameworks for data analysis recommended for heuristic qualitative methods (Diekmann, Allen, & Tanner, 1989; Moustakas, 1994), a coding sheet that followed the semi-structured interview format was created to facilitate identification of themes. The coding sheet is available at http://www.mirecc.va.gov/visn19/research/deployment_related_mtbi.asp. Processes described in the following were used to assess whether the sample size had been sufficient to achieve informational redundancy (Onwuegbuzie & Leech, 2007).

Those initially involved with data analysis (Jaimie L. Lusk, Lisa A. Brenner, and Lisa M. Betthausen) were randomly assigned approximately two thirds (68) of the interviews (each interview was read by two researchers). A coding sheet was used to record themes and quotes associated with deployment-related injuries and emotionally distressing events as well as perceived symptoms and functional impairments associated with such exposures. Themes related to habituation to painful stimuli, failed belongingness, and perceived burdensomeness were also noted (Joiner, 2005). In specific, analysis involved researchers independently recording salient units of information, identifying unique and related elements, clustering unique themes, and synthesizing identified themes using verbatim examples (stepwise replication). After the interviews were coded independently, a day-long coding meeting was conferred. Detailed notes were taken related to assumptions and biases, salient themes, and support for these themes. During the process, transcripts were revisited, and previously reviewed interviews were frequently referenced. Those analyzing the data shared observations to achieve consensus regarding the universal themes discovered (Chwalisz et al., 2008). This process was undertaken to increase the validity of themes identified during coding (discursive validation; Denzin, 1978; Miles & Huberman, 1994). Although the overall sampling strategy (maximum variation) was used to describe outcomes across a diverse cohort (Patton, 1990), three of the investigators (Lisa A. Brenner, Lisa M. Betthausen, and Nazanin Bahraini) reanalyzed the interviews using a similar strategy to the one just described. Prior to analysis, interviews were grouped by diagnostic categories to identify potential heterogeneity between cohorts (neither mTBI nor PTSD, mTBI only, PTSD only, and both mTBI and PTSD).

Results

Despite analytic plans to examine and identify emerging themes unique to the diagnostic subgroups, such differences were not identified. Soldiers described a range of experiences and associated symptoms that were similar across the diagnostic groups. That is, the heterogeneity of symptoms experienced and responses to trauma appeared to reflect individual differences and diversity within subgroups more generally rather than diagnostic variation. The various themes that emerged across subgroups are presented in detail here.

Common Experiences of Physical Trauma and Associated Symptoms

During data analysis, themes regarding physically or emotionally traumatic stressors and responses emerged. Whereas some soldiers reported histories of deployment-related physical injury and/or exposure to emotionally distressing content, others did not. Moreover, soldiers with multiple deployments noted differences between the different deployments. For example, many described being less actively engaged in combat during their most recent deployment; however, the continued psychological and/or physical impact of previous deployments was frequently discussed.

When asked a general question regarding injury history, many soldiers spontaneously described events associated with a blast (e.g., improvised explosive device (IED), rocket-propelled grenade (RPG) that involved an alteration in or loss of consciousness—for example, “It kind of like passed me out for a little bit and, uh, like the next 3 days, my whole like body hurt. You know, I felt like, punched all over.” Injury sequelae noted were often consistent with PCSs (e.g., “headaches”, “memory loss”). Despite these descriptions, soldiers seemed hesitant to endorse a history of TBI. For example, in response to the question “Do you believe you sustained a TBI while you were deployed?” one soldier stated,

I would say—probably say maybe a mild . . . I would say a mild one. I wouldn't say it was a severe brain injury, but it was a mild one . . . and I would say coupled with the depression and, uh, psychological problems I once had and relationship stress and threat of being killed and all of that added together was enough to, uh, damage my brain.

Within and across interviews, soldiers' attributions of symptoms to physical and/or emotional stressors seemed to evolve such that symptoms initially associated with physical or with emotional injuries were later related to the other. Initially, soldiers would describe PCSs (e.g., headaches, dizziness, sleep and memory problems) associated with physical injury events (e.g., blasts), but later in the interview they would associate these and other cognitive symptoms with emotionally distressing events. Soldiers also spoke about physical pain (e.g., back, knee, joint) as an evolving experience. Many described their now-chronic pain as being caused by the cumulative wear and tear of current and past deployments. One individual noted, “We were used to constant pain” while deployed. For many, it was unclear how living with chronic pain would affect long-term psychosocial functioning.

Common Experiences of Emotional Trauma and Associated Symptoms

In response to questions regarding emotionally distressing events experienced while deployed, soldiers often described witnessing violence and its aftermath. Many who were interviewed discussed feelings of distress associated with losing fellow soldiers. One soldier said,

I mean, you just lost a soldier. When you're in the same unit, whether you've known him a day, an hour, for years, you're still family because you have this uniform on. When you lose somebody that wears it, it's like losing a family member. You grieve a little bit and you just move on.

Another noted, "It's the expectation of death—I guess they say the expectation of death is worse than death itself," and still another said, "I came across to that point to where I didn't care if I lived or died anymore."

Guilt associated with surviving was also frequently discussed. After talking about the experience of a soldier dying in his arms, one participant stated, "Sometimes I wish I would have been in the situations they were in so I could have taken their spot . . . Then maybe it would have gone different. Maybe he would still be here today." Another said, "It should have been me in the truck instead of that other medic. At one point, I don't know why, but it felt like, like I was a disgrace to them."

In looking back, soldiers noted feeling distressed with their emotional response to war and death: "Like, over there, death is like humorous. You see humor in death over there." Another stated, "I mean, we were all just laughing . . . It was the funniest thing we had seen, but you know when I think about it now, it's not." In fact, one participant distinctly highlighted the role that humor played in helping to cope with the stress of war, recalling,

You know, so . . . it is absurd, and that was exactly why it was so distressing, because I remember seeing [a brain] . . . and I was like, "Wow, there is a brain on the ground. And there's a boot print in a brain. Like, who sees this kind of shit? . . . Like, I know I am never going to forget this" . . . That's how you have to look at it, you have to like, just deal with it.

When asked directly about experiences of emotional distress and associated symptoms, soldiers spontaneously discussed symptoms frequently noted among individuals who meet criteria for PTSD. Difficulty with sleep and nightmares were frequent:

I slept about 2–3 hours a day, maybe. That's about it. I would wake up with the picture of us picking up the bodies, seeing body parts everywhere, the smell, the smell of blood burns my throat, my gloves, even though I covered them, still have them in my hands. That's about it.

Avoidance and emotional numbing were often discussed in response to exposure to psychologically traumatic stressors. One participant said, "It just hurts, and I don't want to have to relive it." Another soldier indicated that prior to participating in the interview, he had not spoken about his team members being killed, and another stated,

The whole year, you can't show any emotion, you have to stay focused, you can't be worrying about everything back in the States . . . otherwise if you are not and you are thinking about everything else and you forget shit and your guys are going to get hurt.

In terms of emotional numbing, soldiers made statements like "I feel less, and it sucks" and "I can do a pretty good job of making myself pretty numb to things." One soldier said, "Like last night, I really realized it when I told my wife I wanted a divorce. I just sat there calm, just like I'm talking to you." Reflecting on why it might be safer to be disconnected from feelings, a participant indicated, "If you don't get attached, you don't have them symptoms." Another participant stated, "It's like I kind of locked . . . part of myself away where I can't be hurt." Others reported feeling scared but not being able to talk about it out of fear of being perceived as being weak:

There were nights I didn't tell anybody I didn't go on mission, I made an excuse because I just felt so fucking scared. . . . I could not go out there. . . . You can't go out there and show weakness, this and that, in front of your guys.

Related to hypervigilance, soldiers spoke about the importance of attending to every detail in the combat environment, with decisions potentially affecting who will live and who will die. One participant noted, "There is no room for mistakes, so when you make mistakes, it's life threatening." Soldiers also noted having a more hypervigilant stance toward life once stateside. Some accepted this as a way of being now—a default mode of sorts—that would likely never change given how integral it was to their survival while deployed. Others seemed more bothered by the fact that they approached everyday life this way. One participant described the following experience while at the grocery store: "You know, I am looking at sight lines . . . and I'm like, what the hell, I'm just going to [the grocery store]."

Although many of the experiences and associated symptoms reported by participants were consistent with formal diagnostic criteria for PTSD, when specifically asked about having PTSD, soldiers provided equivocal responses or denied having symptoms associated with this condition. For example, in response to the question "Do you believe you experienced or are experiencing symptoms related to PTSD as a result of your deployment?" a soldier stated,

No, because I don't think it is a disorder . . . because just like I said, you know, you take a guy, or a person, a woman, whatever, throw them in a situation, you know, and you expect them to be the same right away, you know, when they come back, and then they are not, people say, 'Oh, well, it's PTSD.' No, it's not. It's just taking time. The only thing that is going to fix certain things is Father Time, and people need to allow that and realize that people need time.

Another said, "Honestly, I would compare it more to culture shock than, uh, PTSD. . . . Hopefully I am right about culture shock—it goes away, right?"

Experiences of Combat

Beyond the experience of physical and emotional stressors, a salient theme among the soldiers was the degree to which being in a combat environment affected their lives. Also salient were the experience of being away from family and friends and the recognition that life back in the United States continued without them. Despite military training, soldiers frequently spoke about the experience of combat and the aftermath of war being surreal or shocking (e.g., "What I saw and what happened, no one should see"). One individual said,

The things you can see yourself being capable of, whether you did or did not do it while you were over there, you never realize . . . you are that type of person until . . . you are deployed and you see those things. . . . Then you come back . . . now you see, like, "Wow, okay, I'm a little bit more messed up than I thought."

Another said,

There was other things I kind of saw, now that I look back on it, were kind of messed up. Where we were at, the terrorists were kidnapping kids. They would behead the kids and put explosives in them. Then, they would tell the families to come out, or the families would see

their kid dead on the street, and when they'd go out there, they would blow them up.

Still another soldier recounted the following:

There is this one particular incident where, I was toting the body bags pretty much and giving them to the medical examiner, and I pulled a tank out of canal, and for some reason that one sticks to me. I saw a bunch of shit that day, and it kind of made me less ready for that that one . . . [unintelligible] . . . leg . . . just a leg . . . and fuck. That one still bugs me. The vehicle smelt like hair. Burnt. I guess . . . it smelt like burning hair.

Many of the soldiers spoke about the harshness of the environment (e.g., the heat, limited food choices) and their jobs being stressful:

That whole ambiance was disturbing. . . . We burn our own waste, and eat this food that I wouldn't even serve to a dog. . . . And people right down the road, they are eating like kings, sleeping on beds, I am sleeping on a cot, getting attacked by bugs.

Finally, many of those interviewed described stressors back at home contributing to feelings of emotional upset. Several soldiers noted having been "cheated on." Another spoke about going through a divorce while being deployed. One soldier stated, "My wife decided to get a boyfriend." Those interviewed also spoke about missing family members, feeling isolated without their family, and not being present for important life events. One soldier was deployed when his son was 10 days old; another missed his father's funeral.

Coping

Soldiers relayed their coping strategies for managing emotional distress associated with deployment-related experiences, including the need to make meaning regarding what they had witnessed. They also spoke about how the experiences affected them as human beings and their ability to carry out their duties. Some of the soldiers spoke about resilience and strategies for coping even when it was difficult: "If you keep telling yourself to go through, you will. You'll keep going." Participants also noted feeling proud of what they had done while deployed:

In Iraq and Afghanistan, been there, we have helped the people, we have done things for them. . . . In Iraq, we were always setting up schools and clinics. You know, you would see a little kid running by, and you toss them an MRE [meals ready to eat], and he's so happy . . . he's getting a candy bar, and you make the whole kid's day. I like to think I've made a difference. And that right there says my life has been worth it.

Others seemed to be questioning what they had done while they were deployed and how it might have changed them as people. Although this was not necessarily widespread, for the group that did speak about it, it seemed quite salient. That is, soldiers' responses were emotionally laden and intense. One soldier discussed it in terms of being a moral dilemma: "There has always kind of been an ongoing moral dilemma, moral battle with myself. . . . Sometimes I am glad I did what I did, and other times I feel pretty crappy about it." Another noted feelings of disillusionment postdeployment:

It's difficult, and I have to fight the feelings of . . . feeling like everything is hopeless and like the world is like some mean joke. Because it's like, nobody cares. . . . They just want to use me and get the work out of me.

Changes—Deployment and Reintegration

Sense of self. Many interviewed spoke about a greater sense of self-confidence and self-discipline as a result of their deployment. They also indicated feeling more mature and competent. One said, "It makes you become a man," and another stated, "In an odd sort of way, it gives you confidence." Participants also noted increased leadership ability postdeployment. However, not all soldiers described positive changes in sense of self. One participant noted, "When I just got baptized, I was a really nice person, really nice, really sweet, really outgoing, and now, I mean, I've completely changed—I am not any of that probably right now."

Relationships. Soldiers expressed having less patience related to people and their complaints. This seemed to be exacerbated by their sense that life in the United States is easy. In speaking about the first few weeks home, one soldier said,

We came back, and they put us on a 3-day pass right away. My parents came down to Texas, came over to my aunt's house, and I couldn't sit still to save my life. We went to church that Sunday, I freaked out and I walked out halfway through, because I was surrounded by people I hadn't been with an entire year, and I was not comfortable with that. Because just my platoon, just the guys I had been with. You know . . . that was hard to go out in public for a while.

Family and relationships were discussed as both important in facilitating a healthy reintegration and also presenting additional challenges for soldiers returning to their prior lives. Some soldiers spoke about the importance of their family in their reintegration process: "I talk to my wife a lot. . . . She kind of keeps me grounded."

Others focused more on challenges associated with returning regarding their close family and intimate relationships. In particular, moving from "single life" to being in a marriage was hard: "[It's] going from being independent the whole time, it's back like being single again. . . . You come back . . . you gotta go to the store with your wife." A consistent theme noted was the sense that the world and soldiers' friends and family had moved on without them: "It's being kind of pushed to the side of everybody's life, you know. I had to come back into their life, not them come back into mine." Another said,

Not only dispensable in the Army but also in civilian life—I was young, I came back after a whole year, and I realized that life goes on without me. And people would, you know, get married and die, and everything goes on without me.

Functioning. Additional functional and day-to-day life challenges associated with reintegration were frequently discussed:

Now . . . freedom? You do not appreciate it until it's taken away from you and you get it back . . . thank God. You want to know what freedom feels like? . . . Go lock yourself in a cage for a year, and come back out, and do what you want to do.

Several soldiers reported formal disciplinary action on reintegration that resulted in real-life consequences (e.g., loss of rank).

Some spoke about feeling angry about being punished by the military, particularly in light of the sacrifices they had made.

Discussion

The aim of this study was to explore the impact of deployment-related exposure to physical trauma and emotionally distressing events as well as the overarching impact of general combat-related deployment experiences on soldiers' perceptions of events, symptoms, senses of self, relationships, and daily functioning on returning home. Perhaps most important, data in this article are reflective of soldiers' thoughts and feelings about their experiences, thereby providing the reader with the unique opportunity look at and perhaps rethink frequently discussed assumptions (i.e., that when combat-related PTSD and mTBI co-occur, they are discrete conditions).

Previous research suggests that being injured and witnessing emotionally distressing events are common occurrences (Hoge et al., 2004); however, a thorough understanding regarding the short- and long-term impact of such exposures is limited. Consistent with previously collected quantitative data, soldiers noted a history of being injured and feeling emotionally distressed during deployment. They also discussed symptoms consistent with those associated with TBI (e.g., headaches) and PTSD (e.g., avoidance). However, for the soldiers interviewed, boundaries between events that resulted in (physical/emotional) injury and subsequent symptoms were often fluid, with symptoms more traditionally associated with mTBI or PTSD being attributed to either or both conditions. Also of note was the manner in which soldiers spoke about the compounding impact of experiences and symptoms across deployments.

Despite continued efforts within both clinical and research circles to identify strategies and methods to facilitate differential diagnosis of mTBI versus PTSD, the present findings support emerging theories regarding reconceptualizing responses to physical and emotional trauma. Although individuals were recruited on the basis of differential diagnostic criteria, and there were analytic plans to examine differences between subgroups, such differences were not identified, thus providing additional support for conceptualizing trauma cumulatively and dimensionally and in the context of biological, psychological, and social factors that affect development over a lifetime (Nazem, Spitzer, Brenner, & Bahraïni, 2014). Whereas categorical models propose that the development of a condition is a pathological response to extreme stress, dimensional models maintain that stress responses (physical and/or emotional) are "inextricably tied to . . . the unfolding of biological, psychological, and social processes through time" (Sampson & Laub, 1997, p. 134), and, as such, the development of a disorder (e.g., PTSD, postconcussion syndrome) represents an extreme response to a traumatic event (Bahraïni & Brenner, 2013; Nazem et al., 2014).

Recent efforts have also focused on developing a more integrated conceptual framework for understanding the clinical manifestations of deployment-related trauma (physical and/or psychological). As noted earlier, Walker et al. (2010) proposed the diagnosis of PMD, consisting of symptoms associated with the clinical triad of PTSD, PCSs, and chronic pain. Their framework reflects an emerging view that challenges attempts to isolate the physical and psychological aspects of combat trauma and their

differential impact on symptom presentation. The clinical reality is that the sequelae experienced by returning service members encompass a variety of symptoms, ranging across changes in affect regulation and mood; fundamentally altered perceptions and beliefs about the world, self, and relationships; cognitive difficulties; physical pain; and other nonspecific somatic symptoms. Moreover, the extent to which these heterogeneous yet interrelated sequelae affect functioning substantially varies across individuals. As such, clinicians should maintain a focus on identifying and treating the symptoms that are contributing to functional impairment.

Additional research and clinical implications include considering the impact of using measures that ask about single conditions or events, which may limit the ability of military personnel to express the cumulative nature of their experiences. Moreover, diagnostic challenges—in particular differential diagnosis among those with probable histories of TBI and current posttraumatic symptoms—are significant (for further discussion of mTBI/PTSD assessment, see Brenner et al., 2009). As noted earlier, providers are encouraged to recommend evidence-informed treatments for symptoms (e.g., headaches, depression) regardless of the symptom etiology. Along these lines, there is no evidence to support withholding PTSD treatments while addressing PCSs. These strategies are consistent with Department of Defense/Department of Veterans Affairs–recommended practices (Department of Veterans Affairs & Department of Defense, 2009). To decrease potential negative outcomes (e.g., suicide), clinicians would also benefit from increasing understanding regarding the experiences of those who served and, in turn, engaging in practices that address soldiers' newly emerging senses of self as well as challenges associated with reintegration. For further specific suggestions regarding such approaches, see Brenner et al. (2008) and Litz et al. (2009).

In reflecting on their experiences, soldiers reported positive and negative changes associated with deployments. Many spoke about increased feelings of competency and maturity. Whereas some noted their own resiliency, others discussed feeling confused and upset by what they had seen and done while deployed. Moreover, many of the soldiers interviewed discussed challenges associated with reintegration. Often, they related these to changes in both themselves (e.g., symptoms) and the world around them. Feelings that the civilian world had gone on without them were frequently discussed. These findings are consistent with concepts noted among earlier military cohorts (e.g., "resocialization," "changing step"; Jolly, 1996). Of note, Jolly (1996) emphasized that service members had better reintegration outcomes when family support was present. Similar themes were noted among OEF/OIF veterans, thereby highlighting a potential area for intervention.

Those interviewed spoke about feeling emotionally and morally challenged by the process of trying to make sense of what they had witnessed in combat. Despite the fact that the military fosters a strong moral code that in part prepares soldiers for the reality of war, Litz et al. (2009) suggested that in armed conflicts, service members are "confronted with numerous moral and ethical challenges . . . [including acting] in ways that transgress deeply held moral beliefs" (p. 696). In addition to experiencing "conflict about the unethical behaviors of others, [they] may . . . bear witness to intense human suffering and cruelty that shakes their core beliefs about humanity" (Litz et al., 2009, p. 696). The authors suggested that exposure to such violence may have a sustained psychosocial–

spiritual impact. This assertion is supported by the work of Maguen et al. (2009), who showed that among both Vietnam and OEF/OIF veterans, killing was associated with PTSD symptoms, dissociation, functional impairment, and violent behaviors later on. Similarly, among OEF/OIF soldiers, 40% of whom reported killing or being responsible for killing during their deployment, killing was a significant predictor of PTSD symptoms, alcohol abuse, anger, and relationship problems. Litz et al. (2009) also suggested that care providers will fail to meet the needs of our returned military personnel if they do not “conceptualize and address the lasting psychological, biological, spiritual, behavioral, and social impact of perpetrating, failing to prevent, or bearing witness to acts that transgress deeply held moral beliefs and expectations, that is, moral injury” (p. 697). This will require looking beyond traditional symptoms of PTSD and related constructs, such as survivor guilt. Further research will be required to explore the construct of moral injury, including continued development and validation of an assessment tool to measure this construct and the development and testing of targeted interventions aimed at facilitating moral repair.

It should also be noted that this study has a number of limitations. Interviews were conducted by multiple interviewers, some of whom had limited experience. Data were collected at one military base, and the population did not include soldiers who had been medically evacuated or a sufficient number of women. In addition, all interviews were obtained prior to any qualitative analyses. The research team also faced challenges recruiting individuals with PTSD only and female soldiers. Content from interviews should be seen as a reflection of the experiences of those who participated as seen through the eyes of research team members. As qualitative descriptive studies are often directed toward understanding the “who, what, and where of events or experiences, or their basic nature and shape” (Sandelowski, 2000, p. 338) for a specific group of individuals, generalizability may be limited. To date, most research regarding soldiers and their experiences during service and postdeployment has been collected using quantitative methods. Over 100 soldiers who had just returned from deployment were interviewed. The findings highlight salient experiences and issues for returned soldiers and can be used to inform research and clinical practices.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Bahraini, N., & Brenner, L. A. (2013). Screening for TBI and persistent symptoms provides opportunities for prevention and intervention. *Journal of Head Trauma Rehabilitation*, 28, 223–226. <http://dx.doi.org/10.1097/HTR.0b013e318291dab7>
- Bahraini, N. H., Breshears, R. E., Hernández, T. D., Schneider, A. L., Forster, J. E., & Brenner, L. A. (2014). Traumatic brain injury and posttraumatic stress disorder. *Psychiatric Clinics of North America*, 37, 55–75. <http://dx.doi.org/10.1016/j.psc.2013.11.002>
- Bethausen, L. M., Bahraini, N., Krengel, M. H., & Brenner, L. A. (2012). Self-report measures to identify post traumatic stress disorder and/or mild traumatic brain injury and associated symptoms in military veterans of Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF). *Neuropsychology Review*, 22, 35–53. <http://dx.doi.org/10.1007/s11065-012-9191-4>
- Brenner, L. A., Gutierrez, P. M., Cornette, M. M., Bethausen, L. M., Bahraini, N. H., & Staves, P. J. (2008). A qualitative study of potential suicide risk factors in returning combat veterans. *Journal of Mental Health Counseling*, 30, 211–225. <http://dx.doi.org/10.17744/mehc.30.3.n6418tm72231j606>
- Brenner, L. A., Vanderploeg, R. D., & Terrio, H. (2009). Assessment and diagnosis of mild traumatic brain injury, posttraumatic stress disorder, and other polytrauma conditions: Burden of adversity hypothesis. *Rehabilitation Psychology*, 54, 239–246. <http://dx.doi.org/10.1037/a0016908>
- Bryant, R. A., O'Donnell, M. L., Creamer, M., McFarlane, A. C., Clark, C. R., & Silove, D. (2010). The psychiatric sequelae of traumatic injury. *American Journal of Psychiatry*, 167, 312–320. <http://dx.doi.org/10.1176/appi.ajp.2009.09050617>
- Chwalisz, K., Shah, S. R., & Hand, K. M. (2008). Facilitating rigorous qualitative research in rehabilitation psychology. *Rehabilitation Psychology*, 53, 387–399. <http://dx.doi.org/10.1037/a0012998>
- Corrigan, J. D., & Bogner, J. (2007). Initial reliability and validity of the Ohio State University TBI Identification Method. *Journal of Head Trauma Rehabilitation*, 22, 318–329.
- Denzin, N. (1978). *The research act: A theoretical introduction to sociological methods*. New York: McGraw-Hill.
- Department of Veterans Affairs & Department of Defense. (2009, April). *VA/DOD clinical practice guideline for management of concussion/mild traumatic brain injury (mTBI)*. Retrieved from http://www.healthquality.va.gov/mtbi/concussion_mtbi_full_1_0.pdf
- Diekelmann, N. L., Allen, D., & Tanner, C. (1989). *The NLN criteria for appraisal of baccalaureate programs: A critical hermeneutic analysis*. New York: National League for Nursing.
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, 351, 13–22.
- Iversen, A., Chalder, T., & Wessely, S. (2007). Gulf War illness: Lessons from medically unexplained symptoms. *Clinical Psychology Review*, 27, 842–854. <http://dx.doi.org/10.1016/j.cpr.2007.07.006>
- Joiner, T. E. (2005). *Why people die by suicide*. Boston: Harvard University Press.
- Jolly, R. (1996). *Changing step*. London: Brassey's.
- Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*, 29, 695–706. <http://dx.doi.org/10.1016/j.cpr.2009.07.003>
- Maguen, S., Metzler, T. J., Litz, B. T., Seal, K. H., Knight, S. J., & Marmar, C. R. (2009). The impact of killing in war on mental health symptoms and related functioning. *Journal of Traumatic Stress*, 22, 435–443. <http://dx.doi.org/10.1002/jts.20451>
- Maguen, S., Ren, L., Bosch, J. O., Marmar, C. R., & Seal, K. H. (2010). Gender differences in mental health diagnoses among Iraq and Afghanistan veterans enrolled in Veterans Affairs health care. *American Journal of Public Health*, 100, 2450–2456. <http://dx.doi.org/10.2105/AJPH.2009.166165>
- Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Nazem, S., Spitzer, E. G., Brenner, L. A., & Bahraini, N. H. (2014). Beyond categorical classifications: The importance of identifying post-trauma symptom trajectories and associated negative outcomes. *Journal of Clinical Psychiatry*, 75, e947–e949. <http://dx.doi.org/10.4088/JCP.14com09450>
- Onwuegbuzie, A. J., & Leech, N. L. (2007). A call for qualitative power analyses. *Quality & Quantity: International Journal of Methodology*, 41, 105–121.
- Patton, M. (1990). *Qualitative evaluation and research methods*. Beverly Hills, CA: Sage.
- Sampson, R. J., & Laub, J. H. (1997). A life course theory of cumulative

- disadvantage and the stability of delinquency. In T. P. Thornberry (Ed.), *Advances in criminological theory: Vol. 7. Developmental theories of crime and delinquency* (pp. 133–161). Piscataway, NJ: Transaction.
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, 23, 334–340. [http://dx.doi.org/10.1002/1098-240X\(200008\)23:4<334::AID-NUR9>3.0.CO;2-G](http://dx.doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G)
- Tanielian, T., & Jaycox, L. (Eds.). (2008). *Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery*. Santa Monica, CA: RAND Corporation.
- Terrio, H., Brenner, L. A., Ivins, B. J., Cho, J. M., Helmick, K., & Schwab, K. (2009). Traumatic brain injury screening: Preliminary findings in a US Army Brigade Combat Team. *Journal of Head Trauma Rehabilitation*, 24, 14–23.
- Walker, R. L., Clark, M. E., & Sanders, S. H. (2010). The “postdeployment multi-symptom disorder”: An emerging syndrome in need of a new treatment paradigm. *Psychological Services*, 7, 136–147. <http://dx.doi.org/10.1037/a0019684>
- Weathers, F. W., Litz, B. T., Herman, D. S., Huska, J. A., & Keane, T. M. (1993, October). *The PTSD Checklist: Reliability, validity and diagnostic utility*. Paper presented at the annual meeting of the International Society for Traumatic Stress Studies, San Antonio, TX.

Received August 8, 2014

Revision received May 21, 2015

Accepted May 21, 2015 ■