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Quality of Life, Community Integration, and Behavioral Health Outcomes in Military Burn Survivors

Linda H. Yoder, PhD, MBA, RN, AOCN, FAAN

School of Nursing, The University of Texas at Austin, Austin, TX, USA

David C. McFall, PhD

The Community Care Collaborative, Austin, TX, USA

Dale Glaser, PhD

Statistics, The University of San Diego and San Diego State University, San Diego, CA, USA

Purpose:

Military burn survivors treated in the Military Burn Center are typically not included in other national burn studies. The purpose of this study was to examine the quality of life (QOL), post-traumatic stress, depression, and community integration outcomes of military burn survivors for a period of 18 months after burn center discharge.

Methods:

This study consisted of a descriptive longitudinal design. The Roy Adaptation Model was used as the conceptual framework for this study. Data were collected using the Burn Specific Health Scale-Abbreviated (BSHS-A), the Short-Form -36 (SF-36), the Post-traumatic Stress Checklist-Military (PCL-M), the Centers for Epidemiologic Studies Depression Scale (CESD), the Community Integration Questionnaire (CIQ), and demographic/clinical questionnaires. Data were collected from the patients and their medical records at burn center discharge, 3, 6, 12, and 18 months post-discharge. Measures of central tendency, correlations and multilevel modeling were used to analyze the data.

Results:

There were 77 participants in this study. They were primarily active duty Army, Caucasian males, with at least a high school education and an average income between \$20,000-40,000 per year. The burn survivors had a total body surface area burned of 24% (median = 17%) with full thickness burns accounting for 14% (median = 6%); their average length of stay in the burn center was 44 days (median = 17 days). The participants demonstrated improved QOL on most measures over time. The BSHS-A physical, mental, and general health domain scores showed statistically significant improvement over time but the affective and social domain scores did not significantly differ over time. However, the SF-36 physical and mental component means scores were significantly different over time. These scores also were better than those of the normed scores for the U.S. healthy population and above the 75th percentile in both cases. The CIQ scores showed significant, albeit slight differences over time but patients did not return to their pre-burn perceptions of their community integration. Post-traumatic stress and depression scores did not differ significantly over time but none of the overall mean scores indicated positive screening for post-traumatic stress or depression, although scores did fluctuate slightly over time. Regarding post-traumatic stress, 66.2% of the total variability was attributable to between individual differences. Similarly, 61.6% of the total variability in CESD scores was attributable to between individual differences.

Conclusion:

Although the QOL and behavioral health outcomes of the military burn survivors did change over time, there were fluctuations in some of the instrument scores that indicated a possible need for psychosocial interventions at various time points to facilitate continued rehabilitation. Psychiatric clinical nurse specialists and case managers could provide ongoing assessments and interventions as needed.

Longitudinal research with all burn survivors should continue in the outpatient setting. Return to work status should be included in subsequent research with military burn survivors as well as their ability to remain in the military. Qualitative research should be integrated into the studies to better determine the patients' perspectives about the quantitative results at the various time points in the rehabilitation trajectory.

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Keywords:

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Many of these references are older than 5 years but they are the most current information available

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Abstract Summary:

This was a longitudinal study of military burn survivors after they were treated at the military burn center located at Fort Sam Houston, Texas. Quality of life, satisfaction with life, community integration, post-traumatic stress and depression were outcomes of interest over 18 months post-burn center discharge.

Content Outline:

I. Purpose of Study

- A. Military burn survivors are typically not included in other burn studies
- B. There are limited prospective studies of burn survivors post burn center discharge
- C. Quality of life, satisfaction with life, post-traumatic stress, depression and community integration were the outcomes under investigation

II. Methods

- A. This study consisted of a longitudinal prospective design
- B. The Roy Adaptation Model was the theoretical framework used
- C. The Burn Specific Health Scale Abbreviated (BSHS-A), the Short Form-36v1 , the post-traumatic checklist-military (PCL-M), the Centers for Epidemiologic Studies

First Primary Presenting Author

Primary Presenting Author

Linda H. Yoder, PhD, MBA, RN, AOCN, FAAN
The University of Texas at Austin
School of Nursing
Associate Professor
Austin TX
USA

Professional Experience: Was the principal investigator for this study regarding burned military service members and their quality of life after discharge from the military burn center. She has 25 years experience as a researcher and author. She is active in the local Sigma chapter; is a member of research and grant review committees. Dr. Yoder also serves as a speaker regarding clinical topics, leadership, and scholarship for various chapters.

Author Summary: Linda H. Yoder, PhD, MBA, RN, AOCN, FAAN, is an Associate Professor at the University of Texas at Austin School of Nursing. Dr. Yoder was an Army Nurse Corps officer for 28 years, retiring at the rank of Colonel. Dr. Yoder is an alumna of the Robert Wood Johnson Executive Nursing Fellowship (2011 Cohort) and she is the President of the Academy of Medical-Surgical Nurses. She is a Fellow in the American Academy of Nursing.

Second Author

David C. McFall, PhD

The Community Care Collaborative

Director, Integrated Delivery System Implementation

Austin TX

USA

Professional Experience: Nov 2014-Present Director, Integrated Delivery System Implementation The Community Care Collaborative Ascension Health Austin, TX Sept 2013-Nov 2014 RN V Project Manager Delivery System Reform Incentive Payment Pool Behavioral Health Crisis Intervention Stabilization Unit University Medical Center Brackenridge Emergency Department A Member of the Seton Healthcare Family, Austin, TX June 2011-May 2015 Research Assistant III The Geneva Foundation, Tacoma, WA July 2010-Sept 2013 Registered Nurse IV Charge Nurse University Medical Center Brackenridge Emergency Department A Member of the Seton Healthcare Family, Austin, TX May 2006-Jul 2010 Clinical Manager University Medical Center Brackenridge Emergency Department A Member of the Seton Healthcare Family, Austin, TX Aug 2000-May 2006 Registered Nurse IV-Charge Nurse University Medical Center Brackenridge Emergency Department A Member of the Seton Healthcare Family, Austin, TX

Author Summary: Has 36-years of Nursing experience in Level I and Level II Trauma Centers in Texas and California. In his current role, he works with community partners to enhance clinical quality, improve patient care experiences, and improve the health outcomes for approximately 95,000 under and uninsured citizens of Austin/Travis County Texas.

Third Author

Dale Glaser, PhD

The University of San Diego and San Diego State University

Statistics

Professor

San Diego CA

USA

Professional Experience: Dr. Dale Glaser has consulted for a wide array of clients in such varied disciplines as health care, marketing, pharmaceutical, manufacturing, government, and education. Moreover, he has guided many faculty and students in developing designs and employing the proper analysis for their projects and degrees. He also keeps active in the academic domain by instructing courses in undergraduate and graduate level statistics, research design, testing and measurement, and Industrial/Organizational Psychology-related courses at San Diego State University, University of San Diego, California State University, San Marcos and Alliant International University, as well as serving on multiple editorial boards in the social and health care sciences.

Author Summary: Dale Glaser has a Masters of Science in Counseling Psychology and Ph.D. in Industrial/Organizational Psychology. He has had extensive experience using his research and statistical skills, both as a consultant and staff member, in a variety of disciplines including marketing & planning, consumer research, clinical research, health care, education, human resources, and government.

