Vicarious Post-traumatic Growth in U.S. Military Nurses Who Served in the Iraq and Afghanistan Wars







Mary Ellen Doherty, PhD, RN, CNM
Elizabeth Scannell-Desch, PhD, RN, FAAN
Jennifer Bready, PhD

Study Purpose

To assess and examine Post-Traumatic Growth in U.S. Military Nurses who served in the Iraq and Afghanistan Wars and reintegration postdeployment



IRB Approval

Western Connecticut State University



Definition of Post-Traumatic Growth

• The term 'post-traumatic growth' was coined in 1995 by Tedeschi & Calhoun in their book, "Trauma and Transformation: Growing in the Aftermath of Suffering."

• The person experiencing 'growth' goes beyond resilience and exceeds previous levels of functioning. Consequently, their life is enhanced in some way.

Study Design

- Convergent parallel mixed-method design:
 - -- Online survey using Post-traumatic Growth Inventory (Tesdeschi & Calhoun, 1996) & Core Beliefs Inventory (Cann et al., 2010)
 - --6 open-ended questions formulated by the researchers & added to the online survey
- Participants 'clicked' to affirm consent on the survey

Data Collection

 Survey was open online for 4 months via SAFN, ANCA, & NNCA websites

 These 3 organizations also sent recruitment emails to membership at least once

Inclusion criteria & consent was addressed



Sampling

- Sampling Strategy: Purposive
 - Electronically advertised by Society of Air Force Nurses, Army Nurse Corps Association & Navy Nurse Corps Association

- Sample = 282 Nurses completed online survey
 - 112 Army Nurses
 - 143 Air Force Nurses
 - 27 Navy Nurses

Sample Demographics

• Current Age: 46 yrs. Avg. (range 25-66+)

Gender: 65 males (24%); 217 females (76%)

• Race/Ethnicity: 84% White; 16% Black/Latino/Asian/Other

Highest education: 29% BSN; 62% Masters, 9% Doctorate

Time in the Military: 16 yrs. Avg. (range 5-30+ yrs)
 45% currently in military
 55% no longer in military

Study Instruments

- Posttraumatic Growth Inventory
- 5 dimensions: 6 point Likert (0 5)
- 21 questions
 - Relating to Others (Factor I)
 - New Possibilities (Factor II)
 - Personal Strength (Factor III)
 - Spiritual Change (Factor IV)
 - Appreciation of Life (Factor V)

- Core Beliefs Inventory
- 6 point Likert (0 -5)
- 9 questions about life events



DATA ANALYSIS

Used SPSS v.25
--PGTI & CBI

--6 questions by qualitative content analysis

Findings

Posttraumatic Growth Inventory (PGTI)

- Appreciation of Life (V) showed the highest growth
 - Growth in this factor was significantly higher than other factors (p < 0.001)
- Personal Strength (III) was the second highest growth
- Other changes followed descending order:
 - Spiritual Change (IV)
 - New Possibilities (II)
 - Relating to Others (I) was lowest dimension
 Growth in this factor was significantly lower than the other factors (p < 0.001)

Findings (continued)

- Comparing gender, the only significant difference was for New Possibilities (II), which women scored significantly higher than men (t = -2.442, df = 276, p = 0.015).
- Comparing where the nurses were deployed, the only significant difference was with Relating to Others (I) (F = 3.454, p = 0.033).
 - Nurses who served in Afghanistan (p = 0.043) and Iraq (p = 0.027) scored significantly lower for Factor 1 than those who served in another location.
- There were no significant differences for Branch of Military or any other variables.

Findings (continued)

- There were very weak, but significant positive correlations (α < 0.05) for:
 - Respondent's age and Total PTGI ($r_s = .143$, p < 0.05)
 - Relating to Others ($r_s = .127$, p < 0.05), and
 - Appreciation of Life $(r_s = .121, p < 0.05)$.
- There was a weak to moderate positive correlation for Spiritual Change ($r_s = .282$, p < 0.001).
- There was also a positive, weak correlation between years in the military and Spiritual Change ($r_s = .155$, p = 0.011).

Qualitative Findings

Dimensional Themes

- Appreciating my life more now
- I'm stronger than I thought I was
- I'm embracing new possibilities 'on my own terms'
- Spirituality is more than organized religion
- Hugging 'those I care about' as tight as I can



Study Conclusions

- This study presents initial evidence that some nurses experienced some PTG.
 - ---Nurses' qualitative comments matched-up with quantitative scores of the PTG Inventory
- Military leadership needs to give support to nurses in the war zone & after returning home to help balance their lives & foster successful reintegration



Study Limitations

- External validity of results is limited because we cannot generalize to the entire population of military nurses who deployed in the Iraq & Afghanistan wars
- Since this is the first study to investigate vicarious posttraumatic growth in U.S. military nurses who deployed to war:
 - --- No comparisons can be made to prior research with military nurses in wars,
 - --- There was no comparison group of military nurses who had not deployed to war
 - ---282 nurses who were members of SAFN, ANCA, or NNCA voluntarily participated in this study

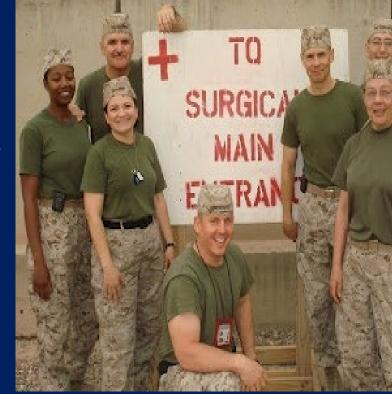
Implications for Nursing

- Military leaders need to enhance strategies to support nurses/caregivers in war zones & after they return home. They need to know:
 - ---Their work is valued
 - ---They will be cared for & not forgotten
 - ---Families will be looked after during deployment
- Possible Interventions (Calhoun & Tedeschi, 2013)
 - ---Journaling about experiences/thoughts
 - ---Periodic peer debriefing in small groups
 - ---during deployment
 - ---during reintegration



Recommendations

- Posttraumatic growth in caregivers needs to be further studied
 - Studies need to include several trauma-related variables:
 - ---Time since trauma/deployment
 - ---Trauma type/deployment
 - ---Age at time of trauma/deployment
 - ---RN experience before trauma/deployment
- Need further research to quantify the long-term psychological impact of PTG & whether a focus on PTG may be helpful in treatment for veterans



OUR BOOKS

