

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 post-deployment



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** (Tedeschi & 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 ($\alpha < 0.05$) 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

