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

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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 (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 ($\alpha < 0.05$) 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