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**TITLE:**
Telephone Support During Overseas Deployment for Military Spouses

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**Memphis, TN 38104**

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**13. SUPPLEMENTARY NOTES**

**14. ABSTRACT**

Deployment impacts both service member and family, and the cost can be high. Spouses' reactions to deployment may include emotional distress, loneliness, anticipatory fear or grief, somatic complaints, and depression. The goal is to help spouses learn ways to manage stress and solve problems related to deployment and reintegration, communication, managing long distance relationships, and other common problems. The study compared telephone support groups to online education sessions for 161 spouses. In the Telephone Support groups, a group leader and participants 12 times over six months to focus on education, skills building and support. Education Only online sessions provided the same education content, without skills building or support. Content included strategies to reduce or eliminate communication difficulties, how to find help; practical concerns; fostering resilience and decreasing stress; fostering relationships while apart, negotiating roles and relationships; changes during deployment; strategies to support the spouse and the service member; and cues to alert spouses when to seek mental health services for the family or themselves. All participants significantly improved in resilience, depression, anxiety, and coping. There was no difference between arms in resilience or depression. Webinar participants significantly improved in anxiety and showed a trend toward improved coping. Both groups reported self-efficacy as a driver of benefit. For webinar participants, there was no effect for dosage. For support group participants, more sessions attended led to significantly improved anxiety, and trends toward improved resilience, depression, and coping.

**15. SUBJECT TERMS**

Spouses, social support, stress disorders, communication, combat disorders

| 16. SECURITY CLASSIFICATION OF: | | | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES | 19a. NAME OF RESPONSIBLE PERSON |
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**INTRODUCTION:**

Deployment impacts both service member and family, and the cost can be high. Spouses' reactions to deployment may include emotional distress, loneliness, anticipatory fear or grief, somatic complaints, and depression. Spouses may also be stressed by single-parenting, learning skills such as home repairs, making decisions alone, and lack of communication with the service member. Assistance during deployment can also help with reintegration post deployment. This randomized clinical trial examined two interventions designed to help spouses manage deployment and prepare for reintegration. The study enrolled 161 spouses/significant others. In the Telephone Support groups, a group leader and participants met 12 times over six months to focus on education, skills building and support. Education Only online sessions provided the same education content, without skills building or support. Content included strategies to reduce or eliminate communication difficulties, how to find help; practical concerns; fostering resilience and decreasing stress; fostering relationships while apart, negotiating roles and relationships; changes during deployment; strategies to support the spouse and the service member; and cues to alert spouses when to seek mental health services for the family or themselves.

All participants showed significant improvement in resilience, depression, anxiety, and coping. There was no difference between arms in resilience or depression. Webinar participants significantly improved in anxiety and showed a trend toward improved coping. Both groups reported self-efficacy as a driver of benefit. For webinar participants, there was no effect for dosage. For support group participants, more sessions attended led to significantly improved anxiety, and trends toward improved resilience, depression, and coping.

A no cost extension was requested and granted, extending the project through March 2016.

**BODY:**

| **Completed Tasks** |
|---|
| **Task 1: Develop Manual of Operations (MOP)** – completed Year 1, April, 2011– March, 2012 |
| **Task 2: Obtain IRB and HRPO** approval – Completed, Year 1, April, 2011– March, 2012, Q3, October-December, 2011 |
| **Task 3: Print approved materials**– Completed, Year 1, April, 2011– March, 2012, Q3, October-December, 2011 |
| **Task 4: Hire and train personnel** – Initially Completed Year 1, April, 2011 – March, 2012; Replacement staff hired and trained Year 2, April, 2012 – March, 2013, Q6, July – September, 2012 |
| **Task 5: Recruit and Randomize** – 161 spouses recruited and randomized, half in each arm, 227 screened. Completed December, 2013 |
| **Task 6: Intervention 1 (Telephone Support Groups)** –Telephone support groups provided. Completed May, 2014. |
| **Task 7: Intervention 2 (Online Education/Webinar Sessions)** – Webinar sessions provided. Completed June, 2014. |
| **Task 8: : Data Collection/Data Entry/Cleaning -** 161 baselines collected, 137 6 month follow-ups, 125 12 month follow-ups, and 98 project evaluations collected. Data collection completed December, 2014. All data entry and cleaning completed February, 2015. |

| | **Year 4, April, 2014 – March, 2015** |
|---|---|
| **Tasks and Activities** | **Progress** |
| **Task 9: Data Analysis** | |
| 9.a Analyze Data | |
| **Milestone 9(a)** Completed data analysis | • Baseline demographics analyzed (see Appendices)<br>• Baseline analysis begun (see beginning draft manuscript in Appendices)<br>• Baseline to six month analysis begun (see Appendices) |
| **Task 10: Prepare and Disseminate Results** | |
| **10.a** Prepare papers and presentations | • 1 presentation<br>• 2 grant proposals<br>• 1 manuscript in preparation |

**KEY RESEARCH ACCOMPLISHMENTS:**

Baseline to six months analysis begun

Participants significantly improved in
- Resilience
- Depression
- Anxiety
- Coping

No difference between arms in resilience or depression

Webinar participants
- Significantly improved in anxiety
- Had trend toward improved coping

Dosage
- For webinar participants, no effect for dosage
- For support group participants, more sessions attended led to
    - Significantly improved anxiety
    - Trend toward improved resilience
    - Trend toward improved depression
    - Trend toward improved coping

**REPORTABLE OUTCOMES:**

**Baseline to six months data**
- Table 1. Mixed Model Analysis of Outcome Variables

**Presentations** (available upon request)

- Martindale-Adams J, Nichols LO. Caregiver Center: Research and Clinical Programs. Preventive Medicine Conference, December 11, 2014.
- Nichols, L, Martindale-Adams, J. Telephone Support during Overseas Deployment for Military Spouses). U.S. Army Military Operational Medicine Research Program (MOMRP)/Joint Program Committee for Military Operational Medicine (JPC5) In Progress Review, March 24, 2015.

**Grant proposals**
Family members, particularly parents, have contacted us to request assistance while their children are deployed and after deployment.
- Interventions for Parent Caregivers of Injured Military/Veteran Personnel. Submitted May, 2014 to Military Operational Medicine Research Program (MOMRP). Abstract attached.
- Supporting Parent Caregivers of Injured Veterans. Submitted December, 2014 to VA Health Services Research and Development (HSR&D), to be resubmitted to VA Rehabilitation Research. Abstract attached.

**Manuscript**
Decision making and communication during deployment

**CONCLUSIONS:**

Both interventions provided benefit with participants in both arms significantly improving in resilience, depression, anxiety, and coping. There was no difference between arms in resilience or depression. Webinar participants, compared to support group participants, had significantly greater improvement in anxiety and showed a trend toward greater improvement in coping.

When dosage was examined, for webinar participants, there was no effect for dosage. However, for support group participants, more sessions attended led to significantly improved anxiety, and trends toward improved resilience, depression, and coping.

When qualitative data were examined, support group participants reported that self-efficacy and connecting with others caused benefit. Support group participants reported difficulty finding time to participate and they would like to see each other (e.g., via Skype) and have more discussion time during the group sessions.

> *"I learned to communicate better and I also learned that I don't have to do everything by myself that I can ask for help. And I also learned to take time out for me."*

> *"I was on the phone for a period of time with other spouses that were going through the same thing I was going through. I felt like I wasn't alone in it and I actually got to vent out as far as to people who knew what I was dealing with instead of just talking to a friend that either didn't care or they didn't understand."*

Webinar participants also reported that self-efficacy caused benefit. They liked the Spouse Workbook and the webinar format but wanted more interaction and more information.

*"The slideshows helped me understand the emotions I was feeling. They also helped me learn how to cope with those emotions. And, it also taught me what to expect when he came back. And, it helped me help him cope with his feelings when he came back."*

*"Also, it was nice because I could talk to my husband about it as well. So, we would do some of the homework things. … It was helpful for not just me but my husband as well."*

Dissemination Options – based on funder needs

During the upcoming NCE year, the project could provide to the Army (and to any other DoD entity) the materials to provide Telephone Support Group, including Spouse Workbooks and Staff Manuals, and training slides and certification materials, based on those used in VA to train telephone support group leaders. The VA's Caregiver Center provides this type of training to VA staff nationally to run telephone support groups for Post 9/11 Spouses/Caregivers, Caregivers of Veterans of all Eras, Dementia Caregivers, and SCI/D Caregivers. These could be easily modified for military providers.

Webinars for on-demand viewing to be paired with a Spouse Workbook could also be developed. Based on participant recommendations, some form of interaction (e.g., monitored chat/blog/on line or telephone scheduled discussions) would be desirable. Some spouses also suggested embedded videos to show skills.

**REFERENCES and SUPPORTING DATA:** N/A

**APPENDICES:**

- Table 1. Mixed Model Analysis of Outcome Variables, Baseline to Six months
- Grant proposals' abstracts
- Quad chart

Table 1. Mixed Model Analysis of Outcome Variables

| Variable | Baseline N = 161 M ± SD | 6 Months N = 137 M ± SD | Group *p*-value | Time *p*-value | Group by Time *p*-value |
|---|---|---|---|---|---|
| Anxiety (0-21) | | | .494 | <.001 | .032 |
| Support | 6.0 ± 4.4 | 5.4 ± 5.1 | | | |
| Webinar | 7.3 ± 5.2 | 5.0 ± 4.8 | | | |
| Depression (0-27) | | | .376 | <.001 | .198 |
| Support | 5.5 ± 4.3 | 3.8 ± 4.4 | | | |
| Webinar | 6.6 ± 5.5 | 3.9 ± 4.2 | | | |
| Resilience (0-100) | | | .342 | <.001 | .180 |
| Support | 75.4 ± 11.5 | 78.3 ± 9.4 | | | |
| Webinar | 75.9 ± 11.8 | 81.0 ± 10.2 | | | |
| Personal Coping (8-40) | | | .773 | <.001 | .075 |
| Support | 33.0 ± 3.8 | 34.5 ± 4.0 | | | |
| Webinar | 32.5 ± 4.6 | 35.4 ± 4.2 | | | |
| Family Coping[a] (6-30) | | | .180 | <.001 | .128 |
| Support | 26.2 ± 3.2 | 26.8 ± 3.3 | | | |
| Webinar | 26.1 ± 3.9 | 27.9 ± 2.4 | | | |

Note: Anxiety = GAD-7, Depression = PHQ-9, Resilience = CD-RISC, Personal and Family Coping questions from the 1991-1992 Survey of Army Families II in USAR-EUR. [a] Family Coping is only assessed with participants who have children living in the home. N = 102 and 93 at baseline and 6 months respectively.

**Grant Abstract - Parent/Family Caregivers of Military Personnel - Army**

**Background**: For the current conflicts, the high operational tempo and its repeated deployments have had significant effects on service members. Over 103,792 individuals have been diagnosed with PTSD and 253,330 with TBI. Almost half (49.3%) of active military members are 25 years of age or younger, with the highest percentage of younger members in the Marines (68.5%) and 43.3% are unmarried. For many young and unmarried military service members, parents and, to a lesser extent, other family members, provide care ranging from full care to supervision. This group of individuals, focusing on parents, are frequently at a loss as to how to cope with changes in their child.

**Hypotheses**: REACH (Resources for Enhancing All Caregivers Health) individual Sessions, compared to Education Webinars, will be more effective in improving outcomes, including depression, anxiety, burden, coping and self-efficacy. Telephone Support Groups (based on Spouse Telephone Support (STS)), compared to the webinar attention control study arm, will be more effective in improving outcomes, including depression, anxiety, resilience, coping and self-efficacy.

**Specific Aims**: Aims include: 1) assess feasibility; 2) determine participant satisfaction; 3) determine participant adherence to therapeutic recommendations; and 4) determine changes in parent/family caregivers' outcomes; and 5) develop dissemination materials.

**Study Design**: This randomized clinical trial will test two established interventions to provide education, training in coping skills, and support to parent/family member caregivers of military personnel (active duty, Guard, Reserve) who are post deployment. The two active interventions are research based and currently implemented nationally in the VA system for caregivers. The two study arms are: REACH individual sessions and webinar education sessions, which are analogous to the usual standard of care. Each arm will have 80 participants, for a total of 160 participants. Telephone data collection will be conducted at baseline, three and six. Outcome variables include depression, anxiety, burden, coping and self-efficacy, and participant satisfaction, focusing on utility and support.

**Relevance**: The caregiving population targeted in this study is underserved by VHA and DoD; frequently privacy laws prohibit them from even an understanding of the issues facing their child. However, with the large number of unmarried and young service members, parents frequently shoulder a large portion of care. For example, PTSD caregivers' care burden similar to dementia and chronic schizophrenia caregivers

**Supporting Parent Caregivers of Injured Veterans – VA HSR&D**

**Specific Aims**

This randomized clinical trial will test a behavioral caregiving intervention that has been used successfully for dementia and SCI/D caregivers to provide services to stressed and burdened parent caregivers of Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF)/Operation New Dawn (OND), OEF/OIF/OND Veterans. This intervention is four individual intensive core sessions plus assessment and closure sessions that provide education, support, and skills building including problem solving, cognitive restructuring, communication, and stress reduction targeted to an assessment of the care dyad's needs. It will be compared to education webinar sessions, which are analogous to the usual standard of care and will function as an attention control arm. The study objective is to determine which delivery method is more effective at helping parent caregivers improve their depression, anxiety, and burden.

The long-term objective is to develop materials for parent caregiver interventions that can be disseminated across the Department of Veterans Affairs (VA) Veterans Health Administration (VHA). Each of the interventions (the individual sessions and the education webinars) have different strengths, and may be more acceptable for different organizations and staff, according to varying logistic constraints and organization, patient, caregiver, and staff needs.

Research goals include:

1) Determine feasibility of conducting interventions with parent caregivers.

2) Determine effective strategies for providing education, skills building and support for parent caregivers of returning Veterans; and

3) Develop materials for clinical translation and implementation.

The hypotheses are:

**Hypothesis 1:** Education Webinar arm participants will improve during the course of the study on outcomes, including depression, anxiety, and burden.

**Hypothesis 2:** Individual Session arm, compared to the Education Webinar study arm, will be significantly more effective in improving outcomes, including depression, anxiety, and burden

The effect of potentially confounding variables will be controlled for in analysis, i.e., determining whether impact is equivalent for participants who differ on a range of variables such as number of sessions completed, amount and type of care provided, and type of Veteran injury/disability.

Quad Chart

## Telephone Support During Overseas Deployment for Military Spouses
W81XWH-11-2-0087, 10020008, DHP CSI

**PI:** Nichols **Org:** VA Medical Center, Memphis TN **Award Amount:** $1,016,828

DMRDP

**Study/Product Aim(s)**

- Determine satisfaction
- Determine commitment and adherence to therapeutic recommendations
- Determine whether telephone support groups significantly improve outcomes, compared to educational webinars
- Develop a manual for clinical translation

**Approach**

Randomized clinical trial of 160 spouses, half in each study arm. Compare webinar sessions (the usual standard of care) to more intensive telephone support groups. For the telephone support arm, each group of spouses have 12 one-hour telephone support groups focusing on education, skills building and support over six months. For the education group, spouses viewed online webinars. Data were collected at baseline, 6 and 12 months.

Presentation slide - Results


**Accomplishments:** Baseline to six months analysis begun, materials available to be prepared for dissemination.

### Timeline and Cost

| Activities / Study | 1 4/11-3/12 | 2 4/12-3/13 | 3 4/13-3/14 | 4 4/14-3/15 | 5 4/15-3/16 |
|---|---|---|---|---|---|
| Finalize manual, obtain approvals, print materials | | | | | |
| Recruit subjects | | | | | |
| Administer interventions | | | | | |
| Collect, analyze, process and publish data | | | | | |
| **Estimated Budget ($K)** | $90 | $332 | $340 | $254 | |

Updated: 31 March 2015

**Goals/Milestones**

- ☑ Finalized Manual of Operations (MOP) including telephone support group topics and scripts and online education/webinar sessions topics and scripts, screening forms and scripts, data collection forms, scripts and documentation
- ☑ Obtained IRB and HRPO approval
- ☑ Printed approved materials
  - 2500 brochures 190 Workbooks
- ☑ Hired/Trained personnel
- ☑ Recruited, enrolled and randomized subjects (Total: 161 spouses )
- ☑ Administer intervention 1 (telephone support groups)
- ☑ Administer intervention 2 (online education/webinar)
- ☑ Collect, analyze and process data
- ☐ Publish data

**Comments/Challenges/Issues/Concerns**

- NCE requested and granted

**Budget Expenditure to date**

Projected expenditure: $1,016,828.00 Actual Expenditure: $379,161.38 (as of 03/31/15)