Evaluation of a Peer-Delivered, Strength-Based Family Education Program

On Family Resilience Factors in Veterans Returning from Iraq and Afghanistan

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Abstract

**Purpose:** The purpose of this study was to evaluate the effects of participation in a peer-led, strength-based family education program focused on family resilience factors in returning OIF/OEF veterans and their families.

**Data sources:** De-identified data from Veterans returning from Iraq and Afghanistan and veteran family member participants in the 8-week Operation Resilient Families (ORP) program was analyzed. Data analysis included review of demographic information and statistical analysis of pre- and post self-assessment evaluation questionnaires.

**Results:** Demographic data was provided on forty seven of fifty-three known participants – 89%. Data represented veterans and veteran family members, with nineteen (19) reporting veterans and twenty-eight (28) reporting family members. In the veteran participants, the most frequently represented military service branch was the Army (53%), followed by the Navy (16%), Marines (11%), US Air Force (5%), and not reported (15%). The family participants represented 18% Army, 7% Marine, and 75% not reporting. Veteran participants tended to be older than the family member participant with a mean age of 51 years versus 36 years of age. Veterans reported an average of two deployments with a range of seven to none. Family members reported an average of one deployment for their family member.

Statistics were calculated on seventeen matched pre- and post- self assessments. Resiliency scores were significantly increased for both veteran and family member groups. Combined scores calculated for specific resiliency factors – family relationships, family communication and knowledge of resources – were all significantly increased, as well. The ORF program is composed of a didactic portion (knowledge) and an experiential, practice component. The 8-week format allows participants to practice the skills that were taught in each class.
session, as well as the opportunity to discuss within the groups any problems that were encountered when trying to implement the skills. An increase in knowledge does not assure changes in behavior. Follow-up is needed to determine if the family wellness recovery plans were implemented.

**Conclusions:** The ORF Program strives to build on and support the strengths of returning combat veterans and their families. The curriculum is focused on identifying strengths, teaching coping skills, and providing hope for healthy re-integration after deployment. Healthy relationships, effective family communication, and knowledge of resources significantly increased for those who participated in the groups.
Evaluation of a Peer-Delivered, Strength-Based Family Education Program
On Family Resilience Factors in Veterans Returning from Iraq and Afghanistan

The United States has deployed more than 1.7 million Americans to Iraq and Afghanistan. Operation Enduring Freedom (OEF) began in Afghanistan in October 2001 and Operation Iraqi Freedom (OIF) began in Iraq in March 2003. Combat operations in Iraq officially ended on August 31, 2010. Under Operation New Dawn, approximately 50,000 troops remain in peace-keeping and advisement roles. This all voluntary military force faces greater challenges than ever before. A larger proportion of the combat troops are National Guard and Reservists who tend to be older than the Active Component, more likely to be married with children, and most likely have been employed outside of the military before being deployed (Frain, Bethel, & Bishop, 2010). Lengths of deployments are longer, redeployment is common and the time between deployments have been shorter than in previous wars (Hosek, Kavanagh, & Miller, 2006). Improvements in medical technology and the use of body armor have saved lives, but created new problems. Mental health disorders and cognitive impairments have been termed the invisible wounds of this war (Tanielian & Jaycox, 2008). It is estimated that for every soldier killed in the war, there are at least sixteen wounded. In addition to physical disabilities, the number of soldiers discharged with mental health diagnoses is estimated to be greater than 20% (Hoge, Auchterlonie, & Milliken, 2006).

When returning home from deployment, both the veteran and the veteran’s family have expectations of a joyous reunion. Optimistic expectations may soon be replaced by the realities that when families are apart, they change. The veteran has been exposed to conditions and experiences of war, while the spouse has often had to adjust to being a single parent, with all the responsibilities of managing a home and family. Redefining family roles, getting reacquainted,
and establishing healthy communication are challenges faced by the reunited family that may benefit from a program of support and education.

**Significance**

Of those veterans who screen positive for a mental disorder post-deployment, only 23 to 40% will seek care (Hoge et al., 2006, McFee, 2008). Consequently, it is a crisis that often forces these individuals to seek help. It is estimated that 1% of the active military force will complete or attempt suicide due to combat stress. The fear that use of mental health services will negatively affect their employment or limit their military careers is a barrier to getting help (Tanielian & Jaycox, 2008). Veterans need help to access services more effectively, and need to live in a community in which they feel safe to ask for help. Stigma and barriers to mental health care could be reduced by educating veterans and their families that “combat stress reactions are normal and expected responses to abnormal situations, rather than signs of psychopathology” (Pietrzak, Johnson, Goldstein, Malley, & Southwick, 2009). In a recently published study, the investigators found that Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) veterans who reported suicidal ideation, also screened positive for posttraumatic stress disorder, depression, and alcohol problems. These same veterans scored lower on measures of resilience, unit support, and post-deployment support (Pietrzak, Goldstein, Malley, Rivers, Johnson, & Southwick, 2010).

Post-deployment social support from family and friends, and a perceived sense of purpose and control are protective against suicidal ideation (Pietrzak et al., 2010). Often it is the family who are the first to recognize post-deployment readjustment problems, and be negatively impacted by them. Both the veteran and the family unit can benefit from interventions that teach problem-solving skills and resourcefulness (Frain et al., 2010). Family members tend to be less
concerned with stigma and are more motivated to seek help. National Guard and Reservists make up 30 – 50% of the personnel deployed in Iraq (Frain et al., 2010). After deployment, these individuals and their family members lack the benefit of outreach efforts afforded to active duty soldiers and family members and may be left feeling isolated and detached from information and benefits in their communities (McFee, 2008).

Background

The Veterans Health Administration has long known that involving family members in a soldier’s recovery process is effective. The Substance Abuse and Mental Health Services Administration (SAMHSA) has included family psycho-education as nationally acclaimed evidence-based practice for inclusion in the treatment of mental disorders and substance use disorders. To date, most family psycho-educational offerings have been developed and delivered by mental health professionals. These family psycho-education programs are limited due to limited availability of trained clinicians, financial resources, and reimbursement issues. Consumers and family members may not want to be identified with mental health facilities due the stigma attached to psychiatric illness (Dixon, McFarlane, Lefley, Lucksted, Cohen, Falloon, Mueser, Miklowitz, Solomon, & Sondheimer, 2001). The problem or pathology focus of psycho-educational programs may deter persons who are seeking to strengthen their relationships with information about resources and problem solving strategies. Additionally, professionally-led family psycho-educational programs can be expensive and available at times convenient for the professional, not the family or consumer. Professionally driven services tend to be offered in settings convenient to professionals, such as mental health or clinic settings. Research on the efficacy of peer-delivered family education is limited.
The National Alliance for Mental Illness (NAMI) has experience in the development and delivery of peer programs. Their Family-to-Family Program is led by a family member of a person with mental illness. The program is a 12 week family education program designed to provide information about the various mental disorders and develop strategies for coping with a mentally ill family member. Evaluations of this program have demonstrated outcomes of increased knowledge about mental illness diagnoses and a decrease in the perceived burden (Dixon, Lucksted, Stewart, Burland, Brown, Postrado, McGuire, & Hoffman, 2004). Unlike professionally-led family psycho-education programs, peer-delivered programs are more often delivered in community settings or settings linked with natural supports, such as libraries, community centers, or church meeting rooms. In the case of veterans experiencing post-deployment readjustment problems, professional community providers often lack sufficient experience with the military/veteran culture, or war-zone deployment and post-deployment readjustment issues. Therefore, a peer (veteran and veteran family member) is uniquely qualified to provide support and guidance to these veterans and veteran family members.

**Problem**

Mental health disorders such as posttraumatic stress disorder, depression, anxiety, insomnia and substance abuse plague our returning veterans. With only 20% of the veterans referred to mental health services actually seeking help, available Veteran Health Administration mental health services are not being utilized effectively (Tanielian & Jaycox, 2008). Stigma and access barriers are cited as reasons for underutilization of mental health services. Respondents in the RAND study reported fears about confidentiality and fears that treatment would have a negative impact on job assignments or on their military careers. Other were concerned that treatment for mental health problems was ineffective or that medications would have unpleasant
side effects (Tanielian & Jaycox, 2008). Re-integration problems such as substance abuse, insomnia, PTSD, and mood disorders impact the quality of life of both the veteran and their families. The consequences of untreated mental illness; such as substance abuse, homelessness and rising suicide rates, are posing a significant challenge to both military and civilian communities (Tanielian & Jaycox, 2008).

There is a critical need to reach out to returning OIF/OEF veterans and their families. Operation Resilient Families (ORF) is a veteran and family-driven program developed by the National Alliance on Mental Illness (NAMI) Waco Affiliate with funding from the Texas Resources for Iraq-Afghanistan Deployment (TRIAD) Fund and a substantial donation to NAMI Texas by the Family Support Foundation on Mental Illness. Significant portions of the Operation Resilient Families program were adapted from the professional provider-delivered “Operation Enduring Families” curriculum, developed by Ursula Bowling, Psy.D, Alan Doeman, Psy.D and Michelle Sherman, PhD with the support of the VA South Central (VISN 16) Mental Illness Research Education and Clinical Center; a program which was based on Michelle Sherman’s Support and Family Education (SAFE) psycho-education program. It was through the vision and advocacy for peer support services, that Wayne Gregory, PhD and NAMI Waco Board Member envisioned this curriculum to be peer-led; and, thus, pursued the necessary funding and assembled a team of veterans, family members and other advocates to assist. Under the leadership and direction of Christine Woods, this team carefully developed a curriculum that is focused on enhancing family resilience through a process designed to help prevent or reduce overwhelming readjustment challenges. Desired outcomes of participation in ORF are: decreased stigma of mental illness, improved family quality of life; and, increased knowledge of available resources which would subsequently increase access to mental health services (ORF Training
Manual, 2010). ORF is a strength-based, family education program focused on helping families communicate more effectively and learn skills to meet the challenges of post-deployment reintegration. Veteran and veteran family members (peers) who have been through military deployment and who show signs of thriving in their post deployment readjustment offer hope to those veterans and families who are struggling to re-engage.

**Purpose**

The purpose of this study is to evaluate the effects of participation in a peer-led, strength-based family education program focused on family resilience factors in returning OIF/OEF veterans and their families.

**Literature Review**

**Methods**

A search of social science, nursing and health science literature was conducted using electronic databases to July, 2010: CINAHL, MEDLINE/PubMed, PsychInfo and Cochrane Database of Systematic Reviews. The search was limited to English language articles. Recommended resources were reviewed that did not present in the search. Reference lists from the relevant studies were searched for additional references.

**Results**

The search identified 152 articles, of which 56 were considered potentially relevant to this study. A more detailed review of the full text articles led to the inclusion of 11 studies and one relevant report. The search did not yield any level I studies. There were two level II studies, seven level III studies, and two level VI studies. The quality of ten studies was rated good and one was rated low using the Johns Hopkins Nursing Evidence-Based Practice Model and Guidelines (2007) Evidence Rating Scale. Study methodology varied significantly. There were
no studies that combined peer-delivered, strength-based, family education. As such, the results of the literature search are grouped by concept.

In a randomized control study conducted by Braga, Júnior, & Ylvisaker (2005) direct clinician care was compared to indirect family-supported rehabilitation of children with traumatic brain injury. Eighty-seven children ages 5-12 were randomly assigned to the clinician-delivered or to the family-supported intervention group. Physical and motor functioning was evaluated at baseline and after treatment using the SARAH Scale of Motor Development (SARAH Scale), second edition. Cognitive functioning at baseline and after treatment was measured by the Weschsler Intelligence Scale for Children, third edition (WISC-III). Parents in the family-supported intervention sample effectively acquired the skills needed to give physical and cognitive interventions within the context of everyday routines of the child’s life at home. Although both groups demonstrated improvements, only the children in the family-supported intervention group demonstrated significant improvements in both measures (WISC III, p < 0.004 and Sarah scale, p < 0.011).

Three studies involving 272 OEF/OIF veterans reported on risk and protective factors for development of mental health symptoms and the relationship to resilience, unit support, and postdeployment social support. In each of the studies, the same population was used and the data were gathered from the Needs Assessment Surveys completed by Connecticut OEF/OIF veterans who served from 1/2003 to 3/2007. Surveys were mailed to 1000/1050 veterans and the average return rate was 27%. Assessment instruments in the Veterans Needs Assessment Survey included: The CAGE, The Combat Experiences Scale (CES), The Connor-Davidson Resilience Scale (CD-RISC), The Patient Health Questionnaire (PHQ-9), Perceived Stigma and Barriers to Care for Psychological Problems, The Postdeployment Social Support Scale (PSSS), The
Posttraumatic Stress Disorder Checklist-Military Version, The Psychosocial Difficulties Scale (PDS), and The Unit Support Scale (USS). The CAGE Questionnaire is a 4-item instrument used to screen for alcohol abuse. The CES is a 15-item self-report instrument from the Deployment Risk and Resilience Inventory that assesses exposure to combat, such as firing a weapon, being fired on by enemy or friendly fire, witnessing injury or death. Higher scores indicate greater combat experience. The CD-RISC is a 25-item self-report assessment of psychological resilience. The PHQ-9 is a 9-item self-report screening instrument for depression derived from the clinician-administered Primary Care Evaluation of Mental Disorders. The Perceived Stigma and Barriers to Care for Psychological Problems instrument assesses stigma and obstacles that dissuade individuals from seeking mental health treatment. The PSS is a 15-item self-report measure that assesses postdeployment emotional support and instrumental assistance provided by family, friends, coworkers, employers, and community. The PDS is a 23-item questionnaire that assesses psychosocial functioning in family and peer relationships. The USS is a 12-item self-report instrument that assesses the amount of assistance and encouragement in the war zone from unit leaders and members, and the military in general. Lower unit support and lower postdeployment social support were associated with increased mental health symptoms, and decreased resilience and psychosocial functioning. 12.5% of respondents reported suicidal ideation on the PHQ-9. Increased postdeployment social support and a sense of purpose and control were negatively associated with suicide ideation (all p's > 0.23). Negative beliefs about mental health care and decreased perception of unit support were associated with increased stigma and barriers to care. The limitations to each of these studies were the relative low survey return rate, and limited generalizability to the relatively older and predominantly National Guard
Two studies examined the effectiveness of a peer education and support program for veterans with psychiatric diagnoses (Vet-to-Vet program) compared to standard care (without peer support) on measures of recovery orientation, confidence, and empowerment. Recovery orientation was measured with nine items from the Recovery Attitudes Questionnaire (RAQ). The Mental Health Confidence Scale is a measure of general confidence and self-efficacy. The 28-item Making Decisions Scale was used as a measure of general empowerment. Program evaluation results showed satisfaction and a significant level of recovery orientation. In the quasi-experimental study, the Vet-to-Vet cohort scored significantly higher on measures of empowerment and confidence than did those in standard care \(p = .03, \ p = .01 \) respectively (Barber, Rosenheck, Armstrong, & Resnick, 2008; Resnick & Rosenheck, 2008).

In a study conducted by Murray-Swank et al (2007) sixty nine persons who had a diagnosis of schizophrenia, schizoaffective disorder, bipolar illness, or recurrent major depression were recruited from clinical programs within the VA Maryland Healthcare System. Each participant met with research staff for a 60- to 90-minute assessment between August 2004 and March 2006. In addition to obtaining demographic and clinical assessments, the assessors verbally administered standardized measures designed to assess participants' experience of the family environment, and their views about family participation in care. The following measures of key variables were included. One question on family contact was adapted from the Brief Quality of Life (QOL) Scale to determine how often participants had in-person contact with each family member in their family support system. Participants completed the subjective satisfaction scale from the Brief QOL Scale, which includes four questions assessing the participants'
satisfaction with family relationships. Perceived Support within the Family measured consumers’ perception of support and empowerment within the family. Three items from the family module of the Addiction Severity Index (ASI) were included to measure family conflict and distress. A “yes” or “no” response indicated a desire for family involvement in mental health care.

Participants also indicated the last time one of their family members “met or spoke with a VA clinician who provided their mental health care” and rated their satisfaction with the services received. A Family Needs and Barriers Questionnaire was developed to assess participants’ perceptions of family needs and perceived barriers to family participation in treatment. The psychiatric diagnoses were obtained from a review of clinical charts. Three subscales from the Brief Symptom Inventory (BSI) were used to assess psychiatric symptoms: depression (six items), paranoid ideation (five items), and psychoticism (5 items). Data analysis revealed the sixty-seven percent of participants (n = 46) desired one or more of their identified family members to be involved in their treatment. Participants were highly interested in their family receiving specific types of information about their illness and treatment, including topics such as medication, side effects, and working with treatment providers (Murray-Swank et al., 2007).

Three studies involved 363 family members of persons with serious mental illness who participated in Family-to-Family education program (FFEP). The NAMI Family-to-Family Education Program is a free 12-week course for families, partners and friends of individuals with serious mental illnesses, taught by trained NAMI family members and family-member consumers. The program provides education about illness and treatment; helps family members cope with the range of emotional responses to mental illness; teaches problem-solving, communication, and self-care skills; and encourages advocacy efforts for patients and their families (Bourland, 1998). The purpose of each of the studies was to examine the effectiveness
of a 12-week family-led education intervention. The longitudinal study involved collection of data (interview) at baseline, completion of program, and six month post completion. The FFEP was associated with reduced subjective burden ($P<0.01$) and increased empowerment ($P<0.01$). Subjective care burden is reflected in self-reports of reduced worry (of relatives) and displeasure. Knowledge of SMI ($P<0.001$), understanding of the mental health system ($P<0.001$), and self-care also improved ($P<0.001$). No decay occurred at 6-month follow-up. These study groups had greater homogeneity (family member with mental illness) and results were consistent across studies (Dixon et al., 2001; Dixon et al., 2004; Pickett-Schenk, 2008).

A final article is presented because it reports on psychotherapy outcome research and the relationship with the concepts of the consumer-driven recovery model. In response to a push from mental health consumer groups to find an alternative to the medical model, persons with mental illness have been motivated to find an approach that allows them to collaborate with professionals within a structure that empowers them, instills hope, and encourages personal responsibility within a nonpathologizing framework (Jacobson & Greenley, 2001). There is no research evidence to support the efficacy of any one psychotherapy treatment method over another (Tilsen & Nylund, 2008). Change is associated with four factors: client; relationship; hope or placebo; and, model or technique (Asay & Lambert, 1999). The author suggested that the dissonance between evidence-based practice and consumer need could be bridged by shifting to practice-based evidence. Rather than choosing in advance the specific treatment based on diagnostic criteria, clinicians should work together with clients to determine the best approach to their care — a collaborative relationship is the basis for change. The client outcome, from the client perspective, is the key to effectiveness (Tilsen & Nylund, 2008).
Evidence-Based Conclusions

There is a relationship between resilience, unit support, and postdeployment support to the development of mental health problems in veterans of Operation Enduring Freedom and Iraqi Freedom. Programs which bolster unit support, resilience, and postdeployment social support may help protect against stress and the development of depressive symptoms, including suicidal ideation, and improve psychosocial functioning in veterans. Encouragement from military leaders and fellow soldiers while serving in the war zone is critical, as is support received from the military in general. Talking with family and friends about experiences while deployed may help prevent suicidal ideation and decrease distress related to PTSD, depression and other deployment-related conditions. Resilience and sense of purpose and control can be enhanced with interventions such as well-being therapy (Fava et al, 1998) and hardiness training (Maddi, 2007), which focus on personal growth, life purpose, autonomy, self-control, self-acceptance, and positive relationships with others (Pietrzak et al, 2010). Negative beliefs about mental health care and unit support are modifiable risk factors for stigma, barriers to mental health care, and low mental health care utilization. Delivery of mental health services in primary care settings and confidential counseling may also help decrease stigma associated with treatment in this population (Pietrzak et al., 2009; Pietrzak et al., 2010; Pietrzak, Johnson et al., 2010).

Peer support may enhance personal well-being. The Vet-to-Vet program has been favorably evaluated by veteran participants. It strives to encompass the spirit of recovery and positive psychology. Peer facilitators promote empowerment by allowing consumers to serve as role models and leaders. In the Vet-to-Vet program, open disclosure of mental health problems by peer facilitators and participants helps to reduce stigma and increase self-acceptance.
There are many models and levels of family involvement that results in beneficial outcomes, including increased treatment participation: greater satisfaction with care; improved hope, and knowledge and empowerment among consumers. Family members of persons with mental illness have strong needs for information about mental health disorders and the treatment of these disorders (Murray-Swank et al., 2007).

Participation in family-led education interventions met the information needs of families and provided them with support to better cope with a family member’s mental illness. It enhanced family members’ empowerment and reduced the subjective burden of mental illness by lessening worry and displeasure. The family-led program improved knowledge of mental health diagnoses, increased understanding of the mental health system and self-care (Dixon et al., 2001; Dixon et al., 2004; Pickett-Schenk et al., 2008).

**Theoretical Framework**

The core concepts of the recovery model are hope, empowerment and competency (Jacobson & Greenley, 2001). Jacobson and Greenley state that recovery refers to both internal conditions – the attitudes, experiences, and processes of change of individuals who are recovering – and external conditions – the circumstances, events, policies and practices that may facilitate recovery. See Figure 1. Together, internal and external conditions produce recovery. The focus of recovery is competency. Recovery relates to a subjective attitude asserting that regardless of their state of illness or health, people can have hope, feel capable of expanding personal abilities and make their own choices (Resnick, Rosenheck, & Lehman, 2004).

**Figure 1 – Jacobson and Greenley Model of Recovery**

<table>
<thead>
<tr>
<th><strong>Internal Conditions</strong></th>
<th><strong>External Conditions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>Circumstances,</td>
</tr>
<tr>
<td>Experiences</td>
<td>Events,</td>
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<tr>
<td>Processes of change</td>
<td>Policies, and</td>
</tr>
<tr>
<td></td>
<td>Practices that facilitate recovery</td>
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</tbody>
</table>

→ Recovery
Concepts of wellness and recovery have been connected in the literature. In order to work an ‘active’ recovery program, individuals must learn skills that support health. Swarbrick (2009) defines wellness as a “conscious, deliberate process that requires the person to become aware of make choices for a more satisfying lifestyle”. It is an active process of creating and adapting patterns of behavior that lead to improved health in the wellness dimensions. A wellness lifestyle includes a self-defined balance of health habits such as adequate sleep and rest, productivity, exercise, participation in meaningful activity, nutrition, productivity, social contact, and supportive relationships.

The successful coping of families during life transitions, stress, or adversity has been described as family resilience. The Resiliency Model of Family Stress, Adjustment and Adaptation is a model used by rehabilitation counselors and is particularly useful for rehabilitation of military veterans because this model was validated on military personnel and their families (McCubbin and McCubbin, 1991). The model provides a framework for understanding family influences and how they can be used to support necessary adaptations post deployment (McCubbin & McCubbin, 1988; McCubbin, Thompson, & McCubbin, 1996). A family resilience perspective considers the strengths of parents, family dynamics, relationships, and the social environment. Resilient families use a combination of protective and recovery factors to respond to crises and challenges. Protective factors support adjustment, or the ability to maintain function and to meet developmental tasks. Recovery factors are used when faced with a crisis and support the family’s ability to adapt (McCubbin & McCubbin, 1993). Table 1 provides a comparison of resilience factors with characteristics of resilient families (Black & Lobo, 2008).
Table 1 Prominent Protective/Recovery Factors Characteristics of Resilient Families (Black & Lobo, 2008)

<table>
<thead>
<tr>
<th>Resilience Factor</th>
<th>Family Characteristics</th>
</tr>
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<tbody>
<tr>
<td>Positive outlook</td>
<td>Confidence and hopefulness; repertoire of approaches; sense of humor</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Shared value system</td>
</tr>
<tr>
<td>Family member accord</td>
<td>Cohesion; nurturance; clear parental roles; avoidance of open parental conflict</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Stable family roles that can adapt to situations and developmental changes</td>
</tr>
<tr>
<td>Family communication</td>
<td>Clarity, open emotional expression, and collaborative problem solving</td>
</tr>
<tr>
<td>Financial management</td>
<td>Sound money management, family warmth despite financial problems</td>
</tr>
<tr>
<td>Family time</td>
<td>Finds time to be together</td>
</tr>
<tr>
<td>Shared recreation</td>
<td>Develops child social and cognitive skills: cohesion and adaptability</td>
</tr>
<tr>
<td>Routines and rituals</td>
<td>Embedded activities that promote close family relationships; maintenance even during family crisis</td>
</tr>
<tr>
<td>Support network</td>
<td>Individual, familial, and community networks to share resources.</td>
</tr>
</tbody>
</table>

This author proposes a framework that integrates key concepts from the recovery, wellness and family resilience models. Hope, empowerment and relationships are common to each circle. The focus is on making choices that promote better function (improved quality of life). Consumers (peers) are an integral element of the recovery model. Implementing strategies to improve wellness in each dimension will restore balance and help veteran families grow.
In this model the individual and family have hope and confidence that change can occur, are willing to make a conscious, intentional effort to make the changes needed to restore balance, share a common spiritual belief that they are not alone, and take personal responsibility to work on skills that strengthen relationships within the family and the community.
Outcome Evaluation of Pilot Project

Research Questions

Upon completion of the Operation Resilient Families Program, do OIF/OEF veterans and their families report:

1. Improved family relationships?
2. Improved family communications?
3. Increased knowledge of available resources to help them manage challenging family situations?

Design

The ORF Program is in the pilot stage of implementation. The results obtained from this formative evaluation will be used to evaluate the program and identify those areas that need revision. The evaluation used a one-group pre and post-test pre-experimental design. Efforts were made to limit variation in program implementation by providing a structured training for all peer facilitators and providing each facilitator with a scripted manual to guide the education and discussion components. Fifty-three peer facilitators (veteran or veteran family member) completed the three-day training and certification process conducted by NAMI Texas in Austin, Texas. Trained peer facilitator teams are available to lead ORF groups in ten sites across the state of Texas.

Individual participants were asked to complete the Self-Assessment for Operation Resilient Families Program Evaluation before starting the program and after completion of the Operation Resilient Families (ORF) family education program. The ORF program consisted of eight (8) two hour sessions. Over the course of the 8-week program, each participant was asked to develop a family wellness action plan that utilized the skills that were taught in each session.
Participants were encouraged to implement each stage of the plan into their family life between sessions, and asked to report back on their experience in the next group meeting. Topics covered in the eight sessions included the following:

- Introductions and Returning to Family Life after Deployment;
- Reuniting Our Civilian Family;
- Communication Skills – Communicating Feelings;
- Communication Skills – Listening/Soft Start Ups;
- Communicating (and Dealing with Anger) in Your Family;
- Building Family Resiliency / Understanding Potential Risks;
- Facing Family Challenges with Strength; and,
- Together: Building Understanding, Empathy and Resilience.

Each site was responsible for advertising and recruitment of participants into the ORF groups (this study). A variety of approaches were taken to recruit participants. For example, the Gulf Coast MHMR placed an article in the Houston Chronicle describing the program. The article listed the dates, times and location of the program. The El Paso Times listed the times and location of its ORF group. Veterans returning from deployment participate, along with their families, in a function called the Yellow Ribbon Ceremony. A power point presentation was developed to be used during these activities to inform veterans and veteran family members of the ORF program. This same power point can be viewed online at www.mhtransformation.org/documents/presentations/Operation%20Resilient%20Families%20Families. A flyer describing the ORF program can be downloaded from the NAMI Texas website (namitexas.org). A formal brochure was created for distribution in the community.
(Appendix D). The proposal was approved by the Institutional Review Board for the Protection of Human Subjects (IRB) of the University of Texas at Arlington.

Population and sampling plan

Consenting veterans and veteran family members completing the eight week Operation Resilient Families (ORF) program from November 1, 2010 through July 1, 2011 were included in the study. The ORF program was offered to: (1) veterans of OIF/OEF deployment; (2) adult family members of an OIF/OEF veteran; or, (3) a close friend of an OIF/OEF veteran. Those individuals who were veterans of other wars or, families of veterans of other wars were not eligible to participate in ORF.

Methods

Each veteran or veteran family member who attended the first scheduled group/class meeting was offered the chance to participate in the program evaluation. Using a scripted explanation, the facilitators provided a brief overview of the ORF program and the Informed Consent. Participants were then asked to sign the Informed Consent (Appendix A), complete a demographic sheet (Appendix B) and the Pre-Assessment Evaluation (Appendix C). Participation in the program evaluation was not required for participation in ORF family education program. In order to insure confidentiality, participants were instructed to select a unique personal ID to put on the demographic sheet, and the Pre and Post-Self-Assessment Evaluation. This ID was followed by a “V” for veteran or “F” for family member. The group facilitator instructed the participant to put this ID on the demographic sheet, the Pre- and the Post-evaluation forms included in their participant workbook.
**Measurement methods**

Specific indicators of the ORF program were measured by the Self-Assessment for Operation Resilient Families Program Evaluation that was completed prior to, and upon completion of the program (Appendix C). The Self-Assessment Evaluation is a 17 item, 6-point, Likert-type tool designed to evaluate understanding in areas of family relationships, family communication, and knowledge of resources. The tool was developed by the ORF consultant. Face validity for the instrument was established by review of the curriculum planning committee composed of 14 persons representing veterans, veteran family members, active military, and the National Guard, as well as, two mental health providers, a department of state health services representative and members from both NAMI Texas and NAMI Waco. Content validity was determined by independent review of the tool by two PhD psychologists (a practicing psychologist who is expert in PTSD, and an educational psychologist) and an experienced master’s level psychiatric nurse practitioner. Specific indicators for evaluation of family relationships, family communication and knowledge of resources are identified in Table 2. An analysis of the scores from the pre- and post self-assessment evaluation tool, and an analysis of demographic data were used to evaluate the ORF program.

**Table 2**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Relationships</td>
<td>Items # 1, 4, 8, 10</td>
</tr>
<tr>
<td>Family Communication</td>
<td>Items # 2, 5, 6, 7, and 9</td>
</tr>
<tr>
<td>Knowledge of Resources</td>
<td>Items # 3, 13, 14, 15, and 17</td>
</tr>
</tbody>
</table>
Data collection plan

Participants in the Operation Resilient Families program were asked to complete the demographic form and the pretest self assessment during the first group meeting. The posttests were completed during the eighth (final) group meeting. Facilitators mailed the signed consent forms, demographic sheets, completed pre and posttest self assessment evaluations to the ORF coordinator, in Austin, Texas. These forms are kept in a locked file cabinet in the office of the ORF Program Coordinator in Austin, Texas. The ORF coordinator provided this researcher with de-identified data for fifty-three participants on July 1, 2011.

Data analysis

Demographic data was provided on forty seven of fifty-three known participants – 89%. Data represented veterans and veteran family members, with nineteen (19) reporting veterans and twenty-eight (28) reporting family members. In the veteran participants, the most frequently represented military service branch was the Army (53%), followed by the Navy (16%), Marines (11%), US Air Force (5%), and not reported (15%). The family participants represented 18% Army, 7% Marine, and 75% not reported. Veteran participants tended to be older than the family member participant with a mean age of 51 years versus 36 years of age. Veterans reported an average of two deployments with a range of seven to none. Family members reported an average of one deployment for their family member. See table 3.
Table 3 Demographics

<table>
<thead>
<tr>
<th>Participant designation</th>
<th>Military Branch</th>
<th>Mean Age</th>
<th>Mean # deployments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veteran N=19</td>
<td>Army 53%</td>
<td>51 years</td>
<td>2 (range 7 to 0)</td>
</tr>
<tr>
<td></td>
<td>Navy 16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marines 11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>US Air Force 5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown 15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Member N=28</td>
<td>Army 18%</td>
<td>36 years</td>
<td>1 (range 4 to 1)</td>
</tr>
<tr>
<td></td>
<td>Marine 7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown 75%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Frequency distribution and mean scores were computed for each item, each of the three major concepts represented in subscales in the instrument (i.e., family relationships, family communication, and knowledge of resources) and overall scores. Paired-sample t-tests were conducted on participants’ pre test and post test scores. The analysis was done on two datasets: combined veteran and family member(s) scores and separate veteran and family member scores. All analyses were performed using SPSS 17.0 for Windows.

Evaluation Tool

The reliability of the self-assessment evaluation tool was established by computing a Cronbach’s $\alpha$ analysis of the Self-Assessment Evaluation tool. A score was obtained for the all 17 items on the tool; and, for grouped items measuring improvement in family relationships, family communication and knowledge of resources. The Cronbach’s $\alpha$ analysis value is 0.91 for the 17 item pre- and post-assessment evaluation tool used to demonstrate influence on family resilience factors. The Cronbach’s $\alpha$ is 0.71 for Family relationships (items #1, #4, #8, and #10); 0.91 for family communication (items #2, #5, #6, #7, and #9); and, 0.85 for knowledge of resources (items # 3, #13, #14, #15, and #17).
Results

Paired samples t-tests were computed on 17 matched pre- and post-self assessment evaluations. Do OIF/OEF veterans and their families report improved family relationships? Analysis revealed that knowledge about family relationships significantly increased from baseline to post group participation, $t(2) = -5.89$, $p < .05$; $\bar{x} = 71$ vs 98 respectively, $p = 0.028$. Do OIF/OEF veterans and their families report improved family communication? Knowledge of family communication significantly increased from baseline to post group participation, $t(4) = -17.11$; $p < .05$; $\bar{x} = 69$ vs 97, respectively, $p = 0.000$. Do OIF/OEF veterans and their families report greater knowledge of available resources? Knowledge of resources significantly increased from baseline to post group participation, $t(3) = -7.97$; $p < .05$; $\bar{x} = 72.75$ vs 102.75, respectively, $p = 0.004$.

A paired samples t-test calculated on the pre- and post-self assessment evaluation scores revealed that overall family resilience factors significantly increased from baseline to post group participation, $t(16) = -19.26$, $p < .05$; $\bar{x} = 70.88$ vs 99.35 respectively, $p = 0.000$. Paired sample t-test performed on the veteran group revealed significant improvement in overall scores for resilience factors from baseline to post group participation, $t(5) = -12.61$; $p < .05$; $\bar{x} = 67.83$ vs 100.17, respectively, $p = 0.000$. Paired sample t-test performed on the family member participants revealed significant improvement in overall scores, $t(10) = -17.2$; $p < .05$; $\bar{x} = 72.55$ vs 98.91, respectively, $p = 0.000$. See Table 4.
Table 4 Comparison of Means

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>t</th>
<th>df</th>
<th>Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Veterans and Family members (combined)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>70.88</td>
<td>17</td>
<td>-19.26</td>
<td>16</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>99.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>71.00</td>
<td>2</td>
<td>-5.89</td>
<td>2</td>
<td>.028</td>
</tr>
<tr>
<td>Post-test</td>
<td>98.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Communications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>69.20</td>
<td>4</td>
<td>-17.11</td>
<td>4</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>97.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>72.75</td>
<td>3</td>
<td>-7.97</td>
<td>3</td>
<td>.004</td>
</tr>
<tr>
<td>Post-test</td>
<td>102.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Veteran Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>67.83</td>
<td>6</td>
<td>-12.61</td>
<td>5</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>100.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>72.55</td>
<td>11</td>
<td>-17.20</td>
<td>10</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>98.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

The Operation Resilient Family Program was launched statewide prior to completion of a small, well-controlled pilot study. As a result, the issues that might have been addressed in a smaller venue posed a greater challenge to the local mental health centers across the state. The peer facilitators were provided ongoing telephone and electronic support from the ORF coordinator. They faced difficulty recruiting participants. This resulted in a delay of starting the
groups. The ORF program coordinator assisted with efforts to market the program in the different communities. There were fifty-three identified participants, with family members being in the majority. This is consistent with the premise that family members are less impacted by stigma and would seek help sooner than the returning veteran. Demographic information was reported on only 49% of the participants. The available data provided to the researcher for analysis was incomplete: multiple pre-tests, without matching post-tests; or, post-tests, without matching pre-tests. After carefully sifting through the de-identified data, statistics were calculated on seventeen (17) matched pre- and post- self assessments. Overall resiliency scores were significantly increased for both veteran and family member groups. Combined scores calculated for specific resiliency factors – family relationships, family communication and knowledge of resources – were all significantly increased, as well.

The curriculum was written and intended to be implemented over an 8-week time period. Due to the difficulty with recruitment of participants, the time frame was the first modification made by peer facilitators. One group was conducted on two consecutive Saturdays; other groups met more than once a week, over a shorter period of time. It is unclear if any of the groups followed the prescribed 8-week format. The ORF program has a didactic portion (knowledge) and an experiential, practical component. Built in to the 8-week format was the opportunity to practice the skills that were taught in each class session, as well as the opportunity to discuss within the groups the problems that were encountered when trying to implement the skills. It is difficult to determine if the participants in the shorter programs would get this time to implement and receive feedback and support as they try new skills. An increase in knowledge does not assure changes in behavior. This aspect of the program was not evaluated.
Limitations

One limitation is that events could have occurred over the 8-week program which could have affected the responses of participants. The evaluation did not control for other interventions that the family unit may have received. As a result, it is difficult to determine if changes in pre- and post-test responses are the direct result of the ORF groups or other interventions. Effort was made to limit variation in program implementation by providing a structured training for all peer facilitators and providing each facilitator with a scripted manual to guide the education and discussion components. Individual variation of facilitators could not be controlled.

Generalization of the results is limited by the nature of the study design and the small sample size.

The groups that were started and completed were more focused on the content and the evaluation data was often incomplete. In the efforts to get groups started, several sites modified the prescribed ORF curriculum/group format. The goal of this clinical project was to evaluate the efficacy of a strength-based, peer-led family education program on family resilience factors. Various modifications have made it difficult to evaluate the program as it was written and intended for implementation.

There is limited research in the use of a strength-based, peer-led, family education programs for veterans returning from combat and their families. This researcher concludes that it is better to report the data, with risk of making type I errors and encourage other nurse researchers to explore this approach further, rather than make type II errors and suggest that no further research is needed. It is also possible that the Hawthorne effect may have influenced the responses of both the veteran and veteran family member responses to the self-evaluation assessment questionnaire.
Conclusions

The ORF Program is a prevention model that strives to build on and support the strengths of the returning combat veteran and their family. The curriculum helps participants identify strengths, learn coping skills, and provide hope for healthy re-integration after deployment. The results of this formative evaluation demonstrate significant increases in knowledge of healthy relationships, effective family communication, and available resources for those who participated in the groups. Resilient families are strong families. When implemented, the strategies learned in the ORF groups, will improve the quality of their lives and assist the returning veterans in making a smoother, less conflicted transition from combat to civilian life.

Recommendations

The results of this formative evaluation were included in a formal report that has been submitted to the stakeholder group (Appendix E). This evaluation provides support for the premise that veterans and veteran family members who participate in the ORF family education program will possess greater knowledge of healthy family relationships, effective family communication and available resources. These are all characteristics of resilience. The resilient family is a strong family. Military families are strong and in order to stay strong, must prepare themselves for the transition from combat to non-combat existence. Transitions are vulnerable times. Marketing of the ORF program should focus on the strengths of the veteran and the veteran families – staying strong by openly acknowledging the challenges those families coming together after deployment face, identifying their strengths, and arming them with skills to cope with post deployment stressors. Recommend: Develop formal marketing and recruitment plan. This plan needs to identify community partners (health care providers, churches, schools, childcare providers) and get the information about ORF out to them.
Knowledge can help people understand one another better. Effective communication can be taught and practiced, but making changes takes time. The 8-week time frame was built into the ORF program to allow the time for changes to take place. Shorter time frames may provide the knowledge (information) but limits the time for supported behavior change (using new skills).

**Recommend:** Identify site to implement ORF program in its original, intended format. In addition to analysis of the pre- and post-self assessment evaluations (which reflect greater knowledge), identify 3 to 5 behavioral outcome measures (family wellness recovery action plan). At completion of program, how many pieces of the action plan were implemented? The results of this evaluation could be used to compare to the results of varied delivery options of the ORF program.

ORF peer facilitators want to help their fellow veterans and veteran families. They are more concerned with presenting the curriculum content and group support, than they are in getting the paperwork done and returned. With only 17 complete data sets, it is difficult to evaluate the strengths and weaknesses of the program. The ORF program is intentionally scripted in order to have continuity in its presentation.

**Recommend:** Develop strategy to assure greater continuity in ORF program implementation. This includes more frequent contact with peer facilitators prior to first group (to ensure that all 1st class paperwork is completed and completed correctly); and prior to final class. Develop a *Master Roster Form* which lists each participant (by anonymous ID), with a column to note if they are a veteran or family member, columns indicating completed paperwork (informed consent, demographic form, pre-assessment), columns with dates of each class, and final column indicating completion of post-test. This master roster could more accurately track how many...
persons complete the program. The facilitators would return this form to the ORF coordinator with other paperwork.

**Recommended:** For support and continuity to the ORF program, continued funding of the ORF coordinator position is highly recommended.

Further research is needed to determine if participation in a peer-led, strength-based family education program post-deployment can decrease the incidence of major depression, suicide, alcohol and drug use, divorce, family violence or other adverse conditions.

**Recommend:** Establish means to follow-up with participants after completion of program at scheduled intervals (1 month, 3 months, 6 months, and 1 year). Compare participant reports with standard data.

**Acknowledgments**

I would to thank and acknowledge faculty Diane Snow, PhD, APRN, PMHNP-BC my faculty advisor and Maureen (Reni) Courtney, PhD, APRN, FNP-BC, for their guidance, support and encouragement throughout the DNP clinical project journey. I would also like to thank Robin Peyson, Executive Director, NAMI Texas, for her patience and confidence that this project could provide helpful data to support the mission of providing mental health services to our military families. Thanks to Sandra Thomas, ORF program coordinator, for her assistance and support in contacting peer facilitators to gather the evaluation data for this project.
References


doi:10.1097/01.NAJ.0000277823.51806.10
Appendix A

Handout C

Informed Consent for Participation in Operation Resilient Families

Operation Resilient Families is an 8 week, peer informed, peer delivered, strengths based family engagement process in which family members are assisted in developing effective methods of communicating with each other about OIF/OEF deployment stresses. Veterans, service members, spouses, parents, and mature children may participate in this activity. Each of the 8 week meetings may last two hours. A key feature of this activity is the development of a Family Resilience Plan unique to each participating family. This plan emphasizes identifying and using unique family strengths to manage potential challenges following deployment. Participants are asked to complete an evaluation after each session and a self assessment of knowledge and skills both before the first session and after the last session. Collection of this information will be done anonymously. The information will be used to evaluate and improve the training and will be maintained by NAMI Texas. It is possible that the evaluation results may be published.

Participants in this training agree to protect the confidentiality of each member of the group. The limits to this confidentiality are in cases in which an individual expresses desire to harm himself/herself or others and cases in which there is child or elder abuse.

We are aware of no hazards or dangers involved with this training or in the submission of evaluative and/or self assessment information. A participant may choose to drop out of the activity at any point or may choose not to furnish evaluative and/or self assessment information.

This activity was supported by a Texas Resources for Iraq and Afghanistan Deployment (TRIAD) grant given to the Waco Affiliate of the National Alliance on Mental Illness (NAMI Waco). NAMI Texas was a sponsoring partner in the development of this training.

I have read and understand this informed consent form, affirmed by my signature below.

_________________________  __________________
Signature                Date
Veteran and/or Family Member,

Thank you for agreeing to participate in the evaluation of the OEF/OIF Veteran and Family-Led Education and Support Program. We value your feedback. We also want to ensure that the program “speaks to” participants of all ages, ranks, cultures, family structures, etc. In order to evaluate this aspect of the ORF program, we ask that you provide the following information:

*******************************************************************************

(Please check all that apply, or fill in blank where requested)

Branch of Military Service: Air Force Army Marines Navy National Guard

Veteran: ___ Highest Rank: Enlisted: ___ NCO: ___ Officer: ___ Senior Officer ___

Family Member: ___ Type of Family Member: ________________________________

(For example: parent, spouse, sister, uncle, cousin, etc)

Relationship to Returning Veterans Other than Family: __________________________

(For example: prior era veteran, friend, fiancée, chaplain, etc.)

Your Age: ______ Your Gender ________ Your Race/Ethnicity ________________________

Your Marital Status: Married Divorced Separated Unmarried

Your Children: Number of Children: ______ Their Gender and Ages: ___________________

How many times were you deployed? __________________

How many times was your family member deployed? __________________

How did you learn about the ORF Program? ________________________________

*******************************************************************************

Again, thank you for your assistance.

Thank You for your Service!
# Appendix C

## HANDOUT D

(Pre and Post) Self-Assessment for Operation Resilient Families Program Evaluation

**Participant ID:** __________________________ **Date:** __________________________

For each personal and/or family item below, please circle the number that best describes what you currently believe or feel to be true.

<table>
<thead>
<tr>
<th>Personal Belief</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I understand how to improve family relationships after a deployment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2. I know about how to improve our family communications.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3. I know about books, websites, and other resources to assist with post-deployment readjustment issues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4. I know how to create a low stress environment at home.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5. In our family, we communicate well with each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6. Our family is good at managing stressful life events.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7. Our family does a good job of dealing with strong emotions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8. The stress level in our household is low most of the time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
For each personal and/or family item below, please circle the number that best describes what you currently believe or feel to be true.

<table>
<thead>
<tr>
<th>Personal Belief</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Our family does a good job of solving problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10. Our family has a lot of fun together</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11. I have a good understanding of what my personal strengths are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12. My family has a good understanding of what our family strengths are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13. I have a strong personal support network and know who I can call upon when I need someone to talk to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14. My family has a strong support network and we know who we can call upon when we need advice or assistance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15. I have and regularly use a number of personal strategies to maintain or strengthen my resilience and sense of well-being</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16. My family has and regularly uses a number of family strategies to maintain or strengthen our resilience and well-being.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17. My family has effective plans for preventing and/or dealing with our most challenging family situations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
ORF Program Goals:

★ To share information about the common experiences of returning combat veterans and their families

★ To explore resources and resiliency strategies for adjusting to life after deployments

★ To empower veterans and their families to overcome the common challenges which arise following periods of military deployment

★ To foster a confidential community where participants can benefit from mutual learning, shared experiences and peer support

★ To teach self-advocacy skills and link veterans and their families with additional opportunities for assistance and support

For more information about OPERATION RESILIENT FAMILIES please contact Sandra Thomas, ORF Program Coordinator, at 512-693-2000 or e-mail at sthomas@resilientfamilies.org

Operation Resilient Families is a copyrighted program provided by NAMI Texas. © NAMI Texas, 2010
Operation Resilient Families (ORF) is an eight-session peer-led program for veterans of Operations Enduring and Iraqi Freedom (OEF/OIF) and their families. While openly acknowledging difficult post-deployment issues, this program uses a strength-based and strategic approach. The ORF program focuses on enhancing family resilience through a process designed to help prevent overwhelming readjustment challenges.

Through a series of facilitated discussions and exercises, ORF participants identify their own family’s strengths, resources and challenging situations. With the support of peers sharing similar experiences, participants also learn to utilize a number of communication and problem-solving skills, and develop a personalized Family Resilience Plan for use in proactively addressing their specific family circumstances.

What topics are covered?
The following topics are covered over the course of the 8-session program:

- Introductions, “Returning to Family Life after Deployment”
- “Reuniting Our Civilian Family”
- “Communication Skills - Communicating Feelings”
- Communication Skills - Listening/Soft Start Ups”
- “Communicating (and Dealing with Anger) in Your Family”
- “Building Family Resiliency/Understanding Potential Risks”
- “Facing Family Challenges with Strength”
- “Together: Building Understanding, Empathy and Resilience”

Who can participate?
- Operation Resilient Families is designed for all OEF/OIF veterans and their adult family members or close friends. Mature adolescents may also participate. While veterans and their family members are encouraged to jointly participate in ORF, this program equally welcomes veterans or family members who attend alone.

Who are the facilitators?
- Operation Resilient Families is led by two trained peer facilitators, consisting of both a veteran and a family member who have firsthand war-zone post-deployment readjustment experiences. In addition to working with the entire group, peer facilitators also lead separate break out sessions with the veteran and/or family members during the program.

Where are groups offered?
- ORF groups are offered throughout the State of Texas in natural (non-stigmatizing) community settings, such as libraries, community centers, church meeting rooms, etc. For more information or interest in finding a group in your area, please contact the NAMI ORF Coordinator at (512) 693-2000.

What does it cost?
- ORF is free of charge to OEF/OIF veterans and their family members.
March 08, 2011

Jane Harmon
Dr. Diane Snow
College of Nursing
Box 19407

Protocol Title: Evaluation of a Peer-Delivered, Strength-Based Family Education Program On Family Resilience Factors in Veterans Returning from Iraq and Afghanistan

RE: Exempt Approval Letter
IRB No.: 2010-0556e

The UT Arlington Institutional Review Board (UTA IRB) Chair (or designee) has reviewed the above-referenced study and found that it qualified as exempt from coverage under the federal guidelines for the protection of human subjects as referenced at Title 45 Part 46.101(b)(4). You are therefore authorized to begin the research as of March 01, 2011.

Please be advised that as the principal investigator, you are required to report local adverse (unanticipated) events to this office within 24 hours. In addition, pursuant to Title 45 CFR 46.103(b)(4)(iii), investigators are required to, "promptly report to the IRB any proposed changes in the research activity, and to ensure that such changes in approved research, during the period for which IRB approval has already been given, are not initiated without IRB review and approval except when necessary to eliminate apparent immediate hazards to the subject."

All investigators and key personnel identified in the protocol must have documented Human Subject Protection (HSP) Training or CITI Training on file with this office. The UT Arlington Office of Research Administration Regulatory Services appreciates your continuing commitment to the protection of human research subjects. Should you have questions or require further assistance, please contact Robin Dickey by calling (817) 272-9329.

Sincerely,

Patricia Turpin
Patricia G. Turpin, PhD, RN, NEA-BC
Clinical Associate Professor
UT Arlington IRB Chair
Stakeholder Report
Prepared by Jane Harmon MSN, RN, PMHNP, CARN-AP (DNP candidate)

Title:

**Evaluation of a Peer-Delivered, Strength-Based Family Education Program on Family Resilience Factors in Veterans Returning from Iraq and Afghanistan**

The United States has deployed more than 1.7 million Americans to Iraq and Afghanistan. Operation Enduring Freedom (OEF) began in Afghanistan in October 2001 and Operation Iraqi Freedom (OIF) began in Iraq in March 2003. Combat operations in Iraq officially ended on August 31, 2010. Under Operation New Dawn, approximately 50,000 troops remain to serve in peace-keeping and advisement roles. As these military operations come to an end, large numbers of troops are returning home to face a new challenge – the challenge of re-establishing relationships with their families. The Operation Resilient Family Program was developed to meet this need. The program is organized to capitalize on the strengths of the US military – both the active duty person and the family that supports them.

**Significance**

Of those veterans who screen positive for a mental disorder post-deployment, only 23 to 40% will seek care (Hoge et al., 2006, McFee, 2008). Consequently, it is a crisis that often forces these individuals to seek help. It is estimated that 1% of the active military force will complete or attempt suicide due to combat stress. The fear that use of mental health services will negatively affect their employment or limit their military careers is a barrier to getting help (Tanielian & Jaycox, 2008). Veterans need help to access services more effectively, and need to live in a community in which they feel safe to ask for help. Stigma and barriers to mental health care could be reduced by educating veterans and their families that “combat stress reactions are normal and expected responses to abnormal situations, rather than signs of psychopathology”
(Pietrzak, Johnson, Goldstein, Malley, & Southwick, 2009). Post-deployment social support from family and friends, and a greater sense of purpose and control are protective against suicidal ideation (Pietrzak et al., 2010). Family members are generally the first to recognize post-deployment readjustment problems, and be negatively impacted by them. Both the veteran and the family unit can benefit from interventions that teach problem-solving skills and resourcefulness (Frain et al., 2010). Family members tend to be less concerned with stigma and are more motivated to seek help. National Guard and Reservists make up 30 – 50% of the personnel deployed in Iraq (Frain et al., 2010). After deployment, these individuals and their family members lack the benefit of outreach efforts afforded to active duty soldiers and family members and may be left feeling isolated and detached from information and benefits in their communities (McFee, 2008).

**Background**

There is a critical need to reach out to returning OIF/OEF veterans and their families. Operation Resilient Families (ORF) is a veteran and family-driven program developed by the National Alliance on Mental Illness (NAMI) Waco Affiliate with funding from the Texas Resources for Iraq-Afghanistan Deployment (TRIAD) Fund and a substantial donation to NAMI Texas by the Family Support Foundation on Mental Illness. Significant portions of the Operation Resilient Families program were adapted from the professional provider-delivered “Operation Enduring Families” curriculum, developed by Ursula Bowling, Psy.D, Alan Doeman, Psy.D and Michelle Sherman, PhD with the support of the VA South Central (VISN 16) Mental Illness Research Education and Clinical Center; a program which was based on Michelle Sherman’s Support and Family Education (SAFE) psycho-education program. It was through the vision and advocacy for peer support services, that Wayne Gregory, PhD and NAMI Waco Board Member
envisioned this curriculum to be peer-led; and, thus, pursued the necessary funding and assembled a team of veterans, family members and other advocates to assist. Under the leadership and direction of Christine Woods, this team carefully developed a curriculum that is focused on enhancing family resilience through a process designed to help prevent or reduce overwhelming readjustment challenges. Desired outcomes of participation in ORF are: decreased stigma of mental illness, improved family quality of life; and, increased knowledge of available resources which would subsequently increase access to mental health services (ORF Training Manual, 2010). ORF is a strength-based, family education program focused on helping families communicate more effectively and learn skills to meet the challenges of post-deployment reintegration. Veteran and veteran family members (peers) who have been through military deployment and who show signs of thriving in their post deployment readjustment offer hope to those veterans and families who are struggling to re-engage.

Purpose
The purpose of this study is to evaluate the effects of participation in a peer-led, strength-based family education program focused on family resilience factors in returning OIF/OEF veterans and their families.

Outcome Evaluation of Pilot Project

Research Questions
Upon completion of the Operation Resilient Families Program, do OIF/OEF veterans and their families report:

1. Improved family relationships?
2. Improved family communications?
3. Increased knowledge of available resources to help them manage challenging family situations?
Design

The evaluation used a one-group pre and post-test pre-experimental design. Individual variation of facilitators could not be controlled. The nature of the study design and the small sample size limit generalization of the results. The proposal received approval from the Institutional Review Board for the Protection of Human Subjects (IRB) of the University of Texas at Arlington.

Individual participants completed the Self-Assessment for Operation Resilient Families Program Evaluation before starting the program and after completion of the Operation Resilient Families (ORF) family education program. The ORF program consists of eight (8) two hour sessions. It was designed to be delivered over eight weeks. Delivery was one aspect of the program that was modified due to difficulties with recruiting participants.

Population and sampling plan

The evaluation (study) included consenting veterans and veteran family members completing the eight session Operation Resilient Families (ORF) program from November 1, 2010 through July 1, 2011. The ORF program was offered to: (1) veterans of OIF/OEF deployment; (2) adult family members of an OIF/OEF veteran; or, (3) a close friend of an OIF/OEF veteran. Those individuals who were veterans of other wars or, families of veterans of other wars were not eligible to participate in ORF.

Fifty-three peer facilitators (veteran or veteran family member) completed a three-day training and certification process conducted by NAMI Texas in Austin, Texas to provide the ORF curriculum. Trained peer facilitator teams are available to lead ORF groups in the ten sites across the state of Texas. Each site was responsible for advertising and recruitment of participants into the ORF groups (this study). A variety of approaches were taken to recruit
participants. A power point presentation was developed to be used during these activities to inform veterans and veteran family members of the ORF program. This same power point can be viewed online at
www.mhtransformation.org/documents/presentations/Operation%20Resilient%20Families%20..
A flyer describing the ORF program can be downloaded from the NAMI Texas website (namitexas.org).

Measurement methods

Specific indicators of the ORF program were measured by the Self-Assessment for Operation Resilient Families Program Evaluation that was completed prior to, and upon completion of the program. The Self-Assessment Evaluation tool is a 17 item, 6-point, Likert-type tool designed to evaluate understanding in areas of family relationships, family communication, and knowledge of resources. The tool was developed by the ORF consultant. Face validity for the instrument was established by review of the curriculum planning committee composed of 14 persons representing veterans, veteran family members, active military, and the National Guard, as well as, two mental health providers, a department of state health services representative and members from both NAMI Texas and NAMI Waco. Content validity was determined by independent review of the tool by two PhD psychologists (a practicing psychologist who is expert in PTSD, and an educational psychologist) and an experienced master’s level psychiatric nurse practitioner. Specific indicators for evaluation of family relationships, family communication and knowledge of resources are identified in Table 2. Cronbach’s $\alpha$ analysis of the Self-Assessment Evaluation tool was performed to determine internal consistency for items measuring improvement in family relationships, family communication and knowledge of resources. The Cronbach’s $\alpha$ analysis value is 0.91 for the
pre- and post-assessment evaluation tool used to demonstrate influence on family resilience factors. Individual items were grouped and analyzed to reflect specific concepts of family resilience. The Cronbach’s $\alpha$ is 0.71 for Family relationships (items #1, #4, #8, and #10); .91 for family communication (items #2, #5, #6, #7, and #9); and, 0.85 for knowledge of resources (items #3, #13, #14, #15, and #17).

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item #</th>
</tr>
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<tr>
<td>Family Relationships</td>
<td>Items #1, 4, 8, 10</td>
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<tr>
<td>Family Communication</td>
<td>Items #2, 5, 6, 7, and 9</td>
</tr>
<tr>
<td>Knowledge of Resources</td>
<td>Items #3, 13, 14, 15, and 17</td>
</tr>
</tbody>
</table>

Data analysis

De-identified (anonymous) data from the Self-Assessment Evaluation pre- and post-tests was provided to this investigator for analysis. Data analysis started with a description of the sample that included the following variables: designation of whether the participant is a veteran or family member, branch of military service, age, and number of deployments.

Frequency distribution and mean scores were computed for each item, each of the three major concepts represented in subscales in the instrument (i.e., family relationships, family communication, and knowledge of resources) and overall scores. Paired-sample t-tests were conducted on participants’ pre test and post test scores. The analysis was done on two datasets: combined veteran and family member(s) scores and separate veteran and family member scores. All analyses were performed using SPSS 17.0 for Windows.
Program Demographics

Demographic data was provided on forty seven of fifty-three known participants – 89%. Data represented veterans and veteran family members, with nineteen reporting veterans and twenty-eight reporting family members. The most frequently represented military service branch was the Army (32%), followed by the Marines (9%), Navy (6%), and US Air Force (2%). Military branch was not reported for 51% of the group participants. Veteran participants tended to be older than the family member participants with a mean age of 51 years versus 36 years of age. Veterans reported an average of two deployments with a range of seven to none. Family members reported an average of one deployment for their family member. See table 3.

Table 3 Demographics

<table>
<thead>
<tr>
<th>Participant designation</th>
<th>Military Branch</th>
<th>Mean Age</th>
<th>Mean # deployments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veteran N=19</td>
<td>Army 53%</td>
<td>51 years</td>
<td>2 (range 7 to 0)</td>
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<tr>
<td></td>
<td>Navy 16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marines 11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>US Air Force 5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not reported 15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Member N=28</td>
<td>Army 18%</td>
<td>36 years</td>
<td>1 (range 4 to 1)</td>
</tr>
<tr>
<td></td>
<td>Marine 7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not reported 75%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results

Paired samples t-tests were computed on 17 matched pre- and post-self assessment evaluations. Do OIF/OEF veterans and their families report improved family relationships?

Analysis revealed that knowledge about family relationships improved from baseline to post group participation, $t(2) = -5.89, p < .05; \bar{x} = 71$ vs 98 respectively, $p=0.028$. Do OIF/OEF veterans and their families report improved family communication? Knowledge of family communication significantly increased from baseline to post group participation, $t(4) = -17.11; p < .05; \bar{x} = 69$ vs 97, respectively, $p=0.000$. Do OIF/OEF veterans and their families report greater knowledge of available resources? Knowledge of resources significantly increased from baseline to post group participation, $t(3) = -7.97; p < .05; \bar{x} = 72.75$ vs 102.75, respectively, $p=0.004$.

A paired samples t-test calculated on the pre- and post-self assessment evaluation scores revealed that overall family resilience factors significantly increased from baseline to post group participation, $t(16) = -19.26, p < .05; \bar{x} = 70.88$ vs 99.35 respectively, $p=0.000$. Paired sample t-test performed on the veteran group revealed significant improvement in overall scores for resilience factors from baseline to post group participation, $t(5) = -12.61; p < .05; \bar{x} = 67.83$ vs 100.17, respectively, $p=0.000$. Paired sample t-test performed on the family member participants revealed significant improvement in overall scores, $t(10) = -17.2; p < .05; \bar{x} = 72.55$ vs 98.91, respectively, $p=0.000$. See Table 4.
### Table 4 Comparison of Means

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>t</th>
<th>df</th>
<th>Significance (2-tailed)</th>
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<tr>
<td><strong>Veterans and Family members (combined)</strong></td>
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<tr>
<td>Resilience</td>
<td>70.88</td>
<td>17</td>
<td>-19.26</td>
<td>16</td>
<td>.000</td>
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<tr>
<td>Pre-test</td>
<td>70.88</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td>99.35</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Family Relationships</td>
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<td>2</td>
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<td>Pre-test</td>
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</tr>
<tr>
<td>Post-test</td>
<td>98.00</td>
<td></td>
<td></td>
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<tr>
<td>Family Communications</td>
<td>69.20</td>
<td>17</td>
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<td>.000</td>
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<tr>
<td>Pre-test</td>
<td>69.20</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td>97.00</td>
<td></td>
<td></td>
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<tr>
<td>Knowledge of Resources</td>
<td>72.75</td>
<td>17</td>
<td>-7.97</td>
<td>3</td>
<td>.004</td>
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<td>Pre-test</td>
<td>72.75</td>
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<td></td>
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<tr>
<td>Post-test</td>
<td>102.75</td>
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</tr>
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<td><strong>Veteran Group</strong></td>
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<tr>
<td>Resilience</td>
<td>67.83</td>
<td>6</td>
<td>-12.61</td>
<td>5</td>
<td>.000</td>
</tr>
<tr>
<td>Pre-test</td>
<td>67.83</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td>100.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family Group</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>72.55</td>
<td>11</td>
<td>-17.20</td>
<td>10</td>
<td>.000</td>
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<tr>
<td>Pre-test</td>
<td>72.55</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td>98.91</td>
<td></td>
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</tbody>
</table>

**Discussion**

The Operation Resilient Family Program was launched statewide prior to completion of a small, well-controlled pilot study. As a result, the issues that might have been addressed in a smaller venue posed a greater challenge to the local mental health centers across the state. The
peer facilitators were provided ongoing telephone and electronic support from the ORF coordinator. They faced difficulty recruiting participants. This resulted in a delay of starting the groups. The ORF program coordinator assisted with efforts to market the program in the different communities. There were forty-seven identified participants, with family members being in the majority. This is consistent with the premise that family members are less impacted by stigma and would seek help sooner than the returning veteran. Demographic information was reported on only 49% of the participants. The available data provided to the researcher for analysis was incomplete: multiple pre-tests, without matching post-tests; or, post-tests, without matching pre-tests. After carefully sifting through the de-identified data, statistics were calculated on seventeen (17) matched pre- and post- self assessments. Resiliency scores were significantly increased for both veteran and family member groups. Combined scores calculated for specific resiliency factors — family relationships, family communication and knowledge of resources — were all significantly increased, as well.

The curriculum was designed to be implemented over an 8-week time period. Due to the difficulty with recruitment of participants, the time frame was the first modification made by peer facilitators. One group was conducted on two consecutive Saturdays; other groups met more than once a week, over a shorter period of time. It is unclear if any of the groups followed the 8-week format. The ORF program has both a didactic portion (knowledge) and an experiential component. The 8-week format allowed time for participants to practice the skills that were taught in each class session, as well as the opportunity to discuss within the groups the problems that were encountered when trying to implement the skills. It is difficult to determine if the participants in the shorter programs would get this time to implement and receive feedback and
support as they try new skills. An increase in knowledge does not assure changes in behavior. This aspect of the program was not evaluated.

Limitations

Effort was made to limit variation in program implementation by providing a structured training for all peer facilitators and providing each facilitator with a scripted manual to guide the education and discussion components. Individual variation of facilitators could not be controlled. Generalization of the results is limited by the nature of the study design. The groups that were started and completed were more focused on the content and the evaluation data was often incomplete. In the efforts to get groups started, several sites modified the prescribed ORF curriculum/group format. The goal of this clinical project was to evaluate the efficacy of a strength-based, peer-led family education program on family resilience factors. Various modifications have made it difficult to evaluate the program as it was written and intended for implementation.

Conclusions

The ORF Program is a prevention model that strives to build on and support the strengths of the returning combat veteran and their family. The curriculum helps participants identify strengths, learn coping skills, and provide hope for healthy re-integration after deployment. The results of this formative evaluation demonstrate significant increases in knowledge of healthy relationships, effective family communication, and available resources for those who participated in the groups. Resilient families are strong families. When implemented, the strategies learned in the ORF groups, will improve the quality of their lives and assist the returning veterans in making a smoother, less conflicted transition from combat to civilian life.
Recommendations

This evaluation provides support for the premise that veterans and veteran family members who participate in the ORF family education program will possess greater knowledge of healthy family relationships, effective family communication and available resources. These are all characteristics of resilience. The resilient family is a strong family. Military families are strong and in order to stay strong, must prepare themselves for the transition from combat to non-combat existence. Transitions are vulnerable times. Marketing of the ORF program should focus on the strengths of the veteran and the veteran families – staying strong by openly acknowledging the challenges those families coming together after deployment face, identifying their strengths, and arming them with skills to cope with post deployment stressors.

Recommend: Develop a formal marketing and recruitment plan. The plan needs to identify community partners (health care providers, churches, schools, childcare providers) and get the information about ORF out to them.

Knowledge can help people understand one another better. Effective communication can be taught and practiced, but making changes takes time. The 8-week time frame was built into the ORF program to allow the time for changes to take place. Shorter time frames may provide the knowledge (information) but may limit the time for supported behavior change (using new skills).

Recommend: Identify one site to implement ORF program in its original format. In addition to analysis of the pre- and post-self assessment evaluations (which reflect greater knowledge), identify 3 to 5 behavioral outcome measures (family wellness recovery action plan). At completion of program, how many pieces of the action plan were implemented? The results need to be compared with the results of modified delivery options of the ORF program.
ORF peer facilitators want to help their fellow veterans and veteran families. They are more concerned with presenting the curriculum content and group support, than they are in getting the paperwork done and returned. Without complete paperwork, it is difficult to evaluate the strengths and weaknesses of the program. The ORF program is intentionally scripted in order to have continuity in its presentation.

**Recommend:** Outline strategies to assure greater continuity in ORF program implementation.

This may include more frequent contact with peer facilitators prior to first group (to ensure that all 1st class paperwork is completed and completed correctly); and prior to final class. Develop a *Master Roster Form* which lists each participant (by anonymous ID), with a column to note if they are a veteran or family member, columns indicating completed paperwork (informed consent, demographic form, pre-assessment), columns with dates of each class, and final column indicating completion of post-test. This master roster could more accurately track how many persons complete the program. The facilitators would return this form to the ORF coordinator with other paperwork.

**Recommended:** For support and continuity to the ORF program, continued funding of the ORF coordinator position is highly recommended.

Further research is needed to determine if participation in a peer-led, strength-based family education program post-deployment can decrease the incidence of major depression, suicide, alcohol and drug use, divorce, family violence or other adverse conditions.

**Recommend:** Establish means to follow-up with participants after completion of program at scheduled intervals (1 month, 3 months, 6 months, and 1 year). Compare participant reports with standard data.
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1023-1032.

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Southwick, S. M. (2010). Psychosocial buffers of traumatic stress, depressive symptoms,
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Freedom: The role of resilience, unit support, and postdeployment social support. *Journal of
Affective Disorders, 120*(1-3), 188-192.
Evaluation of a Peer-Delivered, Strength-Based Family Education Program
On Family Resilience Factors in Veterans Returning from Iraq and Afghanistan
J. M. Harmon MSN, RN, PMHNP-BC, CARN-AP
The University of Texas at Arlington College of Nursing

In partial fulfillment of the requirements of
N6621 Clinical Practicum
Diane Snow PhD, APRN, PMHNP-BC
July 2, 2011
Evaluation of a Peer-Delivered, Strength-Based Family Education Program on Family Resilience Factors in Veterans Returning from Iraq and Afghanistan

DNP Clinical Research Project
Jane Harmon MSN, RN, PHN PN-BC, CARNP-AP

Introduction

- 1.7 million Americans have been deployed to Iraq and Afghanistan since October 2001
- Mental health disorders and cognitive impairments have been termed the invisible wounds of these wars (Twelvetrees & Ayres, 2006)
- Only 23 - 40% of veterans needing help will seek help due to perceived stigma and access barriers (Stewart et al., 2005)
- Support from family and friends is protective factor against suicide (Pitlik et al., 2010)
- Both the veteran and the family unit benefit from interventions that teach problem-solving skills and resourcefulness (Plotkin et al., 2010)

Evidence Summary & Translation
Findings & Implications from the Literature

- No existing evidence that integrates peer delivery with strengths-based education for veterans and veteran families
- Limited evidence to support efficacy of family-led programs for families of persons with mental illness (NAEM Family-to-Family Programs) (Steen, Lucksted, Stevens, Burford, Brown, McQuaid, & Huffman, 2004; Rourke, 1996)
- Evidence supports the efficacy of family psychoeducation - treatment of mental illness (Steen et al., 2000; Steen et al., 2004; Rourke-Skemp et al., 2000)

Why this project?

- Current Events
- Personal contact
  - My son served two tours in IRAQ
  - Nephew training for deployment to Afghanistan
  - Community need

Introduction

- Texas has the third largest population of veterans in the US
- Contributes significant number of troops to OIF/OEF combat
- More than 230,000 veterans in Texas have been on active duty since September 2001 (US Census Bureau)
- Demographics aligned with national estimates,
  - 48% are Active Duty; 52% are Reserve/National Guard
  - 88% are men; 12% are women
  - 65% Army; 13% Air Force; 12% Navy; 12% Marine
  - 34% were deployed multiple times
  - 52% of the largest age group was 20-29 years old

Evidence Summary & Translation
Findings & Implications from the Literature

- Growing evidence for peer delivered services (Recovery Movement) (3 studies) (Barber, Rosenheck, Armstrong, & Resnick, 2005; Rosenheck & Rosenheck, 2007)
- Returning OEF/OIF veterans have multiple needs and a resilient family can better meet the challenges faced after deployment [3 studies] (Murphy et al., 2005; Murdock et al., 2010)
- Distinct differences between goals of family education (support) and family psycho-educative (focused on treatment goals of the patient with mental illness) (Barber, Rosenheck, Armstrong, & Resnick, 2005; Rosenheck & Rosenheck, 2007)
- Peer-led interventions create opportunities for role modeling and mentorship. Inspire hope. (Murphy et al., 2007; Jacobson & Greenspan, 2002)
Human Subjects Approval
- Project received approval by IRB at UTA

Purpose
- The purpose of this study was to evaluate the effects of participation in a peer-led, strength-based family education program focused on family resilience factors in returning OIF/OEF veterans and their families.

Theoretical Framework
- Family Resilience - Wellness + Recovery
  Integrates key concepts from recovery, wellness, and family resilience models.

Operation Resilient Families Program Content
- Introductions and Returning to Family Life after Deployment
- Reuniting Our Civilian Family
- Communication Skills - Communicating Feelings
- Communication Skills - Listening/Soft Start Ups
- Communicating (and dealing with anger) in Your Family
- Building Family Resiliency / Understanding Potential Risks
- Facing Family Challenges with Strength; and,
- Together: Building Understanding, Empathy and Resilience

Project Setting, Administration & Staff
- Setting
  - 10 regions across state of Texas
  - Operation Resilient Families (ORF) is designed as eight 2-hour interactive educational groups that meet weekly over an 8 week period;
  - Hosted in natural settings within the community
- Administration
  - NAMI Texas (Robin Peyson) is designated administrator
  - TWG Family Support Committee
- Staff
  - Sandra Thomas - ORF Program Coordinator

Project Aims
- Enhance family resilience through confidential community learning and support among OIF/OEF veterans and families.
- Objectives
  - Normalize the human reactions to war zone deployment
  - Promote caring and supportive relationships
  - Identify strategies to pro-actively manage stress, recognizes the positive, and positively address adversity
  - Use effective planning, problem-solving and communication skills
  - Have confidence in one's family strengths and a positive view of one's family unit
  - Focus on the "Bright Spots", have hope; and, know when and how to seek help
Stakeholders

<table>
<thead>
<tr>
<th>Internal</th>
<th>External</th>
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<tbody>
<tr>
<td>Veterans</td>
<td>Civilian (local) mental health providers</td>
</tr>
<tr>
<td>Veteran families</td>
<td>Veteran mental health providers</td>
</tr>
<tr>
<td>Program Administrator</td>
<td>People in the community</td>
</tr>
<tr>
<td>Robin Payson ED NAMI Texas</td>
<td>NAMI Advocacy Groups</td>
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<td>Department of State Health Services</td>
<td>Public Funding Agencies</td>
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<td>Sam Shore MH Project Coordinator</td>
<td>Focus Group</td>
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<td>Ted Hughes Health and Human Services</td>
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<td>NAMI</td>
<td>Centers for Disease Control and Prevention</td>
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<td>Peer facilitators</td>
<td>Public Funding Agencies</td>
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SWOC Analysis

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>Quality</td>
<td>Limited time commitment</td>
</tr>
<tr>
<td>No cost</td>
<td>Stress on of peer providers</td>
</tr>
<tr>
<td>Peer delivered</td>
<td>Funding uncertainty</td>
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<tr>
<td>Timeliness of intervention</td>
<td>Ineffective marketing and recruitment plan</td>
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</table>

Opportunity | Challenge |
<table>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Political climate supports veteran interventions</td>
<td>Funding</td>
</tr>
<tr>
<td>New approach (strength-based)</td>
<td>Recruiting participants</td>
</tr>
<tr>
<td>Community partnerships</td>
<td>Overcoming barriers</td>
</tr>
<tr>
<td>Decrease use of crisis services</td>
<td>Non-compliant participants</td>
</tr>
<tr>
<td>Promote strong families</td>
<td>Military culture</td>
</tr>
<tr>
<td>Save lives</td>
<td>Stigma</td>
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<tr>
<td></td>
<td>Paradigm shift prevention</td>
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Research Question

- Upon completion of the Operation Resilient Families Program, do OIF/OEF veterans and their families report:
  - Improved family relationships?
  - Improved family communications?
  - Increased knowledge of available resources to help them manage challenging family situations?

Research Methodology

- Formative evaluation of the ORF program to determine the areas of strength and the areas in need of revision
- One-group pre and post-test pre-experimental design

Threats

- Events could have occurred during the 8 weeks which affected responses
- No control for other interventions the family may be receiving
- Individual variation of peer facilitators in program/curriculum implementation

Measurement

- Demographics
  - Veteran / Family member
  - Age
  - Branch of Service
- A 17 item, 6 point Self-Assessment Evaluation Tool was developed by the ORF consultant to measure family resilience factors.
- Face and content validity determined by committee of professionals (clinical psychologists, educational psychologist and psychiatric nurse practitioner)
- Subscales identified to evaluate specific family resiliency factors
  - Family relationship (Items 1, 4, 6, 10)
  - Family communication (Items 2, 3, 5, 7, 9, 11)
  - Knowledge of resources (Items 3, 12, 14, 15, 17)

Population and Sample

- Consenting veterans and veteran family members completing the eight week Operation Resilient Families (ORF) program from November 1, 2010 through July 1, 2011

- Inclusion Criteria: (1) veterans of OIF/OEF deployment; (2) adult family members of an OIF/OEF veteran; or; (3) a close friend of an OIF/OEF veteran

- Exclusion Criteria: Veterans of other wars or, families of veterans of other wars
Self-Assessment Evaluation Tool

Sample Items

☐ I understand how to improve family relationships after deployment.
☐ In our family, we communicate well with each other.
☐ I have a strong personal support network and know who I can call upon when I need someone to talk to.
☐ My family has effective plans for preventing and/or dealing with our most challenging family situations.

Demographics

<table>
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<tr>
<th>Participant Designation</th>
<th>Military Branch</th>
<th>Mean Age</th>
<th>Mean # of Deployments</th>
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<tr>
<td>Veteran N=19</td>
<td>Army 53%</td>
<td>51 years</td>
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<td>Navy 16%</td>
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<tr>
<td></td>
<td>Marines 10%</td>
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<td></td>
<td>US Air Force 3%</td>
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<td></td>
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<tr>
<td></td>
<td>Not reported 16%</td>
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<tr>
<td>Family Member N=28</td>
<td>Army 18%</td>
<td>35 years</td>
<td>1 (range 4 to 1)</td>
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<tr>
<td></td>
<td>Marine 7%</td>
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<tr>
<td></td>
<td>Not reported 75%</td>
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Reliability of Self-Assessment

☐ Cronbach’s α analyses

- Self-assessment evaluation tool α = 0.91
- Family relationships (items 1, 4, 8, & 10) α = 0.71
- Family communication (items 2, 5, 6, 7, & 9) α = 0.91
- Knowledge of resources (items 3, 13, 14, 15 & 17) α = 0.85

Statistical Analysis

<table>
<thead>
<tr>
<th>Veterans and Family Members (combined)</th>
<th>Mean</th>
<th>N</th>
<th>t</th>
<th>df</th>
<th>Significance (2-tailed)</th>
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<tr>
<td>Resilience Factors (Total Score)</td>
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<tr>
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<td>Family Communications</td>
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<td>Post-test</td>
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<td>Knowledge of Resources</td>
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Data Collection

☐ First group meeting
  ☐ Signed informed consent
  ☐ Completed demographic form
  ☐ Pre-self assessment evaluation form completed
  ☐ All returned to peer facilitators

☐ Final group meeting (8th session)
  ☐ Post-test self evaluations completed
  ☐ Returned to peer facilitators

☐ Peer facilitators mailed informed consent, pre-self assessment, post-self assessment, and attendance logs to ORF Program Coordinator in Austin

Statistical Analysis

<table>
<thead>
<tr>
<th>Veterans</th>
<th>Mean</th>
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<th>t</th>
<th>df</th>
<th>Significance (2-tailed)</th>
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<td>Resilience Factors (Total Score)</td>
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<td>Post-test</td>
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<table>
<thead>
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<th>Family Members</th>
<th>Mean</th>
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<th>t</th>
<th>df</th>
<th>Significance (2-tailed)</th>
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<tr>
<td>Resilience Factors (Total Score)</td>
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<tr>
<td>Pre-test</td>
<td>72.55</td>
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<tr>
<td>Post-test</td>
<td>98.91</td>
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</table>
### Discussion
- ORF program launched prematurely
- Program support
- Marketing and recruitment
- Quality of available data (for analysis)
- Family participation greater than veteran - implications
- All results were significant at the 0.05 level and all but one at the 0.01 level - supports significant increase in family resilience factors

### Conclusions
- ORF Program
  - Education component
    - Significant increase in knowledge of family relationships, family communications, and available resources
  - Experiential
    - Need follow-up contact with participants to determine if the family resilience plan was implemented? Useful? Impact on quality of life?
    - Does more knowledge translate to changes in behavior?
    - Supportive relationships continue beyond the formal group?

### Limitations
- Variations on length of program
- Inability to control for facilitator variances
- Type I (encourage further research) versus Type II error (no further research needed)
- Possible Hawthorne effect

### Recommendations
- Develop strategy to assure greater continuity in ORF program implementation.
  - Create Master Roster Form
  - More frequent contact with facilitators
  - Continued funding of ORF coordinator
- Further Research
  - Follow-up at regular intervals

### Projected Project Outcomes
- Participants will report
  - Improved family communication
  - Improved problem-solving
  - Willingness to seek help when needed
- Program will be launched in other states
- Valued addition to available resources for veterans and their families
- Provide model that can be translated into civilian health care
References


References


Acknowledgements

Diane Snow, PhD, APRN, PMHNP-BC, my faculty advisor and Maureen (Ren) Courtney, PhD, APRN, FNP-BC, for their guidance, support and encouragement throughout the DNP clinical project journey.

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Sandra Thomas, ORF program coordinator, for her assistance and support in obtaining and providing the evaluation data.