Chapter 8 Wartime Deployment and Military Children: Applying Prevention Science to Enhance Family Resilience

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Abstract During wartime, military families and children make extraordinary sacrifices for their country. This chapter reviews the impact of wartime deployments and parental combat-related mental health problems on military children, as well as risk and protective factors that may serve to guide preventive interventions for military families facing multiple deployments, combat operational stress, and psychological injuries. Using a public health prevention approach, we describe the adaptation of evidence-based interventions to support psychological health in military families. This adaptation is FOCUS (Families OverComing Under Stress), a family-centered preventive intervention designed to enhance the strengths of family members, manage deployment-related stressors and reminders, and maintain positive family growth and psychological adjustment throughout the stages of deployment. Supported by the U.S. Bureau of Navy Medicine and Surgery (BUMED), military leadership, community providers, and families, this intervention has been implemented through a large-scale service demonstration project to support military families.

Introduction

The U.S. military has over 3.5 million personnel in its active and reserve components. Over half of today's active component military members are married, and over one-third (38%) are married with children. There are more family members than service members across the active component branches, with children making up over 60% of the military family member population (Office of the Deputy Under Secretary of Defense, 2007). Since 2001, over 1.5 million active and reserve component forces have deployed to a combat mission as part of Operation Iraqi Freedom (OIF) or

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Semel Institute for Neuroscience and Human Behavior, University of California at Los Angeles, Los Angeles, CA, USA e-mail: plester@mednet.ucla.edu Operation Enduring Freedom (OEF). Many of these active and reserve component service members have served repeated and extended combat tours to war zones in Iraq and Afghanistan. This increased demand on military personnel to serve in dangerous, overseas combat duties has led to greater demands on service member families and their children. A parent's military deployment, as well as the service member parent's return and reintegration into the family system, represents a significant adaptation challenge for co-parenting couples and their children.

In this chapter, we describe the major background factors to conceptualize the development of preventive interventions for military children at risk due to multiple deployment stress, as well as parental psychological and physical injury. As a foundation, we examine the context of wartime military service and unique challenges faced by service members, their families, and children, as well as the impact of these stressors on the psychological health of the family. Next, we describe a theoretical framework for applying prevention science and resiliency research to address the psychological concerns of military families from a public health perspective.

As military families are called upon to serve, protect and make sacrifices for the United States, a national response is indicated to support the well-being and positive development of these families and children. As an example of this, we describe the adaptation of a family-centered preventive intervention for military children and families facing wartime deployments. Based on our collaborative team's evidencebased, family-centered preventive interventions, the FOCUS (Families OverComing Under Stress) intervention has been adapted and implemented for military families. FOCUS is a family-centered, selective preventive intervention designed to enhance the strengths of each family member, manage stressors and traumatic reminders, and maintain the family's positive growth and psychological development throughout the multiple stages of military deployment (Saltzman, Lester, Pynoos, & Beardslee, 2007; Saltzman et al., 2009). During high operational tempo, families negotiating reintegration challenges are frequently also preparing for a subsequent deployment. FOCUS provides the military family with the opportunity to develop a family narrative that locates their unique experience and phase of deployment, assisting with both reintegration challenges, and preparing them for future deployments. We describe the staged adaptation and core components of the FOCUS model for military families through sustained support from military medicine (BUMED) and local military installation communities to demonstrate successful program implementation. Key features of the collaborative efforts between a university family prevention team and military partners are described, including programmatic implementation across a continuum of family care.

Background Factors

Several characteristics of deployment and of family composition are important contextual factors in understanding military children's and families experiences. These factors include the high operational tempo of deployment and combat stressors

faced by today's military forces (American Psychological Association [APA], 2007; Kang & Hyams, 2005). In addition to combat and deployment are the everyday lifestyle demands placed on military family members and their children. These demands, and the military's provision of supportive programs to families, play a crucial role in service member satisfaction and reenlistment decisions (Segal, 1986). Next, recent demographic trends suggest that there is a large population of children who have one or both parents in the military. These trends would also indicate that over the last 20 years, there are a growing number of women, single parents, and dual-career parents in the military. Finally, several recent studies have found that parental deployment may play a significant role in the psychological health of the non-deployed parent and children (McFarlane, 2009). Each of these factors is explored in greater detail below.

Signature Challenges Related to Current Military Deployment

Beginning with the terrorist attacks against the United States on September 11, 2001, followed by major combat operations in Iraq and Afghanistan, high personnel demands have been placed on the military to protect and defend the national and international security environment. In order to achieve and sustain these goals, the military has required frequent and prolonged deployment cycles for service members and support personnel (Hosek, Kavanagh, & Miller, 2006). At times, service members have spent 12 months or more in a combat zone, with only 6 months at home prior to serving another deployment. Many OIF and OEF service members have deployed repeatedly to a combat zone (Kang & Hyams, 2005). According to the APA Presidential Task Force on Military Deployment Services for Youth, Families and Service Members (APA, 2007), more than 1.5 million service members had been deployed to the war zone, with 500,000 serving in two tours of duty, 70,000 in three tours, and 20,000 in more than five tours of duty.

In addition to the strains created by the high operational tempo, service members are exposed to daily stressors and potentially life-threatening and traumatic events, including ongoing threats of violence from enemy and hostile forces, exposure to death and/or injury of American or allied forces, exposure to death and injury of civilians, and exposure and threats from improvised explosive devices (IEDs) as well as other types of urban warfare (Friedman, 2006). Additionally, service members serve in some of the most difficult and harsh types of desert environments, where the conditions (i.e., extreme heat, sandstorms) may further confer physical and emotional stress. Repeated deployment and exposure to these types of traumatic stressors and difficult conditions have been shown to be related to high rates of combat-related post-traumatic stress disorder (PTSD) (Baker et al., 2009; Reger, Gahm, Rizzo, Swanson, & Duma, 2009; Seal et al., 2009), traumatic brain injury (TBI; Lew et al., 2006; Okie, 2005), substance abuse (Erbes, Westermeyer, Engdahl, & Johnsen, 2007), and major depression (Hoge et al., 2004) in returning service members and veterans.

Family Demographics in the Military

According to the 2007 Department of Defense demographic report (Office of the Deputy Under Secretary of Defense, 2007), the lowest marriage rates across service branches are among the entry-level enlisted, with marriage rates for active component enlisted (E-1-E-3) reported at 26.5% for the Marine Corp and 35.4% for the Army. Marriage rates climb according to pay grade and rank, with the highest military echelons demonstrating the highest marriage rates. Military officers at the highest ranks (O7-O10) across service branches are nearly universally married, with rates as high as 97.8% for the Army. In 2007, the overall rates of marriage among service members was (from lowest to highest) 45.1% for Marine Corps, 55.1% for Navy, 55.5% for Army, and 60.6% for Air Force. The marriage rate among active component females is 46.2%, while the rate for active component males is 56.7%. In today's military, there are more family members (57.7%; counted as spouses, children, and adult dependents) than active component service members (42.3%; counted as married and single service members). Over half (57%) of active component members have family responsibilities (described as having a spouse and at least one child). The rates of military members with family responsibilities are higher among officers than enlisted personnel across all service branches. For example, 71.7% of Army officers have family responsibilities, compared to 58.3% of Army enlisted; similarly, 70.4% of Navy officers have family responsibilities, compared to 54.1% of enlisted. Given these demographics, there has been an increasing emphasis on military family member functioning and psychological health, as well as on the role of family adjustment on service member functioning and readiness for duty.

Military Lifestyle Demands

To accomplish its mission, the military makes significant demands on its service members and their families. In her seminal work on the subject, sociologist Mady Segal suggests that these demands can potentially lead to negative outcomes for family members. These include (1) geographic mobility, (2) residence in foreign countries, (3) separations from the family, and (4) risks of service member injury and death (Segal, 1986). Burrell, Adams, Durand, and Castro (2006) augmented Segal's original four major demands on families by adding (5) long and unpredictable duty hours, (6) pressures for military families to conform to accepted standards of behavior, and (7) the masculine nature of the military. It is, in fact, these demands that make military service a unique occupational experience for the service member, which extends to the day-to-day experiences of the family.

While it exerts some specific normative pressures directly on family members, most pressures affecting families are exerted indirectly through claims made on the service members. Bourg and Segal (1999) describe the value to the military of

recognizing the legitimacy of the family demands on the service member's time, loyalty, and personal resources. Through systems that address both the needs of the military and family institutions, the military can create "sustained high commitments" from both service members and spouses. Organizational support (contributing to a decrease in the conflicts between the military and family) for families is thus proposed as a means to directly enhance the affective commitment of service members and spouses to the military.

Impact of Military Deployment on Children and Families: Research to Guide Intervention Development

There are almost two million military children with an active or reserve component military parent, many of whom have experienced one or more parental combatrelated deployments since the onset of OIF and OEF (Military Child Education Coalition, 2007). For children and spouses, a service member parent's deployment to combat theater may generate significant worry in the family members. Across the family system, return and reintegration demands following long separations and combat exposure may be quite challenging for the reestablishment of family roles and routines. During deployments, there may be disruptions in social support and financial systems and increased emotional distress in the caretaking parent and children. Following deployments, families may experience the impact of combatrelated mental health problems and physical injuries in the deployed parent once he/she returns home.

Research on the family stress burden of multiple deployments on military children is limited. McFarlane (2009) provides a recent review of the available studies on the impact of parental deployment on children and spouses. Some studies suggest that although military children and families adapt well to routine deployments, the stress of multiple and prolonged deployments, particularly during wartime, may take a toll on some children and families (Lincoln, Swift, & Shorteno-Fraser, 2008; Palmer, 2008; Waldrep, Cozza, & Chun, 2004). Research has indicated that during deployments, children and adolescents may show increased sadness or tearfulness, increased anxiety, higher stress levels, increased behavioral problems, feelings of uncertainty and loss, as well as academic problems (Chandra, Burns, Tanielian, Jaycox, & Scott, 2008; Flake, Davis, Johnson, & Middleton, 2009; Huebner, Mancini, Wilcox, Grass, & Grass, 2007; Rosen, Teitelbaum, & Westhuis, 1993).

Developmental and gender differences have also been documented for children's responses to deployment stress. Infants and toddlers may be particularly sensitive to any distress experienced by their parents or other caregivers (Murray, 2002). Preschool-aged children may regress, exhibiting behaviors they had previously outgrown. In a recent study, Chartrand, Frank, White, and Shope (2008) found that children aged 3–5 years with a deployed parent exhibited higher levels of both internalizing and externalizing behavior than same-aged counterparts whose parents

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were not deployed. While detailed observational or longitudinal studies on the impact of parental separation during wartime on children during infancy and early childhood are limited, concerns exist about the impact of separation from a primary caregiver. Of special note is the way that developmental tasks may be undermined by the prolonged or repeated absence of a primary caregiver. This is also true for school-aged children and adolescents who require a "secure base" to progressively venture into the world and develop more autonomous skills and relationships (Bowlby, 1988). In interviews with teens whose service member parent may have been away accumulatively for 2–3 years out of five, the teens report a long list of missed personal milestones and daily opportunities for engagement, and that even after a parent has been home for some time, he or she may be seen as an outsider (American Academy of Pediatrics, 2009). In addition, gender differences have been found, with one study indicating boys may be more impacted than girls (Jensen, Martin, & Watanabe, 1996).

School-aged children may exhibit problems with attention, emotional dysregulation, and academic difficulties (Lincoln et al., 2008). A recent study with Army and Marine Corps families found increased levels of anxiety symptoms in school-aged children whose parents had experienced combat-related deployments. Moreover, duration of combat-related deployment over the course of a child's life was related to child depressive symptoms and externalizing behaviors, and psychological distress among both service member and non-service member parents was associated with child symptoms (Lester et al., 2010). Adolescents with deployed parents may exhibit anger or aloofness (Lincoln et al., 2008). Furthermore, parents affected by wartime deployments may be at higher risk for child maltreatment or neglect, particularly younger parents with young children (Gibbs, Martin, Kupper, & Johnson, 2007; Rentz et al., 2007). There have also been findings of increased marital conflict and domestic violence in families with a deployed parent (McCarroll, Fan, Newby, & Ursano, 2008).

With rates of combat-related mental health problems indexed at 18% among those returning from deployment to Iraq (Hoge et al., 2004), many children and families may be considered in the "line of fire" of indirect effects of parental psychological symptoms. Numerous studies have described the impact of PTSD on veterans' families, including increased marital distress and domestic violence, "secondary traumatization" of spouses and children, and interference with parenting (Galovski & Lyons, 2004). Other reviews have discussed the intergenerational transmission of trauma in children of veterans (e.g., Dekel & Goldblatt, 2008; Pearrow & Cosgrove, 2009).

When combat exposure is compounded by a military parent's post-combat mental health problems, the children and spouses are likely to be affected as well. Even without the stress of wartime deployment, parental mental or physical illness has been shown to constitute an important risk for poor adjustment in children (Beardslee, 1984; Lester, Stein, & Bursch, 2003; Rutter, 1966; Rutter & Quinton, 1984). Longitudinal evaluation of parental mental health problems for the child have shown that the psychosocial disturbance within the family, especially the child's exposure to parental irritability, aggression, and hostility, are predictive of

child adjustment problems (Rutter & Quinton, 1984). Researchers suggest that the impact of post-traumatic stress on parenting and families may be best understood by considering how primary symptom clusters are manifested in family relationships (Carroll, Rueger, Foy, & Donahoe, 1985; Westerink & Giarratano, 1999), For example, when a traumatized parent returns home with numbed or blunted emotions, and with a reduced ability to express, engage, or disclose to loved ones, he/ she is at much higher risk for marital distress and breakdowns in parent-child relations (Riggs, Byrne, Weathers, & Litz, 1998; Ruscio, Weathers, King, & King, 2002). Riggs et al. (1998) found that, among male Vietnam veterans with PTSD, 70% of these veterans reported clinically significant levels of distress in their family relationships. According to Riggs and colleagues, intimacy difficulties were significantly correlated with PTSD avoidance and numbing symptoms. As service members encounter trauma reminders in daily circumstances that may trigger abrupt changes in their mood and behavior, children and spouses may become confused or even frightened. The tendency of returning service members to be hypervigilant and highly reactive to threat may translate into irritability, a rigid or authoritarian parenting style, and an inability to tolerate normal household interactions, such as children arguing or engaging in physical play (Matsakis, 1988).

Clearly, the effects of post-traumatic stress experienced by a parent can reverberate throughout an entire family. Indeed, following traumatic exposure, a correlation between parent and child psychological symptoms, including traumatic stress, has been found consistently across many contexts and may persist over time (Dybdahl, 2001; Laor, Wolmer, & Cohen, 2001). This constellation of reactions to combat stress and deployment reminders can undermine parental attentiveness and availability, and may result in the service member excluding him/herself from family interactions and daily routines. Families of service members with post-traumatic stress tend to be less cohesive, adaptive, and supportive (Davidson & Mellor, 2001; Riggs et al., 1998; Westerink & Giarratano, 1999). These characteristics are linked with lower levels of family and child resilience, just as family closeness, effective support, and communication are linked with enhanced levels of child and family resilience (Walsh, 2007).

Framework for Interventions with Military Families and Children

As the above studies suggest, military families and children may be at increased risk for psychological health issues as a result of parental military deployment, parental and/or caregiver distress, frequent separations from the parent, and geographic relocation. It should be noted that the wide majority of military families and children function well despite these challenges. Through the identification of both risk and protective factors in military families facing wartime deployments, it is possible to better tailor preventive interventions to mitigate specific risk and promote protective factors in families (Luthar, 2006; National Research Council and Institute

of Medicine, 2009). The objective of prevention programs has long been the reduction of disease or disorder prior to their onset, in individuals who may be at greatest risk. More recent prevention efforts have emphasized prevention approaches with psychological competence or resiliency as the primary outcome. Many effective preventive interventions using strength-based approaches have been developed for children and families facing challenges such as parental divorce, parental medical illness, parental depression, and parental bereavement (National Research Council, 2009). Using this framework, multiple preventive interventions have demonstrated that family-centered approaches promote child positive adjustment, including successful achievement of developmental milestones, in the context of decreased parental functioning due to psychological or physical illness and other family adversities (Luthar, 2006; National Research Council, 2009). Examples of such protective factors that are targeted by family-centered interventions are social support from family members, secure parent-child attachment relationships, and positive parenting practices (Spoth, Kavanagh, & Dishion, 2002; Sroufe, 2005).

A Selective Preventive Intervention for Military Families and Children Facing Combat Operational Stress: The FOCUS Intervention

The developments in family-centered prevention science over the past two decades have provided a window of opportunity for a family-centered prevention for military families and children to be adapted and implemented to address the increased demands on military families during wartime. Below we describe the development of the FOCUS intervention as an adaptation of established evidence-based research (Saltzman et al., 2007). We describe a process of careful adaptation based on detailed integration of research on risk and protective factors for children and families facing deployment stress, identification of core components from evidence-based interventions, and adaptation of implementation strategies for military culture and context.

In addition, we describe the successful implementation of FOCUS for military families through a partnership between a university-based family-centered prevention team and military medicine as a model for integrating prevention services that supports family resiliency, destigmatizing psychological difficulties, and reducing barriers to appropriate care. Critical aspects of the methodological approach to program implementation are reviewed, including the process of iterative adaptation within and for a military community, and for the unique cultures of individual installations.

The FOCUS intervention has been developed from a foundation of evidence-based interventions that reduce risk and support resiliency across the family system, and builds upon a family-centered prevention approach for families affected by challenging circumstances. Over the past two decades, the field of family intervention science has demonstrated that family factors play an important role in child adjustment, and that effective caregiver-child relationships serve as scaffolds for

building adaptive skills such as emotional and behavioral regulation. Family-centered interventions that provide developmental guidance and increase adaptive skills in family members – particularly those that support parent-child communication, relationships, and effective family management – may reduce emotional distress and behavioral problems in children and support positive development over time (Spoth et al., 2002).

Given the ongoing demands placed on families experiencing multiple deployments, building and maintaining parental and child resilience is a critical concern. Longitudinal and intervention research with families in other settings suggests that parents' ability to effectively address the stressors such as wartime deployments and subsequent combat-related emotional distress and traumatic stress reminders will be influenced by their coping skills (Beardslee, Gladstone, Wright, & Cooper, 2003; Rotheram-Borus et al., 2003). Effective coping skills significantly enhance adjustment and positively affect the manner in which stress is managed by children and families (Compas, Phares, & Ledoux, 1989; Patterson & McCubbin, 1987). Interventions combining psychoeducation and coping skills have been successfully utilized to help families coping with chronic stressors and to increase a family's capacity to manage significant transitions and enhance problem solving strategies (Gonzalez, Reiss, & Steinglass, 1987; Rotheram-Borus, Lee, Lin, & Lester, 2004).

As a resiliency training intervention, FOCUS has been implemented at selected military installations for military families who have at least one child age five or older. Because a family-centered approach is used, younger (less than age five) children's needs are addressed as well through parental psychoeducation, developmental guidance, and FOCUS skill building as described below. Initial FOCUS child sessions and activities, however, have been designed for the developmental skills of school age children, tweens, and adolescents. Sessions and activities for preschool aged children have been adapted for implementation.

The principles of FOCUS are largely founded on the concept of psychological resiliency (for review, see Luthar, 2006). The concept of psychological resiliency is considered a process of active engagement in and maintenance of adaptive behaviors, as well as achieving positive developmental milestones in the face of stressful or traumatic life events. The FOCUS model is based on both learning and practicing skills that support and maintain family resiliency (e.g., emotional regulation, communication, goal setting, problem solving) in order to enhance family cohesion and social support.

Development of shared meaning in the context of stress or adversity has been linked to family resiliency (for review, see Walsh, 2006). FOCUS skills are developed and practiced in the context of a family narrative that is constructed as a graphic timeline. This narrative provides family member with the opportunity to address estrangements that may have emerged through the deployment, and establish a shared sense of meaning in response to deployment and other significant experiences (such as injury, training separations, etc.). Family members benefit from the shared learning, enhanced communication, and development of skills to contend with stressful events, as well as enjoy the positive supportive elements of a cohesive family environment.

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Several fields of developmental, family, and intervention research illuminate the relevance of a family-centered approach to supporting child and family resiliency during stress. The foundational and theoretical underpinnings of this research have informed the development and application of FOCUS for military families and are described below. First, FOCUS is informed by the basic tenets of the family systems perspective including: (1) the family as a whole is greater than the sum of its parts; (2) individual family members have an ongoing and mutual impact on one another; and (3) individual members must always be understood in the context of the larger family system (Cox & Paley, 1997). As parents and children experience challenges common to military families, and as any one family member is affected by certain stressors, it is likely that other family members will also be affected. For example, if one parent has recently returned from deployment and is dealing with combat operational stress, the other parent and the children will likely be impacted by the difficulties the deployed parent is experiencing (note that this point is highlighted in the combat operational stress continuum model). Similarly, what is occurring in one relationship in the family will impact or "spill over" (Erel & Burman, 1995) into other relationships in the family. Thus, if the marital relationship is strained during or following deployment, parent-child relationships are likely to be adversely affected. FOCUS addresses the ongoing and mutual influences that family members have on one another and aims to work with as many family members as possible. By enhancing the skills of multiple family members, the family as a unit is best prepared to successfully manage the ongoing challenges of military life. A family systems perspective also highlights the notion that families typically maintain a certain equilibrium or "homeostasis." That is, most families are typically governed or organized by certain rules or patterns of interaction (e.g., mom and dad may each be responsible for certain parenting duties). This equilibrium can be challenged by both normal developmental transitions (e.g., birth of another child, child starting school) and more non-normative events (e.g., parent leaves for or returns from deployment, parent injured in combat). Families must adapt to and reorganize around these transitions and events. Military families have been described as "accordion" families (Minuchin & Fishman, 1981) in that they must frequently adjust to the departure and return of one (and sometimes two) family members - retracting and expanding to accommodate the presence and absence of a deployed parent.

When a parent is deployed, the family typically needs to reorganize and find a new equilibrium. For example, the oldest child often takes on some of the responsibilities of the deployed parent, and the non-deployed parent assumes both parenting roles. When the deployed parent returns, the family must reorganize again – an older child may have to relinquish new-found independence, and the returning parent and non-deployed parent will have to resume the daily coordination of parenting tasks. Some families will be able to reorganize and adapt to these events relatively smoothly, whereas others may have a harder time responding when the family's typical way of functioning is disrupted. For families experiencing other ongoing tensions or strain, the need to constantly respond to change can further jeopardize long-term well-being. Thus, a major goal of FOCUS is to assist families in developing

the coping skills that will allow them to handle these periods of reorganization more adaptively so that each family can function at its peak, both as a family unit and as individual members.

Co-parenting refers to the ways in which parents either support or undermine one another's parenting; how disagreements about childrearing are negotiated; how parenting duties and tasks are divided or shared; and patterns of parental interactions in the family (Feinberg, 2002). A large body of research suggests that the quality of the co-parenting relationship has important implications for both child and family well-being over time. For example, problems in the co-parenting relationship have been linked with behavior problems, attachment insecurity, and emotional dysregulation in children, as well as decreased maternal warmth, less father involvement, and less positive parent-child interactions (Bonds & Gondoli, 2007; Feinberg, 2002; Feinberg & Kan, 2008; Schoppe-Sullivan, Weldon, Claire, Davis, & Buckley, 2009).

Multiple and/or prolonged deployments can challenge the co-parenting relationship in significant ways. Parents may find it challenging to renegotiate their roles upon reunion and reestablish themselves as a team, as well as prepare for an upcoming deployment. FOCUS assists parents in strengthening and improving the quality of their co-parenting relationship. Teaching parents emotional regulation, goal-setting, communication, problem-solving, and management of combat stress and deployment reminders can equip them to deal more effectively with parenting disagreements. The co-parenting relationship may also be strained if the deployed parent has difficulty readjusting from being in a military environment (perhaps expecting the other parent to just "follow orders"), or if he/she is dealing with combat-related stress. Allowing parents to share their individual experiences and perceptions around deployment may help them to develop a better understanding of each other's difficulties readjusting to parenting roles. Additionally, parental conflict may have significant impact on child adjustment. There is a wealth of literature suggesting that negative emotions or interactions in a couple's relationship "spill over" (Erel & Burman, 1995) into the rest of the family and can disrupt the parent-child relationship (Cox, Paley, Harter, & Karnos, 2001). Parents who are distressed by conflicts with their spouse may be less emotionally available or attuned to their children, may withdraw from their children, may attempt to enlist one or more of their children as an ally in the conflict, or may engage in overly harsh, overly lax, or inconsistent disciplinary practices with their children. Children may perceive ongoing conflict between their parents as a threat to their emotional (and sometimes) physical safety and to the stability and integrity of their family life. The skills emphasized in FOCUS training can all serve to enhance the quality of the co-parenting relationship, and support parents or caretakers as a "leadership team" whenever possible. While not designed to provide marital counseling, FOCUS training can assist families in preventing further marital strain by increasing family cohesion, enhancing problem solving, and repairing breakdowns in communication.

Third, the family-centered approach used in FOCUS is informed by attachment research. An attachment perspective can be useful in understanding children's responses to separations from a parent during deployment. When a primary attachment

figure leaves, some of a child's usual resources for dealing with stressful circumstances or emotionally distressing events are no longer available. Children may rely on the non-deployed parent for more comfort and reassurance than normal during the deployed parent's absence. However, the non-deployed parent's own coping abilities and resources may be taxed during deployment, as he/she manages extra household responsibilities or assumes the responsibilities of both parents, all while dealing with his/her own concerns about the deployed parent. The impact of deployment on family members may be moderated by how well they are able to stay connected with the deployed parent during his/her absence. Particularly for young children, who tend to be concrete, the ability to see or talk to their parent or to have tangible reminders of their deployed parent may be very important in helping them to manage their emotional concerns. Attachment theory (Bowlby, 1969, 1973, 1980) has described the parent-child relationship as the foundation of the child's sense of security, with children learning through their earliest caretaking experiences that they can look to the parent for comfort, protection, or soothing when distressed, frightened, or feeling threatened. The parent's ability to act as an external source of emotional regulation for the child early in life is described as a primary predictor of security of attachment. Through interactions with important caregivers, children develop the capacity for self-regulation. Moreover, children's confidence that their caregivers will provide emotional support enhances their ability to explore new environments and develop social competency. Indeed, a wealth of research suggests that children with more secure attachment relationships have more positive relationships with teachers and peers, fare better academically, and are better able to handle stressful situations (Ahnert, Gunnar, Lamb, & Barthel, 2004; Belsky & Fearon, 2002; Nachmias, Gunnar, Mangelsdorf, Parritz, & Buss, 1996; O'Connor & McCartney, 2007; Sroufe, 2005). Although attachment concerns can be quite evident among younger children, they should not be presumed to be absent among older children and adolescents. Attachment concerns may be articulated less explicitly by older children and instead manifested in the form of behavior problems or somatic complaints. FOCUS training assists parents and children alike by normalizing attachment concerns for older children, as well as for parents with younger children.

Research Foundations of the FOCUS Intervention

FOCUS is grounded in three well-established interventions that have demonstrated a positive impact on child psychological adjustment and family functioning, through rigorous randomized controlled trials, in families and children facing challenging circumstances, including parental depression, parental medical illness and loss, and wartime exposure.

The first source program for FOCUS is a preventive intervention designed to strengthen children and families in which a parent is depressed (Beardslee et al., 2003; Beardslee, Wright, Gladstone, & Forbes, 2008). This intervention has been adapted for

use with single parents, inner-city moms (Podorefsky, McDonald-Dowdell, & Beardslee, 2001), and Latino families (D'Angelo et al., 2009). It has also been adapted for use in Head Start and Early Head Start to help teachers deal with depressed parents (Beardslee, Avery, Avoub, & Watts, 2009). The approaches have been used in a number of countrywide programs for children of the mentally ill, including Holland and Finland (Solantaus, Toikka, Alasuutari, Beardslee, & Paavonen, 2009). For children affected by parental depression in the context of a preventive intervention program, both risk and protective factors for adjustment difficulties in children were identified and used as the foundation for a family-based intervention (Beardslee, 1984; Beardslee & Podorefsky, 1988; Beardslee & Wheelock, 1994; Beardslee et al., 2003). In particular, the children's resilience consisted of the capacity to accomplish age-appropriate developmental tasks, engage in relationships, and understand what was happening to their parents and understand their parent's depression (Beardslee et al., 2009). This intervention received very high ratings in the objective review in the National Registry of Effective Programs (www.nrepp.samhsa.gov).

The second source program is a family-centered intervention for medically ill parents and their children, which has demonstrated improvements in psychological adjustment for both parents and their children receiving the intervention over long-term follow-up in a large-scale randomized trial, and has been adapted for multiple communities (Lester, Rotheram-Borus, Elia, Elkavich, & Rice, 2008; Rotheram-Borus et al., 2004; Rotheram-Borus, Stein, & Lin, 2001). At 6-year follow-up, children of parents with HIV who had been in the intervention condition continued to show benefits across several important domains of adjustment, including more employment, greater school attendance, and reduced childbearing (Rotheram-Borus et al., 2004). In this context, multiple analyses have demonstrated the importance of parental mental health, family adjustment, and parent-child relational factors on child adjustment over time, as well as highlighted key risk and protective factors to guide prevention at a family level (Lee, Lester, & Rotheram-Borus, 2002; Lester et al., 2001, 2008; Rotheram-Borus et al., 2004; Stein, Riedel, & Rotheram-Borus, 1999).

The third is a trauma-focused intervention for children and parents exposed to trauma and loss. In a randomized controlled trial, this team's program has been shown to reduce primary trauma-related symptoms, and improve school and interpersonal functioning among participants (Saltzman, Layne, Steinberg, Arslanagic, & Pynoos, 2002). Their investigation of war-affected youth and families in Bosnia-Herzegovina entailed a nation-wide assessment of the mental health needs for youth in the post-war period, the development and implementation of a trauma/grief intervention, and ongoing research into risk and resilience factors predicting psychosocial adjustment among Bosnian youth (Layne, Saltzman, Savjak, & Pynoos, 1999; Saltzman et al., 2002). A primary goal in this undertaking was to clarify specific mechanisms and pathways of influence leading to childhood pathology and impaired functioning that would be appropriate targets for risk assessment and early intervention (Layne et al., 2008; Saltzman, Pynoos, Layne, Aisenberg, & Steinberg, 2001). Utilizing family-level traumatic stress psychoeducation and skills

to manage the impact of traumatic reminders, this successful evidenced-based program was also used in a trauma-informed intervention for children affected by trauma and loss in other trauma-impacted communities in the United States, and following the terrorist attacks of September 11, 2001 (Layne, Saltzman, & Pynoos, 2002). Described previously, the FOCUS intervention has integrated core elements of trauma-informed psychoeducation and skills building from this program for parents and children (Saltzman, Babayan, Lester, Pynoos, & Beardslee, 2008).

Core Components Adapted for Military Families and Combat Operational Stress

Across foundational interventions, common core components were identified as appropriate for the adaptation of the FOCUS Program. These core components are integrated into FOCUS intervention and are delivered in a flexible manner based on a family's needs and strengths as identified by a structured assessment protocol and family-generated narrative timeline. The core components of FOCUS intervention practices include: (1) psychoeducation on developmental reactions, combat operational stress continuum, and deployment stress reactions across the family; (2) emotional regulation skills; (3) goal setting and problem solving skills for deployment-related challenges; (4) management techniques for discordant exposures, traumatic stress reactions, and traumatic reminders; (5) impact of deployment stress on parenting practices; and (6) focus on understanding the different deployment narratives of the experience of different family members and integrating them (Beardslee et al., 2009). These core components are delivered in an eight-session intervention for military families with children, including parent sessions with one or more child caretakers, child sessions, and family sessions that are designed to develop a shared family narrative, address needed family skills, and make a family plan.

Family-level assessments and psychoeducation in FOCUS are designed to be consistent with the Combat and Operational Stress Continuum Model, the heuristic on which other stress control and resiliency programs in the Navy and Marine Corps are based (Nash & Baker, 2007; U.S. Marine Corps & U.S. Navy, in press). Although developed as a tool for military leaders to promote the psychological health of service members, the Continuum Model may also help families monitor and respond to stress in family members. This evidence-informed model categorizes stress states into four color-coded zones - green, yellow, orange, and red each representing a different putative level of risk for role impairment and mental disorder based on both stressor exposures and stress responses to those exposures (Nash, in press; Nash & Baker, 2007). This includes teaching about the Stress Continuum in FOCUS family psychoeducation to encourage communication and understanding between service and family members regarding the most potentially toxic operational experiences to which everyone in the family is exposed: trauma, loss, moral injury, and cumulative wear-and-tear. It also reduces obstacles to treatmentseeking posed by stigma since the Stress Continuum model conceives of persistent

distress or dysfunction resulting from exposure to these operational stressors as literal injuries to the brain and mind rather than expressions of personal weakness.

Additional family-level education is integrated into the FOCUS sessions, including education on the impact of deployment cycles and combat operational stress on children of different ages and developmental levels, parenting practices, and family life through guided discussions, and education through feedback from assessments and activities designed to heighten personal and interpersonal awareness. Based on a family's unique circumstances, FOCUS provides information to address the family's issues and concerns. This process of providing information to the family members helps them to feel understood, builds an alliance with the service provider, and serves to normalize and contextualize the family's current difficulties. Family-level education is integrated throughout FOCUS program sessions based on family concerns as they emerge in the context of the family deployment narrative. Key targets of family-level education include: (1) assisting the family in identifying separation, combat, and/or deployment stress reminders that trigger emotional and behavioral responses in the service member and/or family members; (2) linking particular combat or deployment-related stress reactions to breakdowns in family cohesion, communication, routines, and parenting activities; (3) addressing similarities and differences among family members' reactions to the deployment experience (particular attention is paid to separation and reunion experiences, and erroneous or problematic interpretations on the part of individual family members); (4) identifying prior or current strengths within the family linked to deployment experiences (e.g., specific ways in which the family has successfully contended with a challenge or hardship); and (5) linking child developmental information to family-specific assessments and deployment experiences.

Because of the important contributions of perceived and received support to child and family resiliency, social support across the family system and within the community are addressed in the program. This support may include family members' capacity for physical and emotional comforting, their willingness to listen to other family members' fears and worries in a nondefensive manner, their prioritization of family fun and together time, and their ability to provide accurate and appropriate advice and material support. Perceived levels of family support are usually articulated in the course of the program. If levels are deficient, specific forms of family support may then be targeted by prioritizing the family's goals.

Developing Family Resiliency: The FOCUS Core Skills

Through the family narrative, family members reflect on their individual and shared challenges and accomplishments, identify family strengths and plans, bridge estrangements that may have emerged during the process of separation and reunion, and plan for future challenges, such as upcoming deployment separations. An essential component of this process is developing and strengthening skills that support

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parental leadership and positive parent-child interactions in the face of heightened stress. Enhancing communication and emotional regulation skills provides children with the opportunity to share with their parents what was particularly difficult and painful about the deployment experience and provides parents with the opportunity to respond to such disclosures in a sensitive and supportive manner. Encouragement of home activities to reestablish strong emotional connections between parents and children serves to address some of the ways in which parent-child attachment relationships can be taxed during deployment. Teaching parents emotional regulation skills allows them to manage their own distress more effectively, serve as models for their children, and become more attuned to and respond more sensitively to their children's emotional needs. Encouraging children to express what was difficult about the separation may allow families to strategize around ways to support children's feelings of connectedness with their deployed parent (and with other family members) during subsequent deployments. Additionally, FOCUS integrates home activities that allow children to track a beginning, middle, and end to their parent's deployment, which may also relieve some of the distress they can experience during parental separations.

Emotional regulation. Throughout all FOCUS activities and sessions, families utilize emotional regulation strategies to monitor emotional states and attendant behaviors. The basic steps in enhancing these skills involve increasing the ability of parents and children to monitor changes or extremes in their emotional states, especially focused on emotional reactions linked to stressful deployment experiences. Key emotions to monitor across the family include anger, sadness, guilt, shame, and anxiety/fear, as these may emerge in relationship to deployment experiences. Another area that is the focus of intervention includes the identification of internal and external reminders that contribute to these emotional reactions and escalations of distressing feelings, and how these may play out in terms of interpersonal behavior within the family. For example, a parent may be helped to understand how his combat-related stress manifests in overly rigid or authoritarian parenting interactions and concurrent reductions in the types of communication that build family closeness. The final steps involve selecting and practicing strategies to effectively manage problematic emotional and interpersonal reactions.

Goal setting. These skills are used to help family members identify how they would like things to be different for their families and how to monitor change, and are practiced throughout the program. Parents and children select family goals during their first sessions and continue to track their own progress on these goals in subsequent sessions. Families are taught to recognize and appreciate incremental improvements in behaviors in themselves and in each other. Structured practice with feedback helps family members to develop realistic goals that are specific, monitored, and adjusted as necessary.

Family communication and development of shared deployment narratives. The centerpiece skill of FOCUS is enhancing communication among family members. A combat deployment and/or high operational tempo may be associated with breakdowns in parental and family communication and a tendency for parents and children

to become emotionally isolated. This may be especially true for family members who keep problems to themselves to avoid worrying or burdening other family members. Although sometimes adaptive, this coping strategy may result in family members keeping silent about personal fears, worries, and needs. Parents are able to first bridge the individual deployment experiences (service member, spouse, or other family caretakers) through the parental narratives. The second step in the family narrative is to elicit the children's deployment experiences and current concerns and difficulties. Following a parental preparatory session, the final step is to provide a structured and safe means of sharing these individual storylines and concerns through the family sessions. This structured communication strategy is designed to enable family members to negotiate the ambiguity of a parent's presence and absence in the context of heightened danger which may accompany the deployment cycle (Faber, Willerton, Clymer, MacDermid, & Weiss, 2008).

Problem solving. Families contending with practical, interpersonal, or parenting challenges often benefit from learning a structured approach to problem solving. The simple four-step model used in FOCUS is demonstrated with a problem identified by the family as pressing and important. The family is asked to practice problem solving at home during the coming week. Through ongoing feedback and adjustment of the technique to fit the family, the family develops the skills and confidence to apply a collaborative problem-solving frame to ongoing and more difficult challenges.

Managing combat and deployment stress reminders. Military families negotiating combat-related deployments may find their service member highly reactive to reminders of threatening situations and loss. In addition, family members themselves may also react to reminders of the difficulties they experienced before, during, and after deployment, including wartime losses within the community. These various reactions among family members may contribute to increased family disengagement, conflictual marital and parent-child relationships, and decreased support among family members. FOCUS provides parents and children with education about combat and deployment stress reminders and how they can impact individual and interpersonal functioning. Parents and children are taught strategies to cope with combat and deployment stress reminders, including identifying the cues in their daily lives that trigger memories of stressful or painful experiences, monitoring their reactions to these cues, communicating to other family members when they are experiencing a stress reminder, and developing a plan for how other family members can respond supportively during these times.

FOCUS Development and Implementation for Navy and USMC

With a foundation in these family-centered theoretical models, FOCUS was adapted from previous child and family interventions by the intervention teams described below, and specifically adapted for military families and deployment stress during OIF/OEF. Following consultation with families and providers at a

United States Marine Corps base, this program was implemented with families in partnership with the installation Marine and Family Services personnel support program. Building on these established interventions, the UCLA team adapted and standardized the manualized intervention as "Project FOCUS" in order to support resiliency and respond to military children and families affected by high operational tempo, multiple deployment stress, and combat operational psychological and physical injuries (Saltzman et al., 2007).

Through funding from the U.S. Navy Bureau of Medicine and Surgery, FOCUS has been implemented as a service demonstration project at selected U.S. Marine Corps and U.S. Navy installations. The program has standardized implementation manuals, training and delivery curricula, and outreach materials to support intervention delivery. In addition, FOCUS utilizes web-based, real-time assessment to provide a family check-in and immediate feedback to the family, enabling them to receive selected psychoeducational materials, a customized intervention protocol, as well as referrals to appropriate levels of services when indicated.

This implementation process has included systematic community, command, and family engagement at each installation in order to acculturate and adapt to the specific military communities served. Key components of this process include embedding the FOCUS program within a continuum of family care by linking to local partners in family support and treatment including chaplains, medical and mental health providers, family service programs, school staff, and others. FOCUS outreach approaches include multiple formats in which a family may enter the program, including group level resiliency skill building, workshops, consultations or individual family resiliency training. By providing FOCUS core components at multiple levels of delivery, FOCUS encourages engagement strategies that meet the family's readiness and availability to access resiliency training services. In addition, FOCUS has been physically located in family-friendly, accessible locations such as within family services centers, chapels, and local base shopping centers, and provides FOCUS resiliency training at nontraditional service hours, including after school, evenings and weekends. In addition to engagement and location considerations, assimilation within the military culture also comes from leadership support. Both at the local installation, as well as at the headquarters level, military leadership support allows for the program to be supported by the community for integration and into "the military way of life."

Conclusion

As the United States military engages in a prolonged war overseas, military families and children continue to experience the significant demands of negotiating high operational tempo deployments. The demographics of U.S. active component military have changed in the past several decades to include a much larger proportion of service members with partners and children, defining a growing need to support the well-being of both service members and their family members. While many

studies have shown that military families and children demonstrate high levels of psychological functioning and resilience, emerging evidence suggests that the operational wear and tear of wartime deployments accumulates, and may present heighted risk for adjustment problems in children and family members. In addition, many service members return home from war with combat-related mental health problems and physical injuries, with the potential for direct and indirect psychological impact on their spouses and children over time (Eaton et al., 2008; Flake et al., 2009; Lester et al., 2010; Milliken, Auchterlonie, & Hoge, 2007).

While more information is needed to clarify the longitudinal and developmental impact of wartime deployments for military children and families, foundational research across the developmental and trauma literature demonstrates the consistent finding that children's levels of psychological distress and adaptive functioning are linked to parental levels of distress, suggesting the importance of targeting preventive interventions at a family level. Further, family-level prevention provides an opportunity for engagement of service members and spouses in interventions that may support recovery from psychological injury, while also promoting psychological health in children.

Planning for the long-term public health needs of service members and families experiencing extended and frequent deployments should take into account the impact on the family members, spouses, and children. Unlike during previous military conflicts, the current state of early traumatic stress intervention and prevention science provides a strong foundation to inform translational preventive approaches to support families and children at risk due to combat operational stress. In recent years, there has been a shift in focus to prevention of mental health disorders (National Research Council and Institute of Medicine, 1994, 2009). Programs that may potentially mitigate the impact as described here need to be examined for benefit and field-tested in order to guide a public health response. The process of demonstrating that interventions are useful in a variety of contexts is an essential component of establishing validity of an intervention approach. This requires a balance between methodological rigor and sensitivity to ecological issues, as well as a response to the cultural context surrounding community needs.

To guide such an approach to family-centered prevention, this chapter has summarized the foundational research in the development of traumatic stress interventions and family-centered prevention science, using lessons from the experience of preventive interventions for children of medically ill parents, children with depressed parents, and families affected by war trauma to inform an intervention response for military families at risk. The urgent demands of a country at war point to the need for a systematic rapid deployment of existing evidence-based approaches that may be adapted to meet the needs of military families. Such interventions must be designed to be adaptable not just to a single phase of deployment, but need to recognize the cumulative experience of multiple deployments for military families by assisting with reintegration tasks and preparing for future separations and related challenges. In addition, the implementation of prevention programs to support military families and children should include ongoing evaluation to enhance program implementation and impact over time.

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