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# Health and Mental Health Needs of Children in US Military Families Benjamin S. Siegel, Beth Ellen Davis and THE COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH AND SECTION ON UNIFORMED SERVICES

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CLINICAL REPORT

# Health and Mental Health Needs of Children in US Military Families

### abstract



The wars in Afghanistan and Iraq have been challenging for US uniformed service families and their children. Almost 60% of US service members have family responsibilities. Approximately 2.3 million active duty, National Guard, and Reserve service members have been deployed since the beginning of the wars in Afghanistan and Iraq (2001 and 2003, respectively), and almost half have deployed more than once, some for up to 18 months' duration. Up to 2 million US children have been exposed to a wartime deployment of a loved one in the past 10 years. Many service members have returned from combat deployments with symptoms of posttraumatic stress disorder, depression, anxiety, substance abuse, and traumatic brain injury. The mental health and well-being of spouses, significant others, children (and their friends), and extended family members of deployed service members continues to be significantly challenged by the experiences of wartime deployment as well as by combat mortality and morbidity. The medical system of the Department of Defense provides health and mental health services for active duty service members and their families as well as activated National Guard and Reserve service members and their families. In addition to military pediatricians and civilian pediatricians employed by military treatment facilities, nonmilitary general pediatricians care for >50% of children and family members before, during, and after wartime deployments. This clinical report is for all pediatricians, both active duty and civilian, to aid in caring for children whose loved ones have been, are, or will be deployed. *Pediatrics* 2013;131:e2002–e2015

All Americans are challenged in a world changed by terrorism and war. For the past decade, the wars in Iraq (Operation Iraqi Freedom, Operation New Dawn) and Afghanistan (Operation Enduring Freedom) have been especially challenging for US service members and their families. Recent studies describe the physical and mental health issues of US service members involved in wartime deployments, including the toll on American lives. 1,2 Approximately 2.3 million active duty, National Guard, and Reserve service members have deployed since the beginning of the wars (2001, 2003), and over 40% have deployed more than once, some for up to 18 months' duration. 3 Almost 60% of US service members have family responsibilities, resulting in 2 million US children exposed to at least 1 parental wartime deployment in the

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#### KEY WORDS

military, families, children, deployment, mental health, health

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The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

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past 10 years.<sup>4</sup> The US public and its policy makers are increasingly concerned about the health and wellbeing of the children and families of uniformed service members facing prolonged and multiple wartime deployments. To this end, in January 2011, President and Mrs. Obama announced their commitment to the "care and support of military families as a top national security policy priority."<sup>5</sup>

To a child, wartime deployment means separation from a loved one, usually a parent; an increased sense of danger; and a routine of daily uncertainty. On return of the deployed parent or relative, there are an infinite number of challenges for the child and family members. There are recent and emerging studies specifically describing the effects on children of parental wartime deployments. These studies, outlined in this report, can help inform pediatricians about the needs of military children. Most commonly, children experience separation as loss. Concomitant fear and chronic anxiety have been shown to disrupt the developing architecture of the brain.6 Children, and even adolescents, watch closely for parental cues to gauge their own degree of distress in a given situation. Maladaptive parental coping or distress may be the single most important predictor of child biopsychosocial symptoms during stressful situations, such as wartime deployment.7-9 Some military families may be at higher risk of distress, especially if they are young, experiencing a first separation, have recently relocated, include a foreignborn spouse, have young children, are junior enlisted (entry pay level). are single parents, or have children with special needs.<sup>4,9</sup> Service members and families who have not anticipated an extended wartime deployment, such as activated National Guard and Reserve personnel, may be especially challenged.10

Pediatricians and other clinicians caring for children are on the front line in the medical home because they identify and assess effects of wartime deployment in children and their family members. More than 50% of military children receive their health and mental health care from nonmilitary providers, outside the gates of military installations, especially children of activated service members in the National Guard and Reserve.<sup>11</sup> One civilian group practice outside a large military treatment facility has 12% of their pediatric patient population enrolled in Tricare Prime, constituting care for more than 22 000 children from military families (Stuart A. Cohen, personal communication, November 21, 2012). Pediatricians need to be aware of common issues during wartime deployments, assess family coping skills, provide anticipatory guidance for the typical cycle of deployment, know where to find appropriate resources, and know when to refer for specialized services or care. For example, during well- or acute-care visits, pediatricians can address family stress and coping in addition to individual child needs related to parental/ family military service (see Appendix, General Pediatrician Resources, Home-Base, a toolkit for well-child care of children in military families). This clinical report is intended for all pediatricians, both active duty and civilian, to aid in caring for military children whose loved ones have been, are, or will be deployed.

### **DEMOGRAPHICS OF MILITARY FAMILIES**

US military demographics have changed dramatically since the dissolution of the draft in 1973. As the military became an all-volunteer force with career options, new challenges emerged for the Department of Defense to include housing; family services; over-

seas resources, including education; aging issues; and an increasing retiree population. The addition of more women to the uniformed services (increasing from 1% in 1970 to 15% in 2009) brought with it the need to balance mission and motherhood in a military workplace. Use of the National Guard and Reserve to augment the active duty wartime deployments has resulted in the involvement of even more children and families.

Of the 60% of active duty service members who are married, 93% have female spouses (wives), and 44% have children. On average, military parents marry and have children at a younger age than civilian US parents. Seventy-five percent of all military children are younger than 11 years. The National Guard and Reserve members have similar family demographics as Active Duty service members, except that National Guard and Reserve members and spouses are slightly older, and the greatest proportion of children are schoolage. 12

Military families have many of the same struggles common to all families, including child care, elder care, parenting concerns, marital issues, education issues, and career choices. However, in the military, families face additional stressors, including frequent relocations, international moves, separations other than war, and wartime deployment and its consequences.

Understanding military structure is important when considering the effects of deployment on children of service members. Each of the active duty services and each of the Selected Reserves have unique qualities that can help pediatricians understand the context of a child's experience with wartime deployment. The Department of Defense has 4 services with an active duty component. The largest is the Army, with 500 000 members, followed by the Navy, Air Force, and Marine Corps. The 5 states with most

active duty members are California, Virginia, Texas, North Carolina, and Georgia. 12 As a group, the Reserve and National Guard are often referred to as the Selected Reserve and are made up by the largest group, the Army National Guard, followed by the Army Reserve, the Air National Guard, and the Reserve components from the Navy, Marine Corps, Air Force, and Coast Guard (now under Homeland Security). The 5 states with the largest Selected Reserve members are California, Texas, Pennsylvania, New York, and Florida. In 2005, half of the fighting forces in Iraq and Afghanistan were from the Selected Reserve, and although this has decreased to 15% to 20% of total deployed service members, more than 255 000 National Guard and Reserve service members had deployed by 2008.13

Service members are either enlisted or officers. For every officer (average age is 30 years, and >85% have a bachelor's degree), there are approximately 5 enlisted personnel (>50% are younger than 25 years, and 100% have high school diploma or general equivalency diploma). Active duty families often live on or near a military installation, they have neighbors and friends who are also military, and community resources are organized around military activities, including child care, financial and legal supports, and deployments. Typically, new families are "sponsored" or "hosted" by more experienced military families when they move to a new area.

In contrast, the National Guard and Reserve members train and are "activated." as needed. When these members are activated, it means they have been called up for active duty services. Most often, Selected Reserve members are activated for wartime deployment, although recent natural disasters have also resulted in activations of Selected Reserve members

to Southeast Asia and Haiti. The National Guard has state and homeland responsibilities as well. National Guard and Reserve members' families rarely live near a military installation and often seek health care and support from the community in which they live. These service members have primary civilian jobs. Civilian employers are not required to pay National Guard and Reserve members while they are activated and deployed. They are required to vacate or hold a position until return, although sometimes it is for 12 to 15 months.

TRICARE, the health care entitlement program for military families, has eligibility and benefits determined by the US Congress and administered by the Department of Defense via the TRICARE Management Authority. 14 TRICARE unites the direct health care resources (hospitals, clinics, and medical professional services) of the military medical system with networks of civilian professionals, hospitals, and agencies. TRICARE is free to all active duty military service members and their families. When National Guard or Reserve members are activated, they and their families are entitled to the same health coverage as active duty members.14 This includes medical care and mental health services at any post or base regardless of service type as well as services provided by civilian providers endorsed in the TRICARE network. TRICARE mental health services (whether at a military hospital or clinic or by civilian providers) can be accessed directly by TRICARE beneficiaries without a referral from a primary care provider or previous authorization. Many National Guard and Reserve families switch to the TRICARE health care coverage during deployment because it is basically free, their own company does not cover them during the deployment, or they did not have coverage before activation. Thus, activation and deployment often mean changing family health care providers temporarily or permanently. There are mechanisms for families who wish to seek care from a non-TRICARE network provider. but this choice requires a deductible and copay. For pediatricians with a number of patients with TRICARE benefits, it may be appropriate to consider TRICARE Preferred Provider status (www.tricare.osd.mil). TRICARE benefits remain up to 180 days after deactivation from duty. Dental coverage for families is also available but is not automatic. Eyeglasses are not covered.

#### **DEPLOYMENT**

Deployment is a temporary (3- to 15month) movement of an individual or military unit away from his or her local work site, resources, and family to accomplish a task or mission. Deployments can occur during peacetime (activated service members during Hurricane Katrina in 2005 or, more recently, 12 000 service members to Haiti in 2010). Peacetime deployments (operations other than war) usually mean travel to safe locations, short duration, and interludes of rest and recovery between absences, and most military families do well. In fact, most military families expect periodic separations from their service member for sea tours or specialized schooling and training. Traditionally, "unaccompanied tours" (1-year remote assignments in which the family stays stateside) have not been described as deployment. Wartime deployments, in contrast, represent hostile, dangerous activity of usually long duration.

This is the first time in our nation's history that families are experiencing war in almost real time, with the use of cell phones, instant computer videos, and media coverage on the battlefield. Media reporters embedded in

e2004

combat units provide "living room" observation of war activities. Video cameras and web messaging capabilities permit frequent personal contact with deployed services members, which families say is comforting. 15 However, there are also conversations of "near misses," abrupt disruptions in phone calls, and rumors of injury and death (even in the "safe zone") before confirmation, a few examples of a heightened sense of fear experienced by at-home family members not studied in previous wars.

## HEALTH AND MENTAL HEALTH OUTCOMES OF RETURNING SERVICE MEMBERS

In the past 5 years, researchers have documented a greater understanding of the effects of war on the psychological well-being of soldiers, many of whom are parents. 1,2,16,17 Complications related to war-combat stress disorder, traumatic brain injury, development of psychiatric illness, and increase in health risk behaviors can complicate family life for a child. After deployment, soldiers' emotional and behavioral responses can range from typical shortterm distress, such as change in sleep, decreased sense of safety, or social isolation, to the development of more serious psychiatric conditions, such as posttraumatic stress disorder or depression. It is estimated that more than 30% of returning soldiers have experienced posttraumatic stress disorder, depression, and/or traumatic brain injury. 18 Comorbidities, such as aggression and alcohol misuse, are prevalent in up to half of those with impairment.1 There has also been an increase in the rates of suicide among military personnel. In 2007-2008, 255 active duty personnel committed suicide (20/100 000), an 80% increase from 2003, the beginning of the major troop deployments in Afghanistan and Iraq. There has also been an increase

in service members seeking mental health support; approximately 280 000 service members sought behavioral treatment in 2011.<sup>19</sup>

Studies of service members and their spouses indicate deployment has an effect on spouses' well-being and on marital relationships. In a 2010 report of more than 250 000 Army wives interviewed between 2003 and 2006. there were 41.3 excess cases of a mental health diagnosis per 1000 wives attributable to 1 to 11 months of wartime deployment. Furthermore, if more than 11 months of deployment occurred in those 3 years, 60.7 excess cases of mental health diagnosis per 1000 wives were identified.20 It is not surprising that the toll of lengthy and recurrent deployments has been reflected in marital dissolution. The annual divorce rate among active duty soldiers in 2009 was 3.6%, up from 3.3% in 2007.6 There is a significant body of literature available for informing pediatricians about the effects of parental psychopathology and marital discord on child well-being, distinct from the stress of wartime deployment. Recognizing the increased vulnerability of children in these circumstances is a role general pediatricians already assume.<sup>21–23</sup>

#### CYCLE OF DEPLOYMENT

In 2001, Pincus et al reinforced a model describing the typical emotional reactions of family to deployment, called the "emotional cycle of deployment." With onset of longer and repeated exposures, it is unclear whether a cycle is the correct paradigm, but it does provide insight into the diverse and complex nature of deployments, reflecting both the tremendous resilience as well as vulnerability of military families. Table 1 provides guidance for practitioners to assess and intervene with families throughout the cycle of deployment.

Before the wars in Iraq and Afghanistan, deployment was a rare occurrence for the vast majority of military forces. Most families had never experienced a separation to a hostile

TABLE 1 Anticipatory Guidance for Cycle of Deployment to Assess and Intervene in the Family System

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Stages of Deployment	Provider Assessment and Anticipatory Guidance
Predicting difficulties with deployment	Assess previous history of family dysfunction, mental health issues in parent, special needs of children, recent family relocation, and previous problems during a deployment.
Predeployment	Discuss responsibilities and expectations of each family member during upcoming deployment. Make plans and goals for family rather than "put lives on hold." Decrease likelihood of misperception and distortion. Prepare for communication strategies and expectations.
Deployment	Initiate plans made during predeployment. Continue family traditions and develop new ones. Facilitate children's understanding of the finite nature of the deployment by developing timelines (as age appropriate).
Sustainment	Establish support systems (extended family, friends, religious group, family support groups, etc). Communicate with deployed service member via e-mail, phone, and letters. Avoid overspending. Spend some time without the children. Ask children how they are doing.
Postdeployment	Take time to communicate and get to know each other. Spend time talking to each other. Take time to make decisions and changes in routine. Lower holiday expectations. Keep plans simple and flexible. Do not try to schedule too many things during the first few weeks. Let absent parent "back into" the family circle.

environment before 2001. Since then, however, families have experienced prolonged and repeated wartime deployments. Deployments have 3 stages. each with typical dynamics: predeployment, deployment (including sustainment), and postdeployment (or redeployment).

1. The predeployment stage begins with the unit sending orders for a service member to deploy. Sometimes there are months of notice and preparation, and sometimes only days. Often, soldiers know their next deployment date when they return from a previous deployment. On 1 survey, spouses indicated that the hardest thing about a deployment was hearing of subsequent deployments.15 Predeployment can be challenging for both the service member and the at-home parent. Often, the unit requires long hours and lengthy trainings in the months leading up to deployment, resulting in extended absences. Decisions to find alternative or additional child care are often expensive and stressful. For the 40% to 60% of athome parents who work outside the home, decisions about careers, financial adjustments, or excessive leave to support sick children result in many spouses quitting their jobs. Legal requirements, such as power of attorney and a will, bring up issues of mortality. Unresolved anxieties and expectations from previous deployments interfere with preparation for new deployments. Although the predeployment stage is stressful for parents, it can be confusing to children, who may not understand why separation is necessary and have no concept of the change about to occur. Children at various developmental ages experience excitement, denial, worry, fear, and anger. Emotional withdrawal is not uncommon immediately before deployment. Last-minute or recurrent goodbyes often increase tension.

2. **Deployment** typically lasts between 3 and 15 months. The deployment stage usually begins with a tearful ceremony, despite strong feelings of support, patriotism, and duty. This is often followed by a period (usually 1-6 weeks) of emptiness, loss, and abandonment. Spouses report feeling numb, sad, and vulnerable.15 The intensity leading up to a goodbye can be overwhelming, and the sense of relief that the deployment has actually started can be confusing. After about 6 weeks, most families try to establish a routine. This stage of adjustment may be erratic, with good days and bad days. Finding new resources and new routines and understanding the limits of the family's coping abilities occurs during this time.

Sustainment is the period during the deployment stage (usually between 4 and 13 months) when a new routine without the deployed parent is established. During this time, school-age children and adolescents can develop some positive attributes of a deployment. These difficult life experiences (not dissimilar to family illness, a house fire, etc) can foster maturity, provide opportunities to acquire new skills, encourage independence, build new relationships, and strengthen family cohesion. Deployed service members may come home for 2 weeks for a "midtour" or rest and recuperation leave. Many families have said that rest and recuperation leave is a difficult time for children because it often falls during the school year; children are distracted by anticipation, excitement, and a short period of visitation; and they then have to say goodbye all over again. Despite trying to find resilience and strength, many families describe deployment as a "surviving, not thriving" time. For the month or 2 before homecoming, there may be worry as well as excitement. New independence or self-reliance may have emerged,

and family members are unsure how to reintegrate a deployed parent into a year-older family. This can also be a challenge to the returning service member.

3. At postdeployment (reunion), most families start off with a "honeymoon." The happiness of reuniting is mixed with getting reacquainted and deciding how to share the time lost. There is a sense that problems can be solved, and, to some extent, families can return to "normal." However, the new normal may look different from the roles family members played when a service member left over a year before. The service member is immediately thrust back into a full-time family life, which is desired but often difficult to accommodate while readjusting to daily routines. "Block leave" is 2 to 4 weeks of vacation time given to the postdeployment individual or unit but may not coincide with family member availability from school or work. During this time, at-home parents often want some much-needed respite after a prolonged period of "full-time" parenting.

### **ASSESSING FAMILY'S RESPONSE TO STRESS**

Stress reactions represent an evolutionary advantage in the face of danger, prompting effective adaptations to changing conditions in the environment. Such reactions are often critical and not detrimental. How well or poorly an individual or family responds to a given stressor, such as wartime deployment, is dependent on several factors:

- the individual's previous experiences with stress;
- the meaning of this specific stress;
- the family context where the stress is experienced, including how the parent is coping; and
- the inherent, as well as external, resources available to deal with the stress.

e2006

"To assume either widespread pathology or uniform resilience to the stresses of wartime deployments would be superficial and harmful to children and their families."25 Most families experience substantial stress, and although the risk is present, a minority of families have evidence of being "stressed out," such as maladaptive coping, mental illness, substance use or abuse, or maltreatment. Resilience appears to play a major factor in all phases of deployment. Overall, studies indicate protective factors, including family readiness, "meaning making" of the situation, receipt of community and social support, acceptance of military lifestyle, ability to develop self-reliant coping skills, and adoption of flexible gender roles. Additionally, at least 5 years of marriage, higher parental education, and civilian spouse working outside the home may contribute to stronger family resilience<sup>9</sup> during deployments.

### EFFECT OF WARTIME DEPLOYMENT ON CHILDREN

### **Previous Research**

In the earliest research (1949) on military families coping with postwar settings, Hill studied how the family adjusted to World War II soldiers' return. He proposed that the actual war "time of separation" needed to be considered in the context of family resources. On the basis of family interviews, he noted that the meaning families placed on the war, and the "time of separation" predicted positive versus negative adaptation on return of the soldier.26 Subsequently, McCubbin and Patterson studied families of Vietnam veterans and concluded that a "pile up" of prewar, during-war, and postwar stressors "added up" to the degree of maladaptation and that a cumulative effect of stress was not purely the result of wartime deployment.<sup>27</sup> This concept of contextual factors in a family influencing coping and adaptation to stress of war studied during 20th-century US military conflicts may provide important insight into the first war experiences of the 21st century.

In 1978, LaGrone coined the term "military family syndrome" following review of 792 Army charts of children seen in psychology clinics for behavioral problems.<sup>28</sup> He concluded that military families suffer greater psychosocial difficulties than do families in the general population. Later, more methodologically rigorous research, with prospective studies of military versus nonmilitary children, did not find any differences between military versus nonmilitary children. Interestingly, 1 study of Navy families, for whom routine 6-month "sea duty" deployments were a way of life for years, indicated that children demonstrated increased responsibility, independence, and confidence compared with their peers without deployment experiences, suggesting that children develop a different and beneficial parent-child relationship with the athome parent.<sup>29</sup> In many nonmilitary situations in which parents are absent for periods of time but not in danger, many children demonstrate resilience and strong coping strategies. Clearly, dangerous combat deployments of parents are significantly more distressing than are peacetime deployments for most children. The first combat deployment studies were conducted during Operation Desert Storm (1990-1991). Children demonstrated moderate degrees of increased internalizing symptoms (such as depression and anxiety)<sup>30,31</sup> and possibly less family cohesion.<sup>32</sup> At-risk groups included those with preexisting psychosocial issues and at-home parents with psychopathologic problems. One study addressing whether gender of deployed parents affected children found no significant differences in child adaptation between fathers versus mothers who were deployed.<sup>33</sup> An Army family study reported that children who demonstrated strong coping skills during deployment had greater adaptation postdeployment.<sup>34</sup> Additional information about the history of military children and families is available in a recent *Pediatrics* supplement devoted to military pediatrics.<sup>35</sup>

### **Current Research**

Wartime deployment can be stressful for a child, regardless of his or her developmental stage. Changes in behavior, both externalizing and internalizing, and changes in school performance are reported.7-9,11,36-38 High levels of sadness and worry are reported in most age groups.7-9,39 Depressive symptoms are reported in approximately 1 in 4 children experiencing deployment of a parent.<sup>39</sup> More than one-third of children report excessive worry about their parent's deployment.38,39 A parent survey noted 1 in 5 school-age children cope poorly,9,38,39 and a similar number have academic problems. Length of deployment was associated with significant behavioral health problems.7 Children and their families were ambivalent about access to a wartime parent, on the one hand comforted by talking to parent on computer<sup>15</sup> and on the other hand identifying media coverage as a source of stress.39 In addition, a recent population-based study reported increased use of mental-behavioral health services in children whose parents were deployed.<sup>11</sup> Finally, a large population study of 307 520 children of parents in the nonretired active duty military, children 5 to 17 years of age (2003–2006) noted a greater number of mental health diagnoses and more

diagnoses correlating with the total time of deployment.<sup>40</sup>

### Children of All Ages Are Affected by Wartime Deployments

### Infants and Toddlers

In a survey of almost 4000 military spouses with and without deployed partners, researchers investigating depressive symptoms during pregnancy noted that twice as many women with deployed partners reported depressive symptoms before and after delivery compared with those whose partners were at home.41 In 2008, the first study of preschool-age children affected by current wartime deployments revealed higher emotional reactivity, anxiousness/depression, somatic complaints, and withdrawal than did children whose parents were not deployed.<sup>37</sup> A subsequent study of 57 families with young children found similar findings during deployments.42

### School Age

e2008

The degree of at-home parental stress was the most significant predictor of the child's psychosocial functioning during a wartime deployment. Schoolage children whose parents were younger, had been married for a shorter period of time, and were junior enlisted rank were at higher risk of having psychosocial problems. Parents who had a college education, a sense of military support, and community support had less parental stress and reported fewer psychosocial problems in their children. Using the Pediatric Symptom Checklist during parental deployment, school-age children scored "high-risk" for emotional and behavioral problems 2.5 times more frequently than national norms. Sleep problems were noted in a majority (56%) of the children.9 Lester et al found combat deployments had a cumulative negative psychosocial effect on a sample of school-age

children that persisted despite the return of the deployed parent.<sup>7</sup> Mansfield accessed electronic medical records for outpatient care on more than 300 000 school-age children and found a similar "dose-response" pattern between deployment and increased mental health diagnoses.<sup>40</sup>

### *Adolescents*

In a focus group of adolescents whose parents were deployed to Iraq (Operation Iragi Freedom, Operation New Dawn) and Afghanistan (Operation Enduring Freedom), there were reported changes in relationship with the deployed parent, concern and anxiety about the deployed parent's wellbeing, and worse performance in school, yet increases in responsibility and maturity in caring for younger siblings.38 In a telephone survey of 1500 military youth and their at-home parent, Chandra reported increased emotional difficulties associated with longer deployment times and emphasized the importance of positive coping and mental health of the at-home parent.8 The effects of war can have life-threatening consequences for military children and their families far removed from the battlefields. A study in Texas demonstrated the rate of child maltreatment in the military increased significantly since 2001 and was associated with increased rates of deployment. For military personnel with at least 1 dependent, the rate of child maltreatment increased by approximately 30% for every 1% increase in service members who left for or returned from combat.43 In another study, from a confidential registry of substantiated cases in the Army, child maltreatment was found to be 42% higher in families of US enlisted soldiers during combat deployment versus nondeployed status and exceeded the comparative civilian rates

of maltreatment, which remained steady during the same time frame. Overall, child maltreatment was 3 times higher during times of deployment, with neglect being 4 times higher and physical abuse being 2 times higher. This study reported the highest increase in maltreatment to be attributed to the at-home caregiver while the service member was deployed.<sup>44</sup>

### **SUGGESTIONS FOR PEDIATRICIANS**

All pediatricians should be prepared to address parental (and other relationships that may be meaningful to the child) wartime deployment issues. This includes recognition of servicespecific characteristics of the deployed service member, stage of deployment, and whether there have been previous deployment experiences. The role of the pediatrician is to assess the level of family and child stress that occurs whenever there is a family change, like wartime deployment, and to use the principles of anticipatory guidance, psychoeducation, and continued surveillance and screening as families are seen over time. Asking "How are you doing with this deployment?" may be the single most important family assessment question. Another question is, "Has anyone in your family or close community been involved with wartime experiences?" If yes, the followup is "How are your family members coping with this experience?" There are specific situations that warrant additional probing such as, during the postpartum period, when new mothers with a deployed partner may be at heightened risk of depression. Additional guidance during perinatal and postpartum period can be found in this article's Appendix. Another situation to plan for includes speaking confidentially with adolescents, which may help to ensure they are not downplaying their fears and worry. Because of the increased risk of child maltreatment during deployments, child abuse screening and mental health screening of child caregivers are also important elements of the clinical encounter.

Next, the pediatrician should determine the developmental age of the child and assess his or her understanding of deployment (see earlier section, "Cycle of Deployment"). Families need reassurance that children's reactions to a deployed parent are common reactions (see Table 2) and that, for the most part, children adapt to the experience with effective coping skills. Adolescents self-report problems with a similar prevalence as their parents and may have more valid reporting than their parents of their own internalizing symptoms.<sup>38</sup>

### Common Child and Adolescent Reactions to Deployment

- Preschool: children at this age have difficulty with change and will not have a full understanding of why a parent is leaving or for how long, compared with the older child and adolescent. Before deployment, they will understand that there has been a change in the family behavior but will not understand the full extent until the parent is absent. Children need reassurance that they will be cared for and kept safe and they did not cause the deployment.
- School-age: children at this age have a greater understanding of why a parent is being deployed, but there still may be confusion. They may hear from other friends and see stories about the war on television and may have heightened worries about the safety of their loved one. It is reasonable for the remaining parent to shelter children from the day-to-day details

TABLE 2 Common Reactions to Deployment<sup>45</sup>

Feelings	Behaviors
Preschool	
Confusion	Clinging, demands for attention
Anger	Problems separating from the remaining parent
Guilt	Irritability and aggression
	Regression (thumb sucking, bedwetting)
	Sleep disturbances
	Feeding issues (more picky)
	Easy frustration and more difficult to comfort
School-age	
Same feelings as preschool plus:	New behavior problems or in intensification of already existing problems
Increased sadness (lack of family	Regression
normalcy and loss of deployed parent)	
Worry about deployed parent	Rapid mood swings
Fear that remaining parent might leave or die	Changes in eating and sleeping
Anger at parent for missing important events	Anger at both parents for disrupting normalcy
	Changes in behavior at school and with friends (anger, aggression)
	Need to be and do "normal" things (eg, parties)
	Somatic complaints
Adolescent	
Anger	Misdirected or acting-out behavior toward others or themselves
Sadness	School problems
Depression	Apathy, loss of interest, noncommunication,
	and denial of feelings
Anxiety	Increased importance of friends to the detriment of reasonable family life
Fear	Trying to take charge of the family

of news about the war. Sometimes children feel responsible for the parent being deployed, especially if there has been unresolved tension between the deployed parent and the child. The parent should explain the child's situation to a schoolteacher. It is important to monitor thoughts and feelings about a spouse or partner in front of the child. At this age, children need a trusted adult, either the remaining parent or another adult, with whom they can talk and share their feelings. They need to feel safe and secure.

 Adolescents: teenagers understand the reasons deployment is occurring and the full ramifications of the deployment process. They may feel angry and sad and often get support from their peers outside the family. They may not wish to share their thoughts and feelings with family members. They may not want their parent to inform school of parental deployment. The at-home parent should accept and understand this coping mechanism while monitoring how their teenager is doing in school and with friends.

### Helping Children Cope and Foster Resilience During Deployment

Preschool and Elementary School Children (3–9 Years)

To help the child feel connected to the deployed family member, caregivers should do the following:

- Continue the discussion about the deployed parent on a regular basis.
- 2. Communicate to the deployed parent frequently and regularly: write letters, draw pictures, put together "goodie" packages.

- Keep a calendar for each child so he or she can see when the deployed family member is coming home.
- 4. Have a picture of the deployed parent with the children or with the family. Pictures can be hung up or put in prominent places. This is especially important for the preschool-age child.
- Protect younger children from seeing or hearing about the war effort or violence on television or in the newspapers.
- Have deployed parent audio or video record a favorite bedtime story before leaving, especially if reading was a normal routine before leaving.
- Seek support from extended family or a trusted adult (mentor, for school-age child) who can be available for the children.
- 8. Ask family and friends not to talk about the painful or scary aspects of deployment.
- 9. Keep up the family routine.
- Try to spend extra time with the child or children, if possible and respond empathically to the needs for more attention.
- 11. Encourage ways for children to express their feelings. For younger children, it may be drawing or playing with dolls, and for older children, it may be telling stories or keeping a journal and possibly sharing the journal, especially at bedtime.
- 12. Appreciate that young children will act out scary and fearful feelings through play. Support and understand this process and monitor the behaviors and feelings during times of family or school activities
- 13. Request the free Sesame Street video Talk, Listen, Connect (www.

- militaryonesource.com). Request free Military Child or Youth videos, *Mr. Poe and Friends Discuss Reunion After Deployment* (www. aap.org/sections/uniformedservices/deployment/videos.html) for younger children.
- 14. Communicate to teachers about the deployment and continue to check in on their school performance and behaviors.
- 15. Develop a scrapbook of children's activities and accomplishments to be shared when there is reunion. This will allow the child to "show and tell."

### Middle School and Adolescence (10–18 Years)

- Encourage conversations about deployment and war ("I know this is tough for you and I am here for you. Feel free to talk with me at any time.").
- 2. Help children maintain regular contact with the deployed parent.
- Monitor excessive exposure or contact with media coverage of the war.
- 4. Maintain routines.
- Do not expect teenagers to act as coparents. They should maintain regular activities and responsibilities.
- 6. Do not change any of the discipline rules or their consequences.
- Appreciate the needs of teenagers to be with peers and provide special time with the teenager doing special activities.
- Be patient and calm in the face of increased anger irritability and withdrawal. Extra support or physical affection can help.
- Encourage teenagers to get appropriate nutrition, rest, and exercise and monitor for changes in sleep patterns, changes in

- school, and activities of daily living.
- Encourage middle-school-age children and teenagers to keep a diary and respect the need for privacy if they wish not to share.
- 11. Order a free copy of the video *Military Youth Coping With Separation: When Family Members Deploy* (see Appendix for Resources).
- 12. Encourage children and teenagers to continue extracurricular and community activities.
- Consider attending "Operation Purple" camp (www.militaryfamily.org) activities or summer camps for students with a deployed parent.

### When Should a Primary Care Pediatrician Refer for Additional Help?

If a family is struggling with deployment, the pediatrician can help them contact their "rear detachment chaplain," the "family readiness group," a TRICARE case coordinator, Military One Source, or the local Exceptional Family Member Program; seek deployment-related respite or child care services or offer school-age children "Operation Purple" camp.

The pediatrician may consider a referral to a mental health professional

- if reassurance and helping the parent cope using a psychoeducational intervention or generally supportive counseling is not working after 2 visits or if there is significant stress at the first visit.
- if the pediatrician is unsure of his or her counseling and psychoeducational skills and the family is significantly stressed (learn more about motivational interviewing<sup>46</sup>).
- if the child's behaviors have become more extreme or continue for up to 3 months after the deployed parent has returned home.<sup>47</sup>

- if there is a significant change in behavior or a drop in grades at school.
- if there is increased and sustained negativity and reassurance and support does not help.
- 6. if the teenager is continually away from home and does not check in with the at-home parent.
- if the at-home parent is not able to cope; is excessively worried, anxious, or simply overwhelmed; and cannot respond to the child's emotional needs.
- if there is injury of a parent and if other resources provided are not effective (discussed next section).
- If there is death of a parent and other support programs provided for bereaved families are not effective (see next section).

### **Injury or Death of a Parent**

From October 1, 2001, through February 6, 2012, there were 6351 American casualties in Operation Iraqi Freedom, Operation New Dawn, and Operation Enduring Freedom and 47 545 wounded in action.48 Although the majority of combat casualties have been active duty soldiers, 11.5% have been service members from the National Guard and 7% have been service members from the Reserve.47 The combat death or significant injury of a parent is an unexpected and devastating experience for all families.48,49 The type of injury and degree of disability will determine the way family members cope and adapt. Many families of National Guard and Reserve service members do not have the same community supports as those on active duty. The military medical system and the Office of Veterans Affairs will carry out rehabilitation and medical care of the injured service member. The pediatrician should be available to monitor the social-emotional impact of such an

event on the children and the spouse and refer when appropriate. In this setting, the pediatrician should become familiar with and/or contact the Center for the Study of Traumatic Stress (www. centerforthestudyoftraumaticstress.org), which has expertise and resources specific to combat-injured families.<sup>50</sup>

The death of a parent or significant parenting figure during war is a catastrophically disorganizing event for a child, the surviving parent, and the family. It is one of the unspoken fears that family members endure during wartime deployment. Helping children understand parental death requires a developmentally unique sensitivity, and universal preventive counseling in the face of such a devastating stress should be encouraged. 51,52 The pediatrician should assess the socialemotional reaction of the child in relationship to his or her developmental stage, follow the child over time, and support the remaining parent or life partner. Important policy statements and reports have been provided for pediatricians who desire additional guidance in these skills (see Appendix). When a family is notified of the death of an active duty service member, they are assigned to a Casualty Assistance Representative (CAR), whose sole purpose is to help the family through the military's unique entitlement process and find needed resources. For example, families who reside in government housing (or have a housing allowance) are allowed to remain at their current location (both housing and schooling) for up to 6 months as they determine next steps. Because of the devastating nature of this event, some parents or partners may need referral for social-emotional assessment and therapy, as appropriate. A specific resource for military families is Tragedy Assistance Program for Survivors (www.TAPS.org).53 The pediatrician can encourage parents

to seek out additional military support through Decedent Affairs, Chaplains' Office, or Commanders of the military unit. This support is usually made available at the time that the spouse or partner is notified of the death of their loved one.

### **Supporting the Parent**

Above all, to have the strength to help children, the nondeployed parent needs to feel in control and have someone to help him or her. The pediatrician can encourage each primary caregiver to stay healthy and connected, including someone with whom to share experiences and opportunities for personal growth, respite, and spiritual wellness. The pediatrician can support and help the parent find a mental health professional so that the parent may be better able to care for his or her children.<sup>54</sup> A resource for all military spouses to access adult mental health services, regardless of location, is www.MilitaryOneSource.com. In the setting of a medical home, pediatricians should be familiar with this Web site to help family caregivers with their own emotional needs. Many deployment-specific resources available to active duty families can be accessed on this Web site for activated National Guard and Reserve families, including military family life consultants, chaplains, legal assistance, social work services, and new parent support programs. Recently the Department of Defense, under the auspices of the United States Bureau of Navy, Medicine and Surgery, initiated a demonstration project titled Family Overcoming Under Stress (FOCUS). This project began in 2008 and as of 2010 included 14 military institutions. The goal of the project was to investigate the impact of a family-centered program on military families, addressing stress and mental health, using a "trauma informed, skill based, family centered prevention intervention designed to mitigate the sequelae of stressful deployment-related events on children and parents." The 8-session resiliency psychoeducation program for parents and children used a trained "Resiliency Trainer." Results demonstrated a decrease in parental posttraumatic stress, depression, and anxiety as well as a decrease in childhood conduct problems, emotional symptoms, and total childhood difficulties. In addition, there was significant improvement in "child pro-social functioning and increases in children's use of positive coping strategies."55-58 In addition to direct contact with

In addition to direct contact with a case manager or mental health locator, at-home parents can request free parenting and support books from the online library and can find local support groups.

The American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health has previously released a report titled "Psychosocial Implications of Disaster or Terrorism on Children: A Guide for the Pediatrician."47 The report discusses the diagnostic aspects of posttraumatic stress disorder and acute stress disorder, which may be helpful if a child or adolescent is demonstrating excessive or prolonged symptoms associated with parental deployment or reunion, especially in the circumstance of parental injury. Additional militaryunique resources for the pediatrician can be found on the Section on Uniformed Services Web site (www.aap. org/sections/unifserv/deployment/index. htm), which includes additional military Web sites, recent research publications, videos for children and adolescents, and information about summer camp experiences, such as Operation Purple camps.

The vast majority of military families can and do cope and adapt to service member deployments. Pediatricians

need to recognize when deployment is affecting the emotional and social wellbeing of children and their parents and relatives and be particularly sensitive to the unique needs of National Guard and Reserve service member families. They need to gather deployment-specific information to assess and monitor the socialemotional reaction of children and family members and refer to mental health professionals or deploymentspecific specialists for more extensive diagnostic and therapeutic interventions, as appropriate. By understanding the military family and the experiences of parental wartime deployments, all pediatricians and other health care providers serving children can be the "front line" for the health and wellbeing of US military children and their family members, especially in time of war.

### **Appendix**

## GENERAL INFORMATION RESOURCES FOR PEDIATRICIANS AND PARENTS

### **General Pediatric Resources**

- 1. The American Academy of Pediatrics, Section on Uniformed Services Web site. Available at: www.aap.org/sections/unifserv/deployment/index. htm. Learn about what primary care providers are doing to take care of military children and teens. Order copies of free military child and youth support videos, including the DVD Military Youth Coping With Separation.
- Ginsburg KR. Building Resilience in Children and Teens: Giving Kids Roots and Wings. 2nd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2011.
- Massachusetts Child Psychiatry Access Project toolkit. Available online for assessing military children at well child visits: www.

- homebaseprogram.org/community-education/~/media/DDA3707B-C4A648E89F1A7C619C48FC28.pdf.
- 4. Hooah 4 Health. Available at: www. hooah4health.com. Checklists that pediatricians can help families work through for each stage of deployment, understand reactions postdeployment, and find resources.
- Center for the Study of Traumatic Stress. Available at: www.centerforthestudyoftraumaticstress.org. Resources and research for health care providers, service members, and their families.
- American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health. The pediatrician and childhood bereavement. Pediatrics. 2000;105(2):445–447.
- Bonanno GA, Mancini AD. The human capacity to thrive in the face of potential trauma. *Pediatrics*. 2008;121(2):369–375.
- 8. Levetown M; American Academy of Pediatrics Committee on Bioethics. Communicating with children and families: from everyday interactions to skill in conveying distressing information. *Pediatrics*. 2008;121(5):e1441—e1460.
- Madrid PA, Grant R, Reilly MJ, Redlener NB. Challenges in meeting immediate emotional needs: short-term impact of a major disaster on children's mental health: building resiliency in the aftermath of Hurricane Katrina. *Pedi*atrics. 2006;117(5 pt 3):S448—S453.
- Hagan JF Jr; American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health; Task Force on Terrorism. Psychosocial implications of disaster or terrorism on children: a guide for the pediatrician. Pediatrics. 2005;116(3):787-795.
- 11. Earls MF; Committee on Psychosocial Aspects of Child and Family

Health American Academy of Pediatrics. Clinical Report. Incorporating recognition and management of perinatal and postpartum depression into pediatric practice. *Pediatrics*. 2010;126(5):1032–1039. Available at: http://pediatrics.aappublications.org/content/early/2010/10/25/peds.2010-2348.full.pdf+html.

 Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. Br J Psychiatry. 1987;150:782–786

### Parent Resources

- Sesame Street Talk. Listen, Connect.
   Preschool-aged deployment support
   video program. Learn about the program and order free copies at:
   www.sesameworkshop.org/tlc.
- 2. Operation Purple Camps: www.nmfa. org/site/PageServer?pagename= op\_default. The goal of these free summer camps is to bring together youth who are experiencing some stage of a deployment and the stress that goes along with it. Operation Purple camps give kids the coping skills and support networks of peers to better handle life's ups and downs.

- Military One Source. (800) 342-9647 or www.militaryonesource.com. Military support solutions for families. The single best resource for any family in any branch of service.
- 4. Ginsberg KR. A Parent's Guide to Building Resilience in Children and Teens: Giving Your Child Roots and Wings, 2nd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2011.
- 5. Military Home Front: www.military-homefront.dod.mil.
- Military Child Education Coalition: www.militarychild.org.7. Military Teens on the Move: www.dod.mil/ mtom/index t.htm.
- 7. Tragedy Assistance Program for Survivors: www.taps.org.
- 8. Zero to Three—Coming Together Around Military Families: www. zerotothree.org/about-us/funded-projects/military-families.

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### **REFERENCES**

- Thomas JL, Wilk JE, Riviere LA, McGurk D, Castro CA, Hoge CW. Prevalence of mental health problems and functional impairment among active component and National Guard soldiers 3 and 12 months following combat in Iraq. Arch Gen Psychiatry. 2010;67(6):614–623
- Milliken CS, Auchterlonie JL, Hoge CW. Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. JAMA. 2007;298(18):2141–2148
- Howell A, Wool ZH. The War Comes Home: The Toll of War and the Shifting Burden of Care. Providence, RI: Watson Institute for

- International Studies, Brown University, June 13, 2011. Available at: http://costsofwar. org/article/us-veterans-and-military-families. Accessed January 15, 2013
- American Psychological Association. The Psychological Needs of US Military Service Members and Their Families: A Preliminary Report. Washington, DC: American Psychological Association; 2007. Available at: www. apa.org/about/policy/military-deploymentservices.pdf. Accessed July 23, 2012
- The White House. Presidential initiative supports military families [press release, January 24, 2011]. Available at: www. whitehouse.gov/the-press-office/2011/01/24/

- presidential-initiative-supports-military-families. Accessed July 23, 2012
- National Scientific Council on the Developing Child. Persistent Fear and Anxiety
  Can Affect Young Children's Learning and
  Development: Working Paper No. 9. Cambridge, MA: National Scientific Council on
  the Developing Child, Harvard University;
  2010. Available at: http://developingchild.
  harvard.edu/index.php/resources/reports\_
  and\_working\_papers/working\_papers/wp9/.
  Accessed July 23, 2012
- Lester P, Peterson K, Reeves J, et al. The long war and parental combat deployment: effects on military children and at-home

- spouses. J Am Acad Child Adolesc Psychiatry. 2010;49(4):310–320
- Chandra A, Lara-Cinisomo S, Jaycox LH, et al. Children on the homefront: the experience of children from military families. *Pediatrics*. 2010;125(1):16–25
- Flake EM, Davis BE, Johnson PL, Middleton LS. The psychosocial effects of deployment on military children. J Dev Behav Pediatr. 2009;30(4):271–278
- Gorman LA, Blow AJ, Ames BD, Reed PL. National Guard families after combat: mental health, use of mental health services, and perceived treatment barriers. Psychiatr Serv. 2011;62(1):28–34
- Gorman GH, Eide M, Hisle-Gorman E. Wartime military deployment and increased pediatric mental and behavioral health complaints. *Pediatrics*. 2010;126(6):1058– 1066
- Department of Defense. 2009 Demographics Profile of the Military Community. Available at: http://www.militaryonesource.mil/12038/ MOS/Reports/2009\_Demographics\_Report. pdf. Accessed July 23, 2012
- Waterhouse M, O'Bryant J. National Guard Personnel and Deployments: Fact Sheet. CRS Report for Congress. Washington, DC: Congressional Research Service, National Library of Medicine; 2008. Available at: www.fas.org/sgp/crs/natsec/RS22451.pdf. Accessed July 23, 2012
- Tricare Insurance Program Web site. Available at: www.tricare.osd.mil. Accessed July 23, 2012
- National Military Family Association. Report on the Cycles of Deployment Survey: An Analysis of Survey Responses From April Through September, 2005. Available at: www.militaryfamily.org/assets/pdf/NMFACyclesofDeployment9.pdf. Accessed July 23, 2012
- Hoge CW, Castro CA, Messer SC, McGurk D, Cotting DI, Koffman RL. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. N Engl J Med. 2004; 351(1):13–22
- Hoge CW, McGurk D, Thomas JL, Cox AL, Engel CC, Castro CA. Mild traumatic brain injury in U.S. Soldiers returning from Iraq. N Engl J Med. 2008;358(5):453–463
- 18. RAND Corporation, Center for Military Health Policy Research. Invisible Wounds of War. Psychological and Cognitive Injuries, Their Consequences and Services to Assist Recovery. Santa Monica, CA: RAND Corporation; 2008. Available at: www.oregon.gov/ODVA/TASKFORCE/docs/Resources/Invisible-WoundsOfWar.pdf?ga=t. Accessed July 23, 2012

- Bachynski KE, Canham-Chervak M, Black SA, Dada EO, Millikan AM, Jones BH. Mental health risk factors for suicides in the US Army, 2007–8. *Inj Prev.* 2012;18(6):405–412
- Mansfield AJ, Kaufman JS, Marshall SW, Gaynes BN, Morrissey JP, Engel CC. Deployment and the use of mental health services among U.S. Army wives. N Engl J Med. 2010;362(2):101–109
- 21. Woolston JL. A child's reactions to parents' problems. *Pediatr Rev.* 1986;8(6):169–176
- 22. Committee on Psychosocial Aspects of Child and Family Health and Task Force on Mental Health. Policy Statement—The future of pediatrics: mental health competencies for pediatric primary care. Pediatrics. 2009;124(1):410–421
- 23. Foy JM; American Academy of Pediatrics Task Force on Mental Health. Enhancing pediatric mental health care: algorithms for primary care. *Pediatrics*. 2010;125 (6 suppl 3):S109—S125
- Pincus SH, House R, Christenson J, Adler LE. Emotional cycle of deployment: a military family perspective. US Army Med Depart J. 2001;Apr/June:15–23. Available at: http://4h. missouri.edu/programs/military/resources/ manual/Deployment-Cycles.pdf. Accessed April 9, 2013
- Cozza SJ, Chun RS, Polo JA. Military families and children during operation Iraqi freedom. *Psychiatr Q.* 2005;76(4):371–378
- Hill R. Families Under Stress: Adjustment to the Crisis of War Separation and Reunion. Westport, CT: Greenwood Press; 1971
- 27. Patterson J, McCubbin H. Gender role and coping. *J Marriage Fam.* 1984;46(1):95–104
- 28. Lagrone DM. The military family syndrome. *Am J Psychiatry.* 1978;135(9):1040–1043
- Drummet AR, Coleman M, Cable S. Military families under stress: implications for family life education. Fam Relat. 2003;52(3): 279–287
- Rosen LN, Teitelbaum JM, Westhuis DJ. Children's reactions to the Desert Storm deployment: initial findings from a survey of Army families. Mil Med. 1993;158(7):465— 469
- Jensen PS, Martin D, Watanabe HJ. Children's response to parental separation during operation desert storm. J Am Acad Child Adolesc Psychiatry. 1996;35(4):433— 441
- Kelley ML. The effects of military-induced separation on family factors and child behavior. Am J Orthopsychiatry. 1994;64(1): 103–111
- Applewhite LW, Mays RA. Parent-child separation: a comparison of maternally and paternally separated children in military

- families. *Child Adolesc Social Work J.* 1986; 13(1):23–40
- 34. Huebner AJ, Mancini JA. Adjustments
  Among Adolescents in Military Families
  When a Parent Is Deployed: Final Report to
  the Military Family Research Institute
  and Department of Defense Quality of Life
  Office. West Lafayette, IN: Purdue University, Military Family Research Institute;
  2005
- Davis BE, Blaschke GS, Stafford EM. Military children, families, and communities: supporting those who serve. Pediatrics. 2012: 129: S 3–10
- 36. Chandra A, Burns RM, Tanielain T. RAND Corporation, Center for Military Health Policy Research. Understanding the Impact of Deployment on Children and Families. Findings from a Pilot Study of Operation Purple Camp Participants. Santa Monica, CA: Rand Corporation; April 2008. Available at: www.rand.org/pubs/working\_papers/WR566.html. Accessed July 23, 2012
- Chartrand MM, Frank DA, White LF, Shope TR. Effect of parents' wartime deployment on the behavior of young children in military families. Arch Pediatr Adolesc Med. 2008;162(11):1009–1014
- Aranda MC, Middleton LC, Flake E, Davis BE. Psychosocial screening in children with wartime-deployed parents. *Mil Med.* 2011; 176(4):402–407
- Orthner D, Den K, Rose R. 2005 SAF V Survey Report: Adjustment of Army Child to Deployment Separation (Survey Report). Chapel Hill, NC: The University of North Carolina at Chapel Hill; 2005. Available at: www.army.mil/cfsc/docs/saf5deployreport 15dec05.pdf. Accessed July 23, 2012
- Mansfield AJ, Kaufman JS, Engel CC, Gaynes BN. Deployment and mental health diagnoses among children of US Army personnel. Arch Pediatr Adolesc Med. 2011;165 (11):999–1005
- Smith DC, Munroe ML, Foglia LM, Nielsen PE, Deering SH. Effects of deployment on depression screening scores in pregnancy at an army military treatment facility. Obstet Gynecol. 2010;116(3):679–684
- Barker LH, Berry KD. Developmental issues impacting military families with young children during single and multiple deployments. *Mil Med*. 2009;174(10):1033– 1040
- Rentz ED, Marshall SW, Loomis D, Casteel C, Martin SL, Gibbs DA. Effect of deployment on the occurrence of child maltreatment in military and nonmilitary families. Am J Epidemiol. 2007;165(10):1199–1206
- Gibbs DA, Martin SL, Kupper LL, Johnson RE.
   Child maltreatment in enlisted soldiers'

- families during combat-related deployments. *JAMA*. 2007;298(5):528–535
- 45. Strategic Outreach to Families of All Reservists (SOFAR). The SOFAR Guide for Helping Children and Youth Cope with the Deployment of a Parent in the Military Reserves. Available at: www.sofarusa.org/download\_brochures\_flyers\_multimedia\_links.html. Accessed July 23, 2012
- 46. Lozano P, McPhillips HA, Hartzler B, et al. Randomized trial of teaching brief motivational interviewing to pediatric trainees to promote healthy behaviors in families. Arch Pediatr Adolesc Med. 2010;164(6):561–566
- 47. Hagan JF Jr American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health, Task Force on Terrorism. Psychosocial implications of disaster or terrorism on children: a guide for the pediatrician. *Pediatrics*. 2005;116 (3):787–795
- Iraq Coalition Casualty Count. Available at: www.iCasualties.org. Accessed July 23, 2012
- 49. Zero to Three. Honoring Our Babies and Toddlers: Supporting Young Children Af-

- fected by a Military Parent's Deployment, Injury or Death, a Guide for Professionals. Washington, DC: Zero to Three; 2009. Available at: http://main.zerotothree.org/site/DocServer/GuideFinalMay27.pdf?docID=9322. Accessed July 23, 2012
- Cozza SJ, Guimond JM, McKibben JB, et al. Combat-injured service members and their families: the relationship of child distress and spouse-perceived family distress and disruption. J Trauma Stress. 2010;23(1): 112–115
- Levetown M; American Academy of Pediatrics Committee on Bioethics. Communicating with children and families: from everyday interactions to skill in conveying distressing information. *Pediatrics*. 2008; 121(5):e1441–e1460
- Wessel MA. The primary pediatrician's role when a death occurs in a family in one's practice. *Pediatr Rev.* 2003;24(6):183–185
- Tragedy Assistance Program for Survivors Web site. Available at: www.TAPS.org. Accessed July 23, 2012
- 54. American Academy of Pediatrics. Committee on Psychosocial Aspects of Child and

- Family Health. The pediatrician and child-hood bereavement. *Pediatrics*. 2000;105(2): 445–447
- Beardslee W, Lester P, Klosinski L, et al. Family-centered preventive intervention for military families: implications for implementation science. *Prev Sci.* 2011;12(4): 339–348
- Saltzman WR, Lester P, Beardslee WR, Layne CM, Woodward K, Nash WP. Mechanisms of risk and resilience in military families: theoretical and empirical basis of a family-focused resilience enhancement program. Clin Child Fam Psychol Rev. 2011;14(3):213–230
- 57. Lester P, Mogil C, Saltzman W, et al. Families overcoming under stress: implementing family-centered prevention for military families facing wartime deployments and combat operational stress. *Mil Med.* 2011; 176(1):19–25
- Lester P, Saltzman WR, Woodward K, et al. Evaluation of a family-centered prevention intervention for military children and families facing wartime deployments. Am J Public Health. 2012;102(S1):S48–S54

### Health and Mental Health Needs of Children in US Military Families

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