

# Military deployment: the impact on children and family adjustment and the need for care

Alexander C. McFarlane

University of Adelaide, The Centre for Military and Veterans' Health, Adelaide, South Australia

Correspondence to Professor Alexander C. McFarlane, MB BS (Hons), MD, FRANZCP, Dip Psychother, Professor of Psychiatry, Centre for Military and Veterans' Health, Level 2/122 Frome Street, Adelaide, South Australia 5000  
Tel: +61 8 8303 5200; fax: +61 8 8303 5368;  
e-mail: alexander.mcfarlane@adelaide.edu.au

**Current Opinion in Psychiatry** 2009, 22:369–373

## Purpose of review

Over a million children and their families have now experienced the stress of the deployment of a family member during the recent wars in Iraq and Afghanistan. Whereas there is an extensive clinical literature about the developmental challenges facing children and issues of family adjustment, there is a lack of systematic research. This review summarizes the findings of recent publications.

## Recent findings

Some veterans develop posttraumatic stress disorder as a consequence of their experiences. This condition drives many of the adverse changes in the families of returning veterans through the effects on intimacy and nurturance in their families of withdrawal, numbing and irritability that are components of posttraumatic stress disorder. There is the more general challenge that all families and children face when a partner/parent deploys of role ambiguity consequent on anxiety that is provoked by the threat that deployed family members experience. A study of Kuwaiti military showed that mothers' anxiety had the greatest impact on the children of deployed fathers, although absence of posttraumatic stress disorder in mothers could mitigate the effects of their fathers' posttraumatic stress disorder. Intervention programs are described, but there is a poverty of their evaluation.

## Summary

A substantial advantage of focusing on family adjustment is that it can facilitate access to mental healthcare for veterans while assisting families' positive adaptation.

## Keywords

children, family adjustment, military deployment

Curr Opin Psychiatry 22:369–373  
© 2009 Wolters Kluwer Health | Lippincott Williams & Wilkins  
0951-7367

## Introduction

Sadly, warfare demonstrates the progression of modern medicine. The lessons learnt are all too apparent, and they are reflected particularly in the improved survival rates of physically injured people. Less dramatic, but equally important, has been the recognition and treatment of the psychosocial toll that war brings. This awareness is not confined to serving members of the armed forces, but also extends to the consequences for children and their families. The latter have been the subject of a number of recent excellent reviews that take both a descriptive and clinical perspective [1<sup>••</sup>,2<sup>•</sup>–4<sup>•</sup>,5,6<sup>•</sup>]. Therefore, this review develops themes from recent publications; their relevance is highlighted by the US estimate that approximately 700 000 children have had a parent deployed since 11 September 2001 [5].

## Background themes

There are several factors associated with deployment and the military that impact upon families and children.

## Specific issues related to deployment

The deployment of a parent to a combat zone may be one of the most stressful experiences that a child faces [4<sup>•</sup>]. Furthermore, the parent who is responsible for their care at home may also be stressed and have diminished coping resources. The deployment of parents confronts children with a series of developmental challenges and stresses. Separation from a parent has the potential to deprive a child of the support and nurture which that parent provides, but, in a military context, the child also has to contend with realistic fears about their parent's welfare [7]. Within this context, there is a further set of challenges and issues for both the children and the families that are affected. At times, there is a need for emotional detachment, adoption of differing family responsibilities and roles, and, later, reintegration of the returning parent with the challenges of re-establishing old models of discipline and caretaking. Furthermore, the coverage of wartime events by the media is particularly challenging for adolescent children during their parent's deployment [8].

### The life of military families

Deployment occurs within a wider context for military children, particularly as the average military family moves every 2–3 years [9]. This pattern of social mobility requires children to frequently form new friendships, and adapt to different school environments. Furthermore, there is commonly a disruption to domestic routines. This disruption of social attachments has the potential to further amplify the effects of a parent deploying. The sex and the developmental stage of the child are also important factors that determine the impact of the stresses [4<sup>•</sup>]. This environment also creates multiple risks that can impact upon the mental health of parents who remain at home (usually mothers), which, in turn, is critical to their children's adjustment.

### The impact of combat on the returning parent

There is also the possibility that returning parents may have posttraumatic stress disorder (PTSD), major depression, or mild traumatic brain injury [2<sup>•</sup>] as well as substance misuse and other psychiatric disorders. Sammons and Batten [2<sup>•</sup>] summarized this by pointing out that, for the first time in history, the number of psychological casualties is greater than the numbers of people who die in battle or who are physically injured. The interpersonal consequences are social withdrawal, emotional numbing, which leads to a lack of empathy towards veterans' children, and increased irritability. One of the risks to the children is that returning parents' disorders can manifest as domestic violence.

In addition, research has shown that, during deployment, there is an increased risk of child maltreatment from parents who remain at home [10].

The recent literature provides more systematic information about these various dimensions of the effects of deployment [1<sup>••</sup>, 2<sup>•</sup>–4<sup>•</sup>, 5].

### Patterns and rates of child maltreatment

A recent study, which looked at the incidence of substantiated parental maltreatment in families of enlisted US soldiers who had experienced combat deployment, found that the rates of maltreatment increased during the period of deployment as well rates of child neglect, which were nearly twice as great [10]. In contrast, the rates of physical abuse were less while parents were deployed. However, it is important not to overestimate the risks of child maltreatment in families of enlisted soldiers. Alternatively, abuse should be viewed in the context of a recent study that compared the rates with nonmilitary families in Texas [11<sup>•</sup>]. The rate of substantiated maltreatment of children in military families was lower than that of nonmilitary families (5.05 vs. 7.89 per 1000 person-

years). Also, the proportion of physical abuse only was much higher among military than among nonmilitary perpetrators, reflecting the fact that there are more men in the military, and men in the military have been found to perpetrate more physical violence than women.

The proactive nature of the surveillance being conducted of abuse by army soldiers is reflected in a recent study that explored the patterns of spouse and child abuse perpetuated over a 5-year period (2000–2004). This study explored three patterns of substantiated abuse [12]. Those people who perpetrated only spouse offences made up 61% of the substantiated offenders. A further 27% perpetrated child offences only and 12% perpetrated both spouse and child offences. These patterns were reflected in the different types of abuse such as neglect and physical abuse. Unfortunately the direct role of deployment was not assessed. Collectively, these studies demonstrate that there is an active surveillance program for abuse in the US military that has resulted in a series of substantial recommendations for intervention.

### Families of US troops deployed to the Middle East

Although PTSD has been investigated as the primary cause of maladjustment in much of the literature [13<sup>•</sup>, 14], the direct impact of the violence and suffering of combat exposure on family adjustment is seldom explored as a possible driver of behavioral change. The critical impact of combat on family adjustment is through irritability combined with social withdrawal and numbing, which are components of the PTSD syndrome. These observations emphasize the importance of family-based interventions that target the impact of PTSD on the engagement of affected persons in their intimate family relationships.

The perception and understanding of veterans' predicaments by their spouses who remain at home has a major impact on family dynamics. Renshaw *et al.* [15<sup>•</sup>] found that spouses who experienced more symptoms rated the veterans' symptoms higher than did the veterans themselves. Interestingly, it was only in the group in which the spouses perceived that the soldier had had low levels of combat activity that marital state satisfaction was adversely affected by the soldiers' self-reported symptoms. Importantly, attribution of the soldiers' symptoms to combat exposure provided a buffer against distress in marital relationships. Clearly, there is a need to explore the way that these dyadic adjustments affect the patterns of parenting and the consequences for children.

A major stress that is being faced by many families in the recent deployments of the US forces relates to the extension of deployments [16<sup>•</sup>]. There were substantial negative effects on spouses, particularly in the areas of

psychological symptoms, aspects of their employment, and household strains. Understandably, the spouses whose partners had their deployments extended had significantly more negative perceptions about the army. These observations were made against a background in which nearly 50% of spouses reported depression as well as significant anxiety symptoms during soldiers' deployments. The vulnerability of their marriages was reflected in the finding that 10% felt their relationship had been weakened.

---

### **Findings in communities that have experienced conflict**

An important study, which investigated the impact of the Iraqi occupation on the families of Kuwaiti military personnel, took account of their direct experiences [17<sup>•</sup>]. Although depression was associated with PTSD in the fathers, the mothers' anxiety was the most important predictor of their children's adjustment. The children of prisoners of war (POWs) had the highest levels of anxiety and depression. Having a mother who did not have PTSD was a protective factor against the influence of fathers with PTSD on children, and this emphasizes the centrality of mothers' roles in their children's adjustment. A second study reported research findings that wives' development of PTSD was determined by their husbands' combat exposure and their presence in Kuwait during the occupation, but not their husbands having PTSD [18<sup>•</sup>]. A study from the Balkans emphasizes the universality of the risk to children from exposure to a parent who has been a veteran and who has PTSD [19<sup>•</sup>].

An Israeli study also explored the impact of being a POW on marital adjustment and found that POWs demonstrated high levels of verbal violence and lower levels of self-disclosure [20<sup>•</sup>]. Self-disclosure was found to play an important role, mediating the relationship between marital intimacy and having the avoidance cluster of symptoms of PTSD. Another study of Israeli POWs found that loneliness is a critical mediator between having PTSD and marital adjustment 10 years later, and that this effect is independent of whether veterans were POWs or not [21<sup>•</sup>]. From a clinical perspective, it appears that providing explanations of and strategies to deal with emotional numbing and advice about how to empathize with partners' withdrawal may have some benefit, particularly in the families of POWs. Assessing the direct impact of the war on spouses is also important in understanding families' adjustment.

---

### **The age of the children**

The developmental stage of children is a critical determinant of the effects on them of a parent's deployment.

One study found that children over the age of 3 were significantly at risk of developing depressive symptoms or more prone to externalizing behaviors [22<sup>•</sup>]. Furthermore, unborn children are not protected from the effects of deployment [23<sup>•</sup>], because, in the absence of their partners, mothers struggle more to accept their pregnancies. Supporting expectant mothers, particularly by providing on-base support, was shown to be important because, often, they were separated from their own friends and extended families in the community.

---

### **Role confusion in families with a deployed parent**

Recent findings of role ambiguity in deployed families suggest that clinicians and community-based programs should instigate discussions about expectations around roles that can create predictability in families at all points of the deployment cycle. One study of adolescents who had a deployed parent identified themes of concern about perceptions of uncertainty, loss, boundary ambiguity, and relationship conflict [8]. A manifestation of these tensions was a tendency towards lower thresholds for externalizing behavior as well as emotional lability. Over the course of their parents' deployment, the adolescents were required to both take on and give up particular roles and responsibilities in their families' lives, which added further confusion to their sense of place in their family systems. A similar study [24] that looked at the impact of deployment on boundary ambiguity in families of reservists identified that ambiguity can emerge in family support groups and was found to be most challenging at the end of deployments, particularly for those people who had experienced additional life stresses or losses. Importantly, however, families tended to restabilize once reservists had returned to their work environments and some degree of normality was restored.

---

### **Vietnam veterans: the prolonged effects of deployment**

The impact of female veterans who had PTSD on family adjustment is an issue of considerable relevance because of the demonstrated centrality of the nurturing roles that female partners play in family relationships [25]. An important finding was that subsyndromal symptom severity also appeared to have significant effects on family adjustment. In general, these findings reflect the same patterns that were found by studies of the impact of male veterans who had PTSD, but did not have the same association with abuse. Taft and colleagues [14] found that these patterns of reactivity were reflected in physical assault and psychological aggression, and trait anger played a substantial mediating role. Clinicians should explore these patterns of reactivity to assess and, if necessary, intervene to reduce the risk of assault.

## Active interventions and treatment approaches

The review shows that it is important to create a strategy for moving the focus from veterans to couples and families in order to improve the engagement of service personnel after their deployment, and to recognize and respond to the wider problems that are faced by partners and children. One approach sets out to reduce conflict and encourage intimacy through engaging with the emotions, facilitating better management of interpersonal situations, and participating in activities that facilitate people's recovery from combat-related stress [26•].

An interesting pilot intervention study of 'Operation Purple Camp' was organized around a free summer residential program provided for children with a deployed parent. That program was perceived to be beneficial [27••]. The families of full-time service personnel faced more challenges in dealing with deployment than did the families of reserve personnel. The greater stress observed in their families was during deployment, and at the point of reintegration. This emphasizes the need for support at these times in the deployment cycle. The research also reported that their children worried about the impact of deployments on their caregivers' behavior and this affected their school homework too.

A group of returning veterans and their families who have substantial needs for intensive rehabilitation are those families of veterans who have incurred severe traumatic injuries. One approach has been outlined for dealing with the losses experienced due to severe injury, while assisting in community integration [28•]. The goals of this strategy require adjustment to the new identity of the injured people, finding meaning and mastery in redeveloping a sense of identity, and normalizing the ambivalences that confront families.

## Issues that limit the interpretation of current knowledge

There are a number of limitations of the current literature. Very little research has been done on nontraditional families, the families of female veterans, dual-career families, and single-parent service members [5]. All of the studies that are reviewed in this study looked only at veterans who have partners and they excluded all veterans who experienced the most severe relationship problems and who separated as a consequence. Furthermore, highly stressed families are likely to struggle to participate in organized interventions. Also, there is a striking lack of research from countries other than the US.

## Conclusion

A range of interventions and services has been implemented to support veterans and their families during and

after deployment. However, the effectiveness of these strategies requires assessment. Owing to the immediate duty of care, programs are often put in place before there has been an evaluation of their effectiveness. The differential experiences of active and reserve component service members and their families merit further investigation because people who fall into these two groups may have different needs. Potentially, family and child-focused interventions have a major role in providing mental healthcare for veterans because they are less stigmatized than treatment seeking by veterans who are identified as the patients.

## Acknowledgements

The assistance of Freya Goodhew and Maria Abraham in compiling this review is gratefully acknowledged. This work was supported by NHMRC program grant number 300304.

## References and recommended reading

Papers of particular interest, published within the annual period of review, have been highlighted as:

- of special interest
- of outstanding interest

Additional references related to this topic can also be found in the Current World Literature section in this issue (p. 418).

- 1 Tanielian TL, Jaycox LH. Invisible wounds of war: psychological and cognitive injuries, their consequences, and services to assist recovery. Santa Monica, CA: RAND; 2008.

A comprehensive review conducted by the RAND corporation looking at the psychological and cognitive impacts of deployment on military personnel and their families. Also looks at services that can currently be utilized for recovery and provides suggestions for the further development of such services.

- 2 Sammons MT, Batten SV. Psychological services for returning veterans and their families: evolving conceptualizations of the sequelae of war-zone experiences. *J Clin Psychol* 2008; 64:921–927.

This study summarizes the unique circumstances facing military personnel involved in the 'War on Terror' and reviews recent efficacy research into various treatment intervention modes available.

- 3 McFee RB. Gulf war servicemen and servicewomen: the long road home and the role of healthcare professionals to enhance the troops' health and healing. *Dis Mon* 2008; 54:265–333.

An overview of the emerging challenges facing military personnel from the 'War on Terror' and the Persian Gulf War. Aimed as a guide for clinicians and provides some suggested resources.

- 4 Lincoln A, Swift E, Shorteno-Fraser M. Psychological adjustment and treatment of children and families with parents deployed in military combat. *J Clin Psychol* 2008; 64:984–992.

Reviews the impact of deployment on children with preexisting psychological conditions or other risk factors. A series of case vignettes are used to illustrate the psychological adjustment and treatment implications for children in these situations.

- 5 Johnson SJ, Sherman MD, Hoffman JS, *et al.* The psychological needs of US military service members and their families: a preliminary report. Washington, DC: American Psychological Association; 2007.

- 6 Di Nola GM. Stressors afflicting families during military deployment. *Mil Med* 2008; 173:5–7.

Provides a brief summary of the various stressors effecting families during military deployment and how the development of family support groups has been implemented as a means of improving the experience of these families.

- 7 Pincus SH, House R, Christensen J, Adler LE. The emotional cycle of deployment: a military family perspective. *Journal of the Army Medical Department* 2001; 615–623.

- 8 Huebner AJ, Mancini JA, Wilcox RM, *et al.* Parental deployment and youth in military families: exploring uncertainty and ambiguous loss. *Family Relations* 2007; 56:112–122.

- 9 US Department of Defense. Selected manpower statistics, MO1 (The Directorate for Information, Operations, and Reports). Washington, DC: US Government Printing; 1998.

- 10 Gibbs DA, Martin SL, Kupper LL, Johnson RE. Child maltreatment in enlisted soldiers' families during combat-related deployments. *JAMA* 2007; 298:528–535.
- 11 Rentz ED, Marshall SW, Martin SL, *et al.* Occurrence of maltreatment in active duty military and nonmilitary families in the State of Texas. *Mil Med* 2008; 173:515–522.

The strength of this study is that it was the first that analyzed abuse within military and nonmilitary populations from the National Child Abuse and Neglect Data System. Lower rates were found in the military families but there was the potential for under reporting of maltreatment in military families.
- 12 Martin SL, Gibbs DA, Johnson RE, *et al.* Spouse abuse and child abuse by army soldiers. *J Family Violence* 2007; 22:587–595.
- 13 Taft CT, Schumm JA, Panuzio J, Proctor SP. An examination of family adjustment among Operation Desert Storm veterans. *J Consult Clin Psychol* 2008; 76:648–656.

This substantial prospective study of Desert Storm veterans used structural equation modelling to examine whether there was a direct effect of combat exposure on family adjustment, independent of PTSD.
- 14 Taft CT, Street AE, Marshall AD, *et al.* Posttraumatic stress disorder, anger, and partner abuse among Vietnam combat veterans. *J Fam Psychol* 2007; 21:270–277.
- 15 Renshaw KD, Rodrigues CS, Jones DH. Psychological symptoms and marital satisfaction in spouses of Operation Iraqi Freedom veterans: relationships with spouses' perceptions of veterans' experiences and symptoms. *J Fam Psychol* 2008; 22:586–594.

This is a small nonrepresentative study that examined spouses of National Guard soldiers who had recently returned from deployments in Iraq. During workshops to help the soldiers and their spouses reintegrate into civilian life, it assessed spouse perception of the veterans' experience and symptoms approximately 3 months after deployment.
- 16 SteelFisher GK, Zaslavsky AM, Blendon RJ. Health-related impact of deployment extensions on spouses of active duty army personnel. *Mil Med* 2008; 173:221–229.

This study used a telephone survey to interview 798 spouses of active duty army personnel. It found that families prepare and adjust for a certain period of absence, but there was a substantial detrimental impact of prolonging a deployment.
- 17 Al-Turkait FA, Ohaeri JU. Psychopathological status, behavior problems, and family adjustment of Kuwaiti children whose fathers were involved in the first gulf war. *Child Adolesc Psychiatry Ment Health* 2008; 2:12.

This important study of military families in Kuwait has relevance to communities in which a war has been fought in the same environment. Children of four different groups of Kuwaiti military were studied: the retired, really duties during the war, combat troops, and prisoners of war, 6 years after the Iraqi occupation.
- 18 Al-Turkait FA, Ohaeri JU. Posttraumatic stress disorder among wives of Kuwaiti veterans of the first Gulf War. *J Anxiety Disord* 2008; 22:18–31.

This study of 167 military wives found that 50 (28.4%) fulfilled criteria for probable PTSD. The prevalence was significantly associated with husbands' combat exposure, her presence in Kuwait, but not with husbands' PTSD status. The findings support the salience of effective social support, and the need for empowerment issues to be addressed in psychosocial interventions.
- 19 Klaric M, Franciskovic T, Klaric B, *et al.* Psychological problems in children of war veterans with posttraumatic stress disorder in Bosnia and Herzegovina: cross-sectional study. *Croat Med J* 2008; 49:491–498.

This study found the expected relationship between a veteran's PTSD and developmental problems and symptoms in children. However, the study could not take account of the context of the child's experience or the impact of the civil war on the mothers.
- 20 Solomon Z, Dekel R, Zerach G. The relationships between posttraumatic stress symptom clusters and marital intimacy among war veterans. *J Fam Psychol* 2008; 22:659–666.

This study comparing ex-POWs and controls found no differences in levels of marital intimacy; however, they did present a different pattern of relationships between PTSD clusters and intimacy. The impact of these patterns of communication on children was not explored, but suggestions were made about the potential benefits of sharing traumatic experiences in the marital relationship.
- 21 Solomon Z, Dekel R. The contribution of loneliness and posttraumatic stress disorder to marital adjustment following war captivity: a longitudinal study. *Fam Process* 2008; 47:261–275.

This prospective study examined the relative contribution of loneliness and PTSD to marital adjustment among Israeli veterans of the 1973 Yom Kippur war. It describes the complex relationship between the feelings of estrangement from others and loneliness and the impact on the patterns of communication within the family.
- 22 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; 162:1009–1014.

Although this study raises important issues, the mean duration of deployment of the parents studied was 3.9 months, whereas, in the current conflict in the Middle East, the shortage of personnel has meant that deployments are generally between 12 and 15 months.
- 23 Weis KL, Lederman RP, Lilly AE, Schaffer J. The relationship of military imposed marital separations on maternal acceptance of pregnancy. *Res Nurs Health* 2008; 31:196–207.

This study looked at 503 women and found that the acceptance of pregnancy was more difficult in those with a deployed husband. However, community support provided within the military community had a mitigating effect in contrast to that provided in off-base communities.
- 24 Faber AJ, Willerton E, Clymer SR, *et al.* Ambiguous absence, ambiguous presence: a qualitative study of military reserve families in wartime. *J Fam Psychol* 2008; 22:222–230.
- 25 Gold JI, Taft CT, Keehn MG, *et al.* PTSD symptom severity and family adjustment among female Vietnam veterans. *Mil Psychol* 2007; 19: 71–81.
- 26 Erbes CR, Polusny MA, Macdermid S, Compton JS. Couple therapy with combat veterans and their partners. *J Clin Psychol* 2008; 64:972–983.

Describes how Integrative Behavioral Couples Therapy can be tailored for use with military personnel and their partners who are having relationship difficulty post deployment. Provides a case study to illustrate these techniques.
- 27 Chandra A, Burns RM, Tanielian TL, *et al.* Understanding the impact of deployment on children and families: findings from a pilot study of Operation Purple Camp participants. Santa Monica, CA: RAND; 2008.

The authors give a very comprehensive review of the previous literature surrounding the impact of deployment on service members, their spouses, their children, and their families. It also presents the outcomes of an intervention designed to help families better cope with deployment.
- 28 Collins RC, Kennedy MC. Serving families who have served: providing family therapy and support in interdisciplinary polytrauma rehabilitation. *J Clin Psychol* 2008; 64:993–1003.

This article discusses the importance of a family-centered care philosophy, the interdisciplinary team approach, the therapeutic milieu, and two family-system treatments (medical family therapy and ambiguous loss theory) when treating military personnel with polytrauma and their families. A case illustration is provided.