

Family Cohesion and Relationship Quality in Defence Force Families: Rapid Review

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Abstract

Objective: Retention of serving members in the military may be increased through targeted psycho-social support of their families and dependents. This Defence funded study aimed to provide updated evidence on associations between current military service and the well-being of the member's couple and relationships, to inform policy and practice. We conducted a rapid review of family and couple relationship qualities, comparing current serving samples with civilian, never-serving families. Method: We followed the Cochrane Rapid Review Method, searching publications from 2000. Outcomes were limited to modifiable factors of importance for policy related decision-making. Results: Four search strategies were constructed in Medline, PsycINFO, CINAHL and Cochrane CENTRAL. The review, in two parts, identified over 15,000 articles, of which only seven met the review criteria. The dearth of research identified reflected predominant focus on veteran rather than currently serving samples, and absence of comparison to a civilian group. We therefore also examined individual studies that closely approximated the inclusion criteria. Conclusions: The collated evidence offered four main findings: 1) A significant decrease in marital satisfaction for men and women with progressing stages of deployment; 2) Consistently higher prevalence of intimate partner violence for military versus civilian samples, growing with length of deployment, and mediated by histories childhood abuse or neglect; 3) Increased risk of psychological distress and problematic alcohol use by spouses of serving members, and 4) Barriers to engagement in therapeutic programs for military couples. Practice implications for screening and policy implications for targeted prevention efforts are discussed.

Keywords

Military, Family, Couple, Cohesion, Relationship, Health Outcomes, Mental Health, Rapid Review

1. Introduction

In Western defence workforces, between 60% - 66% of serving members are in a relationship with immediate dependents, including spouses and children (Australian Government Department of Defence, 2020; National Academies of Sciences, Engineering & Medicine et al., 2019). Understanding the unique risks of current military service to the socio-emotional wellbeing of the military spouse and family is key to retention of serving members. To date, literature that assists policy relevant decisions for families and couples is largely limited to veteran samples, and to the study of reintegration dynamics. Studies of current deployment are few, and those with well controlled contrasts to civilian families fewer still. Steps to firming the evidence base in this arena are important to anticipating and ameliorating risk through well targeted screening and prevention programs.

1.1. Wellbeing in Military Couples

A growing evidence base highlights strong potential for negative impact of military involvement on the health and wellbeing of military personnel (Hoge et al., 2002; Pols & Oak, 2007; Vogt et al., 2022). Relative to civilian populations, these include high prevalence of post-traumatic stress disorder (PTSD; Cigrang et al., 2015; Koenig et al., 2019), suicidality (Anestis et al., 2015; Bryan et al., 2015); depression (Bryan & Heron, 2015; Gadermann et al., 2012) and anxiety (Hruby et al., 2021; Taillieu et al., 2018); risky alcohol and substance use (Ames & Cunradi, 2004; Kao et al., 2000), and sleep disorders (Mysliwiec, Gill et al., 2013a; Mysliwiec, McGraw et al., 2013b).

Importantly, mental and physical health challenges may affect dependents too (De Burgh et al., 2011; Verdeli et al., 2011). A growing body of evidence points to unique mental health impacts of military involvement for the spousal partners (De Burgh et al., 2011; Mansfield et al., 2010), and higher relationship distress than civilian couples (Tanielian et al., 2008). For spouses of currently serving military personnel, several processes may be relevant. These include the stress of being separated; distress arising from fear for their serving partner's safety; and pressure arising from the responsibility of extra caregiving duties without usual support (Asbury & Martin, 2012).

Couple relationship quality and satisfaction is also impacted by military service, with evidence of increased marital distress and instability, poorer couple communication, conflict; and intimate partner violence (IPV) (Pflieger et al., 2018; Riviere et al., 2012; Woodall et al., 2020). A large-scale longitudinal study

of active-duty army personnel (Whisman et al., 2021) showed marital distress at baseline was associated with prevalence of a major depressive episode, generalized anxiety disorder, and PTSD assessed five years later. Love et al. (2018) found relational distress was significantly associated with higher rates of suicidal ideation in serving members, amplified in the context of a recent separation or divorce. Combat experience increases the odds of separation and female enlisted members may be at more than twice the risk for divorce as men (Karney & Crown, 2011; Pflieger et al., 2022).

Equally, strong spousal relationships may buffer the sequelae of deploymentrelated trauma (Balderrama-Durbin et al., 2013), especially with higher spouse education level and early military career cycle Pflieger et al. (2020). Meta-synthesis of 24 peer reviewed studies (Monney & Lapiz-Bluhm, 2018) found protective factors for the couple relationship included support received from military, optimism, problem solving strategies, self-directedness, and quality of partner communication with the deployed service member.

Communication is a frequent proxy for couple relationship quality, with focus on content, frequency, and mode of communication between spouses during deployment absence now well researched. Studies examining quality and type of communication during deployment identify the role of protective buffering, used by spouses who intentionally withhold details about concerns on the home-front to emotionally protect their deployed partner. While the intent is healthy, greater protective buffering by partners is found to be associated with the serving member's increased psychological distress and lower marital satisfaction during deployment (Carter et al., 2020; Joseph & Afifi, 2010) and with relational turbulence (McAninch et al., 2021). Knobloch and Basinger (2021) found the serving member's depressive symptoms had indirect associations with partners' self-disclosure and destructive conflict management strategies. Indirect and asynchronous communication (i.e., email/internet, postal mail) was found to be protective (Meek et al., 2019), possibly through allowing time for reflection prior to response.

1.2. Intimate Partner Violence

Evidence has long suggested an elevated risk for IPV in military families compared to civilian populations (Heyman & Neidig, 1999). While study comparability is limited by methodological problems in measurement and reporting of violence perpetration and victimisation (Slep et al., 2011), findings consistently show higher prevalence of IPV perpetration in military samples relative to general population estimates (Ganster, 2004; McCarroll et al., 2010; Schmaling et al., 2011), with more aggressive conflict resolution tactics in intimate relationship conflict, including physical assault, psychological aggression, and sexual coercion. The US National Intimate Partner and Sexual Violence Survey (NISVS) in 2011 found "highest risk" groups for IPV were those in lower ranks of the Army, and veterans (Breiding et al., 2014).

1.3. Military Family Cohesion and Parent-Child Relationships

Beyond the couple dyad, the family attachment network plays an important role in the mental health of serving members and their family (Riggs et al., 2020), to navigate separation, reunion, mobility, and associated psychosocial challenges (Card et al., 2011). Factors associated with enhanced resilience during reintegration include frequent communication and effective household and family management during deployment (O'Neal et al., 2018).

Parent-child relationships in military families are vulnerable to stressors associated with deployment and service-related impacts (Gewirtz et al., 2018), with potential for long term developmental impact for young children (Osofsky, 2013). Few studies have examined how deployment can affect young children's relationships with their at-home parent. Early indications suggest both direct and indirect negative effects on attachment security (Posada et al., 2015), in turn significant predictors of poor socio-emotional adjustment across childhood (McIntosh et al., 2021). Harsh and inconsistent parenting are implicated in children's attachment related distress, associated with couple conflict, low couple satisfaction, parenting stress and the serving member's depression (Giff et al., 2019; Parker, 2019). Protective factors include the responsiveness and emotional capability of the remaining parent (Chandra et al., 2010).

1.4. The Current Study

The retention of serving members in military forces is key to defence force capability (Sminchise, 2016). This Defence Force commissioned study was part of a suite of rapid reviews conducted to assist with progression of policy and practices around family and couple factors implicated in retention of serving members. The current study involved independent rapid reviews of the peer reviewed evidence on impacts of service on socio-emotional functioning within couples, and on family and couple relationship functioning. Both studies included comparison of outcomes for non-serving families.

2. Methods

Rapid reviews are driven primarily by requests for timely evidence for decision-making purposes including to address urgent and emergent health issues and questions deemed to be of high priority (Cochrane Methods, Rapid Reviews). Given the needs of the commissioning service for research input within a two-month window, rapid reviews rather than scoping reviews were conducted, following Cochrane Rapid Reviews guidelines (Garritty et al., 2021). Search constructs and terms were co-designed by the research team, an information search specialist and two members of the commissioning Defence Force project team. Each review was registered on PROSPERO (Review 1: CRD42022320488; Review 2: CRD42022320164).

2.1. Databases

An information specialist in peer review was involved in setting an independent

search strategy and database search within Medline, PsycINFO, CINAHL and Cochrane CENTRAL for each review. A copy of the full search strategies for each database is provided in Supplementary Material. Searches were completed in March 2022.

2.2. PICO Elements and Search Terms

Table 1 and **Table 2** show the PICO elements and search terms (Schardt et al., 2007) for each study. When a pilot revealed few studies with a meaningful comparison group, we adapted the search to include studies examining outcomes for military couples and families relative to general population data.

2.3. Inclusion and Exclusion Criteria

Relative to prior military history, deployments post 2000 have varied greatly in location, length, and mission. In this light, the search date for each review was

Table 1.	Rapid review 1	search terms: me	ntal health and	health outcomes	for both m	nembers of a	couple.

PICO Element	Search Terms
Population: Serving members	Milita*; Soldier*; Officer*; Infantry; Defen\$e; Arm*; Navy; Air force*; Armed service*; Marine; ^S Combat*; Armed force*; Military personnel [MeSH]
Population: Spousal partners	Spouse; Husband; Wife; De facto; Partner; Accompanied; Spouse [MeSH]
Intervention: Serving in a defence force	Serv*; Deploy*; Enlist*; Duty; Post*; Station*; Assign*; Combat; Armed service
Comparator:	N/A—identified via screening. Civilian couples with neither partner ever serving in a defence force. The comparator could be an in-study control group or in text reported population normative data.
Outcomes: Physical health, social and emotional health	Disease; Illness; Mortality; Morbidity; Hospitalisation*; "Health related risk"; Alcohol; AOD; "Alcohol and other drugs"; Substance abuse; Substance misuse; Suicid*; Intentional harm; "Quality of life"; "Health related quality of life"; Social support; Mental health; Mental illness; "Common mental illness"; "Common mental disorder"; Depressi*; Anxiety; Psychosis; Bi-polar; Schizophrenia; "Post-traumatic stress disorder"; "Obsessive-compulsive disorder"; Disease [MeSH]; Mortality [MeSH]; Morbidity [MeSH]; Substance related disorders [MeSH]; Quality of Life [MeSH]; Social Support [MeSH]; Mental health [MeSH]; Mental disorders [MeSH]

Table 2. Rapid review 2 search terms: couple and family cohesion and relationship quality.

PICO Element	Search Terms
Population: Serving members	Milita*; Soldier*; Officer*; Infantry; Defen\$e; Arm*; Navy; Air force*; Armed service*; Marine; Combat*; Armed force*; Military personnel [MeSH]
Intervention: Serving in a defence force	Serv*; Deploy*; Enlist*; Duty; Post*; Station*; Assign*; Combat; Armed service
Comparator:	N/A—identified via screening. Civilian couples and families with neither partner or neither parent ever serving in a defence force. The comparator could be an in-study control group or in text reported population normative data.
Outcomes: Family structure, family or couple relationship quality	Divorc* OR separat* OR marriage OR marital OR relat* OR couple OR famil* OR Conflict OR communic* OR Quality

confined to publications from 2000. Studies were eligible for inclusion if they 1) collected information on indicators as per the search terms outlined in **Table 1** and **Table 2**, and 2) included a non-serving comparison group or reported on comparative population normative data. Review 1 required data for both partners of the couple. Given the project focus of the commissioning Defence Force, military service was restricted to concurrent service at the time of the study, or military personnel "at exit" or within 3 months of exit from service. Inclusions were further limited to peer reviewed publications in English.

Mixed methods, qualitative or quantitative designs, experimental, and RCT study designs were included. Studies were excluded if they reported on a case study (i.e., they included no comparison group) or included veteran data only. Grey literature and supplemental searching were omitted.

2.4. Screening

For each independent review, a pilot exercise was conducted using 30 - 50 abstracts for the screening team to calibrate and test the review form. One reviewer independently screened 100% of abstracts with 20% of abstracts double screened by a second reviewer. One reviewer then screened all articles included at the full-text level and once completed, a second reviewer screened all excluded full-text articles for conflicts. Conflicts were resolved via discussion.

2.5. Data Extraction

For each review, a single reviewer extracted data using a piloted form, and a second reviewer checked for correctness and completeness of extracted data. Data extraction was limited to a minimal set of required data items, in consultation with key stakeholders.

2.6. Risk of Bias

Although an a priori decision was made that studies would not be excluded on the basis of quality assessment status, for transparency, we used the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Case Control Studies to assess risk of bias (Aromataris & Munn, 2020; Moola et al., 2017). This checklist includes 10 items scored on a four-point scale, with response options of Yes, No, Unclear, or Not Applicable. A single reviewer rated risk of bias, with verification of all judgements (and support statements) by a second reviewer. Details are provided in **Supplementary Material Table S1**.

2.7. Synthesis Procedures

Review evidence was synthesized narratively. Meta-analysis was not appropriate in the case of either review, given the small pool of studies returned with dis-similar outcome measurement. Given low yield of studies in the review process of Review 1, a number of aligned studies were included in the narrative synthesis to address the research question.

3. Results

3.1. Review 1: Matched Spousal Outcomes

A total of 5203 results were retrieved as depicted in **Figure 1**. After duplicate removal, 4138 records remained for title and abstract screening. No records from the review met inclusion criteria. One paper was identified via Review 2 and was included for review.

3.2. Review 2: Couple and Family Outcomes

The core search strategy resulted in 10,820 total articles as depicted in **Figure 2**. After duplicate removal, 8274 articles remained for title and abstract screening. The PRISMA diagram below shows the pathway through to the final seven papers included for synthesis.









3.3. Characteristics of Included Studies

Study characteristics of the seven studies meeting all search inclusion criteria are outlined in **Table 3**. Relevant study outcomes and findings are detailed in **Table 4**. Five studies focus on the couple relationship, one of these also on wider family relationships, including the perspectives of children and two focus on the child-parent attachment relationship. Four of the seven studies were conducted in the US. One involved spouses and children of serving members from the British army and two were families from Canadian military and community samples. Sample sizes varied (from 46 to over 26,000), and designs varied, including secondary data analyses, cross sectional surveys with comparison to general population data, and longitudinal within and between group experimental designs. A narrative synthesis of findings from these studies follows, first considering couple quality findings, and then family relationship findings.

Author (year), Country	Study design	Service member population	Research participants	N (Defence; Con), % Female	Participant age Range, Mean (SD), Racial Identification (%)	Comparison group details	Attrition (%)
Cigrang et al. (2021), USA	Baseline data from longitudinal study sub-sample (Quan)	AD enlisted Air Force service members	Airmen, Married or in committed relationship > 6 months, early-career AD (not Guard or Reserve)	373 (373; 0), 32.7% (122)	18 - 40 years, 24.3 (NR) White (76.0), Black (13.1), Asian (5.7), Native Hawaiian/Pacific Islander (3.3), American Indian/Alaska Native (2.7), Hispanic (2.2)	Comparisons are drawn from Nationally representative USA community samples	N/A
Salivar et al. (2020), USA	Pre-post intervention baseline data (Quan)	AD (deployed/ non-deployed), Reserves, National Guard	Low-income military couples (relative to the federal poverty line); 1 or both partners were AD or veterans	742 couples (90; 652)	Military: 34.33 (9.01); Civilian: 33.03 (8.42); White: 58% civilian, 65% MF; African American: 28% both groups; Hispanic/Latino: 12% civilian, 7% MF	Civilian couples	NR re relevant variables
McCarroll et al. (2010), USA	Cross-sectional (Quan)*	Officers, enlisted soldiers	Deployed and non-deployed married AD US Army men and women	26,835 (26,835, 0), 4.9% (1315)	NR White (62.6), Nonwhite (37.4)	N/A	10,679 (28.5)
McLeland et al. (2008), USA	Cross-sectional (Quan)	Reserve Component, Army Reserve, Navy Reserve, Marine Corps Reserve	Male civilians, Reserve Component personnel and AD Army personnel	Civilian and Reserve Component sample: 46 (23; 23), 0% AD sample: 74 (74; 0), 0%	Civilian and Reserve Component Sample: 18 - 50+, NR AD: 20 - 48, 30.7 (6.9) Euro-American (73.0), African American (8.1), Hispanic (10.8), Native American (4.1): NR (4.1)	Civilian men married or in a current exclusive relationship > 12 months	0
Pye & Simpson (2017), UK	Cross-sectional (Quan)	Armoured Corps	British MFs of regular service personnel from the Royal Armoured Corps	112 (78; 34), N/A	NMF, 33.4 (6.7); PrDF, 33.3 (4.5); CDF, 30.2 (3.2); PDF, 31.6 (4.6) Ethnicity/Race NR	NMFs (maternal and child measures)	NR
Tupper et al. (2018), Canada	Cross-sectional (Quan)	Army, Air force, Navy	Military-connected child-mother dyads (in which military partner was 1) deployed, 2) away but not deployed, 3) or working from home unit)	68 dyads; Children: 52% (34); At-home Parent: 100%	Child: 1-6 yrs, 45.21 mnths (17.51) Parent: NR	Community norms	NR
Tupper et al. (2020), Canada	Cross-sectional (Quan)	Army, Air force, Navy	Canadian military families (one parent a member of the Canadian Armed Forces)	85 (51, 34); Child: 49% (42); At home Parent: 100%	Child Total: 3 - 6 yrs; 49.82 mnths (12.76); Child Military: 51.96 (14.73); Child Con: 46.62 (8.24); Parent: NR	Canadian NMFs with similar characteristics to military families (i.e., child age, child gender, language spoken at home)	NR

Table 3. Sample and study design for included studies (N= 7).

Note. AD = active duty; NMF = non-military families; PrDF = pre-deployed families; CDF, currently-deployed families; PDF, post-deployed families; USA, United States of America; UK, United Kingdom; Quan, Quantitative Research Design; mnths = months; NR, Not Reported; N/A, Not Applicable; *NB data collected 1990 to 1994; yrs = years.

Table 4. Study outcomes, covariates and relevant findings of included studies (N= 7).

Author (year)	Indicator variable & Point of service	Outcome variables	Outcome measure(s)	Covariates	Relevant findings and effects
Cigrang et al. (2021)	Active duty for 3 months	 Couple dysfunction IPV ACEs 	1) MSI-B; RDS 2) CTS2 3) ACEs scale (10 items)	N/A	 Higher parental divorce during childhood in SM sample vs. nationally representative survey of US adults: 62% vs. 35% (females) and 49% vs. 32% (males). Equal rates of exposure to IPV in SM sample vs. civilians: 21% (females) and 12% (men). Higher proportion of SMs reported 2+ ACEs, compared with civilians in the CDC-KACES^: 62% vs. 41% (women) and 39% vs. 34% (men). Serving women, compared with serving men, reported more ACEs (<i>t</i> [371] = 4.48, <i>p</i> < 0.001). Total ACEs were related to recent IPV victimization for women SMs, but not for men. SMs reported higher rates of childhood abuse or neglect vs. civilians: 43% vs. 21% (women) and 34% vs. 24% (men).
Salivar et al. (2020)	11% active duty 89% veterans	 Psychological distress Perceived stress Anger Problematic alcohol use Perceived overall physical health Insomnia 	1) K10 2) PSS 3) PROMIS: Anger-SF 4) PROMIS: Alcohol use 5) SF-36 (general health perceptions subscale) 6) ISI	N/A	Nsd were observed on any baseline measure of individual outcomes. 1) Civilian: $M = 5.96$ (5.58), Military: $M = 16.65$ (5.88); $b = 0.695$, $SE = 0.511$, $p = 0.174$, $ES = 0.12$ 2) Civilian: $M = 8.36$ (3.11), Military: $M = 8.77$ (3.19); $b = 0.404$, $SE = 0.284$, $p = 0.156$, $ES = 0.13$ 3) Civilian: $M = 14.63$ (4.72), Military: $M = 14.91$ (4.38); $b = 0.281$, $SE = 0.409$, $p = 0.492$, $ES = 0.06$ 4) Civilian: $M = 5.53$ (6.16), Military: $M = 6.00$ (5.17); $b = 0.468$, $SE = 0.550$, $p = 0.395$, $ES = 0.08$ 5) Civilian: $M = 17.61$ (4.32), Military: $M = 17.93$ (4.08); $b = 0.314$, $SE = 0.367$, $p = 0.392$, $ES = 0.07$ 6) Civilian: $M = 10.18$ (6.23), Military: $M = 10.58$ (5.98); $b = 0.397$, $SE = 0.514$, $p = 0.440$, $ES = 0.06$ Nsd in treatment gains based on military/civilian status, with the exception of greater reduction in insomnia for Civilian couples.
Salivar et al. (2020)	11% active duty 89% veterans (Only active duty reported here)	1) Relationship satisfaction 2) Communication conflict and Emotional support 3) Perceived breakup potential 4) IPV	 CSI ACF Supporting Healthy Marriage project measures Adapted from the MII (3 items) Developed with NDVH (7 items) 	N/A	Nsd in baseline relationship functioning variables between active service and non-military. 1) <i>Satisfaction b</i> = 0.17, <i>SE</i> = 0.467, <i>p</i> = 0.71, <i>ES</i> = 0.04 2) <i>Conflict b</i> = 0.19, <i>SE</i> = 0.49, <i>p</i> = 0.70, <i>ES</i> = 0.04; <i>Emotional</i> <i>Support b</i> = 0.21, <i>SE</i> = 0.32, <i>p</i> = 0.51, <i>ES</i> = 0.06 3) <i>Break-up potential b</i> = 0.02, <i>SE</i> = 0.11, <i>p</i> = 0.87, <i>ES</i> = 0.02 4) <i>IPV b</i> = 0.09, <i>SE</i> = 0.35, <i>p</i> = 0.81, <i>ES</i> = 0.03 Sig. pre-post change in relationship and individual functioning for MF couples. Small between-groups <i>ES</i> s (<i>d</i> = 0.31 - 0.46): relationship satisfaction, communication conflict, emotional support, and breakup potential.
McCarroll et al. (2010)	Deployment status: Deployed in year prior to survey (11,540, 43.0%); never deployed (15,294, 57.0%)	1) Spousal aggression	1) Modified CTS	Sex, age, race, rank, spousal unemployment, children living with respondent, living on/off military installation	 Sig. effect of deployment on self-reported severe spousal aggression by AD Army men and women. Overall prevalence of moderate vs. severe violence against a spouse in military groups was consistently higher: never deployed (17.6% vs. 4.6), deployed < 3 months (19.5% vs. 5.6), deployed 3 - 6 months (20.2% vs. 6.8%) and deployed 6 - 12 months (20.9% vs. 7.6%). Higher than civilian rates (national weighted survey data) of moderate husband-to-wife and wife-to-husband violence: ~10%; and severe violence: 0.7%. The ORs of using severe violence for deployed groups relative to the never-deployed group were 1.16 for deployed < 3 months, 1.26 for deployed 3 - 6 months, and 1.35 for deployed 6 - 12 months. All increments were sig.

McLeland et al. (2008)	Deployment status: Not alerted, $(n = 6)$ Alerted $(n = 13)$ Alerted and mobilized $(n = 4)$ Deployed $(n = 74)$	1) Marital satisfaction	1) KMS Scale	NR	1) Nsd on marital satisfaction between civilian $(M = 18.1, SD = 3.6)$, and any military group: not alerted $(M = 19.5, SD = 2.5)$, alerted $(M = 15.9, SD = 4.5)$, mobilized $(M = 18.0, SD = 1.4)$, deployed $(M = 25.8, SD = 5.7)$. Sig. differences between groups in marital satisfaction of never deployed (civilian <i>and</i> military not alerted; M = 18.4, SD = 3.4) and deployed groups $(M = 15.9, SD = 3.4)$, $t = 2.93$, $df = 74.8$, $p < 0.0005$. Cohen's $d = 0.55$.
Pye & Simpson (2017)	Deployment Status: Pre-D, currently-D, post-D	1) Marital satisfaction 2) Family balance 3) Family satisfaction 4) Family communication 5) Child perceptions of the family	1) KMS Scale 2) FACES IV 3) FSS 4) FCS 5) PCA and PCA-R Scale	Age of mother, age of child, marriage duration, length of soldier's service	1) Pre-D reported highest levels of marital satisfaction $(M = 6.6, SD = 0.5)$, followed by Non-M $(M = 6.1, SD = 0.66)$, Current-D $(M = 5.9, SD = 0.47)$, and Post-D $(M = 5.8, SD = 0.79)$. Sig. effect of Deployment stage on wives' report of marital satisfaction. $(F(3, 106) = 9.6, p < 0.001$, partial $\eta^2 = 0.21$). Nsd between Post-D and Current-D on marital satisfaction $(p = 0.74)$. Sig. differences between Pre-D and Non-M $(p = 0.005)$ in favour of Pre-D. 2) Non-M group scores were highest $(M = 4.8, SD = 1.5)$, followed by Pre-D $(M = 3.6, SD = 0.89)$, Post-D $(M = 1.8, SD = 1.3)$, and Current-D $(M = 0.7, SD = 0.6)$. A Sig. effect of deployment stage on wives' reports of family balance $(F(3, 33.47) = 48, p < 0.001, \eta^2 = 0.81)$. Sig. difference between Current-D and Post-D families $(p < 0.001)$, who both scored lower than Pre-D and Non-M. Pre-D and Non-M showed Nsd on family balance $(p = 0.78)$. Pre-D scored Sig. higher on measure of Rigidity $(t(41) = 8.83, p < 0.001)$, and Sig. lower $(t(54.7) = -2.48, p = 0.016)$ on Cohesion than Non-MFs. 3) Nsd in wives' reports of family satisfaction between Pre-D and Non-M $(p = 0.9)$. Sig. difference between Non-M and Pre-D rated communication Sig. higher than Post-DF $(p < 0.001)$, who rated communication Sig. higher than Post-DF $(p < 0.001)$, who were lower than Current-DF $(p = 0.02)$. <i>PCA</i> : Nsd between Non-M and Pre-D $(p = 0.09)$. Sig. difference D $(p = 0.001)$. Sig. difference between Current-DF $(p = 0.001)$. Sig. difference D $(p = 0.001)$, who were lower than Current-DF $(p = 0.02)$. <i>PCA</i> - R : Nsd between Non-M and Pre-D $(p = 0.09)$, Pre-D Sig. higher $(p < 0.001)$ and Non-M Sig. higher again $(p = 0.01)$.
Tupper et al. (2018)	Deployment status: Deployed (n = 15), away but not deployed (n = 15), working from home unit	 Parenting stress Attachment 	1) PSI 2) SSP	Location of military base, military division, language, child age and gender, maternal education, and family income	 Sig. difference between parenting stress in the military sample (<i>M</i>(<i>SD</i>) = 221.81 (42.62)) compared with the general population (<i>M</i>(<i>SD</i>) = 222.8 (6.2); Abidin, 1995), <i>p</i> < 0.001. Nsd in prevalence of children classified as secure in the overall military sample as compared to the normative population (57% and 65% respectively, <i>p</i> = 0.21; van IJzendoorn & Kroonenberg, 1988). Sig. difference in children classified as insecure in the deployed military sample as compared to the general population (73% and 35% respectively, <i>p</i> = 0.001).

Deployment status: Tupper et Deployed (n = 11), al. (2020) nondeployed (n = 40)	 Parenting stress Attachment 	1) PSI 2) SSP	Language, child age, child gender, maternal education, family income	1) Nsd in parenting stress between groups (deployed, nondeployed and control), $F(2, 81) = 0.25$, $p = 0.778$, $\eta p^2 = 0.006$. 2) Sig. effect of group (deployed, nondeployed and control) on attachment, $\chi^2(2, N = 85) = 6.87$, $p = 0.032$. Children in the deployed group were less likely to present a secure attachment ($z = -2.6$) and more likely to present an insecure attachment ($z = 2.6$).
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Note. ACEs, adverse childhood experiences; ACF, Administration for Children and Families; CDC-KACES, Center for Disease Control and Prevention Kaiser Adverse Childhood Experiences; CSI, Couple Satisfaction Index; CTS, Conflict Tactics Scale; CTS2, Conflict Tactics Scale-Revised; Current-D, currently deployed; FACES-IV, The Family Adaptability and Cohesion Evaluation Scale; FCS, Family Communication Scale; FSS, Family Satisfaction Scale; IPV: Intimate partner violence; ISI, Insomnia Severity Index; K10, Kessler Psychological Distress Scale; KMS, Kansas Marital Satisfaction scale; MII, Marital Instability Index; MSI-B, Marital Satisfaction Inventory-Brief form; N/A, Not Applicable; NDVH, National Domestic Violence Hotline; Non-M, non-military; NR, Not Reported; Nsd, Non significant difference; ORs, Odds Ratio; PCA, parent-child alliance; PCA-R, parent-child alliance revised (no emotional/physical distance content); Post-D, post-deployed; Pre-D, pre-deployed; PROMIS, Patient-Reported Outcomes Measurement Information System; PSI, parenting stress index; PSS, Perceived Stress Scale; RDS, Relationship Dynamics Scale; SF-36, 26-Item Short Form; SSP, Strange Situation Procedure; ^Felitti et al., 1998.

3.4. Findings of Included Studies

3.4.1. Review 1

Physical and Socio-emotional Health for Both Members of the Couple

No significant differences were found at baseline between civilian and military couples in terms distress, stress, anger, alcohol use, perceived overall physical health, and insomnia (Salivar et al., 2020). After participating in a relationship intervention program, the matched civilian sample showed statistically significant treatment gains for all psychological and physical health outcomes, while the military couple sample did not. Study authors conclude that treatment programs may produce less gain in individual functioning for military couples than for civilians (Salivar et al., 2020).

Evidence from Studies not Meeting Full Inclusion Criteria

The Review 1 search strategy identified a series of studies that included relevant populations and health outcomes but did not fully meet the a priori inclusion criteria. We focus here on areas of mental health in which replicated evidence exists, that is, where like findings were reported by two or more studies. Most studies draw from The Millennium Cohort Family Study examining various health indicators in military couples (N > 10,000) (Porter et al., 2020; Sparks et al., 2021; Steenkamp et al., 2018; Walter et al., 2021).

Comparisons between anxiety, depression and post traumatic symptoms in military personnel and their non-serving at-home spouses are inconsistent across studies (e.g., Lucier-Greer et al., 2021; Steenkamp et al., 2018; Berzins et al., 2018; Trump et al., 2015). Greater consistency of findings is seen in the area of psychological distress in which at-home wives exhibited significantly greater distress than their military husbands (Tanichi et al., 2019; Trump et al., 2015). Findings for measures of problematic drinking are highly consistent across the literature. Four studies found frequency and quantity of alcohol consumption was higher for service members than their civilian spouses (Berzins et al., 2018; Erbes et al., 2012; Porter et al., 2020; Steenkamp et al., 2018). Data from the Millennium Cohort Family Study indicates a lower prevalence of moderate-to-severe insomnia in spouses compared with military members (15.68% vs. 18.18%, respectively; Steenkamp et al., 2018).

3.4.2. Review 2

Marital and Family Relationships

Three studies meeting the search criteria addressed the question of marital quality. Findings are mixed. McLeland et al. (2008) compared marital satisfaction scores for men across personnel status (alerted for potential duty, mobilised, and recently returned from duty in a combat zone, N = 91). Comparison data were available for 23 male civilians recruited from a university setting. Subjects were married or in a current exclusive relationship for more than 12 months. The design was cross sectional. The three-item Kansas Marital Satisfaction Scale (KMSS) was used (Schumm et al., 1983), measuring satisfaction with three constructs: your marriage, your relationship with your husband/wife, and your husband/wife as a spouse. When the three types of deployment groups were combined (alerted, mobilised and post-deployed, n = 91) and compared with the civilian and never-deployed military groups (n = 29), significantly lower marital satisfaction was observed in the deployed group (deployed groups M = 15.9, SD = 3.4, civilian and not alerted reserve M = 18.4, SD = 3.4; t = 2.93, ES = 0.55, p < 0.0005).

Salivar et al. (2020) drew from a large randomized controlled trial of online relationship programs for low-income couples (n = 652), to create a propensity matched subsample (Ho et al., 2011) of 90 civilian participants to compare to 90 individuals from military couples where at least one spouse was currently serving. All couples were low-income relative to the federal poverty line. Measures are described in Table 4. Comparing low-income military and civilian samples at baseline, the study found no differences regarding marital satisfaction, conflict, emotional support, or separation potential. The study also examined treatment effects of the 7-hour, 6-week online program with a 15-minute coaching component, contrasting military couples with matched civilian participants. Program completion was lower among military couples (57%) compared with civilians (71%). Program satisfaction was equally positive. Among military couples, relationship satisfaction, conflict, emotional support, and intention to separate were significantly improved after treatment (between-groups d = 0.31 - 0.46) and maintained at follow-up. IPV and individual functioning domains did not improve for the military sample, relative to the civilian sample.

In the only UK study in this review, Pye and Simpson (2017) investigated wives' perceptions of marital functioning (n = 78 currently serving military families, and 34 nonmilitary families in the comparison group). The military group represented three stages of the deployment cycle: pre-deployed, currently deployed, post-deployment. As with the McLeland et al. (2008) study, marital satis-

faction was measured with the three-item, seven-point scale KMSS (Schumm et al., 1983). Marital satisfaction was similar across comparison and all military groups except pre-deployed families who reported significantly higher marital satisfaction. Wives of a pre-deployed soldier scored significantly higher than all other groups on marital satisfaction (M = 6.6, SD = 0.5), followed by non-military (M = 6.1, SD = 0.66), currently deployed (M = 5.9, SD = 0.47), and post deployed (M = 5.8, SD = 0.79). There was a significant effect of deployment stage on wives' report of marital satisfaction (F(3, 106) = 9.6, p < 0.001, partial $\eta^2 = 0.21$). There were no significant differences between post-deployed and currently deployed groups on marital satisfaction (p = 0.74), but a significant difference between pre-deployed and non-military groups (p = 0.005), with wives of pre-deployed soldiers reporting higher marital satisfaction. The findings were not influenced by marriage duration (F(1, 106) = 2.6, p = 0.1).

Intimate Partner Violence and Antecedent Risk

Two studies report on IPV outcomes for military versus civilian samples. In a large random sample (McCarroll et al., 2010) surveyed married US Army men and women currently deployed in active duty (11,540; 43.0%) or never deployed (15,294; 57.0%), to examine relationships between length of deployment and self-reports of moderate and severe spousal violence. The Conflict Tactics Scale (CTS; Straus et al., 1996) was used to measure self-reports of behaviours exhibited in marital conflict. Against comparable civilian national weighted survey data adjusted for race and age, Heyman and Neidig (1999) prevalence of IPV was consistently higher in military groups. Overall prevalence of moderate versus severe violence against a spouse were civilian (10% vs. 0.7%); never deployed (17.6% vs. 4.6%); deployed less than three months (19.5% vs. 5.6%); deployed three to six months (20.2% vs. 6.8%) and deployed six to twelve months (20.9% vs. 7.6%). After controlling for demographic variables, the probability of severe aggression was significantly greater for soldiers deployed in the past year compared with soldiers who had not deployed. Relative to the never-deployed group, the likelihood of using severe violence grew with length of deployment (Odds Ratio: 1.16 for deployment of less than three months, 1.26 for deployment three to six months, and 1.35 for deployment six to twelve months). All increments were statistically significant.

In a US study of 373 early-career active-duty Airmen, Cigrang et al. (2021) examined the contributing influence of historic exposure to adverse childhood experiences (ACEs) on current marital well-being for members serving more than three months and married or in committed relationship longer than six months. Compared with a community sample, a significantly higher prevalence of ACEs was evident for the military sample. A higher proportion of military participants reported two or more ACEs, compared with civilians in the CDC-Kaiser Adverse Childhood Events Study (women: 62%, 41%; men: 39%, 34%). Against comparisons drawn from nationally representative US civilian samples, military women and men reported higher rates of childhood abuse or neglect (women:

43%, 34%; men: 24%, 21%). Prevalence of having experienced parental divorce was significantly higher in the military sample than in a nationally representative civilian sample (women: 62%, 35%; men: 49%, 32%; Haahr-Pedersen et al., 2020). Rates of childhood exposure to interparental violence were roughly equivalent to civilians in the combined National Survey of Children, Exposure to Violence by Office of Juvenile Justice and Delinquency Prevention and Centre for Disease Control and Prevention (Civilian women: 21%; men: 12%; Hamby et al., 2013). Higher number of ACEs in the military sample were related to poorer couple functioning, especially increased likelihood of both IPV perpetration and victimization, for both women and men. Female serving members reporting higher exposure to childhood abuse and neglect were more likely to report perpetrating IPV compared with male service members. Civilian comparison data were not given for IPV, nor for association with ACEs.

Family Functioning

Only one study meeting the inclusion criteria addressed family functioning (Pye & Simpson, 2017). It investigated perceptions of marital functioning, reported by wives of UK serving soldiers British Army's Royal Armoured Corps (n = 220 families). Three stages of the deployment cycle were compared: pre-deployed, currently deployed, post-deployed, plus a non-military comparison group. This is the only study reporting on young children's perceptions of family functioning (aged 3.5 - 11 years). Complete data were available for 78 military families, and 34 nonmilitary families were recruited via opportunity sampling.

Relative to non-military wives, wives of currently deployed and recently returned personnel were less satisfied with their family and its communication. Current and recent deployment was significantly associated with mother reports of poor family balance. Non-Military group scores were highest for family balance (M = 4.8, SD = 1.5), followed by pre-deployment (M = 3.6, SD = 0.89), post-deployment (M = 1.8, SD = 1.3), and current-deployment (M = 0.7, SD =0.6). A significant effect was found of deployment stage on wives' reports of family balance (F(3, 33.47) = 48, $p \le 0.001$, $\eta^2 = 0.81$). Mothers in pre-deployed families reported significantly higher rigidity in family adaptability and cohesion (t(41) = 8.83, p < 0.001), and significantly lower cohesion (t(54.7) = -2.48, p =0.016) than in non-military families. Non-military and pre-deployed groups rated both family communication and family satisfaction significantly higher than post-deployed families (p < 0.001), and current-deployed group ratings were lower than either of these (each p = 0.001).

Children's drawings were coded using the parent-child alliance (PCA) coding scheme. Results indicated highest levels of dysfunctional parent-child alliance in the current deployed group relative to the post-deployed family group (p = 0.02) and relative to pre-deployed or non-military families (p < 0.001).

Child-Parent Relationship

Tupper et al. (2018) explored the association between deployment status and child attachment to their nonmilitary mother in a sample of 68 Canadian mili-

tary families. Results showed a significant direct effect of deployment status on attachment that was not mediated through other factors such as maternal depression, nor moderated by factors such as social support. A subsequent study (Tupper et al., 2020) examined further pathways of impact on these early attachment relationships, with a focus on maternal parenting stress. Child-mother dyads from military families (n = 51 armed forces) participated in an observed attachment assessment with the Strange Situation Procedure (SSP; Ainsworth, 2014), and mothers reported on their stress levels. A Canadian non-military control group was recruited from the community (n = 34). Having a father deployed in the army was associated again with higher levels of insecure attachment to the mother (χ^2 (2, N = 85) = 6.87, p = 0.032), relative to children with a non-deployed father or children with a civilian father.

4. Discussion

The current study aimed to assist related policy planning through examination of recent evidence (past 22 years) about unique or additional risk to couple and family functioning outcomes from current military service by one or more parents, relative to civilian, never-serving populations. The contribution of the Rapid Review method is not only to help stakeholders to understand the state of this specified literature (including comparator groups), but also to identify meaningful implications for the findings. We examine below our findings from a detailed review of seven studies in light of their capacity to corroborate or expand on the prior pool of evidence, and to inform policy and practice.

4.1. Summary of Findings, Translation and Policy Implications

4.1.1. Couple Relationship Quality and Intimate Partner Violence

The strongest and replicated evidence we found is for impacts of deployment on couple relationship quality. The collated evidence confirms 1) a significant decrease in marital satisfaction for men and women with progressing stages of deployment, 2) consistently higher prevalence of IPV for military versus civilian samples, growing with length of deployment, and mediated by histories of childhood abuse or neglect, and 3) less change observed by military couples engaged in therapeutic programs, and additional barriers to engagement in therapeutic programs. Socio-economic stress was a common mediating risk for marital and civilian marriages alike. We confirmed higher risks for significant relationship distress, dissolution of relationships and likelihood of not seeking treatment. The impact of elapsed time on couple relationship quality differed. On balance, relative to civilian populations, we found replicated evidence for a significant decrease in marital satisfaction over time for serving men and female spouses, associated with progressing stages of deployment.

Our findings corroborate consistent prior findings of higher prevalence of IPV perpetration in military samples relative to general population estimates. This included significantly more aggressive conflict resolution tactics in intimate relationship conflict, through physical assault, psychological aggression, and sexual coercion, with frequency growing with length of deployment, and increasing further with veteran status (Kwan et al., 2020). Two large and well conducted studies (Cigrang et al., 2021; McCarroll et al., 2010) provided comparison against civilian national weighted data adjusted for race and age, and controlling for confounding demographic variables, showing rates of IPV perpetration are far above national general population averages. Importantly, even when engaged in treatment for marital difficulties, change in violent behaviours may need additional input for military couples.

The strength of this evidence is clear, and in turn spotlights the imperative for a clear, proactive policy stance in Defence Forces on prevention through universal service provision of psychoeducation, early detection of IPV risk, and active support to engage in couples counselling. Advancement of policy that serves these objectives and rooted in the current research, is key, noting the systemic, inter-sectional complexity of implementation. For example, considerable income, education and employment gaps between current serving military and civilian spouses exist and are also associated with increased risk of violence or assaults in military families (Jiang, Dowling, Hameed et al., 2022). Integrated targets suggested through this review include prioritising younger serving members and those with declining health status, given both are key predictors of domestic violence assaults in military families.

The need for defence workforce support strategies to help prevent broader relationship decline is also clear. A key policy target here includes lifting barriers to engagement in and completion of therapeutic interventions for military couples, particularly for deployed personnel working away from home. This is an intricate arena of practice development, given multiple co-existing realities, not the least, colliding personal attributes for "success" as a serving member and "success" as a member of an intimate couple. For example, schema training in "Military Modes" for enhanced resilience in the face of adverse, and high-risk situations (Fry, 2021; Zhao, Wang, & Shi, 2020) may run counter to the psychological availability needed for maintaining intimacy and sensitive attunement to subtle relational cues in the couple context. Psycho-education support and in-person counselling are indicated to support the couple to deal effectively with communication during deployment about spousal and home-based stress, and to recalibrate power relationships within the family, during and after long periods of deployment related separation.

One promising avenue with strong meta-analytic evidence lies in refined content and availability of psycho-education support for couples (Megale, Peterson, & Friedlander, 2022; Spencer & Anderson, 2021). Barriers to accessibility of interventions are lifting with widespread advancement of digital mental health platforms, including effective couple-oriented platforms allowing asynchronous and synchronous use. The *OurRelationship* platform has been successfully piloted with distressed low-income couples (Doss, Knopp, Roddy, Rothman, Hatch, & Rhoades, 2020), with Veteran Military Families (Knopp, Rashkovsky, Khalifian et al., 2022) in an open trial and with low-income military families (Salivar, Knopp, Roddy, Morland, & Doss, 2020). So too, advances in our knowledge about telehealth for families and couples (McLean, Booth, Schnabel, Wright, & McIntosh, 2021) show the online platform for delivery of couples counselling is viable and as effective as in-person formats.

4.1.2. Supporting the Well-being of the Military Spouse

A related priority area indicated by this review includes the mental health impacts for women spouses of serving members. Policy and practice support for the prevention of psychological distress and frequency and quantity of alcohol consumption for the at-home spouse is clearly indicated. This includes addressing additive risk factor for the spouse when they relocate with their partners, including career advancement, social isolation, and economic dependence (Jiang et al., 2022). Providing more infrastructures for spousal social support and education pathways may improve relationship stress, and reduce strains associated with both spousal risk of IPV victimisation and risk of problematic alcohol use. The emerging evidence for deployment as a risk to early childhood attachment with the at-home parent shows higher prevalence of insecure attachment relationships of young children to their mothers, when the father is actively deployed, relative to civilian families. Increased and well targeted psycho-social support of the spouse is likely to support caregiving availability, conducive to security in young children's attachment security.

4.1.3. Family Functioning

The evidence for family relationship quality was scant, but that identified corroborates earlier findings showing current and recent deployment as a significant and unique risk factor for poor family balance, poor family communication, and higher levels of dysfunctional parent-child alliance. With retention of women in the military particularly challenging (Brandvold, 2014), our findings suggest policy efforts would optimally better differentiate and address mental health impacts for female serving members. For example, when women have dependent children, the need for support to address service/caregiving role and schema clashes seems particularly important. The predominant absence of well conducted studies with reliable comparison to the general community samples means unique potential risks such as this of military life for couples and family relationships have likely been under-stated. This flows into difficulties in developing and implementing policy about prevention efforts for military families that might assist both personal well-being and workforce retention. Furthering this evidence base through future research will aid precision in planning for healthcare support targets for serving and non-serving spousal members of military couples. In the interim, we suggest our findings provide clear directions to defence forces for priority foci.

4.2. Strengths and Limitations

The findings of this review should be interpreted in light of its methodological

strengths and limitations. A key strength lies in the systematic nature of the reviews conducted, and clear inclusion criteria focusing on currently serving military families relative to civilian families. There are a number of limitations to be considered in the current review. A rapid review methodology enables a quick capture of current published literature, but is confined to four databases, and precludes extensive searching of grey and ancillary literature. Our review does not account for doctoral theses or reports as yet unpublished. Given our strict criteria around sample inclusion of currently serving members and a general population comparison group, relatively few studies were isolated. The veteran literature is more advanced but cannot be called on to inform prevention strategies with deployed groups. Other limitations of the included studies were data from small samples, self-report data, cross sectional designs, and an exclusive focus on heterosexual couples. Comparability of the samples was generally not well reported. Only two studies included covariates and accounted for confounders, meaning bi-directional relationships such as couple conflict and the serving member's mental health were not adequately addressed.

Generally, the exposure period of deployment was well described, and some studies examined staged effects within the deployment cycle. However, active versus non-active deployment; combat versus non-combat deployment was not routinely examined. That said, we consider the quality of the included studies adequate on most counts, and their findings help to establish an emerging evidence frame for the unique risks posed by military deployment for couple and family relationships. Future research addressing family functioning, particularly including the perspective of children is needed.

5. Conclusion

Couple and family factors can have a significant influence on a serving member's commitment to their military employment. The current study found unique, additional risk to couple and family functioning outcomes of current military service by one or more parents, relative to civilian, never-serving populations. The strongest evidence is for impacts on couple relationship quality, including significant decrease in marital satisfaction for men and women with progressing stages of deployment. A key contribution of this review is in its corroboration of evidence about the known risk of higher IPV in military families as compared to the general population. Consistently higher prevalence of IPV for military versus civilian samples, growing with length of deployment, is a clear policy target.

Defence forces have both an important goal in the retention of military families and an obligation to address the health and well-being of non-serving spousal partners, family members as well as that of their serving employees (Brandvold, 2014; De Burgh et al., 2011). Policy addressing support for careful and continual screening of IPV across deployment, including socio-economic and current and historic psycho-social risks, and reduction of barriers to engagement in therapeutic programs is key. Additional support for couple and family relationships with progressing stages of deployment is needed with a focus on family balance, social support, family communication, parent-child alliance, and child-parent attachment during deployment.

Collectively, these findings may inform strategies to identify at-risk military families, to prevent relationship decline throughout the family system, and promote individual and relational resilience.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Supplementary Material

Table S1. Quality Assessment of Included Studies (N = 7).

Study (year)	1	2	3	4	5	6	7	8	9	10	Raw score (%)	Risk of bias
Cigrang et al. (2021)	N/A	1	N/A	1	N/A	N/A	N/A	1	0.5	1	4.5/10 (45)	High
McCarroll et al. (2010)	N/A	N/A	N/A	1	N/A	1	1	1	1	1	6/10 (60)	Moderate
McLeland et al. (2008)	0.5	0.5	0	1	1	0	0	1	1	1	6/10 (60)	Moderate
Salivar et al. (2020)	1	1	1	1	1	N/A	N/A	1	0.5	1	7.5/10 (75)	Low
Pye & Simpson (2017)	1	0	0.5	1	1	1	1	1	1	1	8.5/10 (85)	Low
Tupper et al. (2018)	N/A	N/A	N/A	1	N/A	0	0	1	1	1	4/10 (40)	High
Tupper et al. (2020)	1	1	1	1	1	1	1	1	1	1	10/10 (100)	Low
Mean											8/10 (80)	

Note: Y = Yes, N = No, U = Unclear, N/A = Not applicable. 1 = Yes; 0.05 = Unclear; 0 = No; No study was excluded based on quality assessment and risk of bias outcomes. Criteria used to rank the risk of bias: 1) \leq 49% = High risk of Bias; 2) 50% and 69% = Moderate risk of Bias; 3) Above 70% = Low risk of Bias.

Review 1 Search Terms by Database Medline

#	Search Terms	Results
1	Military Personnel/	
2	milita*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	97,524
3	soldier*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	11,735
4	officer*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	22,546
5	infantry.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	557
6	defen#e.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	154,775
7	arm*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	305,525
8	navy.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4611
9	air force*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4186

armed service*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 10 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 279 concept word, rare disease supplementary concept word, unique identifier, synonyms] marine.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 11 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 109,939 concept word, rare disease supplementary concept word, unique identifier, synonyms] combat*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 12 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 56,370 concept word, rare disease supplementary concept word, unique identifier, synonyms] armed force*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 13 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 6957 concept word, rare disease supplementary concept word, unique identifier, synonyms] 14 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 710,832 15 Spouses/ 11,070 spouse.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 16 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 17,184 concept word, rare disease supplementary concept word, unique identifier, synonyms] husband.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 17 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 6670 concept word, rare disease supplementary concept word, unique identifier, synonyms] wife.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 18 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 6026 concept word, rare disease supplementary concept word, unique identifier, synonyms] de facto.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 1904 19 concept word, rare disease supplementary concept word, unique identifier, synonyms] partner.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating 20 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 83,783 concept word, rare disease supplementary concept word, unique identifier, synonyms] spousal partner.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 41 21 concept word, rare disease supplementary concept word, unique identifier, synonyms] accompanied.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 22 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 278,714 concept word, rare disease supplementary concept word, unique identifier, synonyms] 23 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 389,667 serv*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 24 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 1,596,088 concept word, rare disease supplementary concept word, unique identifier, synonyms] deploy*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 61,025 25 concept word, rare disease supplementary concept word, unique identifier, synonyms] enlist*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 4139 26 concept word, rare disease supplementary concept word, unique identifier, synonyms]

onti	nued	
27	duty.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	26,110
28	post*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	3,133,194
29	station*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	104,730
30	assign*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	351,360
31	combat.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	42,691
32	armed service.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	30
33	24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32	5,015,210
34	Disease/	69,097
35	Mortality/	48,368
36	Morbidity/	32,398
37	Substance-Related Disorders/	100,839
38	"Quality of Life"/	231,216
39	Social Support/	75,916
40	Mental Health/	50,063
41	Mental Disorders/	171,598
42	disease.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4,830,905
43	illness.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	558,853
44	mortality.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1,284,781
45	morbidity.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	426,930
46	hospitalisation*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	21,916

278

2325

1432

3092

58

132

Continued "health related risk".mp. [mp = title, abstract, original title, name of substance word, subject heading word, 47 floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] alcohol.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 48 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 327,956 concept word, rare disease supplementary concept word, unique identifier, synonyms] AOD.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 49 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] "alcohol and other drugs".mp. [mp = title, abstract, original title, name of substance word, subject heading 50 word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] substance abuse.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 51 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 55,934 concept word, rare disease supplementary concept word, unique identifier, synonyms] substance misuse.mp. [mp = title, abstract, original title, name of substance word, subject heading word, 52 floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] suicid*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating 53 sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 104,705 concept word, rare disease supplementary concept word, unique identifier, synonyms] intentional harm.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol 54 supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] "Quality of life".mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 397,004 55 concept word, rare disease supplementary concept word, unique identifier, synonyms] "health related quality of life".mp. [mp = title, abstract, original title, name of substance word, subject heading 56 word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol 52,008 supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] social support.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 57 98,768 concept word, rare disease supplementary concept word, unique identifier, synonyms] mental health.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 58 229,230 concept word, rare disease supplementary concept word, unique identifier, synonyms] mental illness.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary 32,876 59 concept word, rare disease supplementary concept word, unique identifier, synonyms] "common mental illness".mp. [mp = title, abstract, original title, name of substance word, subject heading 60 word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms] "common mental disorder".mp. [mp = title, abstract, original title, name of substance word, subject heading

word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol 760 61 supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]

Conti	nued	
62	depressi*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	512,799
63	anxiety.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	272,298
64	psychosis.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	42,452
65	biploar.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	5
66	schizophrenia.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	151,792
67	"post traumatic stress disorder".mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	13,872
68	"obsessivecomplusive disorder".mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
69	bi-polar.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	144
70	34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69	7,415,644
71	14 and 23 and 34 and 72	1463
72	limit 71 to yr = "2000-Current"	1301

PsycINFO

#	Search Terms	Results
1	exp Military Personnel/	32,665
2	milita*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	50,440
3	soldier*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	7563
4	officer*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	21,159
5	infantry.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	306
6	defen#e.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	42,603

7	arm*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	48,752
8	navy.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	3093
9	air force*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	3180
10	armed service*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	675
11	marine.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	2673
12	combat*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	20,147
13	armed force*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	2149
14	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13	164,693
15	exp Spouses/	16,432
16	spouse.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	15,444
17	husband.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	6570
18	wife.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	7931
19	de facto.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	1073
20	partner.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	57,819
21	spousal partner.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	42
22	accompanied.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	35,198
23	15 or 16 or 17 or 18 or 19 or 20 or 21 or 22	122,434
24	serv*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	558,230
25	deploy*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	18,298
26	enlist*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	3992
27	duty.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	11510
28	post*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	470,815

29	station*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	13,216
30	assign*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	104,434
31	combat.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	16,421
32	armed service.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	28
33	24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32	1,082,646
34	exp "Death and Dying"/	43,177
35	exp Morbidity/	7715
36	exp "Substance Use Disorder"/	137,429
37	exp "Quality of Life"/	47,330
38	exp Social Support/	39,835
39	exp Mental Health/	77,152
40	exp Mental Disorders/	918,088
41	disease.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	343,010
42	illness.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	194,012
44	mortality.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	47,142
45	morbidity.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	27,796
46	hospitalisation*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	2373
47	"health related risk".mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	145
48	alcohol.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	134,703
49	AOD.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	853
50	"alcohol and other drugs".mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	1660
51	substance abuse.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	44,397
52	substance misuse.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	3505
53	suicid*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	75,503

54	intentional harm.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	94
55	"Quality of life".mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	96,451
56	"health related quality of life".mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	13,387
57	social support.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	87,631
58	mental health.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	252,326
59	mental illness.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	47,752
60	"common mental illness".mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	90
61	"common mental disorder".mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	505
62	depressi*.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	387,379
63	anxiety.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	262,217
64	psychosis.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	58,844
65	biploar.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	2
66	schizophrenia.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	139,361
67	"post traumatic stress disorder".mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	12,742
68	"obsessivecomplusive disorder".mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	9
69	bi-polar.mp. [mp = title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh word]	192
70	34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69	1,722,901
71	14 and 23 and 33 and 70	1491
72	limit 71 to yr = "2000-Current"	1281

CINAHL

#	Search Terms	Results
S10	S3 AND S4 AND S5 AND S9	(122)
S9	S6 AND S7 AND S8	(143,866)
S8	schizophrenia OR "post-traumatic stress" OR "obsessive compulsive disorder" OR MW disease OR MW mortality OR MW morbidity OR MW substance related disorder OR MW quality of life OR MW social support OR MW mental health OR MW mental disorders	(947,330)
S7	intentional harm OR "quality of life" OR "health related quality of life" OR social support OR mental health OR mental illness OR "common mental illness" OR "common mental disorder" OR depressi* OR anxiety OR psychosis OR bi-polar	(640,360)
S6	disease OR illness OR mortality OR morbidity OR hospitalisation* OR "health related risk" OR alcohol OR AOD OR ("alcohol and other drugs") OR substance abuse OR substance misuse OR suicid*	(1,857,165)
S5	serv* OR deploy* OR enlist* OR duty OR post* OR station* OR assign* OR combat OR armed service	(1,595,553)
S4	spouse OR husband OR wife OR de facto OR partner OR spousal partner OR accompanied OR MW spouse	(110,705)
S3	S1 OR S2	(174,630)
S2	MW military personnel	(16,991)
S1	militar* OR soldier* OR officer* OR infantry OR defen*e OR arm* OR navy OR air force* OR armed service* OR marine OR combat* OR armed force*	174,630

ProQuest Central

((noft(milita*) OR noft(soldier*) OR noft(officer*) OR noft(infantry) OR noft(defen?e) OR noft(arm*) OR noft(navy) OR noft(air force*) OR noft(armed service*) OR noft(marine)) OR (noft(combat*) OR noft(armed force*) OR mainsubject(military personnel))) AND (noft(spouse) OR noft(husband) OR noft(wife) OR noft(de facto) OR noft(partner) OR noft(spousal partner) OR noft(accompanied) OR mainsubject(spouse)) AND (noft(serv*) OR noft(deploy*) OR noft(enlist*) OR noft(duty) OR noft(post*) OR noft(station*) OR noft(assign*) OR noft(combat) OR noft(armed service)) AND ((noft(disease) OR noft(illness) OR noft(mortality) OR noft(morbidity) OR noft(hospitalisation) OR noft("health related risk") OR noft(alcohol) OR noft(AOD) OR noft("alcohol and other drugs") OR noft(substance abuse)) OR (noft(substance misuse) OR noft(sucid*) OR noft(intentional harm) OR noft("quality of life") OR noft("health related quality of life") OR noft(solder")) OR noft(mental health) OR noft(mental illness) OR noft("common mental illness") OR noft("common mental illness") OR noft("post traumatic stress disorder") OR noft("obsessive compulsive disorder") OR mainsubject(Disease) OR mainsubject(mortality) OR mainsubject(social support) OR mainsubject(mental health) OR mainsubject(social support) OR mainsubject(mortality) OR mainsubject(social support) OR mainsubject(mental health) OR mainsubject(mortality) O

Review 2 Search Terms by Database Medline

#	Key Terms	Results
1	Military Personnel/	42,430
2	milita*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	97,550
3	soldier*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	11,737
4	officer*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	22,558
5	infantry.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	557
6	defen\$e.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	0
7	arm*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	305,694
8	navy.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4611
9	air force*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4186
10	armed service*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	279
11	marine.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	109,997
12	combat*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	56,436
13	armed force*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	6958
14	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13	567,069
15	serv*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1,596,864

16	deploy*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	61,095
17	enlist*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4139
18	duty.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	26,120
19	post*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	3,134,584
20	station*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	104,769
21	assign*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	351,522
22	combat.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	42,737
23	armed service.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	30
24	15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23	5,017,508
25	divorc*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	12,271
26	separat*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	850,089
27	marriage.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	36,618
28	marital.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	43,250
29	relat*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	6,679,369
30	couple.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	36,556
31	famil*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1,390,985

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32	25 or 26 or 27 or 28 or 29 or 30 or 31	8,227,553
33	communic*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	543,408
34	conflict.mp. [mp = title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	77,065
35	33 or 34	614,761
36	14 and 24 and 32 and 35	3752
37	limit 36 to yr = "2000-Current"	3274