

Use of the Operational Stress Injury Social Support (OSISS) program in a nationally representative sample of Canadian military personnel

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Introduction

- ◆ Several military personnel will meet criteria for an Operational Stress Injury (OSI; e.g., anxiety disorder, posttraumatic stress disorder [PTSD]) during their lifetime.
- ◆ Evidence suggests many will not seek professional mental health care in a timely fashion, if at all.
 - ◆ The extant literature has focused on barriers to seeking care; however, comparatively less research has focused on variables that may facilitate care seeking among military populations.
- ◆ The Operational Stress Injury Social Support (OSISS) initiative is a unique military program accessible to Canadian active duty military personnel, veterans, and their families.
 - ◆ The OSISS program is designed to enable professional mental health service use and can serve as an adjunct to professional mental health care.
- ◆ The structure of the OSISS program has attracted the attention of several military organizations outside of Canada; however, relatively little remains known about OSISS program use within the Canadian Armed Forces (CAF).
 - ◆ Andersen's behavioural model of health services use (1995, 2008) informed the current study examining patterns of OSISS use within the CAF.

Methods

- ◆ A total of 6700 (86%=men; 78.7% response rate) Regular Members from a nationally representative CAF sample completed in-person interviews as part of the Statistics Canada 2013 *Canadian Forces Mental Health Survey*.
- ◆ Variables
 - ◆ The survey included items assessing socio-demographic, military, childhood adversity, and deployment-related trauma variables.
 - ◆ *Mental Health Composite International Diagnostic Interview (CIDI; World Health Organization [WHO], 2004)* – a structured diagnostic interview assessing major depressive disorder, anxiety disorders, PTSD, and alcohol-related disorders in the past 12 months based on the ICD-10 (WHO, 1992).
 - ◆ Past 12 months OSISS use: “[...] have you seen, or talked on the telephone about problems with your emotions, mental health or use of alcohol or drugs to a Peer Support Coordinator from the OSISS program”
- ◆ Prevalence estimates were computed for all variables included in the analyses and for other descriptive statistics of interest pertaining to OSISS use.
- ◆ A series of univariate and multivariate logistic regression analyses were performed with past 12 months OSISS use as the outcome variable.
- ◆ Analyses were performed using Statistics Canada bootstrap replicates and final survey weights. Proportions were rounded to base 20 for confidentiality purposes according to Statistics Canada data release policies.

Results

- ◆ There were 20.8% ([19.7-21.8] 95% CI) of CAF Regular Members who accessed professional mental health services in the past 12 months.
 - ◆ Comparatively, 1.2% ([1.0-1.5] 95% CI) of CAF Regular Members made use of the OSISS program. Depending on the type of service provider, between 61.5%-66.7% of individuals who used the OSISS program also sought professional mental health care.
- ◆ Prevalence estimates for socio-demographic, military, trauma-related, and mental health variables in relation to past 12 months OSISS use are presented in Table 1.
 - ◆ The mean frequency of OSISS use was 9.1 times ($SD=8.4$). In 56.4% ([46.6-69.3] 95% CI) of cases, the OSISS Peer Support Coordinator made a comment about “whether [the individual] should or should not seek professional help for [their] problems”.
 - ◆ Individuals who used OSISS reported finding the program *not at all helpful* (20.5%; [10.3-30.8] 95% CI)^a, *a little helpful* (10.3%, [4.3-18.3] 95% CI)^a, *some helpful* (28.2%, [17.1-37.7] 95% CI)^a, or *a lot helpful* (41%, [29.6-51.8] 95% CI).
- ◆ The final adjusted model for past 12 months OSISS use is presented in Table 2.
 - ◆ In the univariate regression model, being 35-44 years old (UOR = 2.6, [1.4-4.7] 95% CI) and 45-60 years old (UOR = 1.9, [1.0-3.7] 95% CI) was associated with increased likelihood of past 12 months OSISS use; however, age could not be included in the final model due to sample size restrictions.

Discussion

- ◆ The present study is the first to examine use of the OSISS peer support program within a nationally representative CAF sample of Regular Members.
 - ◆ Only a very small fraction of the total population used OSISS. Most individuals who made use of the program also sought professional mental health care.
 - ◆ The majority of individuals who used the program reported that it was at least *some helpful*.
- ◆ Past 12 months PTSD had the largest association with OSISS use after accounting for socio-demographic variables, deployment trauma experiences, and other mental health diagnoses. Past 12 months anxiety disorders and alcohol-related disorders were also associated with OSISS use but to a lesser degree.
- ◆ Having at least one child under 18 years old living in the household was the only socio-demographic variable significantly related to OSISS use in the final model.
- ◆ The current results suggest interventions focused on PTSD and family systems may be of particular relevance to individuals seeking help from the OSISS program.
- ◆ A strength of the study is the use of nationally representative CAF data including personnel who were deployed in support of the mission in Afghanistan.
- ◆ A limitation of the study is the cross-sectional nature of the data and the small sample size for individuals who used the OSISS program. Future researchers would benefit from evaluating use of the program in a larger sample and with a prospective longitudinal study design.

Table 1: Prevalence estimates – Past 12 months OSISS use

Variables	% (95% CI)
Sex	
Male	1.3 (1.0-1.6)
Female	0.9 (0.3-1.6) ^b
Age	
16-34 years old	0.7 (0.4-1.1) ^a
35-44 years old	1.9 (1.2-2.6) ^a
45-60 years old	1.5 (0.8-2.0) ^a
Marital Status	
Single, separated, divorced, or widowed	1.0 (0.5-1.4) ^a
Married or common-law partner	1.4 (1.0-1.6)

Variables	% (95% CI)
Ethnicity	
Caucasian/White	1.2 (0.9-1.5)
Minority	1.3 (0.3-1.9) ^b
Education	
High school or less	1.2 (0.7-1.6) ^a
Some post-secondary education	1.2 (0.9-1.6)
Rank	
Junior NCO	1.3 (0.9-1.7) ^a
Senior NCO or Officer	1.1 (0.7-1.5) ^a
Element	
Army	1.6 (1.2-2.1)
Navy or Air Force	0.7 (0.4-1.1) ^a

Variables	% (95% CI)
Income	
Less than \$80,000	1.2 (0.8-1.7) ^a
More than \$80,000	1.2 (0.9-1.6)
Children < 18 years old in household	1.7 (1.2-2.2)
Exposure to childhood adversity	1.4 (1.00-1.8)
Deployment trauma exp. (M, SD)	4.4 (2.2)
Anxiety disorders	9.4 (6.5-12.3)
Major depressive disorder	6.6 (4.3-8.8) ^a
Alcohol-related disorders	5.6 (2.3-8.2) ^a
PTSD	11.4 (7.6-14.9)

Table 2: Final adjusted logistic regression model – Past 12 months OSISS use

Block	Variables	UOR	(95% CI)	AOR	(95% CI)
1	Element				
	Army (Ref.)	1.00		1.00	
	Navy or Air Force	0.8	(0.3-0.8)	1.02	(0.6-1.9)
1	Children < 18 in household	2.0	(1.2-3.3)	1.9	(1.1-3.3)
2	Deployment trauma exp. (Mean)	1.61	(1.5-1.8)	1.3	(1.2-1.5)
3	Anxiety disorders	16.6	(10.2-26.9)	2.9	(1.4-6.1)
3	Major depressive disorder	9.3	(5.7-15.2)	1.6	(0.8-3.3)
3	Alcohol-related disorders	5.3	(2.7-10.6)	2.7	(1.3-5.8)
4	PTSD	22.3	(13.4-37.3)	4.9	(2.2-11.1)

Note: CI = confidence interval; M = mean; SD = standard deviation; NCO = non-commissioned officer; OSISS = Operational Stress Injury Social Support; PTSD = posttraumatic stress disorder. Statistics Canada permitted only weighted percentages to be released due to small cell sizes for certain variables. All percentages were rounded to base 20 for confidentiality purposes according to Statistics Canada data release policies. ^aA high level of error is associated with this estimate. The estimate is considered marginally acceptable according to Statistics Canada guidelines. ^bThe estimate does not meet Statistics Canada quality standards. Conclusions based on this data will be unreliable and most likely invalid.

Note: UOR = unadjusted odds ratio; AOR = adjusted odds ratio; CI = confidence interval; Ref. = reference group for odds ratios; OSISS = Operational Stress Injury Social Support; Exp. = experiences; PTSD = posttraumatic stress disorder.

