

## The 2018 Canadian Armed Forces Members and Veterans' Mental Health Follow-up Survey: Breakthroughs, Implications, and Future Directions

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The papers in this special issue from the 2018 Canadian Armed Forces Members and Veterans Mental Health Follow-up Survey (CAFVMHS) present important breakthroughs in understanding the mental health of Canadian Armed Forces (CAF) serving members and Veterans (former members) across their life courses. Under the leadership of Professor Jitender Sareen at the University of Manitoba, a team of researchers from the CAF, Department of National Defence, Veterans Affairs Canada, and academia worked long and hard in collaboration with Statistics Canada to design and report on the 2018 longitudinal follow-up of CAF serving members who had been surveyed in the 2002 Canadian Forces Mental Health Survey (CFMHS). What did they find, and why is it important?

# Time I: The 2002 CFMHS of Serving Members

Time 1 for this longitudinal study was the cross-sectional 2002 CFMHS, a supplement to the Canadian Community Health Survey (CCHS). This first population-level study of the mental health of the whole population of CAF serving members reflected openness and transparency in addressing mental health issues.

Prior to the 1990s, significant cuts were made to CAF health services during post-Cold War restructuring, and Veterans had to find their way in civilian health care.<sup>1,3</sup> Renewed attention to the mental health of serving members and Veterans occurred during the increased CAF operational tempo that began with the deployments to the First Persian Gulf, Rwanda, Somalia, and Balkans wars of the 1990s. Studies in the late 1990s had made it clear that the needs of many serving members and Veterans were not being

met.<sup>1,3</sup> In the 2002 CFMHS, depression prevalence was nearly double in CAF members compared to the Canadian general population.<sup>1</sup> Multiple analyses of the 2002 and 2013 CFMHS yielded rich information about mental health care needs and service utilization in CAF members, informing the development of new mental health services for serving members and Veterans (former members).<sup>1,4</sup> However, the 2013 CFMHS found a concerning increase in some mental health conditions for serving members compared to 2002, in part attributed to the Afghanistan war, in spite of the increase in mental health services.<sup>4</sup>

## Life after Service: The 2003 CCHS, 2010 Survey on Transition to Civilian Life of Veterans (STCL) and the Life after Service Studies (LASS)

Studies in the 1990s of treatment-seeking CAF Veterans had raised flags.<sup>3</sup> There was increasing recognition of the need to

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better understand the mental health of CAF members in transition to life after service. That led to the next major epidemiological breakthrough: the cross-sectional 2003 CCHS of Veterans from prior eras, and the 2010 STCL followed by the 2013, 2016, and 2019 LASS surveys of CAF members released from 1998.<sup>3,5</sup>

Prevalences of mood and anxiety disorders and posttraumatic stress disorder (PTSD) were much higher in Veterans released from 1998 than the Canadian general population. Furthermore, prevalences in Veterans seemed to be higher in CAF Veterans released since 1998 than in serving members and in Veterans from earlier eras. Thowever, the prevalences in Veterans and serving members were not directly comparable owing to survey methodological differences. While these Veteran surveys helped to focus attention on the importance of supporting military members in their transitions to post-service life and beyond, fundamental questions remained about the natural history of mental health conditions across the life courses of members and Veterans.

# Time 2: From Cross-sectional to Longitudinal—The 2018 CAF Members and Veterans' Mental Health Follow-up Survey

Before the 2018 CAFVMHS, findings about the mental health and other aspects of the well-being of CAF serving members and Veterans were cross-sectional. There was clear need for a longitudinal study of mental health in CAF members across their transitions to post-service life. At the time of the followup survey in 2018, 34% of the respondents were still serving and 66% were Veterans (released from service).

# Natural History of Major Depressive Episodes and PTSD

The papers by Sareen et al., Mota et al., and Enns et al. demonstrate the course and correlates of major depressive disorder and PTSD in CAF members. 1,6,7 Nearly half of CAF members did not develop any mental disorder assessed in the surveys. However, over their lifetimes, a majority (54%) did have one or more of the disorders. The findings add longitudinal evidence to the suspicion from the cross-sectional CFMHS, CCHS, STCL, and LASS that the prevalence and complexity of mental health problems has increased over time and across transition. Zamorski et al. and Thompson et al. explored a number of hypotheses for the increasing prevalence of mental health problems that were occurring.<sup>2,3</sup> These CAFVMHS papers identified varying correlates of major depression and PTSD courses across the domains of well-being, including mental health service utilization, childhood adversities, female sex, coping strategies, social support, social networks, work stress, junior rank, female sex, sexual abuse, Army service, deployment, and transition to Veteran (post-military) status.8 However, mental health conditions occurred in all types of members and Veterans, not just in those categories.

### Exposure to Adverse Childhood Experiences

The paper by Afifi et al. confirmed that a history of exposure to childhood maltreatment is common in CAF members and Veterans (62.5%). The new finding is that a history of childhood maltreatment was associated with mental disorders in CAF members and Veterans *independently* of exposure to deployment-related psychologically traumatic events. However, there were *cumulative* effects of having been exposed to both childhood maltreatment and deployment-related psychologically traumatic events. Importantly, childhood maltreatment and mental health problems were reported by all types of serving members and Veterans, across the ranks, in both sexes, and across deployment and socioeconomic status. This key finding adds greater urgency to find ways to interrupt the cycles of adverse childhood experiences in families.

## Female Serving Members and Veterans

Males greatly outnumber females in military service, which challenges research into the well-being of women separately from men in surveys, including the CAFVMHS. The 2018 survey designers were very aware of the need to learn more about women, but the priority focus was to have sufficient power within available resources to address the main research questions. Although each paper examined females, the smaller samples of women limited abilities to draw conclusions. Although females were less likely to experience physical abuse and more likely to experience sexual abuse, both women and men experienced childhood maltreatment. But clearly, more needs to be learned about the determinants of mental health in female members and Veterans.

# Next Steps: Implications for Policy, Services, and Research

The large and growing volume of evidence from all these population surveys is complex. More papers are being written from the data collected in the CAFMHS 2013, LASS cross-sectional and longitudinal components, and the longitudinal CAFVMHS. It will take time to integrate and digest the findings to fully identify and prioritize implications. However, some key implications are evident for policy and services. First, the papers demonstrate the importance of looking at needs across the life course. A critical policy challenge, shared by all Canadians, is the clear need to find ways to deliver effective mental health supports, integrated across agencies. Determinants of mental health derive from all the well-being domains: employment, finances, physical and psychological health, social integration, life skills, housing, and cultural/social environment factors including health and other well-being support services. Second, policy planners and service providers need to attend to supports for families of origin and military families in order to break the vicious cycles of childhood maltreatment and adverse

mental health. Finally, the needs of important subgroups require clarification.

Much remains to be learned from research. First, the papers concluded that a focus on social supports, social networks, and coping strategies could be of value; however, no survey can include all the variables of importance in an issue as complex as determinants of mental health conditions. Research is needed to find effective ways to integrate mental health care services with other determinants of well-being. Further analysis of the longitudinal CAFVMHS data will provide new insights into the complex nature of mental health determinants in life during and after service. Second, physical health conditions and chronic pain, both important correlates of mental health conditions, are more common in CAF Veterans released from 1998 than the general Canadian population.<sup>3</sup> However, no physical health or chronic pain baseline data were collected in the 2002 CFMHS, and the 2018 survey did not directly assess chronic pain. Further studies are needed to understand how physical and mental health conditions and chronic pain relate to each other across Veterans' life courses. Finally, longitudinal studies of families, women, and other important subgroups like indigenous and gendered Veterans are needed to better understand their needs and assist them with mental health in service and across transition to post-service life into old age.

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