

[CHERRY] - *Mental ill-health in firefighters deployed to the Fort McMurray fire*

Authors: Nicola Cherry, University of Alberta

Priority Research Area: N/A

Relevant PSP Population(s): Structural, wildland and industrial firefighters

For more information, please contact: Nicola Cherry

What is the issue? We wished to characterise mental health issues in a cohort of firefighters deployed to the Fort McMurray fire using a Standardised Clinical Interview

What was the aim of the study? To characterise the mental ill-health in this cohort and to use the results to estimate the prevalence of anxiety, depression and PTSD and identify causal factors

How was the study conducted? 1000 firefighters in the cohort of 1234 had completed screening questionnaires for anxiety, depression and PTSD some 30 months after the start of the fire in May 2016. We identified a stratified random sample of firefighters based on these screening instruments and, using funding from this catalyst grant, carried out 193 Standardised Clinical Interviews (SCI-D) to allow symptoms to be categorised on the DSM-5.

What did the study find? Among the 193 interviewed, no diagnosis was reached for 66 (34%), PTSD for 78 (40%), anxiety 59 (31%) and depression 53(28%). Some firefighters were diagnosed with more than one condition. Using these results we estimate a prevalence of 11.9% for PTSD in the whole cohort. Current analysis is identifying factors associated with the likelihood of 'caseness' for particular diagnoses 30 months after the Fort McMurray fire. We find, for example that anxiety, depression and PTSD are all related to serious life events since the start of the fire. PTSD is more likely in those who reported, in the first months after the fire, that their life felt threatened during the fire. Cases of anxiety and depression were more frequent among those whose home base (as a structural, wildland or industrial firefighter) was in Fort McMurray. Using records on physician consultations for mental health issues, we found that these were more common in those with a history of mental health consultations before the fire and for those based in Fort McMurray. Current analysis, based on interviews with fire chiefs from throughout the province, is evaluating the effectiveness of mental health and resiliency training and interventions in mitigating adverse effects of the Fort McMurray deployments.

What are the implications of this study? The full value of the study rests in the evaluation of mitigating interventions. Of those with PTSD only 36% evoked the Fort McMurray fire as a trauma, many relating events at other fires, in their role as a paramedic or events outside work. While it may be possible to demonstrate that interventions around the time of the Fort McMurray fire reduced the effects of that event, it is evident that firefighters deal with multiple traumatic events, suggesting the need for ongoing programs.

What are the key messages? Management of mental ill-health remains a key concern for firefighters

Provide a list of potential target audiences for this research:

Fire chiefs
Unions
Firefighters

Occupational and mental health professionals

[HATCHER] - *Suicide among Public Safety Personnel compared to the General Population in Ontario: A case-control study*

Authors: Dr. Simon Hatcher Ottawa Hospital Research Institute

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Priority Research Area:

Relevant PSP Population(s): Police, Firefighters, Paramedics and Corrections Officers

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What is the issue? First Responders probably have higher rates of suicide than the general population. When First Responders do die from suicide there is often media attention which is not given to other groups in the community.

What was the aim of the study? The main aim of the study was to find out if First Responders who died from suicide in Ontario were different from a matched group of the general population including in terms of the nature of the suicide and recent contacts with the health service. A secondary aim of the study is to see whether suicide deaths of First Responders meet media guidelines for reporting of suicides.

How was the study conducted? We have gathered a list of First Responder suicides in Ontario which includes to date 26 police, OPP, RCMP; 12 firefighters; 18 paramedics; and 8 corrections. We have ethics approval to proceed and data sharing agreements in place.

What did the study find? Due to the COVID pandemic we have not been able to access coroners records at The Chief Coroners building in Toronto as this is closed to researchers. We are waiting for it to reopen.

What are the implications of this study? Not applicable

What are the key messages? Not applicable

Provide a list of potential target audiences for this research: Not applicable

[RICCIARDELLI] *Understanding the impact of prison work on the mental health of Correctional Officers employed by Correctional Services Canada: Beginning a longitudinal study*

Authors: Rosemary Ricciardelli and Stephen Czarnuch, Memorial University of Newfoundland

Priority Research Area: Data collection, analysis and/or reporting on the incidence and prevalence of PTSD in PSP, which may also include information on relevant co-morbidities and health determinants

Biological, clinical and social characteristics of PTSD, including differences that contribute to the risk for developing PTSD and measures/characteristics that may be associated with better treatment outcomes and resilience among PSP

Mental health awareness, stigma reduction, anti-discrimination, and/or literacy programs that have the potential to improve mental wellness among PSP

Relevant PSP Population(s): Correctional Services

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What is the issue? Correctional work is challenging, stressful, and potentially traumatic. Researchers have sought to identify factors that increase the potentiality for correctional officers (COs) to develop psychological disorders but none have explored if COs feel prepared for their job challenges at occupational entry. Limits in evidence-based knowledge undermine the depth of information available to inform correctional practices in ways that help ensure a healthy and safe correctional workforce.

What was the aim of the study? The current study served as a pilot for a larger longitudinal study where we assess CO well-being from recruitment to years post deployment. We sought to identify correctional officer recruits (CORs) mental health status, coping skills, views, and experiences at occupational entry and to use this information to inform pre-employment preparation and skill provision. We ask what influences a COR to enter the field, if they have prior military or public safety personnel (PSP) experience, their meaning-making around physical space, gender, and understanding of safety. We also ask about experiences that have shaped them over their life and their mental health (e.g., trauma, mental health diagnosis).

How was the study conducted? As planned, we conducted clinical interviews by administering a structured diagnostic psychological assessment (the Mini-International Neuropsychiatric Interview [M.I.N.I.]) to recruits to provide a baseline of their historical and present mental health at employment entry. We also completed in-depth semi-structured qualitative interviews to provide context to the data collected in the M.I.N.I. and to identify factors peripheral to the M.I.N.I. that shape correctional work and therein COR wellbeing. We studied the response-based diagnostic criteria in the structured clinical interview and the narrative open ended responses from the qualitative interviews to create an informed understanding of the COR-CO experience.

What did the study find? Many study participants had prior armed forces or public safety background, including prior employment in correctional services. From the M.I.N.I. assessments we learned that although many CORs experienced mental disorders over their lifetime, CORs were actively in good mental health. For example, 30% of CORs had experienced a major depressive episode in the past but none were currently experiencing a major depressive episode. Overall, recruits report very low rates of positive screens for recent (past 7 days to past month) depression, anxiety, Posttraumatic Stress Disorder, alcohol use disorders, or panic disorders and participants reported low rates of suicidal thoughts, suicide plans, and attempted death by suicide in the past 12 months. The qualitative interviews inform us of the motivations of CORs for entering the field (e.g., some intrinsic and some extrinsic), and how life experiences informed their perspectives on prisons, prisoners, and their occupational work. Moreover, we were able to create the necessary processes, tools, and organizational

structures collaboratively with our partner organization and unions that ensure the foundational work for a longitudinal study is cemented.

What are the implications of this study? The current mental health of CORs is generally quite good yet we know that correctional staff do experience compromised mental health at rates significantly higher than those among the general Canadian population. The findings generated from the current and ongoing study help to inform recruitment, support early identification of officers in need of help, reduce individual vulnerability, and provide insight into how institutional cultures vary. These findings are important to contextualize officer well-being and occupational orientations to ultimately inform training processes and improve CO mental health and other correctional staff over time.

What are the key messages? Correctional officer recruits, toward the beginning of their training, are generally quite mentally healthy. Many are intrinsically motivated toward a career in correctional services but extrinsic motivations remain. More needs to be done to ensure CORs stay healthy over the course of their career.

Provide a list of potential target audiences for this research: Correctional Services Canada, and correctional services in each province and territory in Canada as well as internationally. Correctional Services related Unions (UCCO-SACC-CSN, USJE), stakeholders, policy makers, and practitioners.