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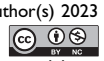
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Suicidal Ideation, Planning, and Attempts Among new Royal Canadian Mounted Police Cadets

Idéation suicidaire, planification, et tentatives chez les nouveaux cadets de la Gendarmerie royale du Canada

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Abstract

Background: Royal Canadian Mounted Police (RCMP) report diverse occupational stressors and repeated exposures to potentially psychologically traumatic events, which may increase the odds of screening positive for a mental disorder, and increase the risk of death by suicide. The current study was designed to provide prevalence information regarding suicidal behaviours (i.e., ideation, planning, attempts) and assess for sociodemographic differences among cadets at the start of the RCMP Cadet Training Program (CTP).

Method: Cadets ($n = 736$, 74.0% male) were administered the structured Mini International Neuropsychiatric Interview by a mental health clinician or a supervised clinical psychologist trainee. The interview includes an assessment of past month suicidal ideation, planning, attempts and lifetime suicide attempts.

Results: Within 1 month of starting the CTP, a small percentage of cadets reported past month suicidal ideation (1.6%) and no cadets reported any suicidal planning (0%) or attempts (0%). Lifetime suicide attempts were reported by (1.5%) of cadets.

Conclusions: The current results provide the first information describing the prevalence of suicidal ideation, planning, and attempts among RCMP cadets starting the CTP. The estimates of suicidal behaviours appear lower than the general population and lower than reports from serving RCMP. Higher prevalence estimates of suicidal behaviours reported by serving RCMP,

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relative to lower estimates among cadets starting the CTP in the current study, may be related to age, cumulative experiences or protracted exposures to operational and organizational stressors, rather than insufficient screening of recruits.

Résumé

Contexte : La Gendarmerie royale du Canada (GRC) déclare divers stresseurs occupationnels et des expositions répétées à des événements potentiellement psychologiquement traumatiques, qui peuvent accroître les probabilités d'un dépistage positif d'un trouble mental, et accroître le risque de décès par suicide. La présente étude était destinée à offrir de l'information sur la prévalence à l'égard des comportements suicidaires (c.-à-d., idéation, planification, tentatives) et à évaluer les différences sociodémographiques chez les cadets au début du Programme de formation des cadets de la GRC.

Méthode : On a administré aux cadets ($n = 736$, 74,0 % masculins) le Mini-entretien neuropsychiatrique international par un clinicien de santé mentale ou un stagiaire psychologue clinique supervisé. L'entretien comprend une évaluation de l'idéation suicidaire, de la planification et des tentatives du mois précédent, et des tentatives de suicide de durée de vie.

Résultats : En un mois après avoir commencé le Programme de formation des cadets, un pourcentage modeste de cadets ont déclaré une idéation suicidaire du mois précédent (1,6 %), et aucun cadet n'a déclaré une planification suicidaire (0 %) ou tentative (0 %). Les tentatives de suicide de durée de vie ont été déclarées par (1,5 %) des cadets.

Conclusions : Les résultats actuels offrent la première information décrivant la prévalence de l'idéation suicidaire, de la planification et des tentatives chez les cadets de la GRC qui commencent le Programme de formation des cadets. Les estimations des comportements suicidaires semblent plus faibles que dans la population générale et plus faibles que les rapports de la GRC en service. Les estimations de prévalence élevée des comportements suicidaires déclarées par la GRC en service, relativement aux estimations plus faibles chez les cadets au début du Programme de formation des cadets dans la présente étude, peuvent être liées à l'âge, aux expériences cumulatives ou aux expositions prolongées aux stresseurs opérationnels et organisationnels, plutôt qu'à un dépistage insuffisant des recrues.

Keywords

public safety personnel, RCMP, police cadets, suicide, mental health

Introduction

The term Public Safety Personnel (PSP) encompasses all personnel who work to ensure the safety and security of Canadians.[1] PSP experience frequent exposure to potentially psychologically traumatic events as a function of their service.[2] PSP may also encounter organizational stressors (e.g., staff shortages, lack of appropriate resources, high demands on various internal support structures)[3–7] and operational stressors (e.g., shift work, fatigue and job-related injuries)[3–7] that can lead to, or exacerbate, post-traumatic stress injuries (PTSIs).[8,9] Additionally, the COVID-19 pandemic and various protests likely compounded the stressors facing PSP.[9–11]

A large proportion of PSP report symptoms of one or more mental health disorders, including post-traumatic stress disorder (PTSD)[12–14] and major depressive disorder (MDD).[14] The Royal Canadian Mounted Police (RCMP) report substantial difficulties with positive screenings for PTSD (30.0%) and MDD (31.7%), with half (50.2%) of RCMP screening positive for one or more lifetime mental health disorders.[14] In contrast, RCMP cadets beginning the Cadet Training Program (CTP) are less likely than serving RCMP to screen positive, based on self-report measures, for PTSD (2.7%) and MDD (6.6%) or for one or more other mental health disorders (15.0%)[15] Screening positive for one or more mental health disorders are associated with an increased risk of death by suicide.[16,17]

Suicide is a complex and multicausal human behaviour.[18] Suicidal thoughts and behaviors (STB) are comprised of suicidal ideation (i.e., thoughts that may or may not include a plan to die) and suicidal behaviours (i.e., suicidal planning and attempts).[19,20] To date, no study has assessed the prevalence of suicidal ideation, planning and attempts among RCMP cadets. To provide further context, data from the Canadian general population and previous RCMP research is presented with the understanding that measurement approaches differ precluding any direct comparisons. Yet, data from the Canadian general population and serving RCMP offer the possibility of caveated comparisons. Data from the Canadian general population indicates lifetime prevalence of suicidal ideation is 11.8%,[21] planning is 4.0%[21] and attempts is 3.1–3.5%.[21,22] Within the general population, death by suicide claimed the lives of 3839 Canadians in 2020.[23] The number of Canadian deaths by suicide in 2020 is comparable to previous years (e.g., 4012 deaths in 2019 and 3811 deaths in 2018).[24] However, the estimates of death by suicide may be low in 2020, as Statistics Canada reported the data might not fully reflect the impact of the COVID-19 pandemic on suicides.[23] Previous data from

serving RCMP indicates lifetime prevalence of suicidal ideation is 25.7%, planning is 11.2% and attempts is 2.4%.[25] Data on the number of RCMP suicide-related deaths are not currently collected.[a] The higher lifetime prevalence of suicidal ideation and planning among serving RCMP compared to the general population may be driven by barriers police officers encounter when trying to access mental health services, including difficulty self-identifying the need for care, confidentiality concerns, perceptions that a psychologist cannot relate, and the stigma suggesting that police who seek mental health services are not fit for duty.[26] Yet, it is unclear if the higher prevalence of suicidal ideation and planning among serving RCMP are a result of their service (e.g., occupational stressors, potentially psychologically traumatic events) and/or due to issues related to the screening process during selection. One way to help determine this is to examine the prevalence of suicidal ideation, planning and attempts among cadets as they enter the CTP at the Depot.

The results presented in the current paper are part of a larger longitudinal study. The current paper clarifies the prevalence of recent (i.e., past month) suicidal ideation, planning, and attempts among RCMP cadets at the start of the CTP (i.e., pre-training; T1). Additionally, the paper provides an estimate of lifetime suicide attempts among cadets. RCMP cadets were expected to report low levels of suicidal ideation, planning, and attempts within the past month and low levels of lifetime suicide attempts as a function of self-selection biases related to willingness to serve and ability to meet the rigorous selection criteria for the CTP.[27]

Methods

Procedure

Cross-sectional data for the current paper were collected as a part of the broader RCMP Study and full details, including the voluntary consent process, are provided in the associated protocol paper.[28] The RCMP Study was approved by the University of Regina Institutional Research Ethics Board (file No. 2019-055) and the RCMP Research Ethics Board (file No. SKM_C30818021312580). The RCMP Study was also approved through a Privacy Impact Assessment as part of the overall approval: National Administrative Records Management System (NARMS; file No. 201611123286) and Public Services and Procurement Canada (PSPC; file No. 201701491/M7594174191).

Data and Sample

The current data were collected as part of the first full assessment of cadets (i.e., pre-training; T1).[28] This assessment included data collected through self-reported sociodemographics, histories, and symptom measures during a full survey completed within 6 days of the cadets' arrival at the national RCMP training headquarters, Depot in Regina, SK, Canada. Of this self-report data, only the sociodemographic characteristics are used in the current paper. The suicide-specific data reported in the current paper were collected through a structured clinical interview completed within 14 days of the cadets' arrival at the Depot. A total of $n = 736$ cadets completed a clinical interview, of whom a total of $n = 699$ also completed the full survey providing sociodemographic data. All participating cadets were assigned a unique ID number to ensure confidentiality. The data collection occurred from May 2019 to October 2021; however, data collection was briefly paused in 2020 due to the precautionary COVID-19 closure of the Depot. COVID-19 required clinicians to conduct clinical interviews online rather than in person. A total of $n = 1696$ cadets were invited to participate in the study and a total of $n = 890$ agreed to participate. The participation rate for the suicide-specific data was 82% of cadets within the Study.

Successful RCMP recruits were required to be Canadian citizens or permanent residents, aged 19 to 57 years and able to read, write and speak English or French fluently.[27,28] Cadets must have also met several recruiting requirements, including security clearances, medical examinations, a polygraph test and minimum physical standards.[27] No suicide-specific screening questions were included during the recruitment process. There were no conditions excluding participation in the RCMP Study for persons otherwise qualified for the CTP. [28] All participants in the RCMP Study are cadets enrolled in the standard CTP.

Clinical Interviews (MINI)

All clinical interviews were conducted in English or in French by a registered clinical psychologist or a supervised master's-level clinical psychologist trainee**.** As noted above, the RCMP protocol paper includes full details on the clinical interviews, storage of data, and ethics-related considerations[28] The clinical interviews were supported by the electronic administration of the Mini-International Neuropsychiatric Interview (MINI).[29,30] Published reports indicate the MINI displays excellent inter-rater reliability with Cohen's kappa values greater than 0.75 for all individual diagnostic screens, the majority of which (70%) are greater than or equal to 0.90.[29,30] After the clinical interviews, the associated nView Behavioural Health software for clinicians compiled the MINI data to produce a variety of categories for which participants were indicated to meet the criteria or not: (1) suicidality (i.e., current, lifetime attempt, - likely in the near future); (2) suicide behaviour disorder (i.e., current, early remission, - remission); and (3) suicide risk (i.e., low, moderate, - high). These criteria are automatically calculated based on the interpretation of participant responses through the scoring algorithm of the MINI and do not allow for clinical judgement to be factored into their application. Based on clinician concerns with the

automatic calculation of data, the research team determined that the automated calculation of MINI criteria to be indiscriminating and a poor assessment measure for this sample. As such, the raw interview data corresponding to the individual question responses were matched with substantial data conceptualizing suicidality as being comprised of suicidal ideation, planning and attempts.[25,31] The data were exported and codified into indicator variables as described below.

Indicator variables: Suicidal ideation, planning, and attempts were assessed with a series of dichotomous (i.e., yes/no) questions from the suicidality module of the MINI (for further details see, Supplemental material). The majority of MINI questions focus on the past month (i.e., questions B1 to B17), with one question focused on lifetime suicide attempts (i.e., question B18). Consistent with research on other PSP sectors,[25] the responses were categorized as follows: (1) suicidal ideation (e.g., "Did you think, even momentarily, that you would be better off dead or wish you were dead or needed to be dead?"); (2) suicidal planning (e.g., "Did you have a suicide method in mind?"); and (3) suicidal attempts (e.g., "Take active steps to prepare to kill yourself, but then someone or something stopped you just before harming yourself?"). The Supplementary material details all questions contained in the suicidality module of the MINI, and indicates the categorization of each item as indicative of suicidal ideation, planning or attempts. Participants were considered to screen positive for suicidal ideation, planning or attempts if one or more of the questions associated with the given category were endorsed. Or, in the cases of items B17 and B19, if any value was reported greater than 0.

Statistical Analysis

SPSS (IBM, version 28 Premium, 2021 New York, USA) was used to conduct the descriptive analyses. Participants were described on their sociodemographic characteristics, including gender, sex, age, marital status, province of residence and level of education using frequencies and percentages. Subsequent descriptive analyses (frequencies, percentages) focused on individual MINI suicide questions, prevalence of past month suicidal behaviors, prevalence of lifetime suicide attempts, and sociodemographic characteristics of participants who reported past month suicidal ideation. Many events of interest were rare. Exact frequencies and percentages could not be reported for cell values < 5 in order to maintain participant privacy and confidentiality.[32]

Results

Details of self-reported participant sociodemographics are provided in Table 1. Most participants reported their sex as male (74.0%; $n = 507$) and gender as men (74.1%; $n = 508$). Most cadets reported being between the ages of 19 and 29 years (63.7%), and being single (54.4%) or married/in a common-law relationship (46.7%). Participants were mainly from Western Canada (54.2%; i.e., British Columbia, Alberta, Saskatchewan, - Manitoba). Most participants reported having either some post-secondary school education (46.1%) or a university degree, 4-year college degree or higher (42.8%).

The low prevalence of past month suicidal ideation, planning, and attempts among participating cadets prevented the data from being reported within a table. Most cadets did not report experiencing suicidal ideation, planning or attempts. Very few participating cadets reported past month suicidal ideation ($n = 12$, 1.6%). No cadets ($n = 0$, 0%) reported past month suicidal planning or a past month suicide attempt ($n = 0$, 0%). The low prevalence of past month suicidal ideation precluded more nuanced descriptions of the results. Most cadets who reported past month suicidal ideation reported their sex as male and

Table 1. Sociodemographic Characteristics of Royal Canadian Mounted Police (RCMP) Cadets Starting the Cadet Training Program (CTP) ($n = 736$).

Sociodemographic characteristics	% (*n*)
Sex	
Male	74.0 (507)
Female	26.0 (178)
Gender	
Men	74.1 (508)
Women	25.4 (174)
Transgender	[b]
Non-binary	[a]
Two-spirit	[b]
Age (years)	
19–29	63.7 (427)
30–39	28.8 (193)
40–49	6.7 (45)
50 and older	0.7 (5)
Marital status	
Single	54.4 (331)
Separated/Divorced	1.9 (12)
Married/Common-Law	46.7 (301)
Widowed	[a]
Province of residence	
Western Canada (BC, AB, SK, MB)	54.2 (381)
Eastern Canada (ON, QC)	33.4 (235)
Atlantic Canada (PEI, NS, NB, NFL)	11.4 (80)
Northern Territories (YK, NWT, NVT)	1.0 (7)
Education	
High school graduate or less	11.0 (73)
Some post-secondary school	46.1 (305)
University degree/4-year college or higher	42.8 (283)

Note: [a]No data are reported.
[b]The sample size is between 1 and 4. Consequently, the data cannot be presented due to ethical and privacy concerns.
Total percentages may not sum to 100 and ns may not sum to 736 due to participants not responding or responding "other." In total, 31 of the 736 participants did not provide complete sociodemographic data.

gender as man. The cadets who reported past month suicidal ideation were mostly between the ages of 19 and 29 years, single, from Eastern Canada, and had a university degree, a 4-year college degree or higher level of education. The low prevalence of lifetime suicide attempts among cadets precluded presenting the data in a meaningful table. Very few ($n = 11$, 1.5%) participating cadets reported lifetime suicide attempts.

Discussion

The novel results from this element of the RCMP Study include the estimates of the past month prevalence of suicidal ideation, planning, and attempts among RCMP cadets as well as an estimate of lifetime suicide attempts. Specifically, none of the cadets reported past month suicidal planning or attempts and very few reported past month suicidal ideation. Lifetime suicide attempt(s) were reported by very few of the participating cadets. The current results are the first estimates of suicidal ideation, planning and attempts both recent (i.e., past month) and lifetime (in the case of attempts) by RCMP cadets starting the CTP.

As noted above, no cadets reported past month suicidal planning or attempts, but 1.6% of cadets reported past month suicidal ideation. Due to the low prevalence of past month suicidal ideation reported by cadets, the exact results depicting the relationship between many sociodemographic variables could not be reported due to privacy and ethics-related concerns. Although the exact data cannot be presented, the prevalence of male cadets reporting suicidal ideation is consistent with a previous study wherein male RCMP reported higher prevalence of past year and lifetime suicidal ideation than female RCMP.[25] Notably, the collection method and timeframe differ. Gender and sex dimensions of suicidal ideation, planning, and attempts should remain a consideration in future research as the RCMP may differ from the general population. Specifically, in the general population, suicidal ideation is more commonly reported among females, but death by suicide is more common among males.[33,34] In the current paper, male cadets reported higher suicidal ideation than female cadets. Also, due to privacy and ethics concerns, the exact numbers could be presented, but cadets who reported suicidal ideation tended to be younger (19–29 years old), which is also consistent with the results of a previous study.[25]

The results indicate that age or experience may be associated with the possibility of developing more robust coping mechanisms, spousal support and/or increased economic stability as increased age was associated with fewer instances of suicidal ideation which is consistent with previous research.[25] Most of the participating cadets who reported past month suicidal ideation reported being single, which was also consistent with previous research results.[25] Indeed, supportive relationships can protect mental health and may reduce the risk STB.[35] Most of the participating cadets who reported past month suicidal ideation reported being from Eastern Canada (i.e., Ontario and Quebec). The possible influence of geography warrants additional attention and may be a proxy for several other factors including regional dynamics, population density, stigma and access to resources.

To further contextualize the results, it is possible to compare the cadets' lifetime data, which was only collected for suicide attempts, to serving RCMP and the Canadian general population as previously referenced. The cadets reported fewer suicide attempts than the Canadian general population and serving RCMP.[21,22,25] The lifetime suicide attempts of serving RCMP may be a result of the previously evidenced relationship between mental health disorders and increased risk for suicidal attempts among police[36] given the higher rates of mental disorder among serving RCMP compared to the cadets.[14,15] In addition, cadets may be less willing than serving RCMP or the general population to report suicidal ideation, planning or attempts, despite assurances of confidentiality, due to fears of being backtrooped or removed from the Depot. Direct comparisons of the present results with RCMP data or the Canadian general population data must be done with caution due to differences in age-related controls, measurement instruments, and time periods. Underreporting of suicide-related data may be more common during structured interviews than self-report surveys.

The results highlight several gaps in the extant mental health literature regarding RCMP cadets, RCMP, and perhaps police in general, by describing the prevalence of suicidal ideation, planning, and attempts among cadets starting the CTP. Previous studies of police recruits mainly focused on psychological screenings as a key tool for mitigating subsequent suicide risk by identifying modifiable and remediable risk factors rather than estimating the prevalence of suicidal ideation, planning, and attempts.[37,38] Understanding the prevalence of suicidal ideation, planning, and attempts among cadets as they begin training provides a useful benchmark against which to compare changes that may occur throughout their careers as RCMP officers.

Strengths and Limitations

There are several strengths and limitations to the current study. Strengths include (1) the large sample; (2) data were derived from clinical interviews, rather than self-report;[16,39] (3) the results cover both past month and lifetime suicidal indicators;[25] (4) the participants completed all RCMP Study tasks as part of paid time which may have assisted in helping ensure a representative sample; (5) the *a priori* provision of expected results in the protocol paper[28] which would help to mitigate Type I error risks and guard against Type II errors;[40] (6) the timing of the data collection creates a baseline in which cadets are unlikely to have been yet affected by any possible negative impacts of the training;

and (7) the results provide the first information about baseline suicidal behaviours among newly recruited RCMP cadets starting the CTP.[25]

Limitations of the current study include (1) COVID-19 shifted the clinical interviews from in person to online; (2) voluntary participation created an unknowable influence of self-selection biases; (3) despite structural assurances regarding the protection of their mental health data,[28] ongoing perceptions of the stigma of mental health challenges among PSP may have facilitated underreporting of suicidal behaviours.[41,42] For example, as part of consent the clinicians clarified: "If you let me know that you are in immediate danger of harming yourself, I have to let the appropriate health authorities know to keep you safe." The cadets may have underreported symptoms due to confidentiality concerns, ongoing perception of stigma related to mental health in law enforcement, and/or fear of being back trooped or removed from Depot; (4) the decision to use clinical interviews rather than self-report surveys to collect suicide-related data was a precaution to ensure a heightened level of caution in the event that any cadets appeared to be at risk of suicide. However, due to the data collection method, percentages based on clinical interviews and self-report questionnaires such as previously collected RCMP data must be compared with a degree of caution due to the possibility of cadets underreporting suicidal ideation, planning or attempts during clinical interviews; and (5) the MINI was not designed or validated to be separated into suicidal ideation, planning, and attempts. But this categorization is widely accepted within the literature and adds nuance to the questions.[25,31,35,36]

Conclusion

The cross-sectional results from the current study confirm gaps in the literature on PSP mental health, specifically for RCMP cadets, by identifying the prevalence of suicidal ideation, planning, and attempts among cadets starting the CTP. The data indicate quite low levels of suicidal behaviour among cadets. The RCMP Study is longitudinal; consequently, the present study provides much-needed information on the extent of suicidal ideation, planning, and attempts at the start of the CTP (i.e., pre-training; T1) which can later be compared with the same variables at other time points in the future. The gap between the low prevalence of suicidal ideation, planning, and attempts among RCMP cadets and the increased rates reported by serving RCMP suggests occupational stressors may have substantial negative impacts on RCMP mental health.[3] Further research is required to better understand the differences between RCMP cadets and the wider RCMP, specifically the career stage(s) and factors that may increase suicidal ideation, planning, and attempts. The ongoing RCMP Study is anticipated to help better understand the nuanced interactions between diverse risk and resilience variables.

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Data Availability Statement

Data access will not be provided due to the sensitive nature of the content.

Declaration of Conflicting Interests

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Supplemental Material

Supplemental material for this article is available online.

Note

a. The RCMP F Division and the Saskatchewan Coroners Service confirmed that vocational suicide data (i.e., RCMP-specific) is not currently collected.

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