RESEARCH



Soldiering on only goes so far: How a qualitative study on Veteran loneliness in New Zealand influenced that support during COVID-19 lockdown

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ABSTRACT

Introduction: On April 25, 2020, Veterans' Affairs in New Zealand (NZ) contacted approximately 3,000 of 8,000 known military Veterans by phone during the SARS-CoV-2 pandemic to ensure they were safe during the government-imposed lockdown. The impetus to this initiative were the findings of a cross-sectional quantitative survey of NZ Veterans, followed by the qualitative survey reported here, both carried out in 2019. The former report found 33% of 89 respondents were lonely and reported barriers to seeking support, and over half of Veterans felt uncomfortable accessing it. **Methods:** To understand the factors underlying loneliness, a qualitative survey was developed based on the barriers previously identified and a literature review. A purposeful sample based on gender, age, and ethnicity identified 20 respondents from the initial survey: 10 lonely and 10 non-lonely. Interviews were followed by an inductive thematic analysis, and themes and sub-themes were developed. **Results:** Ten of the 20 potential participants responded: 6 lonely and 4 non-lonely. Social and geographic isolation, problems with re-integration into the civilian community, and health problems were found to contribute to Veteran loneliness. Social connectedness, particularly to service peers, was the primary mitigating factor. Barriers included stoicism and perceptions of ineffective and inaccessible services. Inequity in the Veteran support system also emerged as a barrier for Veterans who had not deployed on operational missions. **Discussion:** During the pandemic, social connectedness will have decreased, and loneliness increased. Designing interventions with these factors in mind, and ensuring equity of access to support, should help combat Veteran loneliness.

Key words: ANZAC Day, COVID-19, depression, isolation, lockdown, loneliness, lonely, New Zealand, pandemic, protective factors, qualitative, Veterans, Veterans' Affairs New Zealand

RÉSUMÉ

Introduction : Le 25 avril 2020, *Veterans' Affairs in New Zealand* (NZ) a téléphoné à environ 3 000 des 8 000 vétérans connus pendant la pandémie du virus SARS-CoV-2 afin de s'assurer de leur sécurité dans le cadre du confinement imposé par le gouvernement. Cette initiative était motivée par les observations d'un sondage quantitatif transversal auprès des vétérans de NZ,¹ suivi du sondage qualitatif exposé dans le présent article. Tous deux ont été réalisés en 2019. Le premier rapport a démontré que 33 % des 89 répondants étaient esseulés et signalaient des obstacles à obtenir de l'aide et que plus de la moitié des vétérans se sentaient mal à l'aise d'y accéder. **Méthodologie :** Pour comprendre les facteurs à l'origine de la solitude, les chercheurs ont créé un sondage fondé sur les obstacles déjà établis et sur une analyse bibliographique. Au moyen d'un échantillon raisonné reposant sur le genre, l'âge et l'ethnie, ils ont extrait 20 répondants du premier sondage, soit dix qui souffraient de solitude et dix qui n'en souffraient pas. Ils ont fait suivre les entrevues d'une analyse thématique inductive et dégagé des thèmes et sous-thèmes. **Résultats :** Dix des 20 participants potentiels ont répondu, soit six qui souffraient de solitude et quatre qui n'en souffraient pas. L'isolement social et géographique, les difficultés de réintégration à la vie civile et les problèmes de santé faisaient partie des facteurs qui contribuaient à la solitude des vétérans. La connectivité sociale, notamment avec les camarades de service, était le principal facteur protecteur. Les obstacles incluaient le stoïcisme et la perception que les services étaient inefficaces et inaccessibles. Les vétérans qui

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n'avaient pas participé à des missions opérationnelles ont également considéré l'iniquité du système d'aide aux vétérans comme un obstacle. **Discussion :** Pendant la pandémie, la connectivité sociale a diminué et la solitude a augmenté. L'élaboration d'interventions tenant compte de ces facteurs et l'assurance d'offrir l'équité d'accès à l'aide devraient contribuer à contrer la solitude des vétérans.

Mots-clés : COVID-19, confinement, dépression, esseulé, facteurs protecteurs, isolement, Journée de l'ANZAC, Nouvelle-Zélande, pandémie, qualitatif, solitude, *Veterans' Affairs New Zealand*, vétérans

INTRODUCTION

ANZAC Day and COVID-19

The New Zealand and Australian Division, later to be known as the Australian and New Zealand Army Corps (ANZAC), landed on Turkey's Gallipoli Peninsula at dawn on April 25, 1915. The first ANZAC Day, a joint day of remembrance for both countries, was held a year later on April 25, 1916, and every ANZAC Day since then. In 2020, ANZAC Day fell in Week 4 of the SARS-CoV-2 response, with the country in isolation to prevent community spread of infection. It was the first time since 1916 that New Zealanders were unable to gather nationwide to mark what has become their national day. With appropriate social distancing, spontaneous events did take place and addressed a vital need for community connectedness for both Veterans and New Zealanders as a nation.

Veteran loneliness had not previously been investigated in New Zealand, but a cross-sectional quantitative survey carried out in 2019 found 33% of the 89 respondents were lonely, with high levels of distress, and over half of the lonely respondents expressed barriers to accessing support¹. This suggested a more in-depth qualitative approach to explore how the participants conceptualized and experienced loneliness. Although carried out prior to the SARS-CoV-2 pandemic, the findings highlighted problems with loneliness and social isolation likely to be exacerbated during the response. COVID-19 alert Level 4 became known as the "lockdown," and, barring essential workers, New Zealanders had to stay at home unless exercising or grocery shopping. This enforced but necessary social isolation helped prevent the pandemic's spread but seemed likely to exacerbate loneliness.

A preliminary report on this study, previously shared with New Zealand Veterans' Affairs (NZVA), a unit of the New Zealand Defence Force, gave the organization the idea to contact 3,000 Veterans with active claims for whom NZVA had contact details. Veterans contacted by NZVA ranged in age from 19 to 109 years.

Social isolation and loneliness are recognized problems for society in general, being linked to increased mortality and morbidity,² forming an important narrative in the experience of Veterans. They are associated with the transition to civilian life, and particularly with re-integration into the wider community³ Militarycivilian transition is a complex process^{4,5} that begins before service, occurs during service, and extends to life after service. While military members are selected for their health, adverse childhood experiences may be what motivates some to enlist in the first place.⁶ During service, the mobile and transient nature of employment mean transitions are frequent, impacting loneliness and social isolation for some.⁷ Posttraumatic stress injury (PTSI), along with traumatic brain injury, are the signature wounds of the conflicts in Afghanistan and Iraq,⁸ negatively impacting physical and psychological health and contributing significantly to loneliness.⁴ Loss of military identity, community, and culture⁹ make identity adjustment difficult post-service, causing some Veterans to feel alienated in the civilian world.¹⁰

Social isolation and loneliness are important constructs, often used interchangeably, but fundamentally different,¹¹ with social isolation being a significant feature of the pandemic response. The loneliness of a Veteran may also be unique, conceptualized as experiential isolation, a sense that no one else understands what the Veteran experience is like, rather than the classical concepts of social or emotional isolation. Intersubjectivity is a sociological term described by Reich as "implying a promise of a connection ("inter") between seemingly autonomous selves ("subjects")."12 Veterans may experience a failure to connect (a sense of failed intersubjectivity) in several ways, such as a loss of sense of self in the civilian world, an inability to relate to those who have not served, and a feeling they are the only person who feels a certain way.¹³

In older Veterans, risk factors for loneliness include advanced age, disability in activities of daily living, trauma, perceived stress, depression and symptoms of PTSI.² Protective factors are being married or cohabitating, higher income, greater subjective cognitive functioning, social support, secure attachment, dispositional gratitude, and frequency of attending religious services. While these factors do not necessarily alter vulnerability for all individuals, a complex interplay of intrinsic and extrinsic factors seem to impact loneliness for some Veterans. As social isolation is a problem, appropriate social support would appear to be part of the solution.¹⁴

As we wish to develop interventions, the research questions are: What are the risk and protective factors for loneliness in New Zealand Veterans, and how can support be improved? This qualitative study was therefore carried out with the aims of determining how Veterans conceptualize loneliness, identifying the potential risks and protective factors, and ascertaining if there were barriers to seeking support.

METHODS

Veteran classification

There are thought to be approximately 31,000 Veterans in New Zealand, aged 19 to 109 years.¹⁵ Legal Veterans are those who "took part in qualifying operational service at the direction of the New Zealand Government."^{16(p.18)} This group has access to health and social support from NZVA. Veterans without qualifying operational service cannot access these services but are entitled to no-fault compensation for injuries and occupational illnesses under the Accident Compensation Act 2001 (The ACC Act).¹⁷ Both groups have access to the free public health care system. In this article, the inclusive definition of *Veteran* was used regardless of operational status.

Participants

This study was a follow-up to a cross-sectional scoping survey on loneliness in which 62 of 89 participating Veterans consented to follow-up.¹ The original survey and the follow-up reported here were carried out by successive groups of final-year medical students, Trainee Interns (TIs), over a six-week period, as a timetabled health care evaluation project. The 62 Veterans from the original 89 who agreed to follow-up were aged 18 years and older, and members of the Royal New Zealand Returned and Services Association (RSA) and/or NZ military social media sites. To ensure the sample was reasonably representative of NZ Veterans, a purposeful sampling strategy was developed using the demographic variables previously collected, including gender, age, ethnicity, living arrangements, and self-reported feelings of loneliness.¹

Based on the logistics of the six-week timeframe, a total of 20 potential participants were selected for interviews. In order to facilitate comparisons in the original survey, we used the single-item loneliness question from the New Zealand Social Report:¹⁸ "In the past 4 weeks, how often did you feel lonely?" Participants were classified as lonely if they answered "most of the time" or "all of the time," and non-lonely if they answered "none of the time" or "some of the time." Each participant was contacted by telephone and asked whether they remained willing to be interviewed, as indicated during the original study. If agreement was provided, email addresses were obtained and a consent form sent to participants, with follow-up by email and phone if consent was not given within a week.

Email addresses were obtained for all but one of the 20 potential participants, who was sent a consent form by postal mail. Eleven completed forms were returned, and one consenting participant could not be contacted; hence a total of 10 out of 20 interviews were completed (6 lonely and 4 non-lonely). Participant demographics are shown in Table 1.

Table 1. Participant demographics

Characteristics	No.*	
	Lonely	Not lonely
Sex	4/2	4/0
Male	4	4
Female	2	0
Age range (years)	39–76	50-71
Employment		
Retired	3	2
Full time work	2	1
Part time work	1	1
Living arrangements		
With others	4	4
Alone	2	0
Relationship		
Married	3	4
Widowed	0	0
Single	2	0
Divorced	1	0
Service		
Army	5	2
Navy	1	2
Serving	1	1

* Unless otherwise noted.

Study design

Consenting participants were contacted by telephone for semi-structured interviews lasting about 20 minutes each. A set of group-specific, open-ended questions was developed based on the barriers identified in the previous quantitative study¹ and a rapid literature scan by the TI group.

The telephone calls were recorded and transcribed by two members of the TI research team. Data collection was to be truncated if data saturation was reached prior to all 20 participants being interviewed. Three members of the research team carried out an inductive thematic analysis¹⁹ by open coding of the text data from the transcripts, grouping these into meaningful units of data and then into categories and themes. Two others not involved in the data collection, transcribing, or coding cross-validated the themes and sub-themes and developed a thematic map to show their interrelationships. The RSA national support advisors were also contacted to provide a general perspective on loneliness and Veteran support in New Zealand.

Ethics approval was obtained from the University of Otago Human Ethics Committee, reference no. F19/007 and the authors consulted with the Ngãi Tahu Research Consultation Committee to assess the relevance of the project to Māori.

RESULTS

After 10 interviews, three central themes emerged from the thematic analysis. The team agreed that the following themes encapsulated the main concepts emerging from the interviews: (1) the impact of isolation and health-related factors on the development of loneliness; (2) the importance of feeling connected and supported in mitigating feelings of loneliness; and (3) the overall barriers to being supported after military service (Figure 1).

Risk factors for loneliness

Two themes – isolation and health-related factors – emerged as risk factors for loneliness across both groups of participants.

Isolation

Isolation was expressed in both a social and geographical context. From a social perspective, participants talked about difficulty re-integrating into civilian life post-service, and a lack of geographic stability during service, as enhancing a sense of isolation. Difficulty

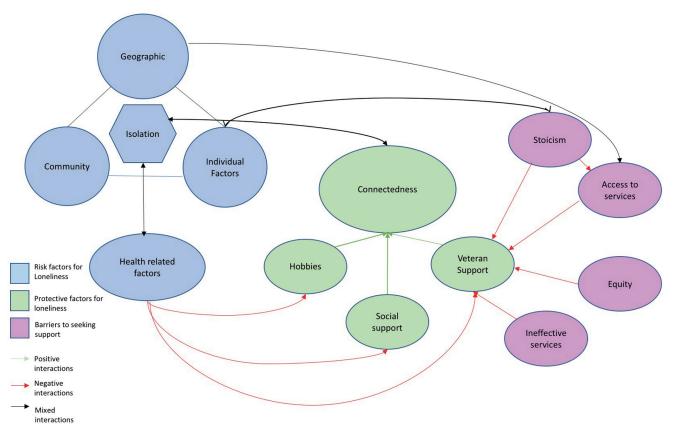


Figure 1. Thematic relationships emerging from the interviews

re-integrating into civilian life and into non-military communities represented social distancing, a feeling that others did not understand. Physical separation from old friends, colleagues, and the military hampered a sense of social connectedness.

Health-related factors

Health-related sub-themes included psychological problems, in particular anxiety, depression, and recurrent traumatic memories, described by interviewees in the lonely group. Several said loneliness was related to the inability of civilians within their family, or circle of friends to understand or share their past experiences.

My last partner, she made my life hell because she wanted to know what happened, and I said, "you don't want to know," and my clinical psych said, "don't tell her because all you're going to do is traumatize her," and to the point where she pushed me, and I said "I was involved in this," and then she changed overnight and 6 weeks later I had to end things because it was all out of control. (Participant 5)

Several participants described feeling depressed and anxious at various stages after service, which made them withdraw from those around them, perpetuating their feelings of loneliness. Physical health problems related to military service, either directly or indirectly, also had a negative impact.

Medical issues from service can be contributing to this ... people with a noise-induced hearing loss do tend to isolate themselves ... I've just had a knee replacement 6 months ago, I find that it's not going too well; my ability to get out and exercise is less. (Participant 5)

Protective factors for loneliness

Connectedness emerged as a major theme to protect against loneliness, expressed as social support, support from Veteran organizations, and engaging in hobbies. Many participants identified the prominent role of connectedness in "keeping busy" or "distracted," while others spoke about the importance of being able to converse with non-judgemental people.

Social support

Having a sense of connection to others or meaningful activities was the main mitigating factor of loneliness identified in participant interviews, both in the lonely and non-lonely groups. In terms of social support, the main theme was a sense of having someone to talk to. Many participants mentioned the role of family, often their spouses, in mitigating loneliness.

For others, friends played an important role.

... Changes are going to happen, and if people that feel lonely or isolated are gonna get support that they need it's got to come from their friends, and we've got to get better at talking about it amongst ourselves. (Participant 6)

The key point of connection for participants was shared understanding of what it was like to be in the military, having a confidante, and talking about feelings of loneliness. Some identified a unique relationship with service peers who could help destigmatize feelings of loneliness. This is an example of the social integration that takes place in the military, where Veterans have similar experiences or perspectives that are fundamentally different from those of civilians, making a shared understanding with civilian family and friends difficult, if not impossible, to achieve.

... Peer-to-peer mentoring, sometimes it's speaking to someone who served with you, it normalizes it a lot more ... If somebody speaks to you one-on-one, you may open up about the first thing, you know, I've suffered too, you don't feel so ... vulnerable, because (otherwise) you think I'm broken, and I'm the only one. (Participant 7)

Hobbies

Participation in community service, sports clubs, travel, hobbies, and employment were other ways in which Veterans expressed finding connectedness during their interviews.

... I'm just busy, I travel a lot, and I've got family, and I don't think there's enough opportunity to feel lonely. it probably is a key factor, I would say. (Participant 1)

Veteran support

A good relationship with Veteran support services was mentioned as a modifier of loneliness, with both the lonely and non-lonely groups having a good sense of available services. The support role of NZVA was noted by several participants:

I've found Veterans Affairs very helpful. And they've certainly stood up to the plate when it came to supporting me, so I am very happy with that. (Participant 10)

Barriers to accessing support

Four main categories emerged during participant interviews as barriers to accessing support for Veterans' loneliness: (1) stoicism; (2) access to services; (3) equity; and (4) perceived efficacy of services.

Stoicism

Stoicism was a common topic for participants and, for some, a direct barrier to accessing support services. Despite needing help, participants indicated a reluctance by Veterans to seek support due to developing a culture of independence and resilience during their military training and service. Asking for help was perceived by some as a weakness, character flaw, or antithesis to military culture.

The biggest issue is around the Veterans themselves and ... serving soldiers saying, "Oh, harden up, you don't want to let your mates down." (Participant 4)

Access to services

Difficulty accessing Veteran support services was reported to contribute to Veterans' loneliness, either due to poor communication between services and individuals in need or due to financial constraints, geographical barriers, and individual factors, such as motivation and/ or willingness to engage with such services.

The RSA ... they don't put notices up; they don't provide any information about any entitlements that you can get access to ... for us Navy guys, it's only been through word-of-mouth and the Navy Facebook pages. (Participant 3)

Participants emphasized the impact of geographical isolation from support services as a contributor to loneliness, particularly in rural settings where larger organizations may not have active offices. Funding for Veterans' services was also a common topic.

You see a lot of money going in a lot of spaces, but you don't see much going specifically to servicewomen or servicemen. (Participant 3)

Differential treatment and equity

Differential treatment of Veterans at an inter-service, local, and international level was an important theme among participants, with discrepancies reported in the quality and breadth of support offered under the Veterans Support Act in comparison to the ACC Act: If you haven't deployed, you're a second-class citizen and don't get the full support of Veterans Affairs. (Participant 7)

Ineffective services

Participants felt support services currently offered in New Zealand were ineffective, with a proportion in both groups expressing concern. Some participants claimed services were limited by financial constraints and others described how this limitation impacted the range and quality of support services offered. Participants explained how getting help sometimes required several proactive attempts to engage with organizations.

(A friend with cancer) said at the time, "I signed the blank cheque and declared my life to the New Zealand Government, and I expected to be looked after," and he wasn't ... there is no support when you leave ... and you've got to justify everything. (Participant 4)

... I hit the wall mid last year, and Veterans affairs couldn't find anyone for me to see. No one. They sent me to (employment assistance program) they said, a guy that knew nothing about military or PTSD, but he wants to talk to you. And I said, look, it's not going to work, but I need help, so I'll go along. After 20 minutes, the guy has gone pale, and I had no idea what to say or do. (Participant 5)

Some participants perceived problems within organizations and with the programs offered and were frustrated, criticizing both the quality and availability of services. This was countered by an unwillingness to engage, as well as by other participants with entirely different experiences, who commended organizations for the support they offered. There were complex relationships between the factors, both driving and mitigating, that interacted to promote either a sense of connectedness and shared understanding, or of isolation and loneliness. Stoicism, as a barrier, was the principle personal factor identified during the participant interviews.

The RSA perspective

In view of the negative comments about support, the authors also spoke with the RSA national support advisors to gain their perspectives on loneliness in Veterans. The advisors emphasized that most Veterans in New Zealand are not lonely due to the personality factors of resilience and a focus on the future. They did, however, note that younger NZ Veterans perceive the RSA as a social club for older people and do not believe it is relevant to them. They also referred to the stereotypical Veteran "macho image" and a sense of being "bulletproof," which can be significant barriers to seeking help.

DISCUSSION

In this qualitative study of six lonely and four non-lonely Veterans in New Zealand, two themes emerged as significant risk factors for loneliness: isolation, both social and physical; and health-related factors. Participants indicated physical and social isolation were related, the former associated with social disconnectedness. In addition to physical distancing, social distancing emerged as problems re-integrating into civilian life and assimilating into non-military communities post-service. Health-related factors included both physical and mental illnesses, with experiential loneliness - a failure of civilian family and friends to share or understand - the Veteran military experience, a common issue.

Factors protective against loneliness and social isolation were support from family, friends, and peers; and the development of a shared understanding of life in the military and the changes that take place on transition. Developing hobbies and staying occupied were also important. Most participants knew of the Veteran support organizations and services available to them; however, a significantly direct barrier to seeking support was found to be a stoic personality, largely developed as part of the military culture. Geographical isolation, and the perceived ineffectiveness of support services offered, were also barriers. Injustice was a sub-theme among study participants, as some Veterans were ineligible for support from NZVA.

Stoicism, as a construct of socialized masculinity, develops during military service as part of the military identity and is now being recognized to have associations with re-integration stress and a poor transition experience.²⁰ Stoicism may be maladaptive when re-integrating into civilian life and seeking help because when health is involved, the classical concept of stoicism has much to do with resilience, whereas maladaptive stoicism focuses on "silence, non-admission and nonhelp seeking behaviours."21 A lasting adherence to the military culture and developing a strong military identity is, therefore, a vulnerability in transition. Upon leaving the military culture, community, and identity is lost or much diminished, leading to a loss of purpose.⁹ If Veterans still have a very strong identification with the military, an "inhibiting military mind,"⁵ the reconnection to civilian life may fail.

The physical and psychological health problems faced by Veterans are also known to impact loneliness.² In a study of Veterans with depression, loneliness was related to higher levels of depression and suicidal ideation, reduced patient activation, not having the knowledge, skills, and confidence to manage one's health, and reduced health-seeking behaviour.²² Some Veterans with psychological health problems associated loneliness with the inability of their family or friends to relate to their past experiences. This is a common narrative that is often conceptualized by researchers as experiential isolation, which is not just as a result of social isolation but also as a failure of others to share their thoughts and feelings. This is failed intersubjectivity, particular to Veterans, because they see their experiences as being unique. In any intervention, this must be addressed for reconnection to occur.¹⁴

As connectedness was found to be a major theme in this study, peer-to-peer support has potential as a possible loneliness intervention,^{3,11} as participants described the benefits of having someone to talk to, either family or friends, but especially a service peer who was non-judgemental and could help them destigmatize their fears.

Participants expressed dissatisfaction with support services, and while there did seem to be problems with access, including financial and geographical barriers, in this small study, motivation to engage also seemed to be a significant barrier. Weir et al²³ reported that many UK Veterans have difficulty engaging in mental health treatment programs due to mental health stigma, poor self-recognition of need, feeling alien and disconnected from civilian health services, and only seeking help when a crisis point was reached. A peer support role in service provision improved the situation "in the majority of instances."

Equity in Veteran support services in New Zealand emerged as a fundamental issue in this small study and has been recognized in a review of the Veteran's Act. A review of the Act recommended a public debate on extending benefits to all Veterans and improving the provisions for their families.²⁴ It remains to be seen whether or not this gains traction in the fiscal aftermath of COVID-19.

Strengths and limitations

The primary strength of this study is that it is the first qualitative study to address Veteran loneliness in New Zealand, with both lonely and non-lonely participants taking part. Weaknesses include the constraint of the six-week period in which to complete the entire project, the small number of respondents and the imbalance between lonely and non-lonely, the latter making it difficult to draw contrasts between these groups. Moreover, the single-item loneliness question, while often used in large surveys,¹⁸ does not capture the underlying constructs of loneliness and social isolation. The results, therefore, cannot be generalized to Veterans as a whole. Response bias is also possible – it cannot be determined in which direction – whether distressed Veterans were more likely or less likely to respond. At-risk Veteran groups, including Māori, women, Pacific Island, and younger Veterans, are also underrepresented.

Conclusion

The results did raise awareness of Veteran loneliness, led to personal contact during the COVID-19 lockdown, and emphasized that the problem needs to be addressed. There were limitations, so generalizing to the larger group of Veterans by including women, young, and Māori Veterans is essential. The role of stoicism must be explored, as it may be a gender-based concept. We do know the findings to be congruent with existing knowledge in that civilian–military transition is a vulnerable period for some Veterans, especially those who have a strong attachment to military culture. This requires careful assessment and management,⁴ with risk factors being recognized at the point of transition,⁵ and appropriate support provided.

REFERENCES

- Khan A, Malcolm G, Andrews-Smith L, et al. Loneliness and psychological health in New Zealand military Veterans. Forthcoming 2020.
- Kuwert P, Knaevelsrud C, Pietrzak RH. Loneliness among older Veterans in the United States: results from the National Health and Resilience in Veterans Study. Am J Geriatr Psychiatry. 2014;22(6):564–9. https://doi.org/10.1016/j.jagp.2013.02.013. Medline:23806682
- Stapleton M. Loneliness and social isolation in the armed forces community. London (UK): Royal British Legion; 2018 [cited 2020 Jun 24]. Available from: https://tinyurl.com/tbjmuqd.
- Pedlar D, Thompson JM, Castro CA. Military-tocivilian transition theories and frameworks. In: Castro C, Dursun S, editors. Military Veteran reintegration. Approach, management, and assessment of military Veterans transitioning to civilian life. San Diego: Academic Press; 2019. p. 24–45.

- Duel J, Godier-McBard L, MacLean M, et al. Challenging missions: vulnerable Veterans leaving the armed forces and promising avenues to support them. In: Castro C, Dursun S, editors. Military Veteran reintegration. Approach, management, and assessment of military Veterans transitioning to civilian life. San Diego: Academic Press; 2019. p. 98–134.
- Blosnich JR, Dichter ME, Cerulli C, et al. Disparities in adverse childhood experiences among individuals with a history of military service. JAMA Psychiatry. 2014;71(9):1041–8. https://doi.org/10.1001/ jamapsychiatry.2014.724. Medline:25054690
- Wilson G, Leslie C, McGill G, et al. Understanding unique factors of social isolation and loneliness of military Veterans: a Delphi study. Newcastle (UK): Northern Hub for Veterans and Military Families Research: Northumbria University; 2019 [cited 2020 Jun 24]. Available from: https://researchportal.northumbria. ac.uk/files/21176945/Wilson_Leslie_McGill_ Kiernan_Understanding_Unique_Factors_of_ Social_Isolation_and_Loneliness_of_Military_ Veterans_2019_.pdf.
- Tanelian T, Jaycox LH. Invisible wounds of war: psychological and cognitive injuries, their consequences, and services to assist recovery. Santa Monica (CA): RAND Corporation; 2013. Available from: https:// apps.dtic.mil/dtic/tr/fulltext/u2/a494242.pdf.
- Hatch SL, Harvey SB, Dandeker C, et al. Life in and after the Armed Forces: social networks and mental health in the UK military. Sociol Health Illn. 2013;35(7):1045–64. https://doi.org/10.1111/ 1467-9566.12022. Medline:23356827
- Romaniuk M, Kidd C. The psychological adjustment experience of reintegration following discharge from military service: a systematic review. J Mil Veterans Health. 2018;26(2):60–73.
- Wilson G, Hill M, Kiernan MD. Loneliness and social isolation of military Veterans: systematic narrative review. Occup Med (Lond). 2018;68(9):600–9. https:// doi.org/10.1093/occmed/kqy160. Medline:30551163
- Reich W. Three problems of intersubjectivity-and one solution. Social Theory. 2010;28(1):40–63. https:// doi.org/10.1111/j.1467-9558.2009.01364.x.
- Stein JY. The meaning of "loneliness" for traumatized Veterans: a semiotic investigation of Veterans' written narratives. J Veterans Stud. 2017;2(2):121–39. https:// doi.org/10.21061/jvs.19.
- 14. Stein JY. The Veteran's loneliness: emergence, facets, and implications for intervention. In: Rudolf L, editor. Psychology of loneliness. Hauppage (NY): Nova Science Publishers; 2017.
- Veterans' Affairs New Zealand [homepage on the Internet]. Wellington (NZ): Veterans' Affairs New Zealand; c2019 [updated 2019 Jul 12; cited 2020 Jun 24].

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Veterans Affairs, our work [1 screen]. Available from: https://www.Veteransaffairs.mil.nz/about-Veteransaffairs/our-work/.

- Veterans' Support Act 2014. Wellington (NZ): New Zealand Government; 2014 Aug 7 [cited 2020 Jun 24]. Available from: http://www.legislation.govt.nz/act/ public/2014/0056/60.0/DLM5537774.html.
- Accident Compensation Act 2001. Wellington (NZ): New Zealand Government; 2001 Sep 19 [updated 2020 Aug 1; cited 2020 Jun 24]. Available from: http:// www.legislation.govt.nz/act/public/2001/0049/latest/ DLM99494.html.
- Ministry of Social Development. The Social Report 2016 – Te pūrongo oranga tangata. Wellington (NZ): Ministry of Social Development; 2016 Jun [cited 2020 Jul 28]. Available from: http://socialreport.msd.govt. nz/documents/2016/msd-the-social-report-2016.pdf.
- Boyatzis E. Transforming qualitative information: thematic analysis and code development. Thousand Oaks (CA): Sage Publications; 1998.
- 20. Mobbs MC, Bonanno GA. Beyond war and PTSD: the crucial role of transition stress in the lives of military Veterans. Clin Psychol Rev. 2018;59:137–44. https://doi.org/10.1016/j.cpr.2017.11.007. Medline:29180101
- Moore A, Grime J, Campbell P, et al. Troubling stoicism: sociocultural influences and applications to health and illness behaviour. Health (London). 2012;17(2): 159–73. https://doi.org/10.1177/1363459312 451179. Medline:22763794
- 22. Teo AR, Marsh HE, Forsberg CW, et al. Loneliness is closely associated with depression outcomes and suicidal ideation among military Veterans in primary care. J Affect Disord. 2018;230:42–9. https://doi. org/10.1016/j.jad.2018.01.003. Medline:29407537
- 23. Weir B, Cunningham M, Abraham L, et al. Military Veteran engagement with mental health and wellbeing services: a qualitative study of the role of the peer support worker. J Ment Health. 2019;28(6):647–53. https://doi.org/10.1080/09638237.2017.1370640. Medline:28853622
- 24. Paterson R. Warrant of fitness, an independent review of the Veterans' Support Act 2014. Wellington (NZ): New Zealand Defence Force; 2018 Mar [cited 2020 Jun 24]. Available from: https://www.veteransaffairs. mil.nz/assets/News-attachments/2018/78d091c780/ review-report-warrant-of-fitness.pdf.

AUTHOR INFORMATION

Guy Austin, Toby Calvert, Natasha Fasi, Ryder Fuimaono, Timothy Galt, Sam Jackson, Leanda Lepaio, Ben Liu, Darren Ritchie, and Nicolas Theis were all Trainee Interns who undertook this project as their health care evaluation project as part of their final year at medical school. They are all now Residents Medical Officers practising throughout New Zealand.

John Dockerty, PhD, MB, is an Epidemiologist and Public Health Physician. He has a special interest in the causes of cancer in children. He is an active member of the Childhood Leukemia International Consortium. His methodological approaches have included studies of time trends and ethnic differences, clustering, case-control studies, and cancer survival. He has also researched the psychological, social, and economic effects of childhood cancer (quantitative and qualitative), and worked on systematic reviews and pooled analyses.

Fiona Doolan-Noble, PhD, is a Senior Research Fellow within the Section of Rural Health and Director of the Rural Aotearoa Research Network. Her research covers the areas of rural health and well-being; rural health care delivery and interprofessional education using a range of qualitative and mixed methods methodologies. She has a particular interest in the role of lay health navigators, also in how rural health service delivery can be informed by a codesign process with rural communities.

David McBride, PhD, MB, has a professional scope of practice in Occupational and Environmental Medicine, a clinical discipline of which Military Medicine is a sub-specialty. He has been an Army Reservist in logistics and medicine since 1973 but may be getting a bit past it. A strong interest in the "evidence base" for practice has led to a research and teaching career in occupational epidemiology and biostatistics.

COMPETING INTERESTS

None declared.

CONTRIBUTORS

All authors conceived, designed, researched, and drafted the manuscript and approved the final version submitted for publication.

Leanda Lepaio, Natasha Fasi, and Toby Calvert conducted the participant interviews. Ryder Fuimaono, Ben Liu, and Timothy Galt transcribed the interviews. Nicolas Theis, Fiona Doolan-Noble, and Timothy Galt performed the thematic analysis. Sam Jackson, Leanda Lepaio, and Darren Ritchie performed the cross validation.

Note: This was a student project completed in a six-week time frame, during which the students worked as a team. They are therefore alphabetically listed. The supervisors were responsible for ensuring the final product was of good publishable quality.

ETHICS APPROVAL

The study protocol was approved by an ethics committee and the ethics certificate information is available from the authors upon request.

INFORMED CONSENT

Informed consent was obtained from the participants.

REGISTRY AND REGISTRATION NO. OF THE STUDY/TRIAL

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PEER REVIEW

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