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Interventions to improve help-seeking for mental health among veterans

Review protocol

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1. INTRODUCTION AND BACKGROUND

1.1. Introduction and background

Serving in the military is associated with significant stressors associated with operational activities that can have implications for physical and mental health, in addition to the pressure of being away from family and friends for extended periods of time.[1] Serving military personnel have been found to experience a higher rate of common mental health disorders compared to the general population, after adjusting for population demographics.[2] Military service personnel may experience an increased risk of mental health difficulties when they first leave military service[3], though in the longer-term, they may experience mental health conditions at rates comparable with the general population.[3,4] Depression, anxiety and alcohol misuse are the leading types of mental health condition experienced by veterans.[4]

Obtaining accurate estimates of mental health conditions amongst veterans, however, is hampered by low help-seeking rates as well as requests from veterans – similar to those found in the general population - for mental health conditions to not be recorded in their medical notes.[4] Evidence suggests that military veterans are reluctant to seek help for mental health conditions and, if they do seek help, will often delay before doing so.[5] There is a lack of comprehensive data on help-seeking rates and delays for veterans, though a historic study based in the US reported that only 23-40% of veterans sought care for mental health conditions[6] and a more recent UK based study of veterans who served during the Afghanistan and Iraq conflicts suggests only half (55%) of those with mental health symptoms sought formal medical help.[7] Data from treatment-seeking samples suggest an average time between leaving military service and seeking treatment of 12.5 years, this varies between age groups and cohorts, and those who served in more recent conflicts such as Afghanistan and Iraq are more likely to seek help earlier than older veterans.[8] A recent systematic review[5] reported that barriers to help-seeking for veterans include stigma and military cultural factors such as stoicism and self-reliance, whilst facilitators included breaking down stigma and myths surrounding both help-seeking and the mental health treatments themselves, as well as peer involvement.

Understanding barriers and facilitators to help-seeking behaviours enables the development of help-seeking interventions, i.e. interventions aimed at increasing these behaviours and, therefore, improving uptake of mental health treatments. The NHS has priority services for veterans (through Op COURAGE), which aim to improve access to health care, including mental health care.[9] This includes supporting veterans to identify if they have a mental health

condition and provides specialist access to mental health treatments. However, there remains a need to interventions to encourage veterans to seek treatment for mental health conditions when they need it.

While there have been a number of systematic reviews of evidence related to the barriers and facilitators for help-seeking amongst veterans, to date no systematic review has identified evidence for the effectiveness of interventions to increase help-seeking rates specifically for veterans. A systematic review of help-seeking interventions for veterans with PTSD has recently been conducted,[10] however, as well as being limited to PTSD, this review was limited to studies based in the USA. To evaluate the evidence for help-seeking interventions most relevant to UK veterans, and for a wide range of mental health conditions, a broader systematic review is therefore needed.

As part of the James Lind Alliance Priority Setting Partnership for Veterans' health, more than 1000 veterans, family members and carers and healthcare providers discussed priorities for veterans' health research and identified the need for interventions to improve help-seeking for mental health conditions amongst veterans to be a priority. Accordingly, the National Institute for Health and Care Research (NIHR) commissioned this project to conduct a systematic literature review (SLR) of interventions to improve help-seeking amongst veterans. This document outlines the protocol for the SLR, including specifying the evidence that will be sought and how it will be considered.

1.2. Objectives

The research questions to be answered by the review are:

- What types of interventions have been evaluated to improve help-seeking for veterans?
- How effective are interventions to improve help-seeking for veterans?

A systematic review of the literature will be conducted to answer these related questions with regards to help-seeking for mental health conditions (help-seeking for physical health conditions is outside of the scope of this review). The focus of the review will be on evaluating the effectiveness of the interventions, and the review will therefore map out the types and effectiveness of interventions that have been evaluated in veterans. Interventions that have been developed and described, but not evaluated for their effectiveness at improving help-seeking, will be considered outside of scope.

2. EVIDENCE REVIEW

To address the review objectives, a systematic literature review (SLR) will be conducted. The SLR will be conducted according to gold-standard methods for SLRs[11,12] and reported according to the PRISMA statement.[13] If required, some pragmatic prioritisation of included studies according to pre-specified criteria may become necessary if a large body of relevant evidence is found (see sections 2.3 and 2.4). In this eventuality, SLR methods will be followed to ensure that prioritisation is reported in a transparent and reproducible manner. The protocol is registered on the PROSPERO database as record number #CRD42025638510[14].

2.1. Inclusion criteria

Inclusion and exclusion criteria for evidence identified in the SLR are reported in Table 1.

The SLR will include studies that evaluate the effectiveness of interventions in comparison to another intervention, no intervention, or a standard of care approach (i.e. single-arm studies will be excluded). Included studies will report quantitative data or a mix of quantitative and qualitative data. In order to generate robust estimates of intervention effectiveness within the SLR timeline, qualitative studies that do not also include a quantitative evaluation of intervention effectiveness will be excluded. Studies will be limited to those most applicable to a UK setting, including studies based in the UK, any other European country, USA, Canada, Australia or New Zealand, with studies from all other geographical locations excluded. Variation in populations or services across nations that would be expected to influence effectiveness estimates will be considered during the analysis. Studies will also be published in English. Published SLRs will be identified, screened for primary studies, and then excluded.

The population is focussed towards veterans who are experiencing a common mental health problem, which we have defined as including the following conditions: anxiety disorders, mood disorders, PTSD, psychosis, eating disorders, personality disorders and addiction.

The population will be limited to veterans who are currently experiencing a mental health condition but are not engaged with mental health services (i.e. either receiving or seeking help for their mental health difficulties). Consistent with the definition used in Resnik et al.,[10] veterans already considered to be engaged will be those who have had two or more mental health-related healthcare appointments in the previous 12 months. The aim of the SLR is therefore to identify interventions that increase the number of veterans who seek help for mental health conditions, and not to evaluate interventions that aim to improve access to treatments for

veterans who are already seeking help or to increase adherence to treatment once veterans have sought help.

It is acknowledged that, because the population will not yet have sought help for their current condition, it may be difficult to establish whether included study populations have a diagnosable mental health condition. However, to be included, studies must be clearly aimed at evaluating interventions to improve help-seeking for the included mental health conditions and/or to improve help-seeking towards services that treat those mental health conditions. Studies aimed at improving help-seeking for general well-being services or to prevent mental health conditions will be excluded. Where the distinction is unclear, the review team will take a judgement call in discussion with JLA, where indicated.

All interventions designed to increase help-seeking behaviour with regards to mental health interventions will be sought. Studies comparing different modes of delivering the same mental health intervention will be included if a stated aim for the modified delivery, as described in the title and abstract of at least one associated publication, is to increase help-seeking behaviours. Help-seeking will be defined as attempts to get help (whether or not successful) from any organisation and directed towards improving mental health conditions. This could include universal healthcare, private healthcare, voluntary sector organisations, and community services (e.g. religious institutions and community support groups) where these are specifically targeted towards delivering mental-health interventions rather than improving general wellbeing.

Included outcomes are quantitative outcomes relevant to measuring changes in help-seeking behaviours (e.g. the number of people seeking help or the speed at which help is sought) or in uptake of services (change in the number of people accepting help from services). In addition, qualitative and survey data will be included where this forms a part of an effectiveness evaluation and describes changes in participants' opinions about help-seeking.

As outcomes assessing participants' health and quality of life will be inextricably linked with the effectiveness of the healthcare received by veterans after they access mental health services, the SLR will not include these outcomes.

Table 1: Inclusion and exclusion criteria

	Inclusion criteria	Exclusion criteria
Population	Veterans of any age (defined as someone who has served for at least one day in the Armed Forces (Regular or Reserve) or merchant mariners who have seen duty on legally defined military operations) who are currently experiencing one of the following mental health conditions and have not yet sought help (defined as attending ≤2 mental health appointments in the previous 12-months): • Anxiety disorders • Mood disorders • PTSD • Psychosis • Eating disorders • Personality disorder • Addiction	• Currently serving members of the Armed Forces • Veterans who are not experiencing an included mental health condition • Veterans who are already receiving or seeking help for their mental health
Intervention	Any intervention that is intended to increase help-seeking for mental health problems, including but not limited to: • Screening initiatives • Interventions that increase awareness of help for mental health difficulties • Interventions that target common barriers to seeking	• Interventions intended to treat mental health problems without the explicit aim of increasing help-seeking • Interventions intended to improve general wellbeing or prevent the development of mental health conditions • Interventions to increase adherence to treatment for mental health conditions

	Inclusion criteria	**Exclusion criteria**
	help amongst veterans (e.g. tackling stigma) • Alternative methods for delivering mental health support (e.g. telemedicine, peer support) where the explicit aim is to increase help-seeking	• Interventions not described as being targeted towards increasing help-seeking in article title/abstract
Comparators	No intervention (standard care) Another intervention aimed to increase help-seeking for mental health problems	None
Outcomes	Primary outcomes • Number of people who seek help • Number of mental health intervention sessions attended • Time to commencing treatment for the mental health condition Service level outcomes • Number of people seen by a mental health service • Change in rates of attendance to mental health service • Number of referrals to further/specialist mental health services	Other outcomes

	Inclusion criteria	Exclusion criteria
	Secondary outcomes • Patient or clinician opinions about the intervention aimed at improving help-seeking • Change in patient or clinician opinions about mental health interventions	
Study design	• Clinical trials (RCTs, CCTs) • Comparative observational studies • Systematic reviews will be used to check for primary research studies • Qualitative data from mixed methods studies (e.g. to ascertain patient or clinician opinion), providing the quantitative part of the study otherwise meets the review inclusion criteria	• Single-arm trials and observational studies • Studies only reporting qualitative data • Studies reported only as conference abstracts

2.2. Search strategy

Searches will be undertaken in seven bibliographic databases: Medline (Ovid), Embase (Ovid), APA PsycInfo (Ovid), Cochrane (Wiley), Web of Science (Clarivate), ASSIA (ProQuest) and PTSD Pubs (Proquest). These searches will include terms for the population (veterans with mental health difficulties) and intervention (help-seeking behaviour), along with terms for European and Five Eyes countries and limits for specific study types (cohort, observational, RCTs and systematic reviews). See Appendix 1 for a sample literature search strategy in Medline. Results will be downloaded into EndNote (Clarivate) and deduplicated before screening.

Supplementary literature searching will be conducted as determined by the needs of the project after the assessment of the key identified papers. This will include checking reference lists of included SLRs, citation chasing, and web searching for unpublished material and policy documents. It is noted that searching for unpublished materials may be useful for identifying evaluations of interventions that did not result in positive findings and were therefore not submitted for publication in peer-reviewed journals. Authors may be contacted for further clarification where needed.

2.3. Study selection

A two-stage screening process will be used. First all titles and abstracts retreived from electronic searches and from any other sources (including additional records identified from relevant systematic reviews) will be assessed against the review inclusion criteria. Second, those articles included at the first stage will be obtained in full and rescreened against the inclusion criteria. Those meeting all inclusion criteria will be included in the review. At both stages all records will be screened independently by two reviewers.

Where a large body of evidence is included for a particular mental health condition and inclusion of all studies is expected to be unfeasible within the SLR timeline, studies will be included only where they meet the following priority criteria: based in the UK followed by studies based in any other european country, larger sample sizes, and peer-reviewed publications. In the event that prioritsation becomes necessary, a brief overview of each excluded study will be presented in a report appendix alongside the rationale for de-prioritisation, but results for these studies will not be extracted and presented.

2.4. Data extraction strategy

Data will be extracted into pre-designed data tables. This will be conducted by one reviewer and all outcome data will be reviewed by a second reviewer.

Data extraction tables will be designed to cover details about the publication (first author, year, publication type), study methods (details about population, intervention, comparator, outcomes and study design), risk of bias assessment, and the results for all relevant outcomes. Data extraction tables may be amended following piloting.

2.5. Quality assessment strategy

The quality of included studies will be assessed using the Centre for Reviews and Dissemination (CRD) tool for RCTs[11] and the Newcastle Ottawa Scale for non-randomised designs.[15] This will be conducted by one reviewer and discussed with a second reviewer where required. If prioritisation of studies becomes necessary, quality assessment will not be conducted for deprioritised studies. Risk of bias in the included studies will be considered in any narrative synthesis of the evidence base.

2.6. Methods of synthesis/analysis

The evidence will be considered in a narrative synthesis. This will be accompanied by summary tables of the extracted data. Where possible, the evidence will be synthesised separately for different mental health conditions. This will best allow an evaluation of both the scale and the effectiveness of different interventions for particular conditions and will inform the implementation of interventions according to target populations. Where evidence exists, the synthesis will consider the effectiveness of interventions for subgroups of veterans who have particularly low help-seeking rates for mental health conditions, such as non-UK born veterans. Consideration will only be given to meta-analysis where there are three or more studies for the same mental health condition that evaluate the same or highly similar interventions. The similarity of interventions will be judged pragmatically by the reviewers and will be based on the following factors: specific components of the intervention, anticipated mechanisms of action, delivery methods (including setting). Indirect treatment comparison is considered outside of the scope of this review and, if this appears to be feasible, will be discussed as a recommendation for further research.

3. STAKEHOLDER INVOLVEMENT

During the development of the SLR, PenTAG will meet with representatives of the JLA to discuss progress and to consult on key decisions, including to guide interpretation of the evidence. Representatives of JLA may wish to consult with stakeholders with an interest in the topic to inform their feedback during these meetings, for example NHS England, the Department of Health and Social Care (DHSC), the Ministry of Defence, and veterans, their families and carers who participated in the Priority Setting Process. Following preparation of the draft report summarising the methods and findings of the SLR, the report will be circulated to relevant stakeholders by the JLA for feedback. The length of time given to stakeholders to read and submit their comments, and the format in which these will be requested, can be agreed with the JLA once the draft findings of the SLR are realised. Following the receipt of comments from stakeholders, PenTAG will collate these and provide a written response to contributors as well as use these to inform any edits to the final SLR report.

4. COMPETING INTERESTS OF AUTHORS

PenTAG has no conflicts of interest relevant to this research.

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Appendix: Example search strategy (Medline)

Literature search strategy

Ovid MEDLINE(R) ALL <1946 to January 15, 2025>

1	exp cohort studies/	2695787
2	cohort$.tw.	1006715
3	controlled clinical trial.pt.	95676
4	epidemiologic methods/	31637
5	limit 4 to yr=1971-1988	9370
6	1 or 2 or 3 or 5	3234364
7	epidemiologic studies/	9645
8	(Follow up adj (study or studies)).tw.	59597
9	(observational adj (study or studies)).tw.	192409
10	Longitudinal.tw.	364576
11	Retrospective.tw.	868636
12	Cross sectional.tw.	603570
13	Cross-sectional studies/	528519
14	7 or 8 or 9 or 10 or 11 or 12 or 13	2076066
15	6 or 14	4267291
16	exp randomized controlled trial/	631588
17	controlled clinical trial.pt.	95676
18	randomized.ab.	676021
19	placebo.ab.	255237

20 drug therapy.fs. 2771249

21 randomly.ab. 450916

22 trial.ab. 733268

23 groups.ab. 2792616

24 or/16-23 6176451

25 review*.ab,ti. or review.pt. or "systematic review"/ or overview*.ab,ti. or meta-analy*.ab,ti. or metaanaly*.ab,ti. or metanaly*.ab,ti. or meta-analysis.pt. or Meta-Analysis/ or meta-regression*.ab,ti. or metaregression*.ab,ti. or (meta adj regression*).ab,ti. or search*.ab. or synthes*.ab,ti. or metasynthes*.ab,ti. or meta-synthes*.ab,ti. or metaethnograph*.ab,ti. or meta-ethnograph*.ab,ti. 6344863

26 (letter or comment or editorial).pt. 2305949

27 25 not 26 6262597

28 15 or 24 or 27 13609748

29 veteran*.ti,ab,kf. 49517

30 exp Veteran/ 24007

31 (army or military or marine* or soldier* or navy or force* or "service person*" or "service man" or "service woman" or troop* or "merchant mariner").ti,ab,kf. 759758

32 (ex or long or former or previous* or length or past).ti,ab,kf. 5442628

33 31 and 32 163108

34 29 or 30 or 33 212687

35 mental health/ or exp mental disorders/ 1574568

36 ((mental* or psycholog* or psychiatr* or behavio?r or emotion*) adj2 (health or ill* or disorder* or condition or disturbance or diagnos* or symptom* or "well being" or wellbeing or syndrome*)).ti,ab. 507273

37 exp adjustment disorders/ or exp anxiety disorders/ or exp mood disorders/ or neurotic disorders/ 254489

38 (anxi* or depress* or melancholi* or neuros* or neurotic or psychoneuro* or stress* or distress* or bipolar or dissociati* or schizophreni* or psychotic or psychosis or trauma* or phobia* or OCD or "obsessive compulsive" or phobia* or "self harm").ti,ab. 2845777

39 ((affective or mood or conduct or anger or personality or sleep* or eat* or oppositional or somatic or somatoform) adj2 (health or ill* or disorder* or condition or disturbance or diagnos* or symptom* or syndrome*)).ti,ab. 192225

40 Self-Injurious Behavior/ or exp Sleep Wake Disorders/ or Internet Addiction Disorder/ or exp Substance-Related Disorders/ or exp Somatoform Disorders/ 469904

41 ((internet or gaming or substance* or alcohol* or tobacco or drug* or narcotic* or opiate* or cannabis or hashish or marijuana or cocaine or amphetamine*) adj2 (disorder* or addict* or depend* or abuse*)).ti,ab. 175752

42 stress disorders, traumatic/ or combat disorders/ or psychological trauma/ or stress disorders, post-traumatic/ or stress disorders, traumatic, acute/ 48517

43 (ptsd or "shell shock" or "post traumatic stress").ti,ab,kf. 46944

44 ((combat or war or military or battle or operational) adj3 (trauma or stress or fatigue or disorder* or neurosis or distress* or shock* or anguish* or exhaustion)).ti,ab,kf. 7613

45 or/35-44 4172191

46 help-seeking behavior/ 1410

47 ((seek or "look for" or take or search* or pursue or uptake or request* or ask* or solicit or utili?e or access*) adj3 (help or support* or service* or assist* or aid* or care)).ti,ab,kf. 141270

48 exp Health Services Accessibility/ 142044

49 exp "Patient Acceptance of Health Care"/ 180626

50 Delivery of Health Care/ 124398

51 Patient Compliance/ 61713

52 46 or 47 or 48 or 49 422406

53 exp australasia/ or exp europe/ or exp united kingdom/ or exp north america/ or exp Russia/ 3478359

54 ("five eyes" or "5 eyes").ti,ab,kf. 5266

55 European Union/ 18328

56 ("national health service" or nhs).ti,ab,kf. 54742

57 (europe* or "united kingdom" or uk or "great britain" or england or scotland or wales or ireland or "north america" or "united states" or "north america" or canada or "new zealand" or australia or australasia or france or germany or spain or portugal or sweden or norway or finland or denmark or belgium or austria or germany or czech* or greece or iceland or italy or baltic or estonia or hungary or latvia or lithuania or luxembourg or croatia or netherlands or poland or scandinavia or slovakia or slovenia or switzerland or turkey or russia or ukraine or romania or belarus or bulgaria or serbia or bosnia or moldova or lithuania or albania or latvia or macedonia or estonia or montenegro or malta or andorra or liechtenstein or monaco or "san marino" or "holy see" or vatican or cyprus or gibraltar or caucasus or kazakhstan).ti,ab,kf. 1946014

58 53 or 54 or 55 or 56 or 57 4422782

59 28 and 34 and 45 and 52 and 58 984