Stigma-related barriers and facilitators to help seeking for mental health issues in the armed forces: a systematic review and thematic synthesis of qualitative literature

S. J. Coleman¹*, S. A. M. Stevelink², S. L. Hatch³, J. A. Denny⁴ and N. Greenberg²

A recent quantitative review in the area of stigma and help seeking in the armed forces has questioned the association between these factors (Sharp *et al.* 2015). To date, the contribution of qualitative literature in this area has largely been ignored, despite the value this research brings to the understanding of complex social constructs such as stigma. The aim of the current systematic review of qualitative studies was to identify appropriate literature, assess the quality and synthesize findings across studies regarding evidence of stigma-related barriers and facilitators to help seeking for mental health issues within the armed forces. A multi-database text word search incorporating searches of PsycINFO, MEDLINE, Social Policy and Practice, Social Work Abstracts, EMBASE, ERIC and EBM Review databases between 1980 and April 2015 was conducted. Literature was quality assessed using the Critical Appraisal Skills Programme tool. Thematic synthesis was conducted across the literature. The review identified eight studies with 1012 participants meeting the inclusion criteria. Five overarching themes were identified across the literature: (1) non-disclosure; (2) individual beliefs about mental health; (3) anticipated and personal experience of stigma; (4) career concerns; and (5) factors influencing stigma. The findings from the current systematic review found that unlike inconsistent findings in the quantitative literature, there was substantial evidence of a negative relationship between stigma and help seeking for mental health difficulties within the armed forces. The study advocates for refinement of measures to accurately capture the complexity of stigma and help seeking in future quantitative studies.

Received 3 August 2016; Revised 23 January 2017; Accepted 24 January 2017

Key words: Health-related stigma, help-seeking behaviour, mental health, military personnel, qualitative methods.

Introduction

Despite previous research identifying the significant psychological needs of those serving in the armed forces (AF) (Iversen *et al.* 2009; Fear *et al.* 2010), only a small proportion of this population who have mental health problems use mental health services (Hoge *et al.* 2004). A number of large research publications in the AF point to stigma as a significant barrier, greater than reported practical or logistical barriers (Hoge *et al.* 2004; Iversen *et al.* 2011). A common definition of stigma used that encompasses its many elements is 'an attribute that is deeply discrediting' that acts to reduce an individual 'from a whole and usual person

(Email: sarah.coleman@kcl.ac.uk)

to a tainted, discounted one' (Goffman, 1963, p. 265). There are several types of stigma and these are thought to interact with each other and contribute to barriers to help seeking; the current research will focus on the types of stigma outlined in Table 1. Stigma has been linked with a number of attributes deemed desirable within the AF, such as toughness, self-sufficiency and mission focus to ensure combat readiness (Dunt, 2009). It is thought that these attributes are associated with help seeking being a sign of weakness, ideas of being self-reliant and a preference with dealing with difficulties on your own (Dickstein *et al.* 2010*)1†.

The most frequently endorsed items of public stigma in the AF are concerns regarding differential treatment from unit leaders, being perceived by peers and leaders as 'weak', and losing the confidence of their unit (Hoge *et al.* 2004; Iversen *et al.* 2011; Hoerster, 2012).

¹ King's College London, Clinical Psychology, Institute of Psychology, Psychiatry and Neuroscience, Addiction Sciences Building, 4 Windsor Walk, London SE5 8AF, UK

² King's Centre for Military Health Research, King's College London, Weston Education Centre, Cutcombe Road, London SE5 9RJ, UK

³King's College London, Psychological Medicine, Institute of Psychiatry, 10 Cutcombe Road, London SE5 9RJ, UK

⁴Queen's University Belfast, University Road, Belfast BT7 1NN, UK

^{*} Address for correspondence: S. J. Coleman, King's College London, Clinical Psychology, Institute of Psychology, Psychiatry and Neuroscience, Addiction Sciences Building, 4 Windsor Walk, London SE5 8AF, UK.

[†] The notes appear after the main text.

Table 1. Stigma types and definitions

difficulties (Wright et al. 2009) Internalized stigma May occur on its own or when individuals who experience mental health difficulties internalize the negative stereotypes and prejudices held by the general public (Vogt, 2011) Structural Rules, regulations or supports with a society either intentionally or unintentionally disadvantage		
endorse prejudice and discrimination against individuals with mental health difficulties (Wright et al. 2009) Internalized stigma May occur on its own or when individuals who experience mental health difficulties internalize the negative stereotypes and prejudices held by the general public (Vogt, 2011) Structural Rules, regulations or supports with a society either intentionally or unintentionally disadvantage individuals with mental illness (Rüsch	Stigma type	Definition
individuals who experience mental health difficulties internalize the negative stereotypes and prejudices held by the general public (Vogt, 2011). Structural Rules, regulations or supports with a society either intentionally or unintentionally disadvantage individuals with mental illness (Rüsch	Public stigma	endorse prejudice and discrimination against individuals with mental health
discrimination society either intentionally or unintentionally disadvantage individuals with mental illness (Rüsch	Internalized stigma	individuals who experience mental health difficulties internalize the
		society either intentionally or unintentionally disadvantage individuals with mental illness (Rüsch

These concerns have been found to be consistent across the US, UK, Australian, New Zealand and Canadian AF (Gould et al. 2010). Organizational and leadership experiences are of particular importance with regards to AF public stigma. High ratings of unit cohesion and the quality of the officer have been associated with lower levels of stigma, whereas negative behaviours, such as causing embarrassment to a member of the unit, have been shown to contribute to mental health-related stigma (Wright et al. 2009; Britt et al. 2012). Internalized stigma may stand on its own or if the public stigma experienced by the person with mental health difficulties starts to internalize, resulting in impaired self-esteem, self-efficiency and feelings of shame and demoralization (Corrigan & Watson, 2002*; Vogt, 2011*; Zinzow et al. 2013*). The most frequently reported internalized stigma beliefs held by individuals in the AF are 'I am crazy' and 'I am weak' (Pury et al. 2014*). Structural discrimination is often experienced when rules or regulations (un)intentionally act to disadvantage a group of people, in this case AF personnel with mental health difficulties (Rüsch & Thornicroft, 2014). These rules or regulations are thought to subsequently influence public stigma and then potentially lead to internalized stigma (Evans-Lacko et al. 2012). Examples include the belief that mental health difficulties may impact one's career, being unaware of where to find help and not having access to resources to access help.

The findings of a broad systematic review regarding the impact of mental health-related stigma and help seeking across populations highlighted the military as a subgroup that were disproportionately deterred by stigma (Clement *et al.* 2015*). However, a recent focus on the quantitative literature in the area dealing with military personnel only revealed questions

regarding this association (Sharp et al. 2015). Despite a high and consistent prevalence of public stigma, the majority of the studies examined found no association between public stigma and mental health service use or intentions to seek help among AF personnel. Many explanations are possible for this discordance, such as the use of different measures or perhaps measures of low quality (not validated) to examine stigma; individuals who are experiencing high levels of stigma may not disclose their mental health service usage or they may not even be aware that they experience mental health difficulties and consequently do not seek help (Fikretoglu et al. 2008; Osório et al. 2013). Further, it is feasible that the measures used did not encompass the complexity of stigma within the AF population. Nonetheless, the contribution of qualitative studies in this area has broadly been ignored and may provide further insight and clarification regarding the experience of stigma, help-seeking experiences, intentions and facilitators.

The current review aims to:

- Identify, synthesis and discuss qualitative literature regarding the processes contributing to and counteracting the effect of stigma on help seeking for mental health difficulties within the AF.
- Critically consider the quality of the identified studies.
- Identify future directions in research and interventions regarding stigma in the AF.

Method

Search strategy

A multi-database text word search using OVID was employed. The database incorporates searches of PsycINFO, MEDLINE, Social Policy and Practice, Social Work Abstracts, EMBASE, ERIC and EBM Review databases (1980–April 2015). A variation of the following key search terms was used: mental health, military, army, stigma, attitudes, barriers, discrimination, internalised stigma, public stigma, help-seeking (online Supplementary Appendix S2). Reference sections of articles and grey literature were also extensively searched. The date of the last search was 19 April 2015.

Inclusion/exclusion criteria

 Empirically based studies looking into help seeking and stigma in military or veteran populations, thereby using qualitative or mixed methods with a qualitative component, published between 1980 and 2015.

- Research that include adults from the age of 18 years
- Studies written in English.
- Review articles were excluded as well as conference proceedings and Ph.D. dissertations.

Quality assessment method

Methodological quality of the process studies was assessed using the 10-item Critical Appraisal Skills Programme (CASP) tool for qualitative research (Critical Appraisal Skills Programme, 2014) (online Supplementary Appendix S3). CASP has been widely used in a number of similar qualitative reviews. Two researchers independently assessed a subset (four) of the studies against the outlined criteria and resolved discrepancies through discussion (S.J.C. and J.A.D.). Studies that did not meet the quality criteria on more than one item were deemed fair and any more than three items were rated fair/poor. Study quality allowed a sensitivity analyses to be conducted determining the impact of lower-quality studies on the reviews findings.

Data extraction

The following data were extracted from the studies: populations studied, country, number of participants, diagnosis of participants, age, ethnicity, recruitment strategy, objective of the study, qualitative method, outcomes measures, data collection, themes identified, most relevant findings and recommendations and implications (online Supplementary Appendix S1).

Data synthesis

We used thematic synthesis to summarize and analyse the data from the various studies (Thomas et al. 2008). Thematic synthesis involves identifying key concepts across studies, even when not described using identical wording or explanations. Identified concepts are developed across the studies and pulled together in themes, in an effort to go beyond the content of the original research studies (Thomas et al. 2008).

This includes three stages:

- Stage one: line-by-line coding of the findings from primary studies.
- Stage two: development of descriptive themes.
- · Stage three: generating analytical themes and 'going beyond' the content of the original studies.

Studies were read repeatedly to ensure that all text relating to barriers and facilitators to help seeking were identified, integrated and grouped into a map of themes. As recommended by Thomas et al. (2008), all of the study findings from text labelled as results or findings were extracted and any findings discussed

in the abstracts. All results were entered verbatim into Nvivo software. Two reviewers independently coded each line of the text labelling the meaning and content (S.J.C. and J.A.D.). During coding, results to previously formed codes were added or a new code was developed where appropriate.

Sensitivity analysis

A sensitivity analysis was used to investigate the effect of methodological quality on the results of the current review. This was conducted by removing the results from the three lowest-rated studies (Stecker et al. 2007; Visco, 2009; Gibbs et al. 2011).

Results

A total of eight qualitative studies (five individual interviews, one individual interviews and focus groups and two focus groups) with a total of 1012 participants were included in the review (see Fig. 1). The studies identified were carried out in the UK (n=2)and the USA (n = 6). Two out of eight studies employed mixed-methods methodologies. Gibbs et al. (2011) was the only study that did not provide details regarding the gender distribution within their study. The studies varied in their focus. One focused broadly on barriers and facilitators to help seeking (Zinzow et al. 2013), one on facilitator pathways for help seeking (Murphy et al. 2014), one on distress and reported stigma (Langston et al. 2010), two focused on stigma related directly to post-traumatic stress disorder (PTSD) (Sayer et al. 2009; Mittal et al. 2013), one on beliefs regarding mental health treatment (Stecker et al. 2007) and one on mental health symptoms and helpseeking behaviour (Visco, 2009).

Characteristics of study methodology

A summary of the studies is in Table 2, whilst Table 3 details the methodology of studies.

Method of analysis

Four studies employed thematic analysis, three used content analysis and one used interpretative phenomenological analysis (Murphy et al. 2014).

Description of research design

Seven studies adequately described their research design; the remaining one failed to justify its study design. Two studies employed mixed-methods designs, integrating quantitative aspects such as questionnaires to complement the qualitative aspects (Visco, 2009; Langston et al. 2010). Both of these studies had larger sample sizes (n=170 and n=374,

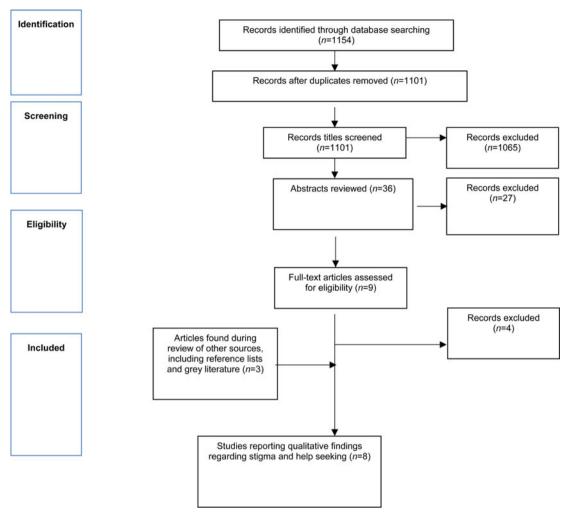


Fig. 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram of study selection process.

respectively) as they also encompassed a quantitative element. The effect of sample size on the qualitative results was not discussed in the studies. Two studies, namely Zinzow *et al.* (2013) and Gibbs *et al.* (2011), employed both focus groups and interviews.

Adequate recruitment strategy

Seven studies used an adequate recruitment strategy; the remaining study had a senior officer instruct participants to attend the focus groups (Gibbs *et al.* 2011). Inclusion and exclusion criteria were well documented in all of the studies. Exclusion was usually based on meeting the criteria for probable diagnosis (*n* = 3) (Stecker *et al.* 2007; Visco, 2009; Langston *et al.* 2010) or currently in treatment (*n*=5) (Sayer *et al.* 2009; Gibbs *et al.* 2011; Mittal *et al.* 2013; Zinzow *et al.* 2013; Murphy *et al.* 2014). A bias towards recruiting individuals with lower levels of psychological distress may have occurred by therapists referring to the studies

excluding potential participants suffering from high levels of psychological distress.

Data collection

Six studies met the criteria for data collection; the other two did not discuss saturation of data nor did they provide a justification for the sample size (Stecker *et al.* 2007; Visco, 2009).

Relationship between the researcher and participants

None of the studies examined the relationship between the researcher and the participants primarily because all failed to include any evidence of good reflective practice. Such examples would have included accounts from the researcher regarding their own role and potential bias and how this may have influenced formulation and findings of the study.

 Table 2. Characteristics of the studies

Study (year)	Quality rating	Sample	Mental health diagnosis	Country	Method of data collection	Analysis method
Gibbs et al. (2011)	Fair/poor	n = 270 (Army soldiers)	In treatment – mental health/alcohol misuse	USA	Focus groups	Content analysis
Langston et al. (2010)	Good	n = 374 (naval personnel)	Probable mental health	UK	Interviews	Thematic analysis
Mittal et al. (2013)	Good	n = 16 (veterans)	In treatment, diagnosis of PTSD	USA	Focus groups	Thematic analysis
Murphy et al. (2014)	Good	n = 8 (individual interviews)	In treatment, diagnosis of PTSD	UK	Individual interviews	Interpretative phenomenological analysis
Sayer et al. (2009)	Fair	n = 44 (veterans)	In treatment for PTSD	USA	Individual interviews	Thematic analysis
Stecker et al. (2007)	Fair/poor	n = 20 (National Guard veterans)	Probable mental health	USA	Semi-structured interviews	Thematic analysis
Visco (2009)	Fair	n = 170 (post-deployment Air Force personnel)	Probable mental health	USA	Individual telephone interviews	Content analysis
Zinzow et al. (2013)	Good	n = 110 (78 soldiers in 12 focus groups and 32 individual interviews)	Focus groups: in treatment and not in treatment mix. Interviews: in treatment	USA	Focus groups and interviews	Content analysis

PTSD, Post-traumatic stress disorder.

Table 3. Characteristics of study methodologies and quality assessed with the CASP quality tool (Critical Appraisal Skills Programme, 2014)

	Semi-structured interviews					Focus groups		
	Langston <i>et al.</i> (2010) ^a ; Gibbs <i>et al.</i> (2011)	Murphy et al. (2014)	Sayer <i>et al.</i> (2009)	Stecker et al. (2007)	Visco (2009) ^a	Zinzow et al. (2013) ^b	Gibbs et al. (2011) ^b	Mittal et al. (2013)
Was there a clear statement of aims of the research?	х	х	x	x	X	x	х	x
Is a qualitative methodology appropriate?	X	Х	X	X	X	Х	X	X
Was the research design appropriate to address the aims of the research?	x	х	x	-	x	X	-	х
Was the recruitment strategy appropriate to the aims of the research?	x	х	x	X	x	X	-	x
Were the data collected in a way that addressed the research issue?	x	X	-	Х	X	X	-	X
Has the relationship between the researcher and participants been adequately considered?	-	-	_	-	-	-	-	-
Have ethical issues been taken into consideration?	X	X	_	X	X	x	X	x
Were the data analysis sufficiently rigorous?	X	X	X	_	-	X	-	x
Is there a clear statement of findings?	X	X	X	-	-	X	X	x
How valuable is the research?	x	X	X	X	х	X	х	x

CASP, Critical Appraisal Skills Programme; x, present in study; –, absent from study.

Full details of the criteria to meet each item on the CASP can be viewed in online Supplementary Appendix S3.

Ethical considerations

One study did not detail how ethical approval was sought (Sayer *et al.* 2009).

Sufficiently rigorous data analysis

Seven of the studies provided adequate details of transcription, reading and familiarization. Bias was addressed in five studies through the use of an independent researcher (Stecker *et al.* 2007; Sayer *et al.* 2009; Visco, 2009; Mittal *et al.* 2013; Zinzow *et al.* 2013), and three studies did not make reference to a second rater or discussions of findings with an independent researcher (Langston *et al.* 2010; Gibbs *et al.* 2011; Murphy *et al.* 2014). Three studies failed to clearly document how they selected the results discussed (Stecker *et al.* 2007; Sayer *et al.* 2009; Gibbs *et al.* 2011). In seven of the studies the quotations

successfully supported the interpretation or themes documented with the exception of Langston *et al.* (2010).

Clear statement of findings

Six studies provided a clear statement of findings, with others not discussing the credibility of their findings or succinctly communicating the key findings (Stecker *et al.* 2007; Visco, 2009). All findings were discussed in relation to the original research question.

Value of findings

All of the research studies were thought to be valuable, as all of them discussed possible implications for practice and research, as well as identifying new areas of research. However, it was rare for authors to consider

^a Mixed-methods study.

^b This study used both semi-structured interviews and focus group methods.

alternative explanations in the discussion of their findings.

Sensitivity analysis

We found that removing the poorer studies had relatively little impact on the overall findings of the synthesis. The main methodological limitations in those regarded as poorer studies focused on an absence of reflexive accounts regarding the influence of the researcher, neglecting to use a second rater or clearly documenting how they selected their results.

Synthesis

In all, five themes and 33 subthemes were identified as underlying the relationship between stigma and help seeking for mental health difficulties within the AF (Table 3). The five themes were organized under the overarching headings of either stigma-related barriers or facilitators to further organize the results into meaningful and coherent categories. The five themes were: non-disclosure, individual beliefs about mental health, anticipated and personal experience of stigma, career concerns and factors influencing stigma. The data were grouped and regrouped into a revised set of inter-related themes and subthemes; this formed the final coding framework. Quotations from the literature to support the findings can be found in online Supplementary Appendix S4.

Findings: stigma-related barriers

Non-disclosure

The theme 'non-disclosure' illustrates the link between a number of behaviours that delay or reduce help seeking, primarily linked to public stigma. This theme was characterized by phrases suggestive of 'carrying on' or 'sucking it up' and is consistent with previous literature regarding usual military culture which encourages individuals to try to solve their own problems and a fear of stigmatization from others driving this (Greene-Shortridge et al. 2007).

Participants spoke about a difficulty recognizing that they had a problem, did not perceive their symptoms to be that severe that treatment was necessary, or indicated to rather seek help for their co-morbid somatic symptoms than mental health difficulties; the latter being a well-known issue in the AF (Britt, 2000). There was a tendency to ignore difficulties or to not perceive the need for treatment until a 'crisis point' was reached, such as severe experiences of somatic difficulties or a life-threatening event, and the only option left was to seek help. Waiting until this point reportedly had a larger impact on the individuals' working life and potentially their career. Participants

across studies felt that accessing services and receiving a diagnosis illustrated to others that they had a problem. This is consistent with civilian literature regarding individuals purposefully avoiding the label that receiving formal care often brings and therefore avoiding public stigma (Corrigan, 2004).

Leadership shaped participants' perceptions of how they would be treated within the unit should they disclose their mental health difficulty. Participants discussed the heightened impact of leaders making positive statements regarding mental health and sharing their own experience of psychological difficulties. Of note, one study reported that leadership may have actively encouraged individuals not to accurately report symptoms on mental health assessments, due to fears that they would always be associated with that problem (Stecker et al. 2007).

Individual beliefs about mental health

The theme 'individual beliefs about mental health' encompasses accounts regarding common internalized stigma. Participants across studies reported internalized stigma beliefs such as 'I am weak', 'I am a danger to others', 'I am crazy' and 'I am unfit for the job'. In addition, participants across a number of studies spoke about worries that they would be perceived as 'malingering'. In terms of gender differences, only one study specifically focused on gender and found that women were more receptive to treatment seeking (Visco, 2009). This finding is consistent with research in both civilian and AF literature (Wang et al. 2005; Cohen et al. 2010).

Experiences of stigma

The theme 'experiences of stigma' was used to encompass individuals' previous experience and individual fears regarding the prospect of help seeking within the AF. Participants across studies reported experiencing a 'lack of understanding' and 'losing respect from peers' and consequently some adopted feelings of being to blame, ashamed and feelings of guilt. Of those that reported utilization of mental health services, participants reported fears of experiencing judgement from professionals, particularly those outside of the AF. They anticipated that professionals without any AF experience would not understand the context of their experiences.

Career concerns

The theme 'career concerns' referred to participants' worries that treatment seeking would impact on their career advancement and may lead to discharge from the AF. They feared that disclosure of their mental health difficulty would result in a lack of confidentiality and therefore act as a structural barrier for career progression. Further, they also feared a change in their duties if they were to seek help and potentially were given medication. Across studies, participants also spoke of how confidentiality could be lost as a result of their absence from the unit. Participants believed that colleagues would infer they were suffering from a mental health difficulty if they were to attend frequent appointments. Concerns about widespread knowledge of their mental health difficulties differed by rank. High-ranked officers expressed concerns that perceptions regarding their leadership abilities and a perceived risk to those that they lead might be affected. Conversely, lower-ranked officers predominantly reported fears around becoming nondeployable and unable to progress in their careers. Further, it was expressed that higher-ranking individuals would be able to conceal their engagement more readily due to increased autonomy. Due to limited research, it is unclear whether these anticipated consequences for AF personnel represent the reality of the situation. However, military personnel diagnosed with severe mental health problems have their duties restricted to ensure their safety and the safety of others and may be found to be unfit for deployment until they recover.

Findings: stigma-related facilitators to help seeking

Factors influencing stigma

The theme 'factors influencing stigma' included facilitating factors in reducing stigma and increasing help seeking. Many participants highlighted the role of leaders within the unit as influential in their decisions to seek help. The influence of leadership in both acting as a barrier to help seeking and a facilitator is an important finding. This result is not surprising given the strong leadership structure of the military, particularly in an active duty setting (Britt et al. 2012). The process of overcoming stigma was attributed to the realization that previously held negative beliefs regarding mental health difficulties conflicted with positive changes in their lives as a result of treatment seeking. Participants cited the value of a psychological understanding in overcoming fears regarding help seeking, including details of where help was available and the symptoms that link to their diagnosis. This understanding assisted participants with their concerns being 'mad', 'crazy' or something wrong with them. On a broader level, a lack of psychological understanding of PTSD at a societal level was an important issue for participants.

Further, participants suggested that the appropriate timing of mental health assessments post-deployment, individual contact with mental health teams prior to incidents and professionals offering the treatment being familiar with military culture (e.g. would understand military-related PTSD) were all facilitators of help seeking. Additionally, knowing other individuals who had experienced and overcome a mental health difficulty was helpful. The value of encouragement and support to seek treatment from peers within the unit and family members highlights the importance of social support in help seeking (Table 4).

Discussion

This study was a synthesis of eight primary qualitative studies focusing on stigma-related barriers and facilitators to help seeking for mental health difficulties within the AF. Five key themes (non-disclosure, individual beliefs about mental health, anticipated and personal experience of stigma, career concerns and factors influencing stigma) relevant to the research topic were identified. Unlike the inconsistent findings from quantitative literature, this qualitative synthesis found consistent evidence that stigma did in fact present as a substantial and multifaceted barrier to accessing care and support for mental health problems in the military.

Strengths and limitations

The rigour of the review was established by applying a comprehensive search strategy to maximize the likelihood of identifying all relevant studies. Further, the widely applied CASP quality tool was used to rate the studies and the sensitivity analysis ensured that literature of lower quality did not adversely affect the overall findings of the review. One key limitation of this review relates to the process of narrative synthesis and its potential to decontextualize findings (Campbell et al. 2011). The reviewers checked that each transfer of themes and concepts across studies was valid, thereby ensuring that the context of the findings was not lost. Further, as the current research included studies from both the USA and the UK the differential role of culture on stigma both at an organizational level and country level was not examined in detail. This review does not provide any direct evidence of an association between stigma and help seeking for mental health issues in the AF, but it does provide a rich account of stigma-related factors that deter and enable help seeking.

Implications for practice

The reluctance to seek help has been demonstrated in veteran and civilian populations (Woodhead *et al.* 2011). Therefore, the current findings may be used to inform practice related to the reduction of stigma

Table 4. Themes across research studies

	Semi-structured interviews					Focus groups		
	Murphy et al. (2014)	Langston et al. (2010) ^a	Stecker et al. (2007)	Visco (2009) ^a	Sayer <i>et al.</i> (2009)	Zinzow et al. (2013) ^b	Gibbs et al. (2011) ^b	Mittal <i>et al.</i> (2013)
Sample size, n	8	374	20	170	44	110	270	16
Non-disclosure								
Reaching a crisis point	x			X		x	X	
Culture of 'carrying on'	x	x	X	X	X	X	X	x
or 'sucking it up'								
Avoidance of diagnosis	X		X	X		X	X	X
Recognizing I have a	X				X		X	x
difficulty								
Somatic difficulties	X							x
Lack of trust in		X	X	X		X	X	
leadership								
Lack on honesty on		X	X	X		X		
mental health assessments								
Individual beliefs about								
mental health								
Underlying weakness		X		X	X	X	X	X
Are a danger to others		X	X	X	X	X	X	X
Are malingering		X		X		X	X	
You are crazy	X		X	X		X		X
You are not fit for this job		X	X	X	X	X	X	X
Anticipated and personal								
experiences of stigma								
Judgement from professionals	X	X	X	X	X	X		X
Labelling								
Perceived risk	V			X		X	v	X
Lack of understanding	X X	Х		X		X	X X	
Shame/blame/fault	*	X		X		X	X	
Lack of confidentiality	x	X		X		X	^	
Losing respect from		X		X		X	х	
peers				Α		*	^	
Career concerns								
Leadership		x		x		x	X	
unsupportive								
Disruption of career		x	X	x		x	X	
progression								
Time for treatment will		х	x	X		X	X	
interfere with my job								
duties								
Medication may interfere				X		X	X	
with my job duties								
Factors influencing stigma								
Importance of leadership	x			x	x	x	X	
Value in shared	X			X	X	X	X	X
experiences (peers)								
Overcoming self-stigma	X			X	X	X		X
through treatment								
Framing problems in a	X		X	X		X		X
similar manner to								
physical illness								
Spousal support	X		x	x	X	x		

Table 4 (cont.)

	Semi-structu	Semi-structured interviews				Focus groups			
	Murphy et al. (2014)	Langston et al. (2010) ^a	Stecker et al. (2007)	Visco (2009) ^a	Sayer <i>et al.</i> (2009)	Zinzow et al. (2013) ^b	Gibbs et al. (2011) ^b	Mittal <i>et al.</i> (2013)	
Appropriately timing assessments post-deployment				х	x	х			
Contacts for mental health embedded in the team	x		x	X	x	X			
Professionals offering treatment familiar with military culture			x	X	x	X			
Education	x			x	X	x			

x, Present in study.

within the wider society, the AF and more specifically within organizational contexts in which individuals are routinely exposed to trauma, e.g. private military security companies and the emergency services.

Wider society

On a wider society level, overcoming structural discrimination is an essential aspect of targeting public stigma (Schomerus *et al.* 2006; Jorm, 2012). The use of interventions, such as mass media, has been shown to increase public knowledge and reduce prejudice (Clement *et al.* 2013). In addition, such campaigns may counter stereotypes commonly associated with mental health difficulties, such as 'weakness', 'malingering', 'unfit for work' and 'crazy'. Education through such campaigns may promote the recognition of psychological difficulties in their early stages through information on prevention and effective treatments for mental health difficulties (Jorm, 2012).

Interventions

Whilst there is little evidence to support the use of screening for vulnerability to mental health problems in organizational settings (Rona *et al.* 2005), if these techniques are used, they should take account of the views of health and welfare professionals involved in any treatment provision (Bull *et al.* 2015). Recent research in the civilian population has shown self-administered computer-based screening tools to screen for mood disorders in primary care setting to be more accurate in recognizing difficulties than individual general practitioner interviews (Vohringer *et al.* 2013).

Additionally, US findings suggest that mental health screening may be of use in a primary care setting, particularly within the first few months of returning home (Milliken *et al.* 2007). However, whilst screening procedures might assist individuals to determine if help seeking may be necessary, to be successful it is likely to be necessary to address concerns around perceived levels of confidentiality and consequent difficulties of receiving the label of a diagnosis.

Findings suggest that the individual affected might be unaware, or that they are reluctant to report their mental health difficulties. In these cases, peer-led intervention, such as Trauma Risk Management (TRiM), has been demonstrated to be effective (Greenberg et al. 2015). This programme has been adopted by the UK AF and, in an adapted format, by the US AF. The peer-led approach of this programme may act to address barriers to help seeking such as distrust of mental health professionals. Research suggested that this approach is more acceptable to members of the AF, has a positive effect on organizational functioning and reduces absence rates after the occurrence of traumatic incidents (Whybrow et al. 2016). The aim of such an intervention is not, however, to treat mental health symptoms; instead it provides a degree of psychoeducation, to allow members of the team to identify persistent symptoms and signpost colleagues to treatment when appropriate.

Treatment

The review has important implications for practising clinicians treating members of the AF. Clinicians may want to integrate strategies into treatment that help

^a Mixed-methods study.

^b This study used both semi-structured interviews and focus group methods.

to counter stigma associated with treatment and target internalized stigma. The following recommendations were identified:

- During treatment clinicians should endeavour to proactively tackle stigma during each consultation to reduce drop out, e.g. normalization of symptoms, challenges to stereotypes and labels.
- Framing mental health difficulties in a similar manner to physical health difficulties.
- · Providing a psychological understanding of how symptoms developed.
- Given reported participant worries regarding whether treatment would meet their needs, it is essential to identify individual needs early in the course of treatment and ensure that these are met and clinicians continue to check with patients that this continues to be the case.
- It may be preferable to time post-deployment mental health assessments a number of days after individuals have returned home, as many reported not disclosing their persistent difficulties to ensure they returned home in a timely manner.
- Given the value of knowing other individuals who had experienced a mental health, it may be of use to offer group therapy where appropriate.
- · Providing psycho-education and access to joint sessions where appropriate.

Future research

These results suggest that future research integrating findings from qualitative studies to inform the design of future quantitative measures is essential to ensure that quantitative research studies in the area of stigma and help seeking are asking the right questions. Further research into the design and ecological validity of questionnaires commonly used in AF stigma research should be priority. Future research should build on some of the highlighted quality shortcomings of the current research included, for example none of the eight studies included a reflective aspect. In addition, research could be directed to evaluating the use of interventions such as providing psycho-education to promote the recognition of mental health difficulties and evaluating stigma-specific interventions targeting leadership. The current findings infer that overcoming internalized stigma may be an important process of help seeking; however, there is very little research in this area to date.

Conclusions

The current systematic review demonstrated that unlike inconsistent findings from quantitative literature, the qualitative literature provides substantial evidence regarding the relationship between stigma and help seeking for mental health difficulties within the AF.

Supplementary material

The supplementary material for this article can be found at https://doi.org/10.1017/S0033291717000356

Acknowledgements

S.L.H. receives salary support from the National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London. The views expressed are those of the authors and not necessarily those of the National Health Service (NHS), the NIHR or the Department of Health. The funders did not have a role in the study design; collection, analysis or interpretation of data; the writing of the manuscript; or in the decision to submit the manuscript for publication.

Note

1 Qualitative studies or studies with a qualitative element referenced in the Introduction are indicated with an *; the remaining studies are of quantitative methodology.

Declaration of Interest

None.

References

Britt TW (2000). The stigma of psychological problems in a work environment: evidence from the screening of service members returning from Bosnia. Journal of Applied Social Psychology 30, 1599-1618.

Britt TW, Wright KM, Moore D (2012). Leadership as a predictor of stigma and practical barriers toward receiving mental health treatment: a multilevel approach. Psychological Services 9, 26-37.

Bull S, Thandi G, Keeling M, Chesnokov M, Greenberg N, Jones N, Rona R, Hatch SL (2015). Medical and Welfare Officers beliefs about post-deployment screening for mental health disorders in the UK Armed Forces: a qualitative study. BMC Public Health 15, 338.

Campbell R, Pound P, Morgan M, Daker-White G, Britten N, Pill R, Yardley L, Pope C, Donovan J (2011). Evaluating meta-ethnography: systematic analysis and synthesis of qualitative research. Health Technology Assessment 15, 1–164.

Clement S, Lassman F, Barley E, Evans-Lacko S, Williams P, Yamaguchi S, Slade M, Rusch N, Thornicroft G (2013). Mass media interventions for reducing mental

- Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, Morgan C, Rüsch N, Brown JSL, Thornicroft G (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine* 45, 11–27.
- Cohen BE, Gima K, Bertenthal D, Kim S, Marmar CR, Seal KH (2010). Mental health diagnoses and utilization of VA non-mental health medical services among returning Iraq and Afghanistan veterans. *Journal of General Internal Medicine* 25, 18–24.
- **Corrigan PW** (2004). Don't call me nuts: an international perspective on the stigma of mental illness. *Acta Psychiatrica Scandinavica* **109**, 403–404.
- Corrigan PW, Watson AC (2002). The paradox of self-stigma and mental illness. Clinical Psychology: Science and Practice 9, 35–53.
- Critical Appraisal Skills Programme (CASP) (2014). CASP Checklists. CASP: Oxford (http://media.wix.com/ugd/dded87_29c5b002d99342f788c6ac670e49f274.pdf).
- Dickstein BD, Vogt DS, Handa S, Litz BT (2010). Targeting self-stigma in returning military personnel and veterans: a review of intervention strategies. *Military Psychology* 22, 224–236.
- **Dunt D** (2009). Review of Mental Health Care in the ADF and Transition through Discharge. Letter of submission of report to Ministers. Acknowledgments (http://www.peacekeepers.asn.au/veterans/studies/ReviewofMentalHealth1May2009.pdf).
- Evans-Lacko S, Brohan E, Mojtabai R, Thornicroft G (2012). Association between public views of mental illness and self-stigma among individuals with mental illness in 14 European countries. *Psychological Medicine* **42**, 1741–1752.
- Fear NT, Jones M, Murphy D, Hull L, Iversen AC, Coker B, Machell L, Sundin J, Woodhead C, Jones N, Greenberg N, Landau S, Dandeker C, Rona RJ, Hotopf M, Wessely S (2010). What are the consequences of deployment to Iraq and Afghanistan on the mental health of the UK armed forces? A cohort study. *Lancet* 375, 1783–1797.
- **Fikretoglu D, Guay S, Pedlar D, Brunet A** (2008). Twelve month use of mental health services in a nationally representative, active military sample. *Medical Care* **46**, 217–223.
- Gibbs DA, Rae Olmsted KL, Brown JM, Clinton-Sherrod AM (2011). Dynamics of stigma for alcohol and mental health treatment among army soldiers. *Military Psychology* 23, 36–51.
- **Goffman E** (1963). *Stigma: Notes on the Management of Spoiled Identity.* Prentice Hall: Englewood Cliffs, NJ.
- Gould M, Adler A, Zamorski M, Castro C, Hanily N, Steele N, Kearney S, Greenberg N (2010). Do stigma and other perceived barriers to mental health care differ across armed forces? *Journal of the Royal Society of Medicine* **103**, 148–156.
- **Greenberg N, Brooks S, Dunn R** (2015). Latest developments in post-traumatic stress disorder: diagnosis and treatment. *British Medical Bulletin* **114**, 147–155.

- **Greene-Shortridge TM, Britt TW, Castro CA** (2007). The stigma of mental health problems in the military. *Military Medicine* **172**, 157–161.
- **Hoerster KD** (2012). Association of perceived barriers with prospective use of VA mental health care among Iraq and Afghanistan veterans. *Psychiatric Services* **63**, 380.
- Hoge C, Castro C, Messer S, McGurk D, Cotting D, Koffman R (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine* 351, 13–22.
- Iversen AC, van Staden L, Hughes JH, Browne T, Hull L, Hall J, Greenberg N, Rona RJ, Hotopf M, Wessely S, Fear NT (2009). The prevalence of common mental disorders and PTSD in the UK military: using data from a clinical interview-based study. *BMC Psychiatry* **9**, 68.
- Iversen AC, van Staden L, Hughes JH, Greenberg N, Hotopf M, Rona RJ, Thornicroft G, Wessely S, Fear NT (2011).
 The stigma of mental health problems and other barriers to care in the UK Armed Forces. BMC Health Services Research 11, 31.
- Jorm AF (2012). Mental health literacy: empowering the community to take action for better mental health. *American Psychologist* 67, 231–243.
- Langston V, Greenberg N, Fear N, Iversen A, French C, Wessely S (2010). Stigma and mental health in the Royal Navy: a mixed methods paper. *Journal of Mental Health* 19, 8–16.
- Milliken CS, Auchterlonie JL, Hoge CW (2007).

 Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *JAMA: Journal of the American Medical Association* 298, 2141–2148.
- Mittal D, Drummond KL, Blevins D, Curran G, Corrigan P, Sullivan G (2013). Stigma associated with PTSD: perceptions of treatment seeking combat veterans. *Psychiatric Rehabilitation Journal* **36**, 86–92.
- Murphy D, Hunt E, Luzon O, Greenberg N (2014). Exploring positive pathways to care for members of the UK armed forces receiving treatment for PTSD: a qualitative study. *European Journal of Psychotraumatology* **5**, 10.3402/ejpt. v5.21759.
- Osório C, Jones N, Fertout M, Greenberg N (2013).

 Perceptions of stigma and barriers to care among UK military personnel deployed to Afghanistan and Iraq. *Anxiety, Stress, and Coping* **26**, 539–557.
- Pury CLS, Britt TW, Zinzow HM, Raymond MA (2014).
 Blended courage: moral and psychological courage elements in mental health treatment seeking by active duty military personnel. *Journal of Positive Psychology* 9, 30–41.
- Rona RJ, Hyams KC, Wessely S (2005). Screening for psychological illness in military personnel. *JAMA* 293, 1257–1260.
- Rüsch N, Thornicroft G (2014). Does stigma impair prevention of mental disorders? *British Journal of Psychiatry* 204, 249–251.
- Sayer NA, Friedemann-Sanchez G, Spoont M, Murdoch M, Parker LE, Chiros C, Rosenheck R (2009). A qualitative study of determinants of PTSD treatment initiation in veterans. *Psychiatry* **72**, 238–255.

- Schomerus G, Matschinger H, Angermeyer MC (2006). Preferences of the public regarding cutbacks in expenditure for patient care: are there indications of discrimination against those with mental disorders? Social Psychiatry and Psychiatric Epidemiology 41, 369-377.
- Sharp ML, Fear NT, Rona RJ, Wessely S, Greenberg N, Jones N, Goodwin L (2015). Stigma as a barrier to seeking health care among military personnel with mental health problems. Epidemiologic Reviews 37, 144-162.
- Stecker T, Fortney JC, Hamilton F, Ajzen I (2007). An assessment of beliefs about mental health care among veterans who served in Iraq. Psychiatric Services 58, 1358-1361.
- Thomas I, Harden A, Chalmers I, Oakley A, Cooper H. Hedges L, Petticrew M, Roberts H, Chalmers I, Hedges L, Cooper H, Juni P, Altman D, Egger M, Mulrow C, White H, Campbell R, Pound P, Pope C, Britten N, Pill R, Morgan M, Donovan J, Dixon-Woods M, Bonas S, Booth A, Jones DR, Miller T, Sutton AJ, Shaw RL, Smith JA, Young B. Sandelowski M. Barroso L. Thorne S. Jensen L. Kearney MH, Noblit G, Sandelowski M, Harden A, Garcia J, Oliver S, Rees R, Shepherd J, Brunton G, Oakley A, Harden A, Brunton G, Fletcher A, Oakley A, Thomas J, Sutcliffe K, Harden A, Oakley A, Oliver S, Rees R, Brunton G, Kavanagh J, Thomas J, Kavanagh J, Tucker H, Burchett H, Tripney J, Oakley A, Bryman A, Hammersley M, Harden A, Thomas J, Oakley A, Harden A, Oakley A, Oliver S, Harden A, Rees R, Shepherd J, Brunton G, Oliver S, Oakley A, Rees R, Harden A, Shepherd J, Brunton G, Oliver S, Oakley A, Shepherd J, Harden A, Rees R, Brunton G, Oliver S, Oakley A, Thomas J, Harden A, Oakley A, Oliver S, Sutcliffe K, Rees R, Brunton G, Kavanagh J, Davies P, Newman M, Thompson C, Roberts AP, Popay J, Noblit GW, Hare RD, Britten N, Campbell R, Pope C, Donovan J, Morgan M, Pill R, Paterson B, Thorne S, Canam C, Jillings C, Dixon-Woods M, Cavers D, Agarwal S, Annandale E, Arthur A, Harvey J, Katbamna S, Olsen R, Smith L, Riley R, Sutton AJ, Dixon-Woods M, Agarwal S, Jones D, Young B, Sutton A, Boyatzis RE, Braun V, Clarke V, Doyle LH, Barroso J, Gollop C, Sandelowski M, Meynell J, Pearce PF, Collins LJ, Walters LA, Wilczynski NL, Haynes RB, Hedges T, Wong SSL, Wilczynski NL, Haynes RB, Seale C, Spencer L, Ritchie J, Lewis J, Dillon L, Boulton M, Fitzpatrick R, Swinburn C, Cobb A, Hagemaster J, Mays N, Pope C, Alderson P,
- Egger M. Davey-Smith G. Altman D. Sandelowski M. Barroso J, Sandelowski M, Thomas J, Brunton J, Fisher M, Qureshi H, Hardyman W, Homewood J, Dixey R, Sahota P, Atwal S, Turner A, Daly A, Willis K, Small R, Green J, Welch N, Kealy M, Hughes E, Popay J, Strike K, Posner G, Marston C, King E (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. BMC Medical Research Methodology 8, 45.
- Visco R (2009). Postdeployment, self-reporting of mental health problems, and barriers to care. Perspectives in Psychiatric Care 45, 240-253.
- Vogt D (2011). Mental health-related beliefs as a barrier to service use for military personnel and veterans: a review. Psychiatric Services (Washington, D.C.) 62, 135-142.
- Vohringer PA, Jimenez MI, Igor MA, Fores GA, Correa MO, Sullivan MC, Holtzman NS, Whitham EA, Barroilhet SA, Alvear K, Logvinenko T, Kent DM, Ghaemi NS (2013). Detecting mood disorder in resource-limited primary care settings: comparison of a self-administered screening tool to general practitioner assessment. Journal of Medical Screening 20, 118-124.
- Wang PS, Lane M, Olfson M, Pincus HA, Wells KB, Kessler RC (2005). Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. Archives of General Psychiatry 62, 629-640.
- Whybrow D, Jones N, Evans C, Minshall D, Smith D, Greenberg N (2016). The mental health of deployed UK maritime forces. Occupational and Environmental Medicine 73, 75-82.
- Woodhead C, Rona RJ, Iversen AC, MacManus D, Hotopf M, Dean K, McManus S, Meltzer H, Brugha T, Jenkins R, Wessely S, Fear NT (2011). Health of National Service veterans: an analysis of a community-based sample using data from the 2007 Adult Psychiatric Morbidity Survey of England. Social Psychiatry and Psychiatric Epidemiology 46,
- Wright KM, Cabrera OA, Bliese PD, Adler AB, Hoge CW, Castro CA (2009). Stigma and barriers to care in soldiers postcombat. Psychological Services 6, 108-116.
- Zinzow HM, Britt TW, Pury CLS, Raymond MA, McFadden AC, Burnette CM (2013). Barriers and facilitators of mental health treatment seeking among active-duty army personnel. Military Psychology 25, 514-535.