AN EXPLORATION AND CRITICAL ANALYSIS OF THE PREDISPOSING FACTORS LEADING TO DEPRESSION WITHIN THE BRITISH ARMY

ALAN PAUL FINNEGAN

A thesis submitted in partial fulfilment of the requirements of Birmingham City University for the degree of Doctor of Philosophy

January 2011

THESIS CONTAINS CD/DVD

Chapter 5

Qualitative Research

With a Focus on Grounded Theory

INTRODUCTION

Qualitative research deals with a relatively small number of cases and is more interested in detail than scope, using a non-positivist approach to present a deeper understanding of social phenomena. There is no agreed model within qualitative research, and considerable thought went into the decision to use a grounded theory to underpin the exploration in this study. The choice was taken after the author successfully completed a Masters level module on qualitative research at the University of Oxford, and had the opportunity to discuss with tutors and other students the aim and objectives of this study. This taught programme also helped clarify the position of this study, and acknowledge the influence of phenomenology, ethnography, symbolic interactionism and constructionist theory in the design and methodology within this research. This chapter will commence by succinctly providing an overview of these influences before progressing to provide a justification for the adoption of grounded theory. The rest of this chapter will supply an overview of grounded theory before progressing in Chapter 6 to detail the application in this study.

Theoretical Influences

Phenomenology

Phenomenologist's advocate that humans are creative agents in the construction of their social world (Ainlay 1986), and use qualitative methods to illuminate a humans understanding of their social life. Phenomenology operates on a meta-sociological level, utilizing descriptive analyses of the procedures of self, situational, and social constitution. Two expressions of phenomenology are *reality constructionism*, which explores how individuals make sense of their social reality (Berger and Kellner, 1981) and *ethnomethodology,* which examines how actors make ordinary life possible (Garfinkel and Sacks, 1970), and aims to demonstrate how people produce a sense of social order in their everyday life (Cuff, 1993).

Phenomenology views language, culture, and common sense as objective features learned by actors in the course of their lives, and for the researcher data is everywhere, from TV show

discourses to radio show narratives, and information is gathered by undertaking analyses of small groups, social situations, and participant observation (Turner, 1974). Intensive interviewing is widely practiced to uncover the subject's stories, their descriptions and orientation or his or her "*life world*" (Porter, 1995).

Ethnography

Hammersley and Atkinson (1995) describe ethnography as: "*Referring primarily to a particular method or sets of methods. In its most characteristic form it involves the ethnographer participating, overtly or covertly, in people's lives for an extended period of time, watching what happens, listening to what is said, asking questions - in fact, collecting whatever data are available to throw light on the issues that are the focus of the research*". Ethnography is a form of holistic cultural anthropological research focusing on the sociology of meaning through close field observation of sociocultural phenomena. The ethnographic investigator strives to avoid theoretical preconceptions and instead to induce theory from the perspectives of the members of the culture. Typically, the ethnographer focuses on a community selecting subjects who are known to have an overview of the activities of the community, and who can identify other representatives of that population. The areas of interest are perceived as significant by members of the society, and sampling is used to obtain a saturation of information in all empirical areas of investigation.

Ethnography is descriptive and the prime data collection method is observation with the researcher living in the culture for months or even years, with the researcher striving to understand the cultural connotations associated with symbols, which cannot be understood in isolation but instead are elements of a whole. Therefore, ethnography is an excellent theoretical choice for covert observation, and useful in areas such as criminology. Data collection is often through interviewing a representative on numerous occasions; using information from previous informants to elicit clarification and deeper responses upon re-interview, to reveal common cultural understandings (Hammersley & Aitkinson, 1995).

Symbolic Interactionism

Symbolic interactionism is closely aligned and influential in grounded theory, and emphasizes the subjective meaning of human behaviour, viewing people as pragmatic actors who continually adjust their conduct to the actions of other actors. People can only adapt because they can interpret other's actions, having learnt from previous experiences, and use those encounters to make sense of the social context in which they find themselves. Interactionist's view humans as active, creative participants in constructing their social world, and tend to study social interaction through participant observation, rather than using surveys and interviews. The observation of the subjects' interactions leads to an understanding of the influence of symbols in the construction of the participants' world. Symbolic interactions state that close contact and immersion in the everyday lives of the participants is necessary to gain an understanding of the meaning of their actions and a definition of the situation itself (Blumer, 1969 & 1979).

Constructivist Theory

A fundamental aspect of constructivist theory is to probe the participant's experiences, exploring how individuals view situations, focussing on *how*, and sometimes *why* they construct meaning in specific situations (Charmaz, 1990 & 2001; Silverman, 2004). An analysis of how people construct actions and meanings can lead a grounded theorist to establish some reasons for it, and this combination of a constructivist and grounded theory model, with the foundations associated to symbolic interactionsim, is the chosen theory in this study.

The constructivist position is that understanding of how a society functions can be obtained through analysis of respondents "accounts" of how their world functions, and this model is closely aligned to the qualitative element of this study where it is hypothesised that the predisposing factors leading to depression within the Army can be gained from MMH clinicians attestations. In constructivist theory, the narrative pulls together disparate experiences into categories and elucidates the tacit meaning (Gubrium, 1988). The

constructivist view is especially pertinent to the military by acknowledging 3 types of sensitivity that shape soldiers' views. These being:

- Historical. Examines the relative historical references and the impact on cognitions and behaviour.

- Political. The political and social influences on thoughts and actions, and the effect on soldiers that are exposed to significant media interest regarding issues such as PTSD and military operations in Afghanistan and Iraq.

- Contextual. Apparently uniform institutions like "the family" take on a very different meaning in different contexts, which is extremely relevant to the military that are often described as a "second family" and has relevance for operational deployments, where the appearance of depression may be the result of very different reasons to the presentation of low mood in barracks.

The influence of these 3 forms of sensitivity are key concepts in this study; suggesting that the causes and recovery from depression are not a uniform phenomenon, but take on a particular meaning in different local contexts and cultures (Silverman, 2001). The result at a practical level is to constantly compel the researcher to look for the context of the described action, and how the data is determined within a particular organisational settings, social process or sets of experiences. Recognition of some of these contextual differences was imperative in defining the areas to be explored within the interviews and shaping the interview schedule. This approach naturally leads to constant comparison, balancing data sets and dividing the data into different categories, leading to results where the researcher will have thought about the context of what has been discovered and the broader implications. This approach if fundamental to grounded theory and makes this approach a natural foundation for this research.

GROUNDED THEORY

Historical Development

Grounded theory emerged from a social study undertaken in a secondary care hospital setting where Glaser and Strauss (1967) explored the impact of loss and dying, with data generated from nurses discussing the care of terminally ill patients who had died, with the aim to identify how clinicians and terminally ill patients handled the cognisance of the impending bereavement. Glaser and Strauss developed the category of "*awareness contexts*" that related to where people were informed of their terminal illness, and this category was then saturated and honed down to relate to a non-medical setting where people learnt about how others define them (e.g. schools). Glaser & Strauss wanted to move qualitative theory beyond descriptive studies into the realm of explanatory theoretical frameworks, thereby providing a conceptual awareness of the studied phenomena, and advocated the development of strategies, declaring that information was data grounded in the views and thoughts of the research sample, and a means of discovering the answer to a set of questions was to explore the issue from "*The point of view of the actors*" (Pursley – Crotteau, 1996), rather than construing hypotheses from existing theories. They advocated that simply following the medical / lay beliefs on a subject was not enough, and thereby developed an innovative, systematic means of qualitative research to provide new insights of potential value to both patients and healthcare workers.

Justification for Grounded Theory in this Study

Nursing is a professional group where the nucleus of clinical duties is based on the concept of "caring", which is not particularly easy to quantify with statistically significant results, and therefore this professional group frequently employ a phenomenology approach to offer an insight into the patient's subjective experience (Benner, 1995). The author's 30 year nursing background and learning experiences are heavily influenced by phenomenology, as reflected in this study, in particular the importance of understanding soldiers' language and culture and how these are learned in the course of their military careers. Also prominent is

that phenomenology views all dimensions as constitutive of all others and for the researcher data is everywhere, not just from respondents' attestations. To gain the subject's views intensive interviewing is widely practiced, and conducted soon after an event to get the subject's reaction before the person starts editing the incident, with information obtained through the use of open questions, an "invisible" researcher, and unobtrusive methods. However, this study did not strive to gain information directly from soldiers, but from the experienced MMH clinicians who treat them, and within the limitations of this independent study there was not scope for prolonged observations of behaviour. The author is also very visible, with a clear aim and objectives to achieve, and there is an essential requirement that the qualitative results must be forceful enough to positively impact on the military financers and policy makers. Therefore, phenomenology was not chosen as the theoretical model in this study.

The author also considered using an ethnographic model, utilising personal experience gained from over 20 years in the British Army to undertake a study based on observational work in a military setting. Ethnomethodological theory provides face validity, encouraging the researcher to reference personal knowledge and experience, for example, the cause of suicide is to be found in the commonsense judgements of coroners (Atkinson, 1978). Ethnography presented a practical basis from which to detail the lives of this military cohort through participation and observation within the groups' environment and community. The author would be able to immerse himself in this society, with access to relevant personnel and documents and provide an insider's depiction of the soldiers "real world."

Ethnography advocates data collection by interviewing subjects on multiple occasions, building on information from previous informants to elicit clarification and deeper responses upon re-interview (Hammersley & Aitkinson, 1995). This process is intended to reveal common cultural understandings related to the phenomena under study and a modified version of this technique was utilized within this study, with new data examined in later interviews as themes developed. Ethnographic researchers' strive to avoid theoretical preconceptions and instead to induce theory from the perspectives of the members of the culture, which again was highly influential in the choice of MMH clinicians as the research

sample. However, using observation in a military setting is prone to difficulties, and an ethnographic study may have been fatally skewed due to the author's position and rank within the Army (see section on "self" in Chapter 6). Rank and military culture is such that soldiers have a disciplined persona which they adopt at work which may not be particularly insightful into the causes of any external distress (Wessely, 2005). In addition, Silverman (2005) advocates that part-time researchers should avoid time-consuming ethnography and take the opportunity to peruse a topic that utilises one's own experience, with data honed down to practical levels. Therefore an ethnographic theory was not utilised as the principal theory in this study.

There were numerous aspects inherent within grounded theory that led to this being utilised, including that grounded theorists are not as concerned with hypothesis testing (Glaser & Strauss, 1967), and this study was always intended to address tactical issues at an operational level. The more robust, "quantitative nature" of grounded theory is appealing to the predominately positivist military audience, enhanced by the symbolic interactionist focus on observable face-to-face exchanges, and acknowledges the importance of how soldiers are influenced by symbols and construct their world. Silverman (2005) observed that it makes sense to base a PhD in an area where the researcher has considerable experience, and grounded theory and symbolic interactionism were areas that the author had utilised before, including a peer reviewed publication that highlighted the importance of understanding a soldier's perception of his subjective world in order to achieve a successful clinical treatment outcome (Finnegan, 1995a). The lessons learnt were applied within this study.

Grounded theory positively differs from ethnography by giving priority to the studied phenomena rather than the description of a setting, and whilst ethnographers see data everywhere, grounded theorists select the scenes they observe using systematic guidelines for probing beneath the surface. However, and most importantly, within grounded theory the objective is to view the world through the eyes of the sample, and from there to produce concepts to inform or challenge traditional beliefs, which moves ethnographic research toward theoretical development by raising descriptions to abstract categories and theoretical

interpretations, which was the key to developing a theoretical model and meeting the aim of the study (Charmaz, 2006).

Grounded theory works best when the grounded theorist engages in data collection as well as data analysis, allowing the researcher to explore nuances of language and meaning and process (Silverman, 2005). The author's position as an identified member of the group, whilst adding an ethnographic dimension to the study, provided the handle for making comparisons with other segments of data as they emerged, included the recognition of factors that aid and hinder help seeking behaviour, and the reasons why young soldiers who are unhappy with military life develop low mood. These elements will be discussed in the next chapters, before which this chapter will highlight the views of critics and advocates of grounded theory, before concluding by detailing the elements involved in the successful construction of a grounded theory.

Critics of Grounded Theory

Critics have stated that qualitative research is contaminated by the values of the researcher and reflected in conclusions and interpretations that are grounded in researchers moral and political beliefs (Weber, 1946). Critics argue that qualitative research utilises unreliable data leading to doubtable validity, especially when there are no deviant cases or accounts are retrospective. Subjects may also provide differing information dependent on demographic differences such as gender (Warren, 1988), age or social class of the researcher (McKeganey & Bloor,1991). For example, men may view intensive interviews as threatening because they occur within a 1 to 1 relationship than may render loss of control and risk loss of public persona, and whether the researcher is male or female may influence the outcome from an interview (Schwalbe & Wolkomir, 2002). These problems are exacerbated and present a considerable dilemma when the cohort is a sensitive group, such as MOD personnel or Acquired Immune Deficiency Syndrome patients, and gaining access to this rich data is prohibited as the group are often reluctant to share. This is not simply a case of getting past the "gatekeeper", but also to obtain quality information from a group subject to intense scrutiny and multiple requests for participation in studies. Within the interviews, either powerful or disempowered individuals may distrust the interviewer, the sponsoring

institution, and the stated purpose of the interview as well as how the findings will be published (Silverman, 2005). How these issues were addressed is discussed in the next chapter.

Grounded theory has been criticised (Atkinson et al, 2003; Bulmer, 1979; Dey, 1999 & 2004; Emerson 1983; Layder, 1998). Buroway (1991) states that grounded theory produces empirical generalisations that lead to generic explanations abstracted from time and place and does not consider power. Others have stated that grounded theory fails to acknowledge implicit theories, which misguide work at an early stage, leading to an analysis built on haphazard and skimpy data (Lofland & Lofland, 1984). Dey (1999) challenges the notion that small sample groups can provide sufficient data to develop a theoretical category, arguing that researchers use conjecture and saturation as an artefact of how grounded theorists manage the data collection, leading to a "smash and grab" strategy based on superficial analysis. Morse (1995) observes that researchers often claim saturation rather than prove they have achieved it, and the coding phase of grounded theory is too broad, identifying topics whilst overlooking how people construct actions and processes, resulting in out of context summaries that do not analyse data.

Benefits of Grounded Theory

With all qualitative research, the aim is to deliver the study group's opinion, whilst minimising the impact of the author's, as this may introduce bias and subjective rather than objective reporting (Hammersley & Atkinson, 1990). Grounded theory can facilitate this through the systematic yet flexible methodological strategy that generates theory that is grounded in the data itself, whilst provided a framework for others researchers to follow. These practical guidelines show how the data can be analysed and used as the study proceeds, and identifies and demonstrates how the subject population cultivate knowledge and views. This model provides a medium that is positioned close to the data, is useful, and offers conceptual density, durability, explanation, and where required, can be modified (Glaser, 1978 & 1992; Glaser & Strauss, 1967). Theoretical frameworks differ in grounded theory from traditional qualitative methods, as theories are not used for deducing specific

hypotheses before data gathering and the structure can ignite ideas and encourage researchers to review data in fresh and innovative ways, and can be shaped to proactively address operational questions (Charmaz, 2006). Depending on the purpose and quality of data and analysis, another advantage is that valuable information can also be achieved in manageable studies and through a limited number of 20 to 30 interviews (Creswell, 1998). The requirement to develop themes from multiple references rather than stand alone attestations ensures that the researcher must explore deviant cases and produce quality results that differ from human-interest journalism.

Grounded theory deals with power issues, and a major strength resides in its applicability across substantive areas, and grounded theory guidelines support researchers in controlling the research process and improving the analytical power of the studies (Bigus, Hadden & Glaser, 1994; Stern, 1994; Charmaz, 2003). The moving back and forward between the data stops the researcher being overwhelmed (Coffey & Aitkinson, 1996), and the positivist position has yet to provide an insight into many important MMH areas.

CONSTRUCTING GROUNDED THEORY

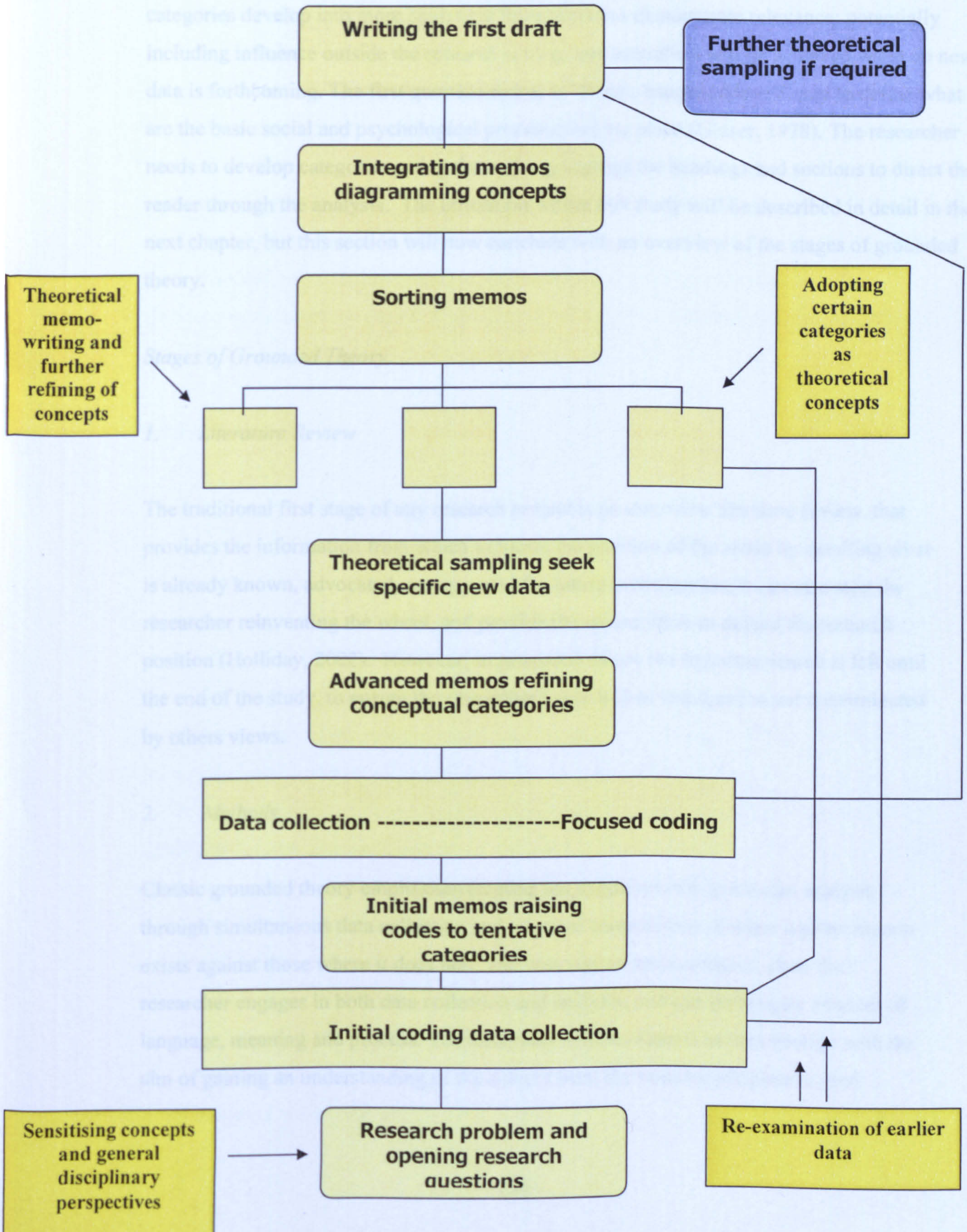
Grounded theory is systematic and follows the pathway detailed in Figure 5.1 (Charmaz, 2006) with the criteria outlined in Table 5.1. From the outset, grounded theorists work with the information being collected, with data separated, sorted and synthesised through qualitative coding. Grounded theory is not a linear process, and researchers are encouraged to stop and write up ideas as they occur, placing this information into relevant situational and social contexts. From the beginning, the researcher is laying the foundation for the emerging theory and undertaking analysis to generate concepts. Grounded theory builds levels of abstraction directly from the data, and then as the categories become more theoretical, gathers additional data to check, leading to successive levels of analysis and refinement of the emerging analytical categories with the aim of providing a theoretical understanding of the studied experience (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987).

Theoretical sampling in grounded theory has a different purpose from random sampling, with the aim is not to create empirical generalisations through large representative samples but to develop theory. This process has been achieved when the emerging categories are "saturated", and the gathering data no longer sparks new theoretical insight, nor reveals new properties of the core theoretical categories. Theoretical saturation is the aim of grounded theory and pinpoints the time to stop gathering data. However, saturation is not just witnessing repetition of the same events or stories but when nothing new is happening: *"Saturation is not seeing the same pattern over and over again. It is the conceptualisation of comparisons of these incidents which yield different properties of the pattern, until no new properties of the pattern emerge."* (Glaser, 2001).

- Simultaneous involvement in data collection and analysis.
- Constructing analytical codes and categories from data, not from preconceived hypotheses.
- Using the constant comparative method, this involves making comparisons during each stage of the analysis.
- Advancing theory development during each step of data collection and analysis.
- Memo-writing to elaborate categories, specify their properties, define relationships between categories, and identify gaps.
- Sampling aimed toward theory construction, not for population representatives.
- Conducting the literature review after developing an independent analysis.

Table 5.1 Elements of Grounded Theory (Charmaz, 2006)

Figure 5.1 The Grounded Theory Process Page 173



The aim of grounded theory is to develop categories that illuminate the data. These categories develop into more analytical frameworks to demonstrate relevance; potentially including influence outside the research setting, and saturation will be achieved when no new data is forthcoming. The first question to ask is "What's happened here?" and to define what are the basic social and psychological processes taking place (Glaser, 1978). The researcher needs to develop categories, using the major groupings for headings and sections to direct the reader through the analysis. The utilisation within this study will be described in detail in the next chapter, but this section will now conclude with an overview of the stages of grounded theory.

Stages of Grounded Theory

1. Literature Review

The traditional first stage of any research project is an extensive literature review, that provides the information from which to locate the position of the study by detailing what is already known, advocated, or suggested for future investigation. It can also stop the researcher reinventing the wheel, and provide the ammunition to defend the research position (Holliday, 2002). However, in grounded theory the literature search is left until the end of the study, to ensure the researcher keeps a clear mind and is not contaminated by others views.

2. Methods

Classic grounded theory emphasises creating the conditions for successful analysis through simultaneous data collection and constant comparisons of when a phenomenon exists against those where it does not. The best way to achieve this is when the researcher engages in both data collection and analysis, and can investigate nuances of language, meaning and process. The researcher follows themes as they emerge with the aim of gaining an understanding of the subject from the samples perspective, and

gathering otherwise unobtainable views. The key to achieving this is through a clear and robust data collection methodology (Glaser & Strauss, 1967; Glaser, 1978).

The researcher needs to understand the topic, to begin to get immersed in the subject area and therefore data is collected from a multiplicity of sources, such as newspapers, the internet, plus observations, interactions and other written material. This information will provide an informed reference point, so that as the study progresses he or she will have the comprehension to pursue hunches and potential ideas and be flexible as the inevitable gaps arise and new categories appear. This knowledge will prove invaluable in developing an interview schedule that provides a suitable framework for tackling the research question.

Interview Schedule

An interview is a directed conversation facilitating an in depth exploration of the subject matter and is well established as a useful data gathering method (Lofland & Lofland, 1984). Interviews are popular with grounded theorists, as the questions can be open ended and directed, shaped yet emergent, and paced yet flexible, leading to an in depth exploration of an aspect of life. The interviewer accepts more direct control over the construction of data than other methods such as ethnography or textual analyses, in order to elicit the views of the person's subjective world and understand the topic from the participant's viewpoint (Seidman, 1997). The main method for the qualitative data collection within this study was through taped interviews and the combination of the quality of the questions and how the interview was conducted would shape the power of the results. It was therefore essential to produce a broad, non judgemental, open ended interview schedule that focused on significant matters, invited detailed discussion, encouraged participation by providing the scope for the interviewee to express their views and catering for the exploration of unanticipated replies as they emerged, providing "interconnectiveness", with the questions related to each other in a meaningful way, moving seamlessly from one area to other (Silverman, 2005). An outline of the benefits of an interview is in Table 5.2.

INTERVIEWS
Intensive interviews allows the opportunity to
• Go beneath the surface of the described experience • Stop to explore a statement or topic • Request a further explanation or more detail • Obtain the participants thoughts, feelings and actions • Maintain focus • Return to previous points • Restate the participants point to validate the accuracy • Slow or quicken the pace • Use observational and social skills to further the discussion • Respect the participants and express appreciation
They allow the participant to
• Break silence and express their views • Tell their stories • Reflect • Provide expert opinion • Choose what to tell • Share significant experiences and teach the interviewer how to interpret them • Express thoughts and feelings • Receive affirmation and understanding

Table 5.2 Benefits of Interviews in Grounded Theory (from Charmaz, 2006)

Framing questions takes skill and practice to meet the dual aim of exploring the topic and facilitating the gathering of data of the participant's experience. Questions should be as few as possible to get the required data and the construction of the interview schedule is a key research activity that must be well planned and shaped on questions that allow the participant to reflect on phenomena and elicit rich data. Questions including "Tell me about", "how, what, and when", "could you describe further" will yield rich data.

3. Coding

Qualitative coding is the process of defining what is contained within the collected data, discovering what is happening, and shaping the analytical framework. In this stage of grounded theory, the researcher asks systematic and regular questions, and from the answers begins to direct future data collection. This is the first step from moving beyond concrete statements to undertaking decisive analysis and is therefore the pivotal link between collecting information and developing the emergent theory to explain the data. Coding means categorising segments of information with a short name that simultaneously summarises and accounts for each element of data. The codes, by sticking close to the data, show how the researcher selects, separates and sort the emerging themes. Transcribing is important, and entire interviews and field-notes have hidden benefits and the first coding of the data need not be the last one (Charmaz, 2006).

Coding should reflect words leading to action and should occur without preconceived concepts in mind and facilitate the emergence of unexpected new topics. The general rules for coding are; to stay close to the data; keep codes simple and precise; construct short notes, and to compare data. Grounded theory coding is in 4 phases, initial, focused, axial and theoretical (Glaser, 1978 & 1992).

a. Initial Coding

Initial codes are provisional, comparative and grounded in the data and make "discoveries" about the study and pursuing these findings is essential in grounded theory. This process involves naming each word, each line, or segment of data with the aim of remaining open to all possible theoretical directions indicated by the emerging data. During initial coding ask: What is the data a study of? What does the data suggest? Whose point of view? What theoretical category does the specific datum indicate? Speed and spontaneity help, and comparing similar events assists the researcher to think analytically about them, aided by initial coding to understand the participant's interpretative frames of reference (Glaser & Strauss, 1967; Glaser, 1978).

b. Focused Line-by-Line Coding

The next section is line by line coding that describes the research topic and further strengthens the foundation of the study. New ideas emerge that were not previously recognised, and begins to shape the thematic analysis. Careful line-by-line coding moves the researcher to fulfil the first 2 criteria for a grounded theory analysis; fit and relevance, with codes that have been constructed and developed into categories that show participants' experiences. It has relevance when it offers an incisive analytical framework that interprets and provides visibility to what is happening.

c. Axial Coding

Axial coding relates to developing sub-categories into categories. This specifies the properties and dimensions of a category and reassembles the data that had splintered during initial coding to give coherence to the emerging analysis. This answers questions such as "when, where, why, who, how and with what consequences"(Strauss & Corbin, 1998; Strauss, 1987)

d. Theoretical Coding

Theoretical codes refers to how substantive codes may relate to each other as a hypotheses to be integrated into a theory, and specifying possible relationships between categories, add accuracy and clarity (Glaser, 1978). The analytical tools that can assist in coding are highlighted in Table 5.3.

Focused	Selective phase using the most significant or frequent initial codes to sort, synthesise, integrate and organise large amounts of data. Need to decide which of the initial coding makes the most analytical sense in order to categorise data inclusively and completely. This leads to the final stages of axial and theoretical coding.
Comparative Methods	Constant comparative element to establish analytical distinctions and thus make comparisons at each level of analytical work. First, compare data to find similarities and differences and make sequential comparisons.
In Vivo Coding	Note, that within both stages there are also in vivo codes, where participants use special terms or language, a sort of insider shorthand for common terms unique to that cohort and of particular relevance in this study with the unique military language and abbreviations.

Table 5.3 Analytical Tools for Coding in Grounded Theory

4. Memo Writing

Memo writing is commenced early in the study, and is a pivotal intermediate step between data collection and writing the dissertation. Writing successive memos helps to increase the level of abstract ideas and to stimulate the researcher to evaluate not just words but all aspects of dialogue, such as what does a long pause mean? what does "you know" mean? Memo writing prompts the researcher to analyse emerging codes early in the study, and avoid forcing data into extant concepts and theories. Memo writing demonstrates the connection between categories and helps identify gaps in data collection until certain codes stand out and take form as theoretical categories. Memo writing links data gathering with data analysis and report writing, building whole sections of papers and chapters and ensures the researcher is involved in writing from an early stage whilst also providing the foundation for effective supervisory meetings. There are both early and advanced memos as detailed in Table 5.4 (Charmaz, 2006).

MEMO WRITING	
EARLY MEMOS	ADVANCED MEMOS
• What is going on within the field setting or interviews? • What are people doing and saying? • What do participants take for granted? • How do structure and context serve to support, maintain, impede or change their actions and statements? • What connections can you make? • Which ones to check?	• Trace and categorise data subsumed by the topic • Describe how the category emerges and changes • Identify beliefs and assumptions • View the topic from various viewpoints • Place the topic within a debate • Make comparisons

Table 5.4 Guide to Memo Writing in Grounded Theory (from Charmaz, 2006)

Theoretical Sampling, Saturation and Sorting

During the collection of data, and through coding the initial memos, the researcher is seeking the pertinent data to develop an emerging theory by refining and progressing the properties of each category until no new properties emerge. This theoretical sampling is strategic, specific and systematic and can be used at various points in the study to focus on emerging categories, and the researcher must check variations by taking an idea back to the research sample for confirmation, and if required gather new data to elaborate the categories. Note that initial sampling is where grounded theory starts; theoretical sampling provides the pathway for future direction. The most common error is when researchers confuse the sampling with gathering data until the same patterns reoccur, which will only describe empirical themes, whilst the real objective is to develop a theoretical category derived from analysis of the studied world (Silverman, 2005).

Using Figures and Clustering

Finally, a short paragraph on the advocated grounded theory techniques for displaying processes and results. Figures / diagrams visualise the content and indicate the direction of the analysis (Clarke, 2005; Strauss & Corbin, 1998). A deviant on this theme is clustering, which is a non-linear shorthand prewriting technique to understand and organise the material, and also displays emerging themes, relationships and categories (Soullier et al, 2001; Clarke, 2005). The principle is that the main topic or idea is placed in the centre of a page, and moves out from the core into smaller branches, keeping all relevant material in the same sub cluster. As this map develops, clear connections between each idea, code and category emerge, and keeps branching out until all avenues are exhausted. Figures and clustering are both used within this study and featured in Chapter 6.

Chapter 6

Predisposing Factors and Associated Symptomatology Leading to Depression in the British Army

Aim, Method and the Benefits of Army Life

INTRODUCTION

The Army cannot function without a robust workforce, and the AMHS aim to maximise the psychological support to Army personnel by providing immediate MH care with the expectation that soldiers will return to duty (O'Brien, 1998). To achieve this objective, the Army provides an effective and easily accessible MH service that aims to ensure military personnel are occupationally fit for role, and able to complete full operational duties (Finnegan & Finnegan, 2007). The AMHS are shaped around 8 DCMHs that are strategically located in areas of dense military populations, and consist of multi-disciplinary MMH clinical staff that provide soldiers' with a medium for sharing problems, whilst utilising recognised treatments such as CBT. AMHS differ from civilian practise by providing an occupational MH service that makes recommendations regarding a soldier's suitability for Service, and AMHS clinicians have experience responding to serious risk issues, such as a soldier's capability to handle a live weapon. As a result, clinicians may inform the chain of command of the patient's condition whilst assisting units to address MH issues. The critical mass of Army personnel are fit, young, strong men, and they provide the majority of DCMH patients.

THEORY

The qualitative element of this study utilised grounded theory (see Chapter 5) encapsulated within a biopsychosocial model (see Chapter 1). The research sample was experienced AMH clinicians.

AIM

The aim of this study was to:

a. Identify and evaluate the predisposing factors and symptoms that resulted in British Army personnel requiring a formal MH assessment.

b. Identify trends and risk factors including gender, age and rank and indicate if there were vulnerable groups who are more prone to depression.

c. Determine whether aspects of military life, the support of the AMHS, operational stresses and stigma were significant contributing factors in affecting access to MH services.

This chapter will be structured in 4 sections: the first detailing method and fieldwork; the second describing the application of grounded theory within this study, the third providing a summary of the results and ethical considerations, and finally detail of the benefits of Army life, the Army family and military culture.

SECTION ONE: METHOD AND FIELDWORK

METHOD

Qualitative researchers aim to provide full detail of the processes involved in choosing the subjects to study, the methods, the collecting and analysing of the data (Spencer et al, 2003), and this section will explain the rationale within this study. The method followed the grounded theory structure detailed in Chapter 5, and the author was immersed in the subject area, with simultaneous involvement in data collection and analysis; whilst obtaining background information from a multiplicity of resource, including professional conferences and media sources such as newspapers and the Internet. Figures, clustering and colour were used as a means of developing the categories and to provide clarity to illuminate the data. This will be detailed from page 193, but first this chapter will detail the research cohort and exclusion criteria, the results from a small Likert scale questionnaire before progressing to fieldwork issues related to the role of the "self", interview skills and ethical considerations.

Research Cohort and Exclusion Criteria

The research sample was drawn from the population of 86 serving military and civilian MH clinicians whose clinical backgrounds are detailed in Table 6.1. A number of junior, inexperienced personnel were excluded, leaving a sample group of 61 personnel who have 5 or more years experience employed within Army DCMHs. Contextual sensitivity suggests that the predisposing factors leading to depression are not a uniform phenomena but take on a particular meaning influenced by environment, media, political views, local contexts and local cultures (Silverman, 2001). This design was chosen to maximise the organisational memory of the sample that have many years experience supporting Army personnel in both peacetime and operational settings, with data gathered through interviews and facilitated by a flexible, robust interview schedule. Healthcare professionals involved in the assessment and treatment of people following episodes of DSH have been advocated as being

particularly well placed to identify factors which give rise to suicidal behaviour (National Collaborating Centre for Mental Health, 2004) and therefore experienced AMH clinicians were seen as a reliable method of identifying how a soldier's world functions, particularly in differing peacetime and operational settings whilst existing within the military "family". The benefit in using contextual sensitivity was to focus the questions on asking how, when and where the AMH clinicians generate their descriptions.

The AMH clinicians were expected to provide insight into the complexities associated with depression and to provide sufficient information within the explored categories to provide data to answer the research question and define a theoretical position and explanation through their interpretation of a wide range of soldier's emotions and behaviour (Silverman, 2005). The critical mass of the sample were nurses who made up 72% (N=44) of the respondents, and the small sample population meant that a convenience sample was adopted due to geographical distribution and restrictions such as personnel being posted overseas or being unavailable due to operational commitments. There were numerous other practicalities to be considered such as having to travel significant distances and therefore it was vital to carefully co-ordinate the interviews. This was an important implication, as it limited the opportunity to go back to subjects with the initial results in order to refine them in light of their reactions. Instead, the interviews were slightly modified as new themes emerged.

Clinical Background	Uniformed Established	Uniformed Manning	Civilian Established	Civilian Manning	Total Established	Total Manning	Total > 5 years	% > 5 years
Registered MH Nurse	54	41	25	24	79	65	44	72%
Consultant Psychiatrist	15	6	4	6	19	12	12	20%
Psychologist	0	0	6	5	6	3	3	5%
Social Worker	0	0	4	4	4	4	2	3%
Total	69	47	39	39	108	86	61	100

Table 6.1 Army Mental Health Workforce (2006)

Interviews

The Armed Forces provide an acute example of a closed organisational setting where a "gatekeeper" controls access to a research sample that is subject to intense scrutiny and requests to participate in studies. However, the author's long-term military career meant that this sample could be accessed, with the MOD making assurances that support and resources would be made available.

Data was collected thought a series of in-depth interviews, which following a pilot study commenced in July 2006, with respondents providing detail on aspects of Army life including military ethos, operational experience, stigma and team cohesion, and the effect these issues had on Army personnel accessing or rejecting support. All interviews were completed in private in the respondent's military workplace, with dedicated time identified for the session, thereby minimising interruptions (Finnegan, 1998). As the interviews progressed, new categories emerged such as the plight of unhappy young soldiers, and the interviews continued until the emerging categories were "saturated" and the gathering data no longer ignited new theoretical insight, nor revealed new properties of the core theoretical categories. This was achieved in August 2007 following 19 interviews. The author conducted the interviews, which were recorded onto an audio digital recorder and then transferred to a password protected computer that allowed flexible access to the data, and facilitated personal mentorship and support from the research supervisors. The author transcribed the interviews, enabling the pursuit of leads as they emerged.

An interview schedule was developed as no off the shelf agenda existed, and was constructed following significant input from clinical, military, lay personnel and research supervisors to improve validity and reliability as the quality of the questions and how the interview were conducted would shape the power of the results. The schedule was intended to be comprehensive, and invite a non judgemental, open ended detailed discussion focused on significant matters. The questions were detailed to encourage respondent's participation by providing scope for the interviewee to express their views and cater for the exploration of unanticipated replies as they emerged and leading to what Silverman (2005) described as

"interconnectiveness", with the questions related to each other in a seamless, meaningful way. The interview schedule is at Appendix 6.1.

During the interviews, and before the scripts were transcribed, the author made field notes and listed factors that may later provide an insight into how the interviewees characterised and described particular activities, events and groups. This provided the first basis for conveying members explanations for when, why or how particular things happen, and thereby to elicit members theories of the causes of particular happenings. It was also acknowledged that within the interviews, either powerful or disempowered individuals may distrust the interviewer, the sponsoring institution, and the stated purpose of the interview as well as how the findings will be published (Silverman, 2005). These interviews were less constrained by the potential problems as the research was not undertaken for funding, the author was not anyone's direct line manager, and not engaged in the power displacement associated between clinician and patient. Ways of addressing these residual issues was through clear recognition of one's "self" within the group, and complimented by robust interview skills.

FIELDWORK

This section relates directly to the role of the author within the research field setting, the question of "self", and personal references will be described in the first person.

Understanding the Research Population

I have spent many years in the AMS as an Army Officer, and these experiences and knowledge provided a familiarity with the *studied phenomena* that is seen as a prerequisite in grounded theory (Dey, 1999). There are significant difficulties for a researcher who does not have an in depth knowledge of the study group and must share some experiences (if not necessarily all the viewpoints). This inner knowledge develops a bond between researcher and subject, and without this rapport the investigator is unlikely to get subsequent data from being denied further interviews or observations (Blumer, 1969). I was acknowledged as a

senior member of the research population, which eased the dilemma of gaining access to this sensitive group of MOD employees.

This study was conducted within a relatively narrow and specialist field, relating to a workforce that have extensive knowledge of both MH and military duties. In both these areas there is a particular language, characterised with nuances and abbreviations and referencing an environment that many investigators could not relate too (Busuttil, 2010). The codes that emerge from languages, meanings and perspectives signpost the participants view of their empirical world and early identification, without having to seek clarification, means that the researcher can examine hidden assumptions in one's own language (Silverman, 2005). I had this depth of knowledge which provided the foundation from which to construct the robust interview schedule at Appendix 6.1, and the framework to alter and develop the questions after the interviews commenced.

Potential Problems

This author was undoubtedly part of this cohort and therefore the study and the detriments of the "self" in the interviews had to be acknowledged. This recognition almost certainly meant that certain difficulties were presented, including the recognition that there is a gap between beliefs and action and between what people say and what people do (Gilbert & Mulkay, 1983). There was a clear potential for bias that needed to be carefully addressed to obtain the study group's subjective opinion rather than simple objective reporting (Hammersley & Atkinson, 1995). I had to remain attuned to how I was perceived by participants, and how past and immediate identities could affect the balance. This was vitally important as I was part of the Army family, and in the unenviable position of being an Army Officer dealing with juniors, seniors and MOD civilian employees. Would the group tell me what they think I want to hear? Would they leave out information thinking I already knew their views? Would they avoid controversial opinions? (McCleod, 1994). Was I viewed differently by military or civilian practitioners? nurses or psychiatrists? Unless these issues were tackled then the study results would be significantly diluted.

Therefore my position, my "self", had to be recognised to minimise the impact this position would have on the validity of the study findings, and I acknowledged that personal preconceptions, emitting from the social influences of class, gender, age, political, clinical and historical viewpoints, and nurtured through many years in the Army could permeate the analysis and negatively affect the research conclusions.

Improving Validity and Reliability

I developed a strategy based on published findings and consultation with my research advisors that was based on self awareness, an open mind, and the requirement for supervision (Silverman, 2005). I documented personal initial views, stating pre research opinions into a research diary, and therefore provided a footprint for later retrieval. There were practical implications, such as conducting the interviews wearing civilian clothes rather than military uniform, visiting the research group in their workplace rather than in my office; and interviews conducted on first name terms. As part of my duties I visited each of the Army DCMHs, and was therefore well versed with the facilities and used this knowledge to establish an appropriate conducive environment using well-ventilated, comfortable rooms with good lighting. I attempted to ensure the setting was quiet, for example by turning off mobile phones and preventing interruptions. Finally, it was important not to conduct the interview at the end of the day as the interviewee may want to go home; to be prepared for cancellations, and not to attempt to conduct too many interviews in one day as the sessions were personally exhausting (Finnegan, 1998). I am experienced in conducting interviews, and found the maximum to be 3 interviews per day. These guidelines generally worked, but were not without challenges, for example during 1 interview a pneumatic drill started outside the office, and there was nowhere else to go, yet the situation had to be handled.

Interview Skills

Interview skills were important, and the author is an experienced MH nurse with significant experience in undertaking consultations; honed from over 25 years experience and

underpinned by CBT and Cognitive Analytical Therapy training and taught counselling skills. I had to be sensitive to the criticism that as a trained 'therapist" there could be a negative impact on being a subjective researcher, and the possibility that the author's interview skills would be affected by the personal position within the team and a clinical background as a practitioner would exert some influence on the data collection (Strong, 1979). However, there is a counter position that being a clinician is more of a help than a hindrance, and counselling skills encouraged the author to actively listen and to remain impartial throughout the interviews by utilising competencies such as open questions, constructive use of silence, keeping an open and attentive posture (Sully & Dallas, 2005), focusing on the relevant topic, whilst encouraging respondents to produce their own accounts; and rather than just stating "*uh huhs*" or nodding by replying "*That's interesting, tell me more about it*" (White, 2004).

During the interviews, every effort was taken to highlight that whilst I shared some experiences, these were not necessarily the respondent's viewpoints, and guaranteed group anonymity. Personal referencing and inclusion was anticipated, and during the interviews I acknowledged the link and regularly reinforced the need to exclude assumptions regarding the author's views or experience. For example, in 1 interview I said "*Try as best as possible to try and think, take out any rank structure, I'm an external researcher coming in on a research project*" (interview reference A7) and reinforcing that there were no right or wrong answers as I sought to obtain an honest, open and detailed opinion. This strategy was generally bore out; yet there were still references to me, for example JJ[1] stated "*we are colleagues, we know each other*" (A12). Subjects assumptions included that I was already aware of the respondents beliefs as PP stated "*Well you know my view on this anyway*" (A3), or anticipating my knowledge of military research, even when the findings would not be published for another 2 years (Iverson et al, 2009) when CC stated "*but as you know from the recent work that we have been doing, the Army has got an alcohol issue*" (A2). There were even more detailed references, including involvement in sporting activities from several years previously that linked the discussion to commonality between the interviewer

[1] Letters are used rather than subject's names. The coding process is described later in this chapter.

and the interviewee or checking that I was content with the answer, such as HH queering "*Are you OK with that?*" (A10). Others recognised the importance of the subject matter, and committed to trying to assist, exemplified by FF when discussing the research objectives:

> "*It is a big issue you are talking about and there are a lot of buts and maybes and variables so it is difficult, although I hope for the benefit of what you are doing that I have come across*" (A9).

This was extremely important in regards the validity of these cohorts views and to acknowledge that MMH clinicians were an intelligent, professional group, who would presumably understand the objectives of the research and were used to undertaking taped interviews as part of their normal working life.

SECTION TWO: APPLICATION OF GROUNDED THEORY

To ensure validity and reliability, there must be a systematic and self-conscious research design, providing visibility of the data collection process, with analysis and categories used consistently, and not claimed when there are only a few examples (Mays & Pope, 1995). This second section to this chapter will present in detail the grounded theory pathway utilised to produce the qualitative report in Chapter 7.

Literature Search

Grounded theorists are encouraged to undertake a literature review at the end of the study as there are numerous benefits, including maintaining an open mind and not being skewed by others views (Silverman, 2005). However, the dilemma for the academic researcher is the need to satisfy University requirements, and in this case, an MOD Research Ethical Committee that demanded the inclusion of a literature review displaying key academic references within the research proposal. Also, whether the literature search is at the start or the end, the researcher must have an understanding of any previous classical research, as there is little benefit in "reinventing the wheel".

In this study, there was a low risk that a late literature review would identify the emergence of new questions that may not be able to be pursued without ethical approval. As a balance, this author completed a succinct literature search early, read key abstracts, and to ensure that the study was not replicating other work and to determine if there has been similar classical studies, the author discussed the proposal with the leading UK based authorities in military psychiatry at the Academic Centre for Defence Mental Health at King's College London and with senior colleagues including Colonel Dougie Gamble OBE, Consultant Advisor in Psychiatry to the Army. These experts confirmed that the research was original and had not been investigated in depth, and had the potential to advance knowledge within the MMH community and beyond. The author then left the in-depth literature appraisal, and the writing up of the review chapter until the data collection and the qualitative report was

completed. Hence many of the references in this thesis are from recent publications. This search was supported with information gained during the research from newspapers, the Internet, new broadcasts, radio, TV, fellow students and colleagues.

Initial and Line by Line Coding

It was acknowledged that open-ended interviews are widely regarded as the gold standard of qualitative research (Silverman, 2005), with the aim not to contaminate the cohorts views by giving too much information. The interviews commenced with a short introduction, and then to ease the respondent into a dialogue the discussion continued with 2 general questions, before progressing to address the themes of: Army life; the AMS; demographics; operational deployments, and stigma. The questions attempted to obtain a balanced view, and therefore did not focus on just problematic areas, but facilitated the respondents to highlight enablers that provided soldiers with protection from MH stressors. In the early stages, initial coding was utilised to note the anticipated categories such as the impact of stigma, and then sustained be emerging themes such as the unique presentation of depression within the Army. This was aided by colour coding and progressed into the line by line coding. A verbatim extract from an early interview displaying this process is in Box 6.1, and a full interview in Appendix 6.2.

VERBATIM EXTRACT FROM A STUDY INTERVIEW		
Including line by line coding, with emerging themes highlighted by different colours		
Time		Detail
0.00	AF[2]	A good digital recorded, and the other day I was a little bit concerned because I hadn't pressed the mike in all the way either, and I thought, ah it won't pick up but it did. It's excellent so. So, xxxx (respondent's name) I have got here 1,2,3,4...6 categories relating to Army personnel. Now every question relates to Army personnel who have been referred to a DCMH, a military mental health department, with a diagnosis of depression. And we are trying to, through this conversation, to try and identify, from your own personal experience, what the predisposing factors are, and to some degree the symptomatology. So we'll start off, the factors that I will be going through will be things such as Army life, the medical services and other bits and pieces. But a nice open question to start off, and basically, in your experience, what are the predisposing factors that result in Army personnel requiring a mental health assessment for depression?
1.01	BB	Occupational dissatisfaction, debt, life circumstances, relationships, very rarely are their depressions discovered to actually be endogenous. Situational factors either within their work or within their personal lives. Occupational factors can include evidence of poor management.
	AF	OK, any other occupational factors? You brought out 2 there; you brought out occupational factors and life circumstances. Are there any issues that come immediately to mind?
1.38	BB	I do believe that there is, from my experience, and from the patients and service users that I have assessed, there appears to be a dislocation at times between them and the chain of command. They see themselves as isolated within their working group. And I think that is a major factor, almost a type of institutional neurosis.
	AF	OK, that leads on nicely really, in your experience, what types of symptoms are therefore presented.
2.16	BB	Usually, de-motivation, poor concentration, sleep disorders, occasionally they can demonstrate symptoms of anxiety as well as the underlying depression, depressive illness, or episode of depression. Eating, eating problems, you usually associate with weight gain, I see very few associated with weight loss. Now I, I, I[3] wonder if that is associated with the availability of food within the military environment? Increased alcohol consumption, is a biggy as well.

[2] AF is the author. BB is the respondent. (Each respondent's names and initials were coded in alphabetical order i.e, AA, BB etc.)

[3] Within the text, there are numerous examples where words are repeated. This is a reflection of the verbatim text, and not typographic errors.

	AF	OK, good, that's it. Just a good general top, what is there from your first thoughts. Now I will take you through some of the areas, we have already touched on them briefly, 1 or 2 of them. And the first one is literally into Army life, and my question is, are there common features that are unique to Army life that lead to this depression?
3.19	BB	I believe there are. I believe that one of the, one of the issues, particularly in the teeth arms or very green units is that, they are very much focused upon their objectives for the year, what type of year it is. There are certain tasks to be achieved and the unit as a whole is rated upon, is rated upon their achievement within their yearly or 3 yearly cycle. One of the, one of the problems with that is that I think that there is a culture where as soon as they think that someone has begun to become a passenger or somebody isn't functioning to the full extreme there, there becomes issues that can rapidly result in the individual becoming isolated, becoming, feeling, almost rejected by his peers. Also, there can be I think; I think other people's anxieties and stresses within that sort of environment can be transposed onto others in the form of robust management or even bullying. Particularly through the ranks. I think, I think there is a lot of potential for that, and I see that.
	AF	Two big factors there, team cohesion
	BB	Yeah
	AF	Yeah, and this idea that if you are not part of the team you fall off.
	BB	Absolutely.
	AF	And the other aspect is in relation to robust management, even to an extent bullying. Are there any other factors involved in that robust management that are unique to the Army?
4.54	BB	Well yes. We have a rank structure, we have occupational punishments i.e. you can be given, you can be AGAI'd all the way up to court martial, that doesn't occur in any other working environment. So not only, not only is the big machine feeding you, paying you, it is disciplining you and even provides your health care. So there is this big machine perception amongst the people who get referred to us in terms of, in terms of this acute progressive illness. They, they, perceive themselves as falling out of it, you know, I think their biggest stress is fitting back in, and I think that is why we lose so many on the wayside because they can't see themselves fitting back in.
	AF	Any other factors on there or shall we move on?
5.40	BB	I think amongst the individual you will usually find that, I asked a question at conference last year, in respect of a piece of research, Nicola Fear's study, in regard to the problems with under 24's and suicide, and I, I, thought about proximity to their families, or proximity to who they see as their significant adult outside of the Army and how they get home at weekends, and the weekend off syndrome which I think is unique to the forces, in particular the Army. You know the people where work becomes their only being and they live at work as well, they don't get home at weekends, it is you know, they are getting no respite. A respite issue I think.
	AF	In this Army life, from your perspective, regarding DCMHs, are patients forced to attend?

6.43	BB	No. No. Very very few, I have been managing xxxxx (DCMH name) now and we have had 1 incident where an FMed 8 has arrived before the FMed 7. We have had an FMed 7 which indicates to me that the individual has gone to see the GP, and agreed to the referral. So, we then, when we have looked at factors within the referral that would indicate that there is more of an occupational problem here then we have asked for an FMed 8. So, the evidence would suggest to me that people are not forced, they might be forced to go and see the medical officer in the first instance and then good communication skills take over and perhaps an appropriate referral is made.
	AF	Good. Just the reverse to that really, are there common features that are unique to Army life that make it less likely that personnel will be referred?
7.37	BB	I think there are actually, I think there are people who that, who thrive in Army life who would not thrive in other civilian occupations. Because they are directed, because although they are directed and perhaps the need it for imaginative or innovative management isn't there, they are also given responsibility which they can take, but the actual qualities required are slightly different I think. So those type of people would probably thrive in an Army environment whilst they probably wouldn't thrive in a, well it's those type of people who would probably come to the notice of community mental health services in civilian street, and probably don't come to our attention here.
	AF	Because they have the support of additional responsibilities?
	BB	Because they have responsibilities.
	AF	OK.
	BB	They are fulfilled.
	AF	The next category looks at the medical services.
	BB	BURP, beg your pardon.
	AF	Are Army personnel confident that AMS staff and the DCMH staff will maintain their medical in confidence?
8.40	BB	It has been my experience that they have been. It has been my experience that they, they believe, that we have an influence. Because medical in confidence is a double edged sword, they might not want us to mention certain aspects of their assessment or their review; however they want us to bring other, to bring other issues to management via the medical chain. So, it is a bit of a double edged sword but I have actually not seen any conflict there, and no one has expressed to me the view that they dare not tell me anything in case I go and tell anyone else about it. So, that has not been an issue for me.
	AF	OK, nice and clear. And the last one on the medical services. Are Army personnel more likely to seek help if care is supplied in their units or in a completely separate location such as a DCMH?

9.42	BB	It's been our experience of the outreach clinics that we have at xxxx (DCMH name), we have one down at xxxx (Name of Satellite Clinic) and one down at xxxx (Name of another satellite clinic) that people are not inhibited from attending. And even though they have been given a choice of venue, they chose the venue closest to them. So the evidence would suggest that they are not inhibited by having it in their unit, and that might be something that might encourage them to seek advice. Obviously it has to be separate within the medical chain away from their unit, the only issue I could see is whether, is whether units may badger the particular department or the medical officer for information, and they would have to be clear demarcation there but I, no, the evidence suggest that no, that isn't the case.
	AF	No particular difference, but what is important for the person is not having to travel far?
	BB	Yes.
	AF	OK. A few things with demographics within the Army now, 3 of them and none of these are going to come as a surprise. The first one is: in your experience within the Army, does gender play any part in affecting the referrals?
11.00	BB	Yes it does. I do feel that, I haven't done a study, but there appears to me to be a disproportionate amount of females referred. I don't know if that is true or not, it just appears to me that, I don't know what the actual numbers of females to males within the Army is, but we always have 2 or 3 females at every referral meeting and I am sure that they are on an average, on an average of 8 to 9, and I'm sure that isn't proportionate.
	AF	It's your feeling that I am interested in, so, you, you have identified that, why do you think that is xxxx (Name), if it is?
11.48	BB	I feel that females are more likely to attend to seek help, and they do have a, to use a phrase, they are more in touch with themselves, and I think they are more responsive to mood. And I also think that they are better able to express themselves, especially the younger age group, probably they might not appear mature to me that are more mature than the young males. It's usually the young females we see, and there appears to be a disproportion number of them. I think they are probably better able to express themselves.
	AF	Cross referencing more, we were discussing earlier, do you think any of those pressures, which we talk about in the Army. We talk about the team bonding, having to be seen to be part of it, is that, is that a factor here? or is it just?
12.44	BB	I think it could be, I think there is certainly, there is certainly a plethora of, and I have noticed it, most of the staff, most of the recruiting staff, most of the training staff at say a training regiment are male. There is the odd female pottering about, and there is a, whether that's, whether that is more difficult for females to fit in, canteen culture or that type of stuff, you know, I wouldn't be surprised if that was the case. They are not as physically robust, all those things that are looked upon as very positive things within Army life, like physical robustness, no tears, always just getting on with it, a female joining a organisation, a young girl joining an organisation , she may initially find that very difficult. Therefore, have more trouble bonding, have more trouble bonding and more problems fitting in and therefore, that would affect their mood.

	AF	OK. Staying with demographics really, in your experience in the Army, does age play a part in affecting referrals?
13.57	BB	Yeah. Far more from the younger age group , and as people sort of reach the zenith of their careers we very rarely you know, have referrals above Sergeant and the NCO ranks and very few well, very few over 35. The majority of ours are below 35.
	AF	Why do you think that is?
14.23	BB	I think there is maturity. There is also people who are approaching middle age have more control over their lives and a major factor which I probably didn't mention is control. Lack of control over their circumstances will cause someone to be depressed, that has always been my experience. As you get older you do have more control over your experience.
	AF	So is it the very young, you have given me a marker, 35 that you see less of.
14.56	PW	I think, yeah. Exponentially, if you were going in reverse you would see an increase as they become younger because you do have individuals who are not coping in the additional stages and you are always going to see some wastage there. And we see quite a few of them, so, there is an element of them not coping and there is a filtering going on throughout their careers and that is the way the Army progresses people, it filters people, people don't get beyond the 5 year point, people don't get beyond the 16 year point. So that progressively pulls through, so the people you get who have served over 16 are people who have survived through the system, so.
	AF	Ok
	BB	Yeah
	AF	Are there any other aspects about age?
15.42	BB	Funny enough, we have had a number, not a significant number, but a few referrals of senior NCOs who in their late 30s have a disillusionment, but you usually, it is my experience, their referrals are due to problems outside in their life, relationship breakdown, or they are quite happy with work, they feel fully actualised at work and there problems are not occupationally based. You know, they may be pissed off about a posting or whatever but actually role, their duties whatever; they are happy with and quite comfortable with. And it is the younger people that there is an occupational biases to what is happening. That is my experience.
	AF	Which aspect of the occupation for the younger ones?
16.43	BB	I think, I think the introduction to discipline the, having to deal with, having to deal with different styles of management as people get posted in and out. Because a posting, a posting say of a commanding officer and an OC can have an effect throughout a unit. ....

BOX 6.1 Verbatim Script from a Study Interview

The taped interviews were continued until saturation was completed and from the data that was received I could answer the questions:

- Have I collected enough to portray the content of the study?

- Provide a detailed description from a range of participant's views and actions and opinions?
- Does the data provide depth for analysis?
- Does the data reveal change over time?
- Can the data lead to the development of categories?
- Does the data lead to comparisons between data? (Punch, 1998).

Memo Writing

The author completed memo notes at the end of each session and again when transcribing and listening to digital audio recording of the interviews. These notes annotated emerging themes and issues that were explored in depth as the interviews progressed. These notes were written in the present tense and included:

- AA indicated that a predisposing factor was the competencies of the referring GP. The predicative model therefore may not just be a list of potential biopsychsocial problems but include other dimensions such as the skills of the GP and factors that influence their decision to either treat or refer.
- NN stated the reason for seeing / assessing people who are not clinically depressed is associated with GPs fearing that service-personnel may commit suicide and the increased risk of a population with access to guns. GP decisions were also influenced by significant negative media and the blame associated with the Deepcut suicides.
- QQ (22.40) noted the impact of the terms and conditions of service on young soldiers that have already completed significant service before they are 18 years old by association with military training such as Apprentice College; "when the clock starts ticking" they cannot leave for 4 years.
- RR (36.32) identified that Officers will not report MH problems when deployed, even when they are depressed and not coping.

Some of these areas were new and had not been considered before commencing the interviews. Examples included:

- LL (31.07) noted the requirement for balance when discussing the Army population, and whilst it is recognised that some patients have MH issues related to their dysfunctional background, there are others who originate from horrendous social backgrounds that do well. *AF (personal note) not to generalise and there may be many who are doing very well.*
- KK (51.40) introduced the concept that depression means different things to different people, and that there is a lack of consensus of what depression means. *AF – Literature search – try to identify if the successful assessment of depression by PHC GPs has been quantified.*
- *AF NOTE. What issues do respondents refer to at the end of the interview when they are asked to reflect and identify any other factor? It feels that respondents are highlighting the factor that they might already have mentioned, that they feel is really very important.*
- VV (09.46) indicated that the military has a screening process in place to remove vulnerable personnel before they deploy. This includes the initial attestation, and reinforced by personnel who can seek MH support before deployment, leaving those who deploy being "mentally well."

The memo notes highlighted emerging difficulties such as my role within the group and common dynamics:

- CC (26.28) was not willing to declare that he did not know an answer; preferring to guess.
- All respondents. References to me as a member of the research population, assuming I was already aware of problems, such as, "*As you will already know...you are aware that....*" etc.

- Being a member of the group, I noted comments related to the respondents personal experiences.

Other examples justified the methodology: such as the author undertaking the interviews; the use of interviews as the data collecting tool, and using MH clinicians rather than soldiers.

- CC expressed a high number of military and MH nuances, and the interviewer needs to be familiar in both areas, to understand the constant references to the military and psychiatry.
- KK (12.22) started the sentence by giving one answer, and then as the conversation progressed he changes his mind as he ruminates on the question. This is a significant advantage of interviews over questionnaires where the respondent is likely to give the first answer that comes into his / her head.
- TT (52.24) noted contextual differences of expectations on operations, depending on and influenced by operational experience and whether the soldier has previously toured.

Other examples referenced the developmental aspects from the interviews; whether these were personal or reflective of the respondents' replies, and how dialogue from the interviews connected with personal experiences:

- MM stated that the most important enablers in the Army are one's family whilst a significant stressor is failing to be promoted. *AF – I think MM is describing himself and his values, and I recognise this from my own historical references serving with MM within the AMHS.*
- RR (26.14) provided examples that young soldiers have low mood, but are not depression, and manipulation of the environment, such as allowing the soldier to leave the Army results in full resolution of the symptoms. Also that senior NCOs face a constant pressure to perform, especially on deployments. *AF - Reminds me of having to treat PTSD in NI. Treating operationally attributable issues in the*

UK was straight forward as the soldier had been removed from the contact situation and therefore had nothing to avoid. However, in NI, they could not get away from the threat. This was the context, accessing support and treatment was completely different.

- RR (27.12). Remarks that MH clinicians very rarely see Officers reporting with depression. *AF – Need to identify where they are going to be supported? Are they going somewhere else or are they using alcohol as a secondary coping mechanism?*
- VV (20.00). There appears to be a cathartic benefit for the interviewee from being interviewed. VV states that he had never thought of how he would react as a MH patient before this interview.

The memo notes were also used to highlight significant changes in my own thoughts and annotated issues to be addressed with my supervisor: Examples included:

- PP (2.00). Highlights that AMHS only review personnel with moderate depression. The predictive model in this thesis does not apply to severe depressive illness.
- SS (5.00). There are 2 different entities; 1 regarding depression and 1 regarding low mood; and I am functionally developing 2 predicative models. The first for low mood developing in relation to the situational stressors such as being trapped in the Army and the second for traditional depression.
- *AF. Reminder to provide evidence of the constant comparative method, how I develop questions and revisit areas in more depth as I moved on. How other sub- categories' such as "media and national views" were incorporated into "operations".*

Sub Categories

The coding and memo taking led to 27 sub categories presented in Table 6.2 and diagrammatically in Figure 6.1.

Figure 6.1. Factors Leading to Depression in the British Army

Colour	Heading	Relevance
Dark Grey	Familiarity	References where the author was included as part of the group.
Yellow	GP & PHC	PHC medical issues, GP competencies, referral patterns, and medical in confidence.
Bright Green	Personality	References to how a person's personality can lead to a MH referral.
Pink	The Unhappy Soldier	The young disaffected soldiers who want to leave the Army but cannot due to the terms and conditions of service.
Blue	Relationships	Direct link to how dysfunctional relationship issues can negatively impact on a soldier.
Dark Teal	Families	Family problems and the social issues connected with separation from the family unit.
Violet	Cultural Issues	Relates to changes in the military, the type of soldier being enlisted, and their cultural backgrounds.
Dark Yellow	Situational Stressors	Reference to the different types of stressors, and the accumulative effects.
Dark Red	Army	Role of the military in responding to MH issues, and the responsibility of the chain of command in addressing these issues.
Brown	Macho Culture	References to the macho culture within the Army, and how stoicism is applied.
Olive Green	Stigma	The impact of MH stigma and how soldiers react to being labelled.
Tan	Physical	Why physical problems result in depressive symptomatology.
Light Green	Isolation	The impact of being or feeling isolated.
Blue Grey	Symptoms	Symptoms that are not always aligned to the DSM taxonomy.
Light Orange	Alcohol	Association between alcohol & depression, and how soldiers misuse alcohol.
Rose	Bullying	Bullying within the Army, and the impact on the soldier and the correlation with depression.
Indigo	Team Building	The importance of team cohesion within the Army, and how fragmentation from the team can lead to depression.
Plum	DCMH and Welfare	The role of the DCMHs, and the importance of MH education in preventing / treatment of depression.
Lime	Gender	The impact of gender.
Lavender	Age	The impact of age.
Light Yellow	Rank	The impact of rank.
Light Turquoise	Operations	How the context of deploying on operational tours affect soldiers.
Sea Green	Control and Perception	The soldier's personal perception of their control of their environment.
Turquoise	Benefits of Army Life	The benefits of Army life, such as pension and funds.
Sky Blue	Help Seeking Behaviour	What influences soldiers to seek help, and what are the deterrents.
Light Blue	Social Factors	Societal factors such as the social background of the soldiers.
Aqua	External Factors	Impact of the media and the views of the nation.
Green	Military Depression	Soldiers who do not necessarily meet the ICD coding yet have depressive symptoms.

Table 6.2 Predisposing Factors Leading to Depression in the British Army: Developing Sub Categories

Axial Coding and Constant Comparison

Enhanced analysis using the constant comparative method led to further coding and the groups were reorganised into theoretical codes. An example was the identification of an Army macho culture, with the fractured comments extracted from the various interviews re-assembled under one heading. See Box 6.2.

Category Development Example: The Army Macho Culture
Interview references and observations to Army macho image are assembled into 1 section.
AA. The Army is well known as being the strongest bastion of the macho image, the need for a stiff upper lip and applied stoicism. There are very good reasons for this and no other job expect the workforce to openly risk their lives. However, is this always a good thing? and how does it effect the relationship between a distressed soldier and the AMS? AA highlighted that the culture of toughness must prevail and that it is not a negative thing, (AA 10.23) but a balance must be struck. It is also felt that despite this macho image, soldiers are willing to seek help, because it is part of their training to be fit for task, in both mind and body, and therefore if they are feeling stressed or depressed, it is part of their culture to seek support. "*Personnel understand the need of the team is to seek help. 90% of the time, personnel are completely familiar with the notion that they must ensure that they are fit to parade and if they are not then they must go the medical officer and request the help that they require*" (AA 13.13) **CC.** The Army has a macho image which is not a bad thing. We need personnel who can do the job, "*we don't want to be a pink, fluffy, holy organisation that's not what we are, it's not the job that we are about*" (CC 7.59). Irrespective of the macho culture, there are times when people just need time off "*equally there are times, when, when the welfare card does need to be played, when someone's pregnant girlfriend has just miscarriaged and I think there are times when they do need a period of time and not to be told, tough, you are on guard isn't acceptable these days if we are going to value individuals and treat them as individuals*" (CC 7.59). When looking for reasons of why personnel feel weak and stigmatised, the response comes back to the macho image of the Army and the underlying culture that prevails. "*The culture we come from. We are, are predominately male, we're wearing DPM, we wear body armour, we carry a weapon. We go to areas where they want to hurt us and kill us...even if you are a medic or a CMT, you know, you are still armed, and you are still out there, and when you get to a checkpoint in Bosnia, you still argue your way through. You do the bluff and the bluster. We have short hair, we are fit*" (CC 39.31). Therefore seeking mental health is a sign of weakness, especially when the MH services themselves carry a label from " *a psychiatric nurse, a shrink, a nut nurse, a handbag*" with the attendee being labelled as "*a crying woman or an American*". **DD.** The Army remains a macho organisation, which has a cultural way of dealing with issues

which may be difficult for civilians to understand "*we are a big macho organisation, which is fairly unforgiving, which is full of black humour, and sought of, non PC is a restrictive sense views*" (DD 7.18). The Army is predominately a male environment (DD 18.07), a culture that is "*very macho*" (DD 18.07). There are then differences between cap badge, and an even more macho image "*how do you punish a Parachute Regiment soldier? you tell him he is not going on the next deployment.*" (DD 26.50).

EE. In a macho organisation, how do you articulate being scared "*how do you complain to someone, saying I'm really worried, I'm really feeling scared, I don't want to go*" (EE 13.42). There is a balance between those ready and wanting to go to war and those who do not. (EE 14.32). The macho culture within the military is not necessarily conscious or accepted, but stems from traditional military culture (EE 22.55). Seeking help in this environment "*is not done*" (EE 23.47). The macho culture is a barrier to seeking MH support, "*The Army macho culture, then there is less chance of them coming forward*" (E 30.04). Military culture is "*being male and fighting....big boys don't cry.*" (EE 33.12).

KK. Easier for women to access support due to the macho culture "*I intuitively, I feel that maybe it's easier for girls to come and see us because it's more of a macho thing for the blokes.*" (KK 27.21). In the macho environment, those who fit the role do very well "*If they are roughty, toughty and have a reputation of being a good soldier and being a sort of, a man's man if you like, then they can probably handle it better than if they are sort of slightly sort of on the edge of things.*" (KK 41.42).

LL. Officers do not seek help because it is not expected "*The stigma attached to it. You know Officers don't become depressed.*" (LL 26.27).

MM. Males have an image to maintain "*There is more of a façade to maintain the image of being a copper, being a bloke, and then there is being a woman.*" (MM 31.00). This is even more prevalent in certain units "*In the macho environment of the Army, certain units are very sort of, quick, quick to stamp on and whip up sarcasm. And jibes about men who are talking about problems or not coping so well unless there is a genuine problem, or something they see as a genuine problem*" (MM 31.38). With senior ranks "*saying I can't cope with this is just not acceptable*" (MM 37.00).

QQ = MACHO IMAGE. Males are more concerned regarding stigma (QQ 19.15).

TT = MACHO IMAGE. Military is a male environment and competitive "*they are working with predominately males. ...want to keep up with Private Jones and they will want to keep up, and that's a more, more macho thing.*" (TT 38.28).

VV = The macho image also applies to females "*And I think that translates across into the Army as well. And it's probably magnified in the Army because of the macho culture amongst males in the Army. There is probably a bit of a macho culture amongst females in the Army as well.*" (VV 30.21).

Box 6.2 Grounded Theory Category Development: Example "Army Macho Culture"

After interviews had been reassembled into categorical headings, the sections were then reviewed and constant comparison led to changes, and certain factors that had been coded in a certain area such as the macho image, were moved to another more suitable

category such as stigma. Certain sub-categories were completely absorbed and merged into more relevant headings and areas, examples including "external factors" and the influence of the media being moved under a main category heading of operational deployments. Once this stage was completed, it was possible to evaluate the comments to make small segments, or individual stories that were heavily referenced, containing no subjective inclusions from the author. An example of how this was completed in regard to the macho image is in Box 6.3. It should be noted that this was a small sub category with 25 references, compared to "The Role of the Army" that generated 145 references.

Theoretical Coding and Development

Example: The Army Macho Culture

The Army's competitive, predominately young male environment is the strongest bastion of the macho image **(J2, J6)**, with an expectation that soldiers' maintain "a stiff upper lip" with applied stoicism, as "big boys don't cry" **(J5)**. Within the Army, the macho image had a defined hierarchy, from the super tough parachute and infantry regiments **(J3)**, to softer elements, such as MH clinicians **(J20)**. However, Army medics carry guns, face operational threats and are still part of the military culture **(J13)**, belonging to an institution that civilians do not understand, and has cultural coping mechanisms, exemplified in black humour **(J1)**. The military macho image is not necessarily conscious or accepted, but stems from traditional military culture **(J4)**, and for very good reasons **(J8)**. No other job expects the workforce to openly risk their lives, and soldiers must be tough, and those who fit this model do very well **(J9)**, although to articulate being scared **(J14)**, in particular Officers **(J17)**, and senior ranks **(J18)**, is not done **(J15)**. But there is a balance to be struck **(J7)**, including recognition that some want to go to war and those who do not **(J21)**, and the macho image can be a barrier to seeking MH support **(J16)**. At times soldiers require time out and someone to value them as individuals **(J12)**, and for certain traumas, such as bereavement or relationship problems, then support is advocated **(J11)**. In some units, soldiers are still willing to seek help, because in the Army training they are taught the need to be fit for task, in both mind and body, and therefore if they are feeling stressed or depressed they seek support **(J10)**.

There is also a gender issue, and whilst males are more concerned regarding stigma **(J19, J22)**, even for trauma related issues **(J25)** there is also a macho culture with female soldiers **(J24)**, although on the whole it is easier for women to access support **(J23)**.

J	J	MACHO CULTURE
J1	DD 7.18	We are a big macho organisation, which is fairly unforgiving, which is full of black humour, and sought of non PC, is a restrictive sense view.
J2	DD 18.07	So, it continues to be a dangerous and challenging job, for both sexes. In a culture that is still very macho.
J3	DD 26.50	How do you punish a Parachute Regiment soldier? You tell him he is not

		going on the next deployment.
J4	EE 22.55	I think the chances are that in a male dominated environment, that, and because of the culture of machoness, there is still, you know, if you like, not necessarily a conscious thing. Or an accepted thing.
J5	EE 33.12	Being male and fighting....big boys don't cry.
J6	TT 38.28	They are working with predominately males. ... Want to keep up with Private Jones and they will want to keep up, and that's a more, more macho thing.
J7	AA 10.23	But there is also is culture of toughness that must prevail, in my opinion, because of the job we are expecting these boys to do. So that will prevail, and that should prevail, but there is also a balance to be struck.
J8	CC 7.59	We don't want to be a pink, fluffy, holy organisation that's not what we are, it's not the job that we are about.
J9	KK 41.42	If they are roughty, toughty and have a reputation of being a good soldier and being a sort of, a man's man if you like, then they can probably handle it better than if they are sort of slightly sort of on the edge of things.
J10	AA 13.13	Personnel understand the need of the team is to seek help. 90% of the time, personnel are completely familiar with the notion that they must ensure that they are fit to parade and if they are not then they must go the medical officer and request the help that they require.
J11	MM 31.38	Loss of the mother, probably would recognise as something that is very upsetting...loss of a child, or even a relationship.
J12	CC 7.59	Equally there are times, when, when the welfare card does need to be played, when someone's pregnant girlfriend has just miscarriaged and I think there are times when they do need a period of time and not to be told, tough, you are on guard isn't acceptable these days if we are going to value individuals and treat them as individuals.
J13	CC 39.31	The culture we come from. We are, are predominately male, we're wearing DPM, we wear body armour, we carry a weapon. We go to areas where they want to hurt us and kill us...even if you are a medic or a CMT, you know, you are still armed, and you are still out there, and when you get to a checkpoint in Bosnia, you still argue your way through. You do the bluff and the bluster. We have short hair, we are fit.
J14	EE 13.42	How do you complain to someone, saying I'm really worried, I'm really feeling scared, I don't want to go?
J15	EE 23.47	Generally speaking, in a macho environment men are less inclined too, you only have to look at the PTSD thing, nobody complains to you although they are suffering in silence. It is not done.
J16	EE 30.04	The Army macho culture, then there is less chance of them coming forward.
J17	LL 26.27	The stigma attached to it. You know Officers don't become depressed.
J18	MM 37.00	And they have moved to a rank where people behind then, they have to justify being in that rank. So they get into a pretty difficult position that they cannot back down from. And going back, say, saying I can't cope with this is just not acceptable.
J19	MM 31.00	There is more of a façade to maintain the image of being a copper, being a bloke, and then there is being a woman.
J20	CC 39.31	A psychiatric nurse, a shrink, a nut nurse, a handbag ..... labelled as "a crying woman or an American."
J21	EE 14.32	How do you complain to someone, saying I'm really worried, I'm really

		feeling scared, I don't want to go... They really are not functioning and that is the balance, you know, between, you know going to go to war versus I can't.
J22	QQ 19.15	I think there is more of a perceived stigma from individuals who are male. So there're more worried about coming along in the first place. Males.
J23	KK 27.21	I intuitively feel that maybe it's easier for girls to come and see us because it's more of a macho thing for the blokes.
J24	VV 30.21	And I think that translates across into the Army as well. And it's probably magnified in the Army because of the macho culture amongst males in the Army. There is probably a bit of a macho culture amongst females in the Army as well.
J25	EE 23.47	Macho environment men are less inclined too...complaints.

Box 6.3 Grounded Theory Theoretical Coding and Development:
Example " The Army Macho Culture"

This dialogue was reviewed time after time by the author to remove duplication, ensure comments were in the right area and to produce a story that reflected the interviewees' perceptions and opinions, and these subcategories were then subsumed into the main categories that are described in the results section of this chapter and form the basis for the report in the next chapter.

Checking Results with the Research Sample

Grounded theorists are directed to go back to the subjects with the initial results and refine them in light of their reactions, checking variations by taking an idea back to the research sample for confirmation and if needs be to gather new data to elaborate the categories (Reason & Rowan, 1981). However, it was recognised before the study commenced that this would not be practical for reasons such as the wide geographical spread of the respondents.

SECTION 3: RESULTS AND ETHICAL CONSIDERATIONS

RESULTS

Nineteen interviews were conducted, that lasted between 32 minutes and 63minutes; producing nearly 14 hours of information and generated 146,661 words of data. In 1 interview, the first 7 minutes only were recorded due to a technical problem. The mean age of respondents was 42.79 years, with a median 42 years and mode of 47 years. SD 5.503, with a minimum age of 33 and a maximum of 52, the range being 19 years. 79% (N=15) of the respondents were male and 21% (N=4) were female. 68% (N=13) were married; 21% (N=4) were single and 4% (N=2) divorced.

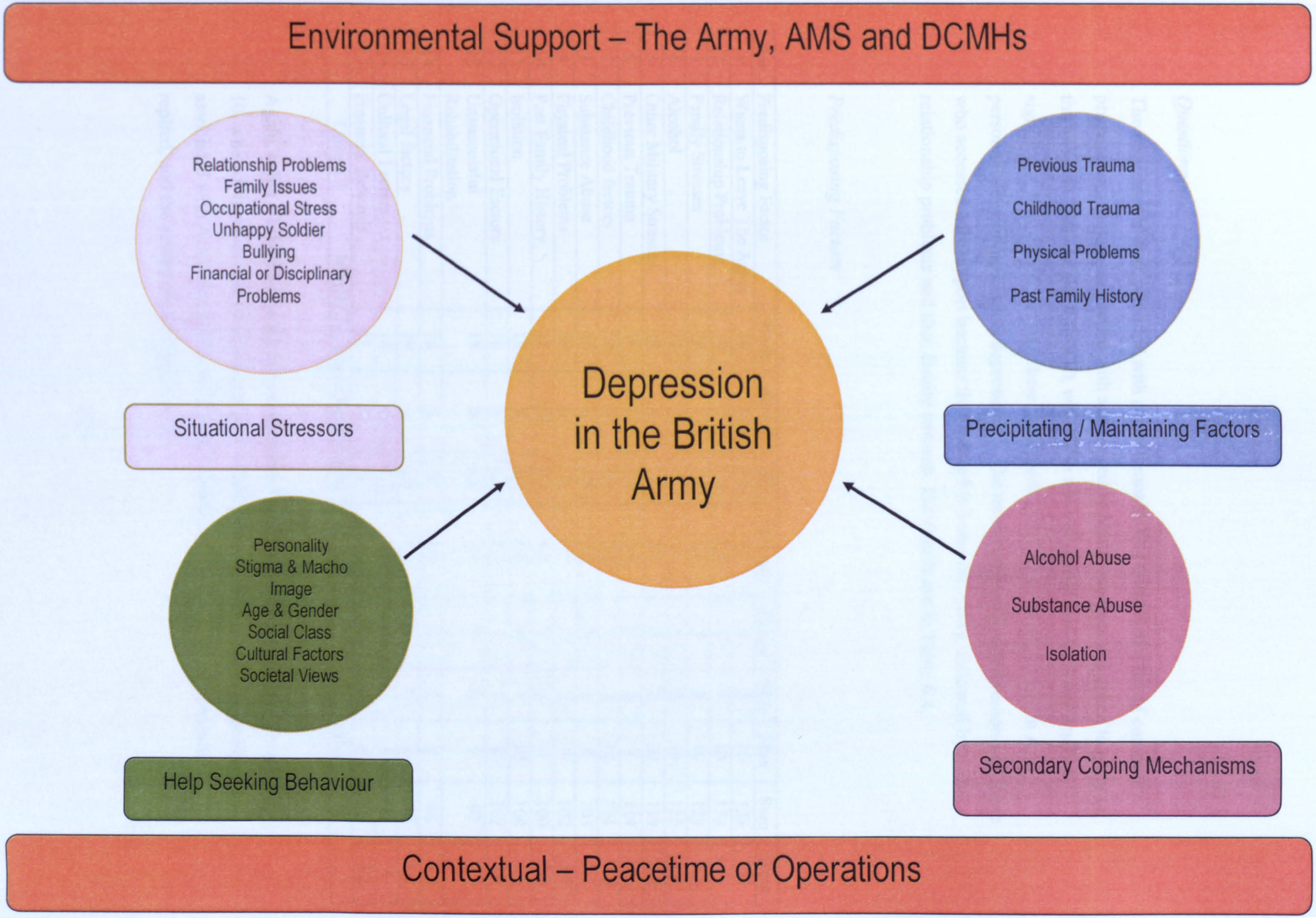
84% (N=16) were nurses and 16% (N=3) were consultant psychiatrists. Their qualifications included 84% (N=16) being RN (MH); 53% (N=10) were RN (A); 37% (N=7) held a Diploma; 48% (N=9) a Degree and 26% (N=5) an MSc. The mean and median number of years employed by the MOD was 20 years, mode of 16 years, SD of 8, with a minimum of 10 years employment and maximum of 38 years service, providing a range of 28 years. 95% (N=18) had deployed on an operational tour of duty, with the mean of 3.6 tours, a median and mode of 3, SD of 2.036 and range from 0 to 7. Areas where the cohort had served are listed in Table 6.3.

Area of Operations	Number	Percent
Former Yugoslavia	14	74
Northern Ireland	9	47
Iraq	14	74
Afghanistan	5	26

Table 6.3 Areas and Number of Times Respondents have Deployed

Initial coding indicated 27 categories that are presented in the previous section in Figure 6.1 and Table 6.2. Analysis of these elements led to the identification of 4 major clusters; predisposing factors, precipitating / maintaining factors, secondary coping

mechanisms and help seeking behaviour. There were issues related to the contextual differences of peacetime and operational settings; and the support provided by the AMS, DCMH and Unit Command. These are presented graphically in Figure 6.2. These factors led to theoretical groupings under the headings of: (a) Occupational Stressors; (b) The Macho Culture, Stigma & Bullying; (c) The Unhappy Young Soldier; (d) Relationships; (e) Gender, and (f) Symptoms and Secondary Coping Mechanisms. These factors will be discussed in depth in the next chapter. However, the respondents also provided balance by highlighting the benefits of military life which is discussed in the last section of this chapter commencing on page 218.


Environmental Support – The Army, AMS and DCMHs
Relationship Problems
Family Issues
Occupational Stress
Unhappy Soldier
Bullying
Financial or Disciplinary Problems
Previous Trauma
Childhood Trauma
Physical Problems
Past Family History
Depression in the British Army
Situational Stressors
Precipitating / Maintaining Factors
Personality
Stigma & Macho Image
Age & Gender
Social Class
Cultural Factors
Societal Views
Alcohol Abuse
Substance Abuse
Isolation
Help Seeking Behaviour
Secondary Coping Mechanisms
Contextual – Peacetime or Operations

Questionnaire

The respondents were provided with a questionnaire that contained a list of common predisposing factors associated with admissions to MMH services and asked to reply to the question "On a scale of 0 to 10, where 0 is not significant and 10 is extremely significant; how would you rate these predisposing factors as being factors in Army personnel developing clinical depression?" The most commonly noted reason was those who accessed MH support because they wanted to leave the Army, followed by relationship problems and then family stresses. The results are in Table 6.4.

Predisposing Factors

Ser	Predisposing Factor	Reply	Medium	SD	Variance	Range	Min	Max	Sum	Mean
1	Wants to Leave The Army	19	8	2.6	6.7	8	2	10	138	7.3
2	Relationship Problems	19	7	1.6	2.4	6	4	10	133	7
3	Family Stresses	19	7	1.8	3.2	7	3	10	129	6.8
4	Alcohol	19	7	2	4	8	2	10	125	6.6
5	Other Military Stresses	19	6	1.7	2.8	6	4	10	119	6.3
6	Previous Trauma	19	6	1.9	3.4	7	2	9	114	6
7	Childhood factors	19	6	1.7	2.8	7	3	10	111	5.8
8	Substance Abuse	18	6	1.8	3.2	5	3	8	103	5.7
9	Physical Problems	18	6	2	3.9	7	2	9	102	5.7
10	Past Family History	18	5.5	2.1	4.3	7	2	9	100	5.6
11	Isolation	19	5	2.2	4.8	9	1	10	104	5.5
12	Operational Factors	19	6	1.9	3.7	7	1	8	102	5.4
13	Unsuccessful Rehabilitation	18	6	2.7	7.5	9	0	9	97	5.4
14	Financial Problems	18	5	2	4.5	6	2	8	86	4.8
15	Legal factors	19	4	2.4	5.6	8	0	8	80	4.2
16	Cultural Factors	18	4	2.3	5.3	7	1	8	72	4
17	Financial Rewards	18	2	3	7	8	0	8	57	3.2

Table 6.4 MMH Clinicians Questionnaire Responses: Factors Leading to Depression

Again, using a Likert Scale the respondents answered the question, "On a scale of 0 to 10, where 0 is never and 10 is always: how would you rate these symptoms as being associated with Army personnel developing clinical depression." All 19 respondents replied, and the results are in Table 6.5.

Symptoms

Ser	Symptom	Medium	SD	Variance	Range	Min	Max	Sum	Mean
1	Low Mood	8	1.3	1.7	4	6	10	158	8.3
2	Sleep Disturbance	8	1.1	1.3	4	6	10	154	8
3	Lack of Motivation	7	1.7	3	7	3	10	133	7
4	Lack of Interest	7	1.9	3.7	7	3	10	126	6.6
5	Lack of Confidence	6	1.6	2.6	7	2	9	115	6
6	Discouraged About Future	6	2.2	4.7	9	0	9	114	6
7	Tiredness	6	2.2	4.9	7	2	9	114	6
8	Poor Concentration	6	1.8	3.4	7	2	9	113	6
9	Thoughts of Self Harm	5	1.96	3.8	6	3	9	113	6
10	Feeling of Hopelessness	7	1.9	3.4	8	1	9	112	5.9
11	Change in Appetite	6	2.4	5.9	7	1	8	101	5
12	Loss of Interest in Sex	5	1.9	3.8	9	0	9	97	5
13	Poor Body Image	5	2.5	6.2	7	0	7	78	4
14	Pain	4	2.5	6.2	8	0	8	77	4
15	Aim to Commit Suicide	4	2.8	7.7	9	0	9	76	4
16	Headaches	4	1.9	3.4	6	0	6	62	3.3
17	Nausea	1	1.9	3.4	5	0	5	42	2

Table 6.5 MMH Clinicians Questionnaire Responses: Symptoms Associated with Depression

All from 19 Replies

ANALYSIS

The data was analysed used a traditional grounded theory. The author gave significant thought and consulted widely regarding the benefits and shortfalls of using a qualitative computer assisted programme to support the analysis of qualitative data. Computer Software for Qualitative Research (CASQAS) operates to the same principles as SPSS for the quantitative data, with the advocated advantages that CASQAS would ensure the comparison of cases was systematic rather than impressionistic, and if coding had occurred in a number of cases then a qualitative computer programme could rapidly indicate which one shows a phenomenon and association against a number of cases. However, the author opted for the conventional method to experience a traditional completion of a grounded theory analysis.

Ethical Approval

Data from qualitative research is "*personal, identifiable and idiosyncratic material so that questions of confidentiality and anonymity are raised in particularly sharp form*" (Mason, 2002). From a ethics perspective, it was important to note that similar studies have received ethical approval and have been published (Hesse-Biber & Dupuis, 1995; Crawford et al, 2009) and the research cohort in this qualitative study were competent adults, all of whom were MH practitioners currently working in clinical practice. It is acknowledged that in previous studies clinical staff have indicated that they were not aware that they could refuse to participate in research (Griffiths, 2006). Therefore, taped interviews were only conducted after the author obtained written and informed consent achieved by providing participants with all relevant information, including the information sheets at Appendix 6.3, detailing the rationale for the research and the author's contact number should they wish to discuss any aspects of the study. This contained sufficient, easily understandable information to allow the subject to decide whether to join in the research or reject the offer to join in this voluntary study and they understood that they could withdraw consent at any time. This direction included an understanding of the measures taken to ensure anonymity by strictly concealing participant's names in reports and publications, and that no information would be traceable to the contributor, with lettered codes used to reference their comments rather than their names, for example "AA stated that...". Therefore presentation of the findings is intended to protect the anonymity of respondents by coding their responses, for example AA, BB; and no further information is provided. The author completed all the transcribing of the audio tapes, rather than relying on secretarial support, and kept the interviews on a password protected computer. As a result all contributions were voluntary and each subject was aware of how the information would be used, for example in peer review journals, presentations, on television or radio and who would have access. These measures complied with UK guidelines (Central Office for Research: Ethics Committee, 2005), and were detailed in an accepted proposal for ethical approval from the MOD Research Ethical Committee and Birmingham City University Degrees Committee.

Providing a Balanced View

Before moving on to identifying and evaluating the predisposing factors leading to depression, the final section of this chapter will try to provide balance by detailing the interviewee's opinions regarding the benefits of Army life and the elements involved in the construction of Army culture. All of the respondents offered their views in the present tense, and to provide a clear reflection of their opinions, and in an attempt to tell their story as seen through the eyes of the respondents, then the author's narrative in the next section and Chapter 7 will also be in the present tense.

SECTION 4: BENEFITS OF ARMY LIFE, THE ARMY FAMILY AND CULTURE

RESPONDENTS' PERSPECTIVE

The Respondents' Views of their Service and the Soldiers they Serve

Interviewees were members of the AMHS, which they perceived to be a capable, multi-disciplinary clinical organisation, providing soldiers' with a medium for sharing problems, whilst providing recognised treatments such as CBT, and acting as the soldiers' advocate. They recognised that the AMHS differed from civilian practise by providing an occupational MH service that made recommendations regarding a soldier's suitability for Service, whilst assuming that soldiers' with MH problems would return to work. AMHS clinicians have experience treating disorders such as adjustment reactions, and respond to serious risk issues, such as a soldier's capability to handle a live weapon. As a result, clinicians may inform the chain of command of the patient's condition whilst assisting units to address MH issues. The critical mass of Army personnel are fit, young, strong men, and they provided the majority of DCMH patients, but a key point was that AMHS personnel recognised that they only assessed soldiers' experiencing MH problems, and therefore their views could be skewed, as highlighted by CC:

> *"I think it's difficult because being in mental health you can get a very skewed vision of a lot of the guys." (S142)*

Measureable Benefits of Army Life

There are factors that reduce the presentation of depression in the Army. Moderate to serious depressive illness, along with other severe MH disorders are screened out during the enlistment / Commissioning process, and the military population is fitter than the national average. FF reflected on this issue:

"People who come to the Army are generally well, and do not come in if they have mental health problems in the past. So all those things are protective factors." (B1)

Once a soldier has enlisted, military lifestyle impacts on all aspects of their existence, and incentives provide significant measurable benefits. These remunerations are available before the soldier joins with university bursaries, and then there is guaranteed employment, good regular income, an excellent pension and ample annual leave. Reasonable housing is available, and as the soldier is promoted then the accommodation improves. They are well fed, clothed, have access to tremendous adventure training, and physical fitness which enhances MH is promoted. The Army provides soldiers' with career opportunities that are not available in civilian life, and they have exceptional opportunities to develop an employment profile, enhanced by internal and external educational opportunities. The Army provides status and recognises achievements with military awards. CC explained some of these factors:

"Yes, there are some incredible positives. There is the fact that everyone is housed, you can give a young private with 4, 5, 6, kids, will begin a 3, you know, a 3, 4 bedrooms house. You know, someone in middle management, a senior NCO with 4 children, you know is given a 4 bedroom house in Church Crookham. ... people have, you know, money to buy smart clothes, to but smart cars, and to go out and socialise. There is the group cohesion issue.....there is the feeling of belonging, the feeling of worth. There is the commonality issue, we all wear the same uniform, even though we are from very different areas and different backgrounds. We all wear that same uniform, we have all done the common military syllabus, common military training. I think there is those issues. We train hard together, we work hard together, we have a disposable income, we are all fed, we are all housed. We have opportunities for development that you never get outside. People can do Diplomas, Degrees, even Masters. People can do ECDL, there is the education centres that can push forward. If people are directed by either the OCs or there senior NCOs by mates, by Corporals, whatever, then there are these opportunities that really good to get people out and to do things. ... they have fantastic opportunities for development, there are things such as adventure training where you are paid to go away. There is a feeling that you have done a good job. Feel that you have been brave, the parades, the medals, ... when the whole nation is behind you, you feel proud to have contributed. I think a lot of the guys are really proud." (Y1)

Rewarding the Team Player

The Army sets high standards, and expects personnel to meet these principles. Army doctrine is enshrined within an ethos of strong-team ethic rather than individual performance, and once recruits have enlisted / Commissioned then the Army begins to shape them to best meet this doctrine. As FF stated:

> *"You have to work in teams, you have to suppress your own individual wants and needs for the greater good of the team." (R9)*

This remoulding of the individual enforces restrictions that impact on personal control, but many soldiers choose this life style, welcoming a structure that appeal to personnel who prefer to be directed. As EE realised:

> *"I think, the transition from no boundaries to boundaries is I think one of the very positive things the Army does for people who come from pretty shit backgrounds." (Y45)*

Thereby the Army promotes group cohesion, through employment, tasks, uniforms and symbols, offering stability, camaraderie and homogeny; achieved through social bonding, living in close proximity and projected in a strong allegiance to the Regiment. The Army thereby provides a protective "family", with a community based on shared values, experiences, and socialising. This is accelerated when recruiting from local communities, and through overseas postings, when with Infantry Regiments, the whole unit move and deploy together, providing a better infrastructure for support. This bonding can be extremely rewarding, as CC stated giving a "*sense of belonging, a feeling of worth*" (R5) and team players do very well, sharing a supportive Esprite de Corps and soldiers learn to depend on and trust their colleagues. Even then, high-quality units can accommodate introverted personnel who do well, and everyone in a unit will have some friends. The end result is a community, of predominately young fit men who are extremely proud of the job they perform, with a sense of belonging within this caring organisation, and prioritise fighting for colleagues above Government and

foreign policy, and will go to extraordinary lengths to demonstrate their loyalty, even dying for each other. FF stated:

> *"Cause most of the boys, again go back to 3 Para, that battle group scenario, most of them go out there cause they are with their friends and they are fighting for their friends, not for the Queen, not for the government or foreign policy. They are going out there to enjoy it, cause that is what they are trained for, they are going to do a job that they know they can do and they are capable of, but they do these things for each other, for the name of the Regiment, for the history of the Regiment, the cap badge." (H5)*

Within this structure, sub cultures are promoted, for example for commonwealth troops such as Fijians and Ghurkhas, and reinforces the supposition that only other soldiers, including veterans, understand Army lifestyle.

The Army rewards personnel who make an effort, whilst penalising those who under-perform, and those who have served for several years are immersed into the system. Soldiers' are given responsibility, allowing them to cultivate and demonstrate their strengths, and they thrive. KK highlighted these benefits:

> *"People can thrive on that and they can grow and if they can access that support then they will get through difficult situations." (Y52)*

Whilst personnel from stable backgrounds do very well; the Army also provides opportunities to personnel from poor, under privileged areas and dysfunctional, even abusive childhoods. The Army provides an escape route, preventing the soldier entering a life of crime, and providing the stable family these soldiers' had never experienced, and adversity in youth can prepare them for the hardships that follow. CC identified these issues when he stated:

> *" I think when you are looking at people coming from, from some very hard areas; I think we often do get some very damaged people. It's why people join; it's what I was going to talk about, those who are actually running away from something. Well, well the Army is the here and now. I think, equally we recruit some very, very damaged people. And a lot*

> *of them do very well, but a lot of them have come from, you know, physical abuse, sexual abuse, drug, heavy drug background, and so on." (Y42)*

They use the military to hold their life together, and enlist or commission for these reasons, and perform extremely well and build excellent careers, despite the mounting pressures.

A Caring and Supportive Organisation

The respondents stated that despite common perceptions, the Army is generally a very supportive, caring organisation, especially to senior personnel, and should a soldier incur hard times or MH problems then the Army is more responsive than civilian employers in supporting depressed employees. VV outlined how this works:

> *"I have always believed it to be true because there is a more rigid and tighter framework of what is acceptable conduct and behaviour and appearance. Among soldiers, anybody who steps outside of that framework is going to get picked up much earlier. So that in civilian life you may have someone whose unkempt, unshaven, abusing alcohol, you know, not caring for himself, loss of motivation, for weeks or months or even years, before anybody is bothered. That can only go on for a couple of days within the Army, and so we nip an awful lot of problems in the bud." (Y41)*

Even with traditional problems enmeshed within Army cultural such as the acceptance of alcohol misuse, the interviewees reported a positive progressive shift, due to better education; for example, lunchtime drinking is less acceptable. There are many examples of excellent units, with strong and fair leadership, and Commanders who are fully versed on the MH of their troops, and there is early identification of vulnerable personnel, and problems are nipped in the bud, including those who drink excessive amounts of alcohol. In particular, smaller, more technical units provide better support, such as the Army Air Corps, Artillery and Engineers. Fully engaging with the soldiers family, especially with younger inexperienced staff, is beneficial, as is stability through extended periods in one location and fewer disruptive postings, and allowing personnel to influence where they serve. Excellent welfare support is provided including financial

advice, and medical care. Troops are supported, and Commanders will remove troops from duties and do everything they can to help, such as providing soldiers' with a compassionate posting. The end result is an extremely loyal and committed workforce, who do not feel stigmatised or weak. NN provided an overview of the process:

> *"We speak to the unit, liaise with MAOCHs, and say is there any way we can get this guy on a detachment because he needs to be near to his family for the next 6 months because his mother is dying. OK, we will put him in a recruiting office in his home town for 6 months or a year, will that do? Well amazingly his low mood, depression and everything is cleared. And the Army is wonderful, going out if it's way to do this for him. So you have a soldier with far better loyalty." (H55)*

Excellent Medical and Mental Health Support

When appropriate, troops are encouraged to seek formal medical support, and referrals made to a suitable agency. There remains a small number who attend for a MH assessment as a result of a third party intervention, such as being directed by the chain of command, however even these paternalistic interventions can be effective, beneficial and supportive, especially when the patient has no insight into their problems and those that have no comprehension of what the AMHS offer. Those aware of the care available within the AMS, respect the service, and when they have a problem, the vast majority access healthcare voluntarily, willingly seeking assistance, for appropriate reasons. This help seeking trend is in part due to their Army training that has taught them to be fit for task, in both mind and body, and they are an open and honest group. FF highlighted how these factors proactively influence the referral:

> *"Well by the large it would be voluntary, but forced I think would be a strong word. If I use the beloved xxxx cause I am working with them. But if someone has an alcohol related, violent crime being investigated then they may say that you need to go and get some help with your anger because we believe that it is attributable to operational service. And the soldier will usually listen to that advice as they respect their seniors. And therefore they say go and get help from the doctor and then subsequently us then that is what you should do. But I think the majority would come because something has happened and there is a*

realisation that, you know, that it has gone on for 3 months. My wife has been chipping away at me, my girlfriend, my family have been chipping away at me, my boss has mentioned it and maybe enough is enough so I have to do something about it. So something might be a eureka moment, some people might need to be guided that way and there may be a kind of very small proportion that are ordered, maybe drink related problems, but look go and sort yourself out." (Z43)

Soldiers' are aware of the specific MH treatments, having accessed the Internet for details of depression and management options such as anti-depressants and CBT, and they expect good treatment and a positive outcome. The AMS then provides an occupational health service, in medical centres that are normally collocated with Army units, and contain GPs, nurses, and other clinicians. To the civilian population, including medical colleagues, the AMS can seem an intolerant, tough organisation, where GPs are persuasive regarding MH referrals, although these are nonetheless appropriate. However, there is rapid assessment and treatment that is much quicker than in civilian practice, with soldiers' more likely to be seen by a doctor rather than taking sick leave, as they would in the NHS. For older, senior personnel, the UMOs are very supportive, providing a wide choice of treatment options. For these reasons, proportionally fewer Warrant Officers and Officers are referred to military DCMHs, and if they are, they rarely fail to attend.

The AMHS clinicians view depression as a treatable illness, and soldiers' are cared for before they reach crisis or self harm, and most are retained in the Army. AMHS personnel are flexible regarding treatment protocols, understanding their clientele, and not always adhering to NICE guidelines such as "watchful waiting". Patients are allocated at least an hour per interview, and there is sufficient time to build a therapeutic relationship. DD explained how this occurs:

"Particularly, as we have the time, we have a least an hour, to speak to them as to why they are here and what our goals are, and just as importantly explaining what we can't do as what we can do. And the idea I give to people is that the chances are that they are not going to be mentally ill and at the end of the assessment they will get a certificate saying pretty much that. Not many of us have a sane check and they will, well you know, they are worried about you and like I said there is

nothing to be worried about and away you go. So once they are here it's fine." (S47)

Irrespective of rank, everyone is treated equally, although AMHS clinicians are sensitive to how difficult it is for Officers and seniors to access support, and how distressed they are. In good units, CPNs provide support within unit lines and therefore can access and advise the chain of command, and not having to travel is an important issue. The majority of interviewees stated that soldiers are not concerned about medical confidentiality, even in sensitive cases, and when medical information is provided back to the unit, the patient agrees to the disclosure; and medical confidentially is not compromised, and only occasionally do things go wrong. LL touched on this issue:

"I think a lot them will not care whether their unit knows or not knows. I think a lot of them will want their unit to know that they are being seen. They may think that there is some sort of secondary gain. Or on a more positive note they might actually want the unit to know so they, they very often will have a very good working relationship with their chain of command." (B78)

which is reinforced by NN:

"Patients are confident that medical in confidence will be maintained...and the vast majority of patients have a great deal of faith and trust in the military medical services and the way we run things." (B79)

When treatment is completed, in these capable units the soldiers are welcomed back from illness, not stigmatised, and generally a MH problem does not negatively affect their career.

However, there are numerous pressures for Army personnel that lead to MH problems and distressing symptoms and these are discussed in the next chapter.

Chapter 7

Predisposing Factors and Associated Symptomatology Leading to Depression in the British Army

The Views of Army Mental Health Clinicians

A Qualitative Study

INTRODUCTION

This chapter details the AMH clinicians' views regarding the predisposing factors and associated symptoms leading to depression within the British Army. The findings indicated that the presenting categories resulted in the formation of 4 major clusters; predisposing factors, maintaining / precipitating factors, secondary coping mechanisms and help seeking behaviour. There were issues related to peacetime and operational settings; and the provision provided by the AMS, DCMH and Unit Command. These factors led to theoretical groupings under the headings of: (a) Occupational Stressors; (b) The Macho Culture, Stigma and Bullying; (c) The Unhappy Young Soldier; (d) Relationships; (e) Gender and (f) Symptoms and Secondary Coping Mechanisms. All of these issues, which can be directly attributed to interviewee observations, will now be discussed. As the interviewees offered their views in the present tense, and to provide a clear reflection of these opinions in an attempt to tell the story as seen through the eyes of the respondent, then the author's narrative will also be in the present tense.

Occupational Stressors

The respondents stated that Army lifestyle is traditionally one of constant turmoil and changes in employment, role, environment and accommodation, yet pressures are continuing to increase due to the Army being over stretched and senior management being less responsive. As retention gets worse, the pressure on those who remain is exacerbated and military service and culture combined with lifestyle problems result in unique multi-factorial stressors that are often incremental / accumulative in nature and result in depression, as LL stated:

> *"It will very rarely be just one issue.... they are you know unhappy with their work, or it's a social problem of some sort." (G17)*

Occupational issues include the working environment, extreme workload and long working hours, often aligned to ridiculous timelines, with personnel sent work when on leave or at home. Therefore incentives designed to reward soldiers, such as promotion, bring extra pressures, especially if someone is promoted above their ability. KK identified these issues:

"Significant life events in that they are all accumulative. And promotion, well of course that can mean a posting. It can mean extra responsibility; it can of course mean doing a job for perhaps, one which you were not prepared for. Either you haven't had the training or you feel that you do not have the confidence. And sometimes people are promoted and are not adequately prepared for their new job. And of course we know that sometimes people are promoted above their ability, simply because it's the done thing, it's just the ways things happen. And some parts of the Army promotion is on time rather than on merit necessarily. So it can be more stressful." (H26)

Frequent Postings

Alternatively, the disruption associated with regular postings brings pressures not faced by many civilian counterparts, and soldiers are frustrated at the recognition that once settled in an area they will be moved after 3 years, having to move home, and children change schools. This is exacerbated when it is an unpopular move, and frequent changes of managers negatively affect promotion opportunities, and lack of promotion when a career is not progressing in the way they intended leads to disillusionment. A posting soon after returning from an operational tour negatively effects team building, at a time when soldiers need the continuity of friends and commanders, and personnel "outside" of the team, away from normal social constructs, find themselves isolated. PP highlighted typical problems:

> *"So those that are less articulate or those who are low maybe moving to a new unit, and often it's that difficulty in integrating. If they already have problems and they are not integrating then that actually segregates them further. You are just going to exacerbate their symptoms even more. I don't fit in; I can't get on with these people, just want to go home every weekend. Feeling really down, I'm feeling very low." (M9)*

Accommodation issues, especially the march in process is stressful, and single personnel often live in poor housing, or sharing a room that leaves little room for privacy. This constant interface with the same colleagues can be overpowering for personnel low in mood, particularly on foreign postings, although interviewees' acknowledged that accommodation had significantly improved. In UK single accommodation, with troops returning to their family home at weekends, resulted in virtually deserted barracks and those within them isolated.

Physical Injuries, Situational Stressors and Personality

There are also mounting numbers of hostile operational tours which is discussed as a separate issue later in this chapter. There are increasing numbers of soldiers with physical injuries, many operationally attributable, including mortar, and shrapnel induced wounds that resulted in soldiers' being severely disabled and medically discharged. There are also non operational physical complaints such as back problems that effected promotion and career opportunities, and have a significant impact on MH. Peacetime duties can be mundane and boring, and there are situational pressures such as financial and / or disciplinary problems and distressing major life events such as relationship and family troubles and bereavement. GG honed in on these issues:

> *"I talk of work issues, relationship issues, financial issues, again leading to the mood state. Genuine changes in mood that is unexplained. Issues around bereavement or loss, there are parental issues of separation, which seems to impact quite significantly on some individuals, you know parents are separating or splitting up. And it's usually, oh they've split up a year or so ago, this in the 25 age group, it seems to be a real big issue, that parents are separating even though they had a really rough life, you know, and, and around the career." (G32)*

Army personnel must have the ability to adapt and make new friends, and their personality will influence whether they seek MH support. KK touched on these factors when he remarked:

> *"You are moving your home, even if it's just one barrack block to another barrack block. You are changing your peer group and especially if you are trickle posted you are not moved with your peer group. It means new limited friends in a strange place. So moving house, changing job, plus the usual deployment commitments. First making and breaking friendships. Promotion, and that is just the normal ebb and flow of Army life. You know, the, lots of life events and these can, certainly in vulnerable people make them more predisposed to developing psychological problems." (F21)*

THE MACHO CULTURE, STIGMA AND BULLYING

The Army's competitive; predominately young male environment is full of black humour and a bastion to the macho image. There is an expectation that soldiers' maintain "a stiff upper lip" and apply stoicism, as "big boys don't cry". The Army macho image is not necessarily

conscious or accepted, but stems from traditional military culture, and for good reasons, as the Army require robust, tough troops, who are resolute and risk their lives, and can function within challenging environments where many civilians would struggle. As CC observed:

> "*We don't want to be a pink, fluffy, holy organisation that's not what we are, it's not the job that we are about*" (J8).

This is reflective of the macho cultures defined hierarchy, from the super tough parachute and infantry regiments who have the most dangerous jobs and high operational commitments. Within this structure, some interviewees' reported that stigma is no worse than in the general population, and even where there were issues, this perception of MH problems equating to weakness is changing, with less negative connotations due to the regular involvement in stressful and hostile tours of duty. As DD stated:

> "*Gone are the days when Generals could use phrases such as lack of moral fibre, they are completely weak....it's much more tolerant. From the very top the culture is changing, towards the suitability of mental health.*" *(F36)*

It is therefore acceptable to seek support for operationally related PTSD, bereavement or relationship problems, but if the cause of the problem is deemed by colleagues to be not serious, then stigma occurs, and depression has a negative overtone.

Other interviewees stated that stigma is entrenched in the military's macho culture, and to be combated the leadership of the Commanding Officer (CO) and senior unit personnel is vitally important, for if they address the causes of the soldiers' distress at a local, regimental level, then many would not be referred to the AMHS. As AA explained:

> "*If regimental staff are taking their role seriously then... a lot of these people would never have a requirement to attend our department because people have intervened in the first instance.*" *(H114)*

Problems occur when the MH tolerance and support advocated by the CO is not enforced at grass roots level or when a supportive CO is posted and replaced by an apparently less responsive Officer, although there may be mitigating circumstances such as meeting pressing

objectives when the focus on MH issues might be diluted. In addition, external pressure from Brigade HQ, such as the monitoring of Did Not Attend rates, can result in censure of a CO, and together with issues related to Deepcut[1], can result in soldiers being directed to the medical centre by their chain of command just to avoid criticism. Without leadership, young, inexperienced Officers will distrust MH patients, especially their ability to handle live weapons, as identified by CC:

> *"So I think there is this stigma issue. There is also the fact that young, inexperienced commanders are more twitched, because you have got a live weapon." (H32)*

In these circumstances, MH problems are viewed as an illness, and dealt with poorly. Males in particular are concerned about negative labelling, even for trauma related issues, and are often penalised, with occupational examples of punishment and troops being publically humiliated and labelled such as biffs, wasters and knackers. SS provided an example:

> *"One battalion here who have an awful time. ... told they are wasters, they don't get any PT, they do remedial PT, they get put on guard although they have chits to say that they can't do PT. They get put on and then they have to find a replacement themselves. Which just reinforces their low mood and their depression and their sense of being useless." (K18)*

Whilst TT added:

> *"When I was in Bosnia, I went to the camp, and the BSM was standing there, and he had everyone standing there. And the guy I was seeing, was standing there, and he said, Oi you, Loony, you get away, you are not good enough to stand with us. So very publicly humiliated, that's in front of the whole Regiment." (Q5)*

These pejorative names negatively effects theses recipients, who tend to be loners, and inexperienced personnel and acts as a barrier to seeking MH support. Personnel are also wary of colleagues with MH problems, especially if they are due to go on operations, or have previously been returned from theatre, which as SS stated:

---

[1] Reference to the 4 high profile suicides that occurred within Deepcut Barracks between 1992 and 1995.

"Reinforces their low mood and their depression and their sense of being useless." (K18)

Harassment and Micro Management

Respondents stated that there is a fine line between robust management and bullying, particularly within the ranks, although the more common form of harassment is associated with personality clashes, where individuals feel unfairly treated. Pressures are exacerbated by rank and hierarchal structures, and tough boundaries, where the Army can be unforgiving. The Army has some very poor mangers, and the negative impact of micro management places extreme pressure on the recipient with a soldier labelled as a "*problem,*" and someone who does not fit in, and directly lead to MH referrals. PP stated:

> *"There are some dreadful managers out there. I think that is about the personality of the person who says, we should all be able to cope with everything..... dealing with people, and useless at it. But there are units unfortunately that have a perception, particularly with the infantry, who have a perception that it's about weakness, it's about failure." (HH88)*

When a soldier is treated differently by their peers, then it has an enormous negative impact. MOD is sensitive to ED problems; have issued a robust policy, and impose unique sanctions on offenders such as a court martial. However, despite awareness of these guidelines, soldiers still feel disempowered, and sometimes believe they deserve the criticism for being weak. Some units do not tolerate those who confront the chain of command, and penalize personnel who try to apply ED policy. SS highlighted the issues:

> "I've *got one at the moment who is P7, home only, with a really bad back. She has been put on guard 3 times in the last week. She has got chits coming out of every orifice and they don't take any notice of them. No. And it's the unit's responsibility. You can keep on chalking it up to occupational health as much as you like. But nothing seems to get done. I've raised the issue with the unit medical officer, so he can raise it in the unit." (Q14)*

Therefore, there is little confidence in the ED system, with personnel reporting being known to the ED Officer. Of note, there are instances of bullying, however these are rare, and there are instances when personnel report being bullied wherever they go, being "serial bullied" and constantly adopting the victim role.

Age and Rank

The older and more senior ranks often remain in Service until the end of their career, when the majority are then aged in their early 40's. During their career they have re-evaluated their commitment to the Army, and are focussed on other prioritises such as family life and are tied in by financial rewards. SS provided an example when he stated:

> *"People's priorities are shifting, and the more they encounter out there, cause I am seeing a lot of people post tour now. That the more they experience the more their priorities are shifting, even the older robust soldier, his priority is shifting towards family life. And when you see death and destruction, and you are being fired upon regularly, it makes you evaluate your own life as well and what you want for the future. And many people we see now are, are going all that way. They are putting themselves before the Army, whereas before the job always came first, and they are starting to reprioritise their own existence now and what that means. So, it's becoming a job more than a way of life." (U43)*

There is a myth that senior rank offers protection from MH problems, yet they feel they have an image to uphold in being strong for their troops. They are also worried about stigma, even when they experience MH problems that are operationally attributable. Despite facing extensive pressures, Officers and seniors believe they should cope, and even in high-quality and supportive units they perceive they will be viewed negatively, as only weak people discuss emotional issues, and to articulate being scared is not done. They want the respect of their colleagues, and are worried about the occupational implications of reporting ill, the negative impact that a MH assessment will have on their career and promotion, now and in the future, and do not want their unit to know. HH stated that:

> *"I think it is associated with the stigma and the older you are; you are less inclined to admit that there is a problem..... likely to affect your future promotion and what people might perceive. Whereas a Tom had only got himself to worry about and not really what other people might think about him." (K32)*

whilst LL added:

" They might be aware of negative things that they may have said about people themselves who might have been referred to the service. You know, he's a bloody biff, or you know, he trying, he's playing the psyche card. Or they may feel hypocritical about that, there could be a number of reasons. It could be because they are looking to Commission and they think it is detrimental to that, or they are looking to be WO2 and they think it will affect their promotion in some sort of way. There could be a number of reasons. But I would image those are the main ones that I have just mentioned." (V32)

They do not want to be the focus of rumours, and either delay or do not seek help, sometimes for years, trying to resolve issues by themselves. They use life experiences to either cope, or try to cope as they seek resolution, and rationalise their symptoms, feeling there is nothing that can help them. They believe they will be viewed as a failure and weak, for disclosing MH problems or seeking support, especially on operational tours, although this is not reflective of the interviewees' experiences. They feel they are no longer trusted; and they feel this labelling is justified, yet continue to work, fearing reprisal and being stigmatised.

Often they are living away from home with expendable funds, become isolated, and as their mood deteriorates, they drink huge amounts of alcohol. NN described the spiral towards depression:

"They can't manage anymore. They can't cope, they can't face it. But they can't leave either because they are in the pension trap, as they see it. They are having problems at work, and they are drinking more. Their relationship is breaking up; the wife they have been married to for 7 years has been unfaithful. The kids are leaving home, they are not needed anymore, and they are not necessary. Life seems to be caving in on them. This I see more with the towards 40 age group." (U38)

It is this older age group that present with a classical depressive illness. Even when given a MH appointment, they will make excuses not to attend, as they find it so difficult. Part of the problem is that there is little peer support for the most senior people in a unit, and deference to rank results in seniors' obvious deteriorating health not being challenged by junior personnel, although the sergeants and Officers Messes can be very protective; a "Masonic" type environment. However, there are few examples of positive role models, such as a CO or Regimental Sergeant Major (RSM) addressing their soldiers saying "I had to go sick, I am fine now." As their career nears completion, it is senior ranks and Officers and older personnel who also find leaving the bosom of the Army stressful, as they then encounter other problems.

Returning to work following a MH illness can be anxiety provoking, and there is considerable stigma associated with leaving the Army due to a psychiatric recommendation.

Confidential Medical Information

Also, due to previous life experiences, such as hearing colleagues MH problems publicly discussed, they are worried about confidentially. As PP described:

> *"I think that some of them are cautious because they are cynical. They are inherently, and this is a generalisation, a cynical population who think that nothing is confidential. Because they can describe something where their OC said something out of turn or whatever. So they have got, so they are, they aren't wholly believing that there is such a thing as confidentiality." (B87)*

and MM observed that:

> *"They know what is said about others so they don't want to be talked about the same way themselves." (B126)*

Some soldiers' believe that within the AMS PHC and MH, and partly due to the layout of the reception areas, that medical confidential information will be inappropriately disclosed, with concerns that as the different clinical and welfare agencies are collocated, then their medical information will seep out, with UWOs, Community Psychiatric Nurses (CPNs) and MOD GPs corresponding with the CO, through forums such as Unit Health Committees, and presume that anything they disclose is going back to the CO. QQ highlighted the implications:

> *"And they worry, sometimes even about the RMO end, certainly people like the unit Welfare Officer, the Padre; they don't see us as being very independent. The Army Welfare Service is seen as more independent, which is quite good. But I think the unit Welfare Officer is very difficult to be independent because they have previously had roles such as the RSM, and they get commissioned and they are the Welfare Officer. But, people do understand that they have the unit Welfare Committee, and the meetings do take place. They can see the rationale for that, but they are still unhappy that they are being discussed by a group of people like that."(B124)*

Alternatively, when seen locally the CPNs become known within the unit, and patient confidentiality is compromised when they are seen attending the MH clinic. If a patient is unlucky enough to need admission to hospital, then everyone knows. Soldiers also distrust local

medics, which is magnified abroad where medical centre staff includes soldiers wives. Notes may not be securely maintained, and non registered medical staff may have access to sensitive information, such as drivers taking personnel to a DCMH. GG stated :

> *"Part 1 orders, you know, I know it has changed recently, but part 1 orders state that Private Smith is to report to the medical centre to collect his appointment. So there was this perception that this was not OK and that everyone knew. Whether it was to have his glasses changed or to have his head attended too. I am not sure that they have total confidence although I think, when we speak to people within the department and we give them the assurance, and I think if you say I am going to discuss this with the unit and they know exactly what you are going to discuss and they are happy for that to happen then I think they are probably reassured at that level. But there is always a perception, and half the time, you know if the duty driver brings Private Smith here for an appointment he knows that he has been to see the shrink. And it 's probably where the disclosure comes from, rather than from ourselves but I think the perception may well be that it is not, it's not as confidential." (B3).*

Seeking Help Outside the Defence Medical Services

Many Officers and soldiers work hard at getting better, but the Army can then follow administrative structures such as a posting which is detrimental to their career and they often end up in the rear party, and there are cases where soldiers are sick at home due to work pressures, for extended periods, without the unit making any contact. It is these units where personnel feel isolated and have no appropriate support for their persistent problems, that soldiers may go absent without leave (AWOL). Officers therefore may not want to be seen locally, especially when work has attributed to their distress, as this compromises medical confidentiality, and they seek support from private civilian agencies, as MM described:

> *"I think there are certain issues, certainly they would rather come to an outside agency where they see a stranger talking to a stranger. In the hope that the boundaries of medical in confidence are not going to go back to their medical centre... a lot of issues of people not trusting their medical centres, and medical in confidence." (B104)*

Others may choose to access a civilian practice hoping to get a different outcome, such as being sent home with a sick note, and may be inappropriately commenced on anti depressants. These

options are not desirable, and have potential dangerous ramifications, as their occupational ability to perform may be jeopardised and they may still deploy.

Antiquated Views of Mental Health

Stigma and bullying within the unique military culture and how the military hierarchy and soldiers view the MH provision has a direct impact on the effectiveness of the AMHS. There remained cases of antiquated beliefs, with the AMHS viewed as being a means of dealing with awkward soldiers with disciplinary problems, and facilitating the removal of these troops from the Army, even when the a soldier does not have a MH issue, leaving confused soldiers attending for appointments. LL stated:

> *"I don't think it's a good thing because people are often confused why they are here in the first place...being told to come here by a CO, well, no it isn't, because a) they don't know why they are here in the first place anyway. I can understand why it happens, because they might be concerned about something. However, the chain of command may refer to safe guard their own position, current political climate and Deepcut, and all the bad publicity we are getting, CMOs* (Civilian Medical Officers) *want to be covering themselves." (H41)*

In units that do not value the guidance from AMHS, then the advice is ignored, and units try to resolve issues that require specialist MH input. When a soldier does not get the support that he / she requires then they may not see any resolution to the problem, and they are likely to be referred to the AMHS as a later time.

THE UNHAPPY YOUNG SOLDIER

A stressful event for one person can be a positive experience for another, and a soldier's personality and preparation before enlistment impacts on their ability to cope with military life, and may increase their propensity for developing depression. Army personnel must have the ability to adapt and make new friends, and their personality will influence whether they will seek MH support. KK touched on those issues when he remarked:

> *"There are lots of life events and these can, certainly in vulnerable people make them more predisposed to developing psychological problems." (F21)*

Survey Two of this study (detailed in Chapter 4) indicated that 47% of young male soldiers, aged between 18 and 22 years old required a MH assessment as a result of wanting to leave the Army. In the questionnaire attached to this section of the study, respondents indicated that young disillusioned soldiers that have to wait for up to 4 years before they could leave due to the terms and conditions of service, was the main reason why Army personnel sought MH support. A prolonged time period to these young men feels like an eternity, and results in MH symptomatology. There are strong reasons why the Army has these restrictions, as it is perceived that reducing the time period and allowing soldiers to leave would have a significant negative impact on workforce planning and is not acceptable due to the effort, training and money spent on turning young people into active soldiers. However, no other organisation has such rigid restrictions, as GG identified:

> *"In civilian world in a normal civvi job, if you are not happy with what is happening at work, whether it be the people or the nature of the work then you choose the wrong job. You can either give notice if they need a months' notice, or you can just vote with your feet and just walk away. In the Army you can't do that. So, I think the restrictions of the organisation probably has a lot to play with the presentation of the illness, and in particular the mood related problems." (D28)*

Recruitment and Enlistment Processes

Respondents indicated that problems occurred as a result of recruitment priorities and the enlistment processes. The Army primarily recruits working class personnel, in often deprived areas containing vulnerable personnel with behavioural and emotional problems related to dysfunctional and abusive backgrounds with unresolved childhood abuse and violence, resulting in personnel who experience difficulty developing interpersonal relationships. FF highlighted these issues:

> *"I would say from my own personal opinion, when you do background histories on these lads who present with difficulties they have had very disruptive childhood's; often abusive, they have had a lot of separations from significant loved ones including mothers and we know those separations are not particularly helpful. In these situations; and divorces, that kind of thing. And these are from the more deprived areas of the north is a classic presentation where they have had several fathers, abusive, drinking, change school several times, no significant family or friends." (S19)*

Their parents are often separated, and unemployed, and the recruit has a history of illicit drug and habitual alcohol misuse, within a culture that seeks support. They have misconceptions of why they join, some to get away from home or civilian related problems, others being pressurised by, or to please their family and influenced by historical inducements, such as relatives serving in the Army. They have unrealistic expectations, perceiving that that will fly through the ranks, but are unaware of even the basic aspects of military life, such as being posted overseas, and when the Army does not meet their expectations they face new challenges that they had not envisaged. RR gave an insight when she described:

> *"A lot of people join the Army because they want to get away from their dysfunctional background. They see the Army as a family, they see it as this camaraderie ship, where they can, you know, they go on tour and everybody is everybody's mate. And they join and they see, well actually, it's not quite like that. And there is a lot of pressure on you, from day 1 really, to be this person, and to get on with your job, as, you know, we all do. But they run away from what they are leaving behind but they run into something that they have no idea of what they are getting themselves into. And then, you know, they see that as right, I've left my family, left this behind but I've actually joined something that is causing me more problems then what was outside. And I think it's just a case of trying to get away from something that perhaps they haven't dealt with. And they have brought that into the Army as well." (C25)*

The enlistment medical should identify personnel who will experience MH problems, and whilst screening could identify some of these individuals, it would also provide excessive false positives and is not recommended. The pre enlistment medical should note softer indicators of MH vulnerability, such as personnel with previous school or employment problems yet there are instances where recruits joined despite having a history of serious depression or psychotic illness. VV emphasized these issues:

> *"Pre-existing illness would be the main one. Most of them turn out to be, to have a history of mental illness before they joined." (C19)*

These issues are missed due to an: over reliance on self-attestation from the recruit; poor assessment by the GP and previous MH issues not being recorded in the medical records. FF elaborated on these factors:

> *"I don't think that the system that we have at present is comprehensive enough or through enough to actually illicit these individuals and do something about it because you could go and see some retired Colonel you know on enlistment and get your FMed 1 ticked for mental disorder so something like on the FMed 1, well that means different things for different people so having a brief period of an eating disorder at 14 may not be reflected on there. Having a behavioural disturbance and an emotional disturbance in your school years may not be reflected and you may have seen an educational psychologist so just childhood sexual abuse issues won't feature in there. So when you are asked the question "any mental health problems?" people just say "No", but they may well have but it is just not screened. And they technically become an irregular entry"* (B4).

The recruiting process should then get the right person into the right trade, as should Army academy or apprentice colleges, however, some end up as square pegs in round holes. Many problems stem from soldiers' being badly advised, either from Recruiters who direct them into an unsuitable employment trade, or at training establishments that are under demand to get vacancies filled and discourage soldiers from leaving in basic training, when the recruit could depart as a right.

There is often a requirement for early, appropriate MH support, although there are restrictions to accessing support during Phase 1 Training due to the recruits' heavy commitment schedule, and they are advised that military life improves once basic training has been completed, or told they can change trade, although they are later discouraged. TT described this spiral in detail:

> *"Going through the assessment especially it becomes a pattern early on, there is dissatisfaction with Service life. And, the questions is that I will ask them is led specifically to that, i.e. I will go through their basic training, how they were recruited in the first, that is, do they have family in the Army, did you join the Army to get away from things? And commonly, the guys will join up to get away from problems at home or to get away from their father. Whatever the situation is. Now that's common again, they will try to get out in basic training and be told a story, "It will be OK when you go to trade training", or go to Phase1 or Phase 2 training. And they will try and get out then and it's "wait till you get to your Regiment, it will be better there". At that point, they are kind of trapped then, and that is common with the guys I see.* They say *"I've written a letter It's been ripped up in front on me, and they say just crack on, you are staying in." Why's that? By the time they get*

to the Regiment they think, well it might be OK, it might be a bit better, they realise that this is not for me. And when they go and do speak to someone they are told, no it's too late. They are told, no, you are now in until you are 22. And there is no way of getting, you know, for someone who is unhappy, there's no benefit for them staying in that 4 years. There is no pension, the older people in the Army, they get in that pension trap where they actually at the 15 years year point now, 6 or 7 till I'm pensioned, I might as well stay another 7 years even though I'm not enjoying it. And they can do that, because they can see the end goal. But for the young guy, his end goal is just getting out. There is no benefit in him staying an extra day, let alone another 2 or 3 years. So again, when you ask, have you been AWOL? Well again these guys have gone AWOL, and then I've come back, and it's then that they will usually end up coming onto our books. Because, very few of them will actually go the MO and ask to come and see us unless they try and get out the FMed 8 way. There is always that, go and see a psychiatrist, go and try and pull the wool over their eyes, and he will get me out under psychiatric grounds. But that isn't as common as people think it is. Units think it is very common, because that is all they think we see. However, it's a very small part of what we see, the ones who get referred to us usually are because of disciplinary matters, or they have generally gone to see the MO because they just can't cope anymore. In for a 2-year period for them, is, even, because we go and try and keep them in, actually try and retain them in some way, shape or form. Look at other options; look at maybe a posting sort of closer to home. Because sometimes it is immaturity, it's just because they are young, and it has worked, a lot of guys I have been able to do that with. And they have sort of served on and they have come back and said, well actually, things are a lot better, and I can sort of move on. But there are some guys who can't see that at all; they can't see any end to it."(D62)

Temperamentally Unsuitable

Some people are just not cut out to be a soldier, and are temperamentally unsuitable for Army Service. They are too immature, and due to poor social and communication skills feel anxious, and develop acute problems due to difficulty integrating into Army life. It is generally quieter personnel who do not conform, failing to make friends and defending themselves through self imposed isolation and they question their ability. They cannot see a positive future whilst they remain in the Army, and spiral towards melancholy; telling friends they are depressed, trapped, losing control, imprisoned, angry, and frustrated, yet at work they do not have the confidence to articulate their distress. KK described these issues:

"Personal problems they may have had before they enlisted into the Service, which for whatever reason they haven't dealt with adequately, and something happens, maybe some kind of fairly minor stress perhaps, and then it brings it all back. Maybe a history of abuse in childhood, for example, or some kind of traumatic experience that they have been through, before they actually joined up. Various personal problems, that they may encounter, at any stage really from coming in at Phase 1 and discovering that they are not happy. And they made a wrong career choice, and they appear to present with low mood, not necessarily a depressive illness as such but a depressive adjustment reaction. And they are deeply unhappy, and feel trapped in the organisation. Can't get out, because they have missed their window of opportunity. The so called temperamental unsuitability. Not really depressed as such, but they seem to be, certainly, appear low in mood and pissed off, fed up, things not going the way they expected, they perhaps didn't anticipate being posted overseas,. Wanted to stay near family in the UK, usual ups and downs, that young people have in regards to relationships, boyfriend, and girlfriend problems. Inability to cope, maybe because they are away from their normal psychosocial support networks, and haven't adequately accessed peer group support in their unit." (C30)

They fail to cope or perform their job, and perceive they are being treated unfairly, and that the military hierarchy does not understand them. They quickly present as dysfunctional, using their considerable expendable funds and spare time to drink large amounts of alcohol, or take illegal drugs, and go AWOL, self harming, leading to disciplinary problems, and whilst they perceive that they will be discharged from the Army, the result may be a judicial sentence and detention. There mood deteriorates, with the referral to the DCMH viewed as a punishment.

Seeking Help

Often there is no one in the unit to support them, and some will access a civilian GP to avoid returning to the Army, believing that going home will resolve their problems, although this is often not the case due to outstanding external problems. It is often then a family member who contacts the unit, describing their relative's distress and symptoms. They report to an Army UMO and then happily access AMHS, very early in their career, and this group have a poor long-term prognosis. Their help seeking is dependent on personal gain and for non therapeutic reasons and for a quantifiable reward, some

misusing the medical services believing they will positively change their predicament, such as: trying to get out of the Army; avoiding a drafting to an operational area; evading disciplinary problems, or obtaining compensation. DD stated:

> *"That people come up with bad backs, bad knees, bad shoulders, and therefore can't be deployed for that purpose. And certainly a big psychological overlay over that. As there are some people who can manage fine with their bad knee until a deployment comes along and then therefore their bad knee is so bad that they can't go." (Z36)*

This is reinforced by TT when describing young dissatisfied soldiers:

> *"Running in very keen to see us, it's doesn't matter who you tell, they are happy for you to tell everybody. Because they just want out." (D70)*

They fabricate and exacerbate their symptoms and manipulate MH psychometric tests to meet their objective, and AMHS clinicians can be tricked. However, if these soldiers are kept in the Services against their will, then their symptoms become more pronounced and distressing. Therefore whilst the depressive symptoms are real, they are not clinically depressed, as exemplified when following a period of time at home their symptoms quickly resolve. The issue can only be resolved administratively, and it is best that they are allowed to leave early[2] for the longer they stay in the Army the more their MH will deteriorate, irrespective of how much AMHS intervention they get (which is significant), and they will not have a resolution of symptoms until they leave. As FF stated:

> *"18 year old who has got in, has to serve 3 years before he can sign off might not seem like a long time to you or I but to a young lad who is looking out on life that is a long, long time, and if he feels nothing can change, that can be the person who can self harm and take their own life, they just think that there is no hope, no help because nothing can be done."*

whilst TT summarised:

> *"If I could talk people into joining the Army, talk people into staying in the Army, well that would be great. Do road shows and keep people. But, no amount of me seeing them, I could see them twice a week, it's not going to change their perspective of what they think is Service life." (D66)*

---

[2] Interviewees stated that 3 to 6 months would be appropriate notification.

RELATIONSHIPS

Respondents stated that common factors leading to low mood and depression was due to relationship and family problems. As AA highlighted:

> *"Invariably, there will be a relationship issue somewhere along the line that for most people is the biggest hit. End of relationship, whether that be the end of a marriage or the end of a long term relationship."(E1)*

Many soldiers can cope with extreme pressures, often in hostile and challenging environments, but cannot deal with a failing relationship. SS stated:

> *"You know a soldier can run into a burning oil field with his life and his guns blazing, but if his wife leaves him he falls to pieces. They are not prepared for the human factor." (E8)*

Relationship problems include pregnant girlfriends, and change as a soldier gets older; gets married and has children, when the problems are children leaving home. Older personnel struggle more as their relationships are usually more defined and long standing, with the loss being similar to a bereavement reaction and they are in crisis. Their performance is negatively affected irrespective of the contextual surroundings, either in peacetime or on operations, resulting in depression or in extreme cases, thoughts of self harm. Relationships are often affected in later life due to years of alcohol abuse.

Separation

Separation causes problems, especially for personnel close to their families or from a sheltered and over protected background, where there is significant distress and lowered mood, exacerbated by the cognition that they cannot discuss their plight, as relatives will not understand their distress. MM stated that:

> *"I've seen a few people who tired of trying to explain themselves to their families, and they get on the phone and they only have about 20 minutes a week, or something like that, and they are trying to tell the family what is going off, and they feel exasperated when the family doesn't understand the abbreviations they are using and stuff like that." (E3)*

Common in older soldiers' is the expectation that later in their careers they will live away from home, with the parental issues of separation from wife and children being significant stressors that affect help seeking behaviour. An increasingly common reason for separation, especially in the infantry, are operational tours and military exercises, that break Harmony Guidelines resulting in insufficient available time to be at home with their family. SS observed:

> *"I think what is impacting on the mental health side is the amount of ops that they are having to do. I think the number of ops and the pace of the ops that they go on has increased significantly over the last 10 years. I went to Bosnia, and that was not during the hot period, this was early 90's. Things had settled down significantly, and there was a lot of TA and augmentees out there, and a lot of support personnel, and it was RMP and logees who had done Christ knows how many tours in recent years. They had done loads. They get pinged for them all the time which is why actually TA and augmentees there were quite popular, you know, preventing people doing these, you know, back to back tours. Excuse me, but you see more, you see it a lot more now of teeth arms units now that are doing back to back tours. Which you weren't seeing several years ago. And that is, undoubtedly, the amount of tours people are getting now. I have no doubt is having an impact on people's mental health." (W48)*

These issues are intensified when personnel are specialists; who have to support other formed units and deployed even more frequently.

Spouses

Spouses are an important part of the equation, and if the wife / partner and family are happy, then a soldier will function well, irrespective of the environment, and will put up with almost anything, including regular tours. DD gave an example by stating:

> *"If we can retain and keep the families happy then generally we can hold onto the soldier. You can deploy the soldiers lots to really terrible and scary places, and as long as he is not phoned every 20 minutes to say the kids have been kicked out of school, or you know, I have to drive 50 minutes to the nearest TESCOs and the house is falling apart ... lots of deployments, lots of horrible places, but as long as everything is settled at home and they come back to a happy home, that's fine. Cause on the whole, families cope quite well with deployments." (E38)*

However, if the wife or family do not understand the rationale for the disruption and are unhappy, and their concerns not addressed, then the result can be ill health in all family members, and relationships can fail resulting in a disaffected soldier. Often it is the spouse (or sometimes work colleagues) who recognises changes in their loved one's behaviour, such as drinking more or being irritable, whilst the soldier denies there is anything wrong. Spouses concerns can be the catalyst for the soldier accessing AMHS, either following an ultimatum, or directly informing the AMS although some soldiers will simply leave the Army to restore harmony at home. DD summarised:

> *"If we can sort the home front out, give them a bit of stability so the wives can have careers, not just jobs. Wives can have careers, kids are settled in school, the housing is all right, then it is much more likely that we are going to have a happy soldier. I lost count as a general duties MO how many really good soldiers we lost. It's either leave or leave my Missus." (E42)*

GENDER

Surveys 1 and 2 indicated that female soldiers were significantly more likely to be referred to a DCMH and to require hospital treatment, although some interviewees felt that males were more vulnerable to MH problems, especially infantry soldiers due to the greater and regular personal threat incurred on operations and their higher rates of alcohol abuse. Others felt that once females have completed basic training they have already developed some resilience, and they progress to excel within the Army. Others felt that women referral rates were higher, but not necessarily for depression, but due to female associated conditions such as eating disorders and PND and due to the changing structure of the Army and the retention of mothers. DD described such issues:

> *"The moment a soldier fell pregnant, they had to leave, and now we are getting soldiers who are pregnant, having babies and elect to stay. And that can be quite difficult, I suspect I have about half a dozen, PNDs on my books." (L5)*

Social and occupational factors may result in the increased level of female vulnerability, stemming from inherent problems associated with social background, and being employed

within a predominately macho male environment, although there is a macho culture with female soldiers, indicated by women who find employment in a male dominated, high risk occupation, and they are more likely to be emotionally labile. Gender discrimination against women is seen as being rare and is becoming less common. Britain had the highest level of single mothers in the European union (Bartholomew, 2004), reflected in increases within the Army, and isolated single parents often struggle and experience more childcare issues. PP highlighted the issues:

> *"Trying to be a service person, a single parent, and trying to deploy. And fulfil the role that they are meant to be delivering. That's a kind of tough act for a lot of them. You have married quarters there, and you have a single mother living in an environment like that. Most of the people surrounding them are partners, with children. They're it. They can't, it's difficult for them to get baby sitters, it's difficult for people to get involved with home, and they are very socially isolated." (T35)*

The respondents also felt that women, whether in the Army or civilian life, are more self aware, emotionally expressive and less affected by stigma, and confide with each other. They are more likely to report distress and find it easier to seek, and access support. QQ stated:

> "*There is that potential that they (*women) *do access the service more. They are more vocal, perhaps, and more confident about using mental health. And sometimes, I think there is more of a perceived stigma from individuals who are male. So there're more worried about coming along in the first place; male." (T26)*

When there are few women in the unit then this support is sought within the medical services. It is recognised that clinicians often over estimated or underestimated the levels of distress of their patients (Zastrow et al, 2008), and respondents stated that once women attend PHC, that GPs are more likely to refer a tearful woman than a man who hides his emotions, although this may be inappropriate as the woman may purely be releasing her frustration before psychologically moving on. EE clearly highlighted this link:

> *"Females are far more expressive emotionally than males are. Generally speaking, in a macho environment men are less inclined too, you only have to look at the PTSD thing, nobody complaints to you although they are suffering in silence. Because it is not done. You know, when you talk to females, and*

you ask them, you know, questions that hit the spot, they will express themselves. Whilst they are talking about pain in an emotional way, and that sometimes can have an effect on the referring person. He will say, when she was in my surgery she just cried all the time. You know, what he or she didn't realise is that they actually helped this person to unload the thing emotionally. So when that person is actually referred here they might be fine because it's done." (T28)

This would account for the higher number of DCMH referrals but not the hospital admissions, although the answer may be due to the closure of the military's own MH hospital which accepted referrals predominately from AMHS clinicians, compared with the system detailed in this study where GPs often referred directly.

OPERATIONAL DEPLOYMENTS

British society is predominately proud of their Army, and the publics' views are important to soldiers, who are well versed in the nations' opinions via easily accessible media coverage available on television, the Internet and in the press (Dandeker et al, 2006; MOD, 2010b). If a critical mass of the UK civilian population disapprove of a deployment, and the outset of Gulf War II (2002) met with considerable negative public opposition, then this may have a negative effect on some troops and their families. NN stated:

"I think initially, you know, it's OK when Britain is winning the war, but when we are struggling a wee bit and people dying, again, some people perceive it as a needless war, and this type of thing. When they haven't got 100% public support, and the press said another serviceman has died unnecessarily, you know, blar, blar, blar. It's, it's very hard to maintain. They've got newspapers out there as well. Same ones that we get. Basically the same BBC News. ITV News. Sky News. Whatever, and it affects morale. I do, I think it affects morale. So, when they return home we get mums ringing us up, saying, oh, my son came back last week and he's really upset, and he's drinking too much, and he doesn't want to return. This is, you know, that's not depression that is probably just fear and anxiety. He doesn't want to go back because he has had a terrible experience; he's not quite ready to return yet." (IV97)

These issues are exacerbated on deployments when faced with a hostile reception from the local population who do not welcome or want foreign troops, and if soldiers deploy on numerous occasions to the same area, then they can lose track of the rationale for the Army's involvement, especially if a colleague was injured, resulting in soldiers leaving the Army on return to the UK. For other soldiers, whilst negative media does not influence them in theatre, there is an impact when they return to barracks, and they resent the lack of recognition, especially towards injured troops. However, for many, the negative media or the disapproving views of a section of a society have no effect, and they are just not interested. LL highlighting that:

> *"I would imagine that a lot of soldiers won't watch some of that stuff, won't be interested and just get on with it."(W94)*

They recognise that the media is inaccurate, whilst others look at rewards such as gallantry medals as a positive vindication of their commitment.

Contextual Influences

Help seeking behaviour is swayed by the contextual influence of deployments and how a soldier responds whilst operating within an often hostile environment. Soldiers who deploy are a fit cohort, with downgraded personnel, including those clinically depressed, excluded from operations. Many find it easier on deployment, leaving behind daily woes, functioning in an environment where alcohol is banned. If the soldier wants to there, then the tour can be positively enhancing and they excel. TT highlighted some of the reasons when he stated:

> *"That's their mindset, is they go out and just get their mindset set on 6 months. And sometimes it is actually easier out there; myself and you go out and all your problems and all the letters from the department company and the solicitors don't come to you. So you have 6 months away, when you have no external pressures and you just do your job. They actually quite thrive on that and they enjoy that."(W29)*

They are kept busy, focussed, and don't have time to worry about lesser worries, especially when they see colleagues injured. Soldiers find themselves part of a defined

team, working towards a common goal, looking out for each other, and performing the duties for which they were trained. In contact situations, when teamwork is valued and vital, and when their friends are in need, then they will not let colleagues down. Units are more cohesive, with people constantly living, eating and working together, which can enable therapeutic peer support. Problems are addressed internally, in an environment where unit support is actually better and there are fewer stigmas. MM provided an insight into the reasons when reporting:

> *"It can be easier for some people to seek support because the medics are more involved. They are usually deploying with medics on the ground. Emotions are heightened because of the anxiety and stuff that is attached to every day, and I think that people are disclosing more to each other, and there is less room for sarcasm and jibes." (W118)*

Soldier's labelled "problem children" in peacetime are dealt with through understanding and can shine, taking the opportunity to independently make decisions. Then as the tour progresses, soldiers' morals, beliefs and personalities positively change, and they develop life skills within this challenging environment. This close cohesion and support can reduce PTSD development although augmentees, such as Territorial Army (TA) soldiers who are not viewed as part of the regular team may struggle.

Stress on the Whole Family

However, operations place extreme pressure on individuals, families and close partners, and the emotional impact of saying goodbye to loved ones is significant, combined with factors such as numerous vaccines, and finding someone to look after the house. As a result, there are adjustment reactions at the point of separation, again when initially in theatre, and also on re-integration home. CC described the issues involved when he stated:

> *" Let's start with the operational issues, the operational issues are massive pressure before the troops go on tour, massive pressure on relationships before the guys go on tour, saying goodbye to their children, their wives, to their girlfriends, to their new girlfriends, quite sometimes to civilians who don't quite understand the whole issue. Combine those kind of pre tour issues with the taking of medication, the taking of vaccines, trying to sort your kit out, 6 months, trying to find someone to look after your car, find someone to*

look after your house, trying to find someone to go to the bank to sort all your debt issues out, so that massive pressure before people go, as well as the goodbyes, followed by the 6 months separation, in an environment where a lot of people don't actually understand what is happening and then coming back into an environment where you have a different perception, a different attitude from your spouse, your partner, your girlfriend, your boyfriend, or whatever it is in difference to the rest of the population. I think that can be very difficult. People don't understand." (W40)

This normal reaction can occasionally be associated with violent behaviour, and whilst much more common than PTSD, this can be misdiagnosed as a MH problem by civilian practitioners, and adds weight to the distorted view that anyone who goes on operations develops MH problems. Once in theatre, the same problems that effect personnel in the UK cause distress on operations, although the stresses are more intense; exacerbated through difficulties communicating from distance. NN stated:

> *"It's exactly the same. You know on operations they come in and say, I'm feeling a bit down. Why? Because my wife is going in for an operation. Out there they think it's worse because they are thousands of miles away and they are unable to get in contact." (W77)*

Examples included relationship problems, family bereavements, a loved one being ill, and poor management. Some cannot cope with the proximity and intensity of constantly living in the company of their colleagues, and some new recruits do not know what to expect, and there is a fear factor.

Worn Out Soldiers

The mounting number and sheer intensity of operational tours are resulting is exhausted, worn out personnel. Whilst some soldiers accessed the AMHS as a premeditated exit strategy to return home, Officers and senior ranks in particular struggle with the pressures and the stress of caring for their men and the impact of colleagues being injured or killed; PP reported this issue:

> *"On the operational front...2 types of low mood that you'll see. Well principally, the seniors that I will see and it's operationally related. It's to do with their perception of their role and guilt about something to do with their men, or women in inverted commas. So it's about their performance and*

they'll develop quite significant symptoms relating to that, but it is not PTSD in its true sense. It's to do with an action they took that maybe resulted in someone dying. The second group are the youngsters who have lost colleagues, have lost friends etc on operations and feel low about the whole experience of being in the military. Not necessarily fearful, it's not PTSD in its sense but they found that what they thought their expectation of what the military was isn't what it's all about. And the whole thing for them is undermined, and a change in their value symptoms and they become low as a result. So the lower the rank is often, that secondary one but the primary one is about role and responsibility. Which generates, they're the ones with the quite strong depressive symptoms." (W79)

They feel that they cannot let their troops down, and are less likely to seek support, hiding symptoms until they return home, when there distress quickly emerges and they breakdown, leading to PTSD and / or depression. They also perceive that being sent home from operations for a MH issue would have a devastatingly negative effect on their career, and they feel that they are not ready to go on tour again. As CC stated:

"And whilst you may want to get out of the operational environment, what it does for your career, we all know in reality is the kiss of death." (W62)

The intensity is greater for soldiers' from the Infantry, Artillery, Engineers and TA augmenters. Also for some medical staff due to the exposure to traumatic events, but being co-located with MH nurses resulted in some medical staff being the "*worried well*" (W34).

Medical Care and Welfare Support

Medical care is generally better due to access to a specified doctor rather than the predominance of locums in the UK, and in an environment where apart from a number of padres, there is no other welfare support. Therefore Commanders have extra welfare responsibilities, and respond by identifying problems early and offering support, and troops can self refer to MH services. BB provided a specific example:

"A major difference is that in the UK, the AMHS are involved with welfare issues, on operations these issues do not result in a referral. Chain of command is far more aware and far more engaged, people sort of look out.

That was 1 case I had; they gave a guy a couple of shifts off. He because twitched whilst out on patrol, there hadn't been anything particularly terrible gone on, he's just become terribly twitched, and was worried about going out again. But he did go out again, after 36 hours but they was with the co-operation of the actual unit that was there. So I think the team becomes more, the actual unit team, the infantry team becomes absolutely protective of its own out there, and probably is more tolerant." (W36)

MH care is focussed on a small number of MH nurses who are already know to the troops through pre tour briefs, that spotlight operationally associated MH issues. These MH nurses provide an outreach service, helping to demystify psychiatry, supporting the chain of command with MH issues, and retaining soldiers' in theatre, which in the long term is better for the soldier. However, it can be difficult for soldiers to access MH support, due to the small number of MH nurses, geographical restrictions, and combat intensity.

SYMPTOMS AND SECONDARY COPING MECHANISMS

These stressors and predisposing factors results in large numbers of psychological and biological symptoms, leading to behavioural and personality changes, and depression. All of the interviewees gave examples, such as GG when he reported:

"Well usually there is some kind of dysphoric mood, sleep disturbance, crying, sorry tearfulness and crying, general unhappiness, may use substances to cope with their mood, they become more withdrawn, and generally unhappy, the relationship tends to go amiss, sexual function tends to deteriorate, appetite deteriorates, or at time appetite increases, but usually there is weight loss reported. Interesting to see people who say I am binge eating, or I am eating more, they still always report weight loss. You know my trousers, so they are not actually eating properly. They, it's more of an occasionally pig out more than anything else. Concentration, mood, memory loss, they usually talk in terms of a fairly dim future and it depends on how far of the continuum of depression, and they will often say, I cannot see a future while I continue in the Army, and I think people become quite desperate." (N1)

The interviewees highlighted secondary coping mechanisms, especially alcohol abuse, within a military culture that accepts and encourages this behaviour, and occasionally drugs abuse, helping Army personnel cope with situational stressors.

These soldiers talk in fairly dim terms and are deeply unhappy, irritable, and describe feeling helpless, useless and hopeless, although thoughts of self harm are rare. Their confidence and self esteem is eroded, and in older personnel, they can become anhedonic, where life seems pointless and they worry about their future. Their concentration is poor and memory is negatively affected. There is a lack of interest, energy and drive and they become increasingly withdrawn and unmotivated. LL provided a typical example with:

> *"They may be fatigued or unmotivated, not have a great deal of violation during the day to do the job that they are doing. Their concentration is poor; they are the kind of classical pointers for clinical depression." (N58)*

Sleep disturbance is common, and whilst preoccupied with their thoughts, they experience early morning waking; insomnia; low mood, and lack quality sleep. They are always tired during the day and may take alcohol to induce sleep. There are changes in diet with either lack of appetite and losing weight or comfort eating, and gaining weight. As a result, their physical state deteriorates, and their shape and appearance changes. They may develop a lackadaisical attitude at work, and performance deteriorates and they become ineffective, leading to poor confidential reports, which exacerbate the situation. They may act out through anger and aggression, be insubordinate, or even remove themselves completely by going AWOL. KK associated these behaviours and the presentation when he remarked:

> *"Well I suppose, presenting symptoms vary. Sometimes the first symptom is some kind of act of self harm. Or it may be something like they were AWOL and they have been sick at home with depression and reluctant to return to the unit because the unit is the main source of their unhappiness. So that may be a presenting factor. Having difficulty at work, their depression may mean that they are not performing so well so they may be getting picked on or even disciplined or poor confidential reports because their performance has tailed off because they are depressed. Which may then of course exacerbate the situation and they will be more depressed because they feel they are not performing well. So they may complain of poor concentration and poor memory." (N110)*

They feel their world is caving in, and if the stresses become high enough, then the soldier may self harm, although not suicide, as the act is prompted by wanting to get away from their distressing thoughts.

Respondents stated that if a soldier was willing to access the APHCS, then the care and support provided could be very effective, and appropriate referrals were directed for a MH assessment. Due to insufficient military doctors, the AMS contain a mixture of civilian GPs (both full time and locum) as well as military GPs (both experienced and inexperienced), and civilian and military MH clinicians often caring for a transient clientele. Most soldiers just want to talk, and don't care if the clinician is in the military or not, although there are advantages to both military and civilian practitioners that will be discussed below. NN described the soldiers' perspective:

> *"Well, I think most of the time they don't really care, and if it's related to something operational then they probably like to see someone who has an understanding of, you know, what they are talking about. And, you know, when you say, you're actually in the Army, or have been in the Army, and have been to those locations, there is a certain air of credibility about you, I think, for the soldiers benefit. That, oh right, so you know what I mean then. Yeah, yeah, I did experience that. And I think it helps with some patients. In saying that, a lot of them don't really care, and don't ask, they just want to talk." (S123)*

The key factor is that soldiers' are treated by competent and proactive GPs and MH clinicians. GP's competencies, motivation, experience, and their strengths and weaknesses are key elements to the standard of MH referrals (and of any predictive model), and therefore some AMHS practitioners place as much weight on assessing the competency of the GP as the presentation of the patient. As AA stated:

> *"We are assuming that the diagnosis is correct, bearing in mind of course that there are a lot of GPs who will refer somebody with a diagnosis of depression but they are in fact not depressed. That's the first thing to assess isn't it? (B15)*

Referrals

GPs may quickly produce MH referrals, including patients with generalised low mood who are not clinically depressed, that if treated compliant with NICE guidelines (NICE, 2004) would be supported in PHC. However, whilst these referrals place an extra burden on DCMHs; GPs have often acted in the patient's best interest due to the increased self harm risk as soldiers have access to guns. Also, the way to manage false positives on initial screening is to provide multi–step assessment (Mitchell et al 2009) and this concept is subsumed within a decision to provide an early referral to a specialist department with recognition that AMHS clinicians have time to develop a deep therapeutic relationship. NN described their rationale:

> *"I think in my opinion that there are 2 reasons. They are trying to do it professionally for the patients best interests. They are GPs, they have 15 minutes maybe to see a patient, and that's if there're lucky, I mean that's on a good day. They haven't got time really to go into someone's, you know, deep understanding and really spend some time with them to try and help them. And they haven't got that time that maybe they would like to have, and maybe they haven't got the expertise either, but they recognise a potential mental health underlying illness here. A mental health issue that needs addressing, and so they refer to the appropriate place which they are professionally duty bound to do. So I think they do the right thing. By doing that, 1, because they don't have the time, 2, because they don't have the expertise, and 3, they are required to do it anyway. The other aspect is yes, the occupational side of the Army, is that due to, I think a lot of attention is put on deliberate self harm, and suicide. Of course, as with the government, we all want that to reduce, given the stresses that some of the soldiers are under at the moment, with different frequent deployments and all the pressures that go with that, I think there is an underlying anticipation that might increase. And therefore maybe more people get referred here straight away than is necessary, but it's more a safety guard. The Medical Officer can say, I don't have the time, I don't have the expertise, I don't have the knowledge, so I refer to people who do. And also, you know, this man just carrying an SA80 with him every day and he has disclosed, he has in the past said he felt like ending his life. It would be wrong and inappropriate as a Medical Officer if I didn't refer. So I think they are duty bound on the risk side. But also on the care side, they are doing the right thing anyway." (B42)*

There are less altruistic motives due to external forces including negative media and the need to do something, resulting in patients that are not clinically depressed being

commenced on anti-depressants. I asked EE were the competencies of the GP a predisposing factor and he identified a number of reasons for GP referrals:

> *"I think it is interesting Alan, because, you know, I think with the more junior GPs, let's go back to them, then it goes back to the old role of the doctor, you know, I think a lot of the young doctors, you know, just qualified, come in, beginning their professional life, there is a feeling that you have to do something. You can't just sit down and say, I think you are going to be OK if you do A, B and C. And part of doing that in the arsenal of a GP is his prescription pad. So the patients listen to you, he is given something, and the GP then says that I think I have done the right thing." (B46)*

Soldiers may also be referred because of easy access to MH, when geographically the PHC Medical Centre and DCMH are co-located, and because they are aware that military DCMHs will accept any referral, which is not the case in the NHS, and is not always appropriate. MOD civilian GPs may refer quicker and more frequently due to contracted hours leaving insufficient time for an assessment and treatment, although for some this is self imposed, and a reluctance to engage with the military chain of command. Alternatively, locum GPs may not be familiar with MMH problems, or the MH support available to them, and request an urgent appointment expecting this to take weeks as it would in the NHS rather than the next day as provided within AMHS.

Other factors are less easy to rationalise, such as GPs being more likely to try and support senior ranks in PHC, although this may reflect a fear that a MH referral could negatively influence a soldier's career with the intent to stop information being disclosed to the chain of command. Alternatively, the patient's work colleagues or family can contact Medical Officers (MO) and influence referrals, and then soldiers will attend a DCMH, irrespective of whether they think they need the appointment or not. NN stated:

> *"The individual themselves denies anything is wrong, but everyone around them sees a change in the behaviour, in the personality has altered in some way. So although they may not see it, they are pressurised initially to report sick by the wife, or by their unit. Being good soldiers, they will do as they are told. I'll go and see the doctor." (B118)*

General Practitioners and Mental Health Personnel

Patient choice is vital, including whether to be treated by civilian or military personnel, and in MH by either a male or female clinician. Uniformed AMHS personnel are required due to the occupational nature of the job; as they understand the consequences of the soldier's actions and have the advantage of being part of the soldier's culture and understand their concerns regarding medical confidentiality. Some patients prefer to be treated by RAMC doctors and Queen Alexandra's Royal Army Nursing Corps (QARANC) nurses, wearing an identifiable uniform, that provides status, which is enhanced when the clinician has credible military skills, and patients' perceive that military staff has a better understanding of Army MH issues. DD stated:

> *"Because we wear the same suit, most of us are in uniform, the soldiers are in uniform, they instantly identify with us. You know the rank slides might be slightly different, but clearly, we are in the same sort of job. We have shared values, shared sort of experiences, and we know what they are going through, we know where they are coming from, because we are all 1 big organisation. Now I think that helps us. Whereas I think it may be difficult to identify with a mental health worker when you don't have all the none verbal cues that we have got." (S106)*

Military doctors have easy access to the military hierarchy that opens many doors, and MH appointments are viewed as complying with military rituals thus supporting the development of a therapeutic relationship. However, inexperienced uniformed GPs may be influenced when the patient is a senior Officer, and be less willing to probe into the patient's problem. Some soldiers prefer to be treated by civilians, especially those sick as home or disgruntled with Army life, perceiving that civilian GPs are less threatening. Also, uniformed doctors have more than 1 master, and if they are not assertive they may report medical details, either deliberately or inadvertently, to the non medical chain of command. This could be through a unit health committee, or through discussions in the Officers Mess, but the soldiers perception is that confidential medical information will be disclosed. VV stated:

> *"Officers with inside a Battalion must have no confidence at all because they talk openly to the Medical Officer about various people. I get is that there is a*

very open conversation with maybe 3 or 4 Platoon Commanders sat around a table with the MO. And they are all hearing what the MO has got to say. So they must know that there is very little confidentiality. Whether that trickles down to the soldiers themselves, or whether these soldiers honestly think that that MO takes himself off to his room at night and doesn't discuss anything, it sounds a bit unrealistic doesn't it?." (B33)

However a transient, locum GP workforce that only occasionally works within the AMS, and that have poor motivation and little insight into military occupational health requirements, present considerable problems. CC observed:

"If you wander down the med centre here you know, you will probably be seeing, a good chance you will see a locum who you will never see again." (B19)

The presentation of depression within the military is unique, and is detailed in the next and final chapter, and requires a different form of treatment to traditional NHS PHC algorithms, and whilst civilian GPs can be competent practitioners with the ability to diagnose depression within their own practice, their locum duties requires a different approach.

Once referred to a military DCMH, soldiers prefer to be treated by military clinicians, perceiving that uniformed personnel that have served on operations have better insight and understanding of the causes for their distress. LL stated:

"Most servicemen would want to know that they are being seen by somebody with some sort of insight, with more insight into what they are going through and have a better idea of the organisation that they are working for." (Z12)

If the MH clinician is known to the troops, and has been on the same tour of duty, then troops are even more likely to seek support. This in particular applies to experienced soldiers, and those with operational related problems or injuries. Rank structure exists in DCMHs, and this is not thought to be an obstacle, although it is better if DCMH Officers treat Army Officers, and some AMHS personnel wear civilian clothing to be less threatening. There is a perception that civilians do not understand Army language; and therefore it will be frustrating to explain every detail and to provide choice, many interviewees stated that the best solution is to have a mixture of civilian and military MH

staff, with civilians having military experience and who understand the Army from pervious service.

CONCLUSION

Key Findings

Benefits of Army Life

The Army provides a protective "family," with a community based on shared values, experiences, and socialising. This bonding can be extremely rewarding, providing opportunities to personnel from poor, under privileged areas and dysfunctional, even abusive childhoods. In this setting, the vast majority access healthcare voluntarily, willingly seeking assistance and not concerned about medical confidentiality.

Army Lifestyle and Personality

Military service and culture combined with lifestyle problems resulted in unique multi-factorial stressors that were often incremental / accumulative in nature, and a soldier's personality impacts on their ability to cope with military life, and their propensity for developing depression.

The Unhappy Young Soldier

Young disillusioned soldiers that have to wait for up to 4 years before they could leave the British Army due to the terms and conditions of service were viewed as the main reason why Army personnel sought MH support. Problems occurred as a result of recruitment priorities and the enlistment process, and many were temperamentally unsuitable for Army Service. Their help seeking behaviour was often dependent on personal gain, but if they were kept in the Army against their will, then their symptoms become more pronounced and distressing. They were not clinically depressed, and this issue could only be dealt with administratively.

Relationships

Many soldiers could cope with extreme pressures, often in hostile and challenging environments, but could not deal with a failing relationship, and some soldiers would simply leave the Army to restore harmony at home.

Gender

Gender discrimination against females was rare, although isolated single parents often struggled. Women were emotionally expressive and less affected by stigma, and found it easier to seek support. GPs were more likely to refer a tearful woman than a man who hides his emotions, although this might be inappropriate as the woman may purely be releasing her frustration before psychologically moving on.

Operational Deployments

Help seeking behaviour was influenced by the contextual environment of peacetime or operations. On tour many found it easier, leaving behind daily woes, and if the soldier wanted to be in theatre then the tour could be positively enhancing. Units were more cohesive and problems were addressed internally, and soldier's labelled "problem children" in peacetime were dealt with through understanding and care, and could shine by taking the opportunity to independently make decisions. However, operations placed extreme pressure on individuals; there were adjustment reactions at the point of separation, again when initially in theatre, and also on re-integration home that could be misdiagnosed as a MH problem, especially by civilian practitioners. The mounting number and sheer intensity of operational tours was resulting in exhausted, worn out personnel.

The Army Medical Services

Some patients preferred to be treated by RAMC doctors, who they perceived had a better understanding of Army MH issues. However, those sick as home or disgruntled with Army life favoured to be treated by civilian practitioners. Once referred to a military DCMH, soldiers preferred to be treated by military clinicians (or those with active

military experience, perceiving that uniformed personnel with operational experience had better insight and understanding into the causes of their distress.

Study Limitations

1. The author's role as a member of the interviewee groups "cohort" was a potential problem that was acknowledged before the interviews commenced, and reflected during the conversations when there were assumptions that the author was already aware of the respondent's beliefs, or anticipating my knowledge of military research, even when it had not been published.

2. There was the potential to have an undiagnosed, non-depressive, military sample as a control group. However, within an independent, part time study the inclusion of a control group would have increased the workload to an unmanageable level. The author has attempted to provide balance with the respondent's views of the positive elements of Army life. In addition, soldiers stories are likely to be significantly affected by the contextual sensitivity of their environment (Silverman, 2005), and factors causing depression in peacetime are likely to be significantly different to stressors on operations (Wessely, 2005). The Army also has a "Macho" image, with Service personnel reluctant to admit MH problems as the admission of psychological distress indicates weakness (Busuttil, 2010). MH stigma could affect a soldier's position and relationship with their peers, whose pressure could convince them that there is nothing wrong, and makes this cohort difficult to co-opt into research studies (Finnegan, 1997).

Closing Comments

Previous quantitative studies examining predisposing factors and symptoms leading to Army personnel presenting with depression have not provided the depth of insight to link these correlations together, and the subjective views of the experienced MH clinicians who treat these depressed personnel provides a valuable insight. The most common predisposing factors leading to a DCMH admission was for young disaffected soldiers

who wanted to leave the Army but could not due to restrictive terms and conditions of Service, and MH clinicians could not facilitate the release of these soldiers' except to recommend an administrative discharge. Whilst noting the operational imperative to have visibility and continuity of personnel, it was clear that significant periods of notice to leave had a negative impact on the MH of young soldiers.

Army employment and lifestyle can provide an extremely rewarding protective "family", and provide significant opportunities, however, Army personnel face often unique multi-factorial stressors, that were often incremental / accumulative in nature, and a soldier's personality impacts on their ability to cope with military life, and their propensity for developing depression. The perception of MH problems equating to weakness was changing, although stigma occurred, especially when there was poor local leadership. Officers and seniors were worried about the occupational implications of reporting ill, the negative impact that a MH assessment might have on their career, and may have sought support from private civilian agencies, which have potential dangerous ramifications that they may still deploy. No clear reason was ascertained why women presented in greater numbers, although isolated single parents often struggled, and GPs may have been more likely to inappropriately refer a tearful woman than a man who hides his emotions. On operational tours, many personnel excelled and were supported by more cohesive units. However, operations place extreme pressure on individuals; there were adjustment reactions at the point of separation, again when initially in theatre, and also on re-integration home, and could be misdiagnosed as a MH problem, especially by civilian practitioners. The mounting number and sheer intensity of operational tours was resulting is exhausted, worn out personnel.

The Armed Forces need an effective MH service that is accessible, readily available, non-stigmatised and which positively advocates a duty of care. The key issues emerging from this study will be correlated with the results from the quantitative studies to produce a predictive / theoretical model to identify vulnerable personnel and to inform policy and educational programmes. This may result in an improvement in operational capability by returning soldiers and Officers to full working duty.

Chapter 8

Military Depression and Study Conclusion

INTRODUCTION

A common theme that emerged during the qualitative interviews concerned the classification of depression within the Army, which participants indicated was different to civilian interpretation. Clues to why this may have occurred can be found in studies into men's MH that have indicated that whilst men and women experience depression in similar ways, they have different ways of presenting their symptoms and distress (Branney & White, 2010). Women are more prepared to cry and seek help whilst men often express their distress through anger or violence; emotional rigidity, exaggerated self-criticism, alcohol and drug abuse, withdrawal from relationships, over involvement in work, denial of pain, and rigid demands for autonomy. This has lead to the labels of "male depressive syndrome" (Winkler et al, 2005) and "masked depression" (Cochran and Rabinowitz, 2000). These gender differences are enhanced within the macho Army environment, leading respondents to provide accounts of 4 distinct areas of a "military depression", and the next section will explore these criterias. Following this the chapter and thesis will conclude with triangulation of the study results and the introduction of a theoretical model regarding the predisposing factors and clinical pathway for military patients with depression.

Military Depression

The diagnosis of clinical depression is based on identifying a number of symptoms that are present over a period of time. There may be a risk of DSH and often co-morbidity with conditions such as alcohol misuse; and is more prevalent in those aged over 30 years old. Consequently, GP training is shaped to identify these factors and symptoms with adherence to a clinical checklist, such as poor sleep pattern, dietary changes, and then following a treatment algorithm including medication and psychotherapy. This model has limitations, as GPs only recognised depression in 47% of cases (Mitchell et al, 2009) due in part to the complexity of fitting the continuous variation of depression severity into a categorical definition. This was further exacerbated by threshold depression, unclear cases, and males expressing their depression through symptoms that were not included within the diagnostic classifications, and as a result GPs rated over 33% of decisions as not definite (Wittchen et

al, 2001). In addition, soldiers predominately present with either an adjustment disorder or mild to moderate depression, and rarely a severe depressive illness as they are either prohibited from enlisting or inevitably discharged from Service. Therefore, AMHS personnel have little contact with seriously mentally ill patients, as EE recognised:

> *"75 to 80% of people I would say would actually be on the borderline of actually diagnosing a depressive episode as in keeping with ICD 10.....in either the kind of depression or the severity." (£[1]14)*

There are different interpretations as "depression" means different things to different people, based on personal and clinical experience, the level of assessment and use of psychometrics, and some GPs use the term depression in the context of describing low mood. These patients may have symptoms or somatic presentations, but they were not clinically depressed. RR reported patients presenting with:

> *"Mild depressive symptomatology, mild depressive reaction, and when they come down here, it is not depression. They are not depressed at all." (£10)*

NN stated that depression was the wrong category and highlighted why:

> *"On the referral it might say that it is low mood, but is it low mood or is it depression? People use the word depression too often. And we see it, I am really depressed today, and I will say, "If you get a posting will you be depressed then?" "No, I will be absolutely fine, then," so they really haven't got a depression. More of a situational low mood. You know, when we look down and we have to use ICD codes, these people might just scratch the surface of having an ICD code of depression. But in reality, it is just probably a low mood because they are unhappy at that particular time in their life. But if the situation has moved, if the environment is moved for them, or the family situation moves. Well my wife is not happy here but if we move back to Carlisle she would be far happier, then I would be far happier. So actual depression that we see is generally limited." (£25)*

Soldiers' clinical presentation was often not the same as seen in civilian practice; and there is a unique category, a "military depression", which is not an ICD 10 depressive disorder, but a depressive adjustment reaction; although it was noted that a depressive adjustment disorder can develop into a serious depression and vice versa. EE highlighted this difference:

---

[1] Letters were used for the coding of respondents quotations. Once all 26 letters of the alphabeat were utilised, then other symbols were used. In the care, the pound sterling symbol (£).

"The category of people who commonly present to us with a mood disorder, say a depressed mood disorder, are not the same category of people you see in civvi street. Yeah, so they are not an ICD 10 depressive episode, commonly, 20%; but they are not just unhappy, something in between. It's almost like a military depression, if you see what I mean. Which has a very good prognosis given doing the right intervention. In my experience it's a different category of depression, but it's not, oh my god, you know, I need to worry about this person. Or there's nothing wrong with him, it's not that. It's something in between. The simplest thing you could call it is a depressive adjustment reaction, or a mild episode, yeah? And it both these cases you can argue and say, they don't need medication or no medication. It's a very good point. And I think that manipulation of the environment, support from the unit, support from family, with an ability to be able to ventilate, to myself, or yourself, or GPs. Will probably be more, you know, therapeutic than slapping them on anti-depressants." (£15)

This has important connotations for treatment, with an effective intervention dependent on a GP who is well versed with dealing with this population. Many civilian clinicians do not have the necessary competencies or insight into the military, and cannot relate to the soldiers experiences, which makes it difficult to arrive at the correct diagnosis with soldiers' labelled depressed even when they had very few symptoms. As PP described:

"If they can't relate to that person's experiences, I think it is very difficult for them to help them. If they are civilian they need a lot of experience of interviewing these patients to be able to understand what they are talking about. Because....almost a dialect at times that is separate to the English language." (S103)

As such, military depression reflects an adjustment reaction that can be addressed by manipulation of the environment with support from family, friends and work colleagues rather than clinical intervention. Medication is not required, and is contra indicted, and considerably fewer patients require a formal MH assessment, as their low mood would resolve in time. This research identified that the "military depression" related to 3 specific groups; and also that females were more likely to present. As the following definition is integral to a predicative model, then the descriptions are in the present tense.

Group 1

Private soldiers aged 18 to 22 years old who were early in their military career, and wanted to leave the Army but could not due to their terms and conditions of service.

The respondents indicated that the largest single factor leading to a formal referral for depression was the young disillusioned male soldier who had to wait up to 4 years before they could leave the Army due to their terms and conditions of service, resulting in multi factorial MH symptomatology in a group who described being trapped, losing control, frustrated, imprisoned and angry.

These soldiers are often recruited from poor working class areas with previous behavioural and emotional problems related to dysfunctional, disruptive and abusive backgrounds, with unresolved childhood abuse and violence. Their parents are often separated and unemployed, have a history of illicit drug and alcohol misuse, and originate from a culture of seeking support. There may be previous school or employment problems, and they enlist to get away from home or civilian related difficulties. They have misconceptions of why they join, some being pressurised by, or to please their family and they have unrealistic expectations. They are unaware of the basic aspects of military life, and perceive they are being treated unfairly and that the military hierarchy does not understand them and quickly present as dysfunctional, such as going AWOL, self harming, using illicit drugs, and getting into disciplinary problems. They are habitual abusers of alcohol, and have considerable expendable funds and spare time. They are immature, with poor social and communication skills, and report feeling anxious. They have difficulty developing interpersonal relationships, fail to integrate and make friends, or perform their job. They have little confidence to articulate their distress, and cannot see a positive future whilst they remain in the Army.

At a very early stage in their career they happily access the AMHS and have a poor long-term prognosis. Some help seeking is dependent on personal gain and quantifiable rewards, and they wilfully misuse the medical services, fabricate symptoms and manipulate MH psychometric tests to meet their aspiration; believing they will positively change their predicament of getting out of the Army, or evading disciplinary problems. However, if they cannot leave the Army, then they become increasingly unhappy, develop MH symptoms, and truly suffer, and the longer they are retained then the more their MH deteriorates; and it is this group that self harm. However, whilst the symptoms are real, they are not clinically

depressed, and if the clinician can positively manipulate the environment, such as providing a period of time at home then the symptoms quickly resolve. This issue can only be resolved administratively, and resolution is not obtained until they leave the Army.

Group 2

NCOs and Senior NCOs aged in their late 20s and early 30s, and had been exposed to multi factorial situational, environmental and occupational stressors.

This group have been in the Army for a number of years and have been promoted, taking on extra occupational responsibilities and have completed operational tours. They are often married with a young family; and face multi-factorial stressors that are incremental / accumulative in nature and resulted in large numbers of psychological and biological symptoms, leading to behavioural and personality changes.

Occupational problems stem from a heavy workload and long working hours, often aligned to pressing timelines. Measures introduced to reward soldiers, such as promotion, could bring extra pressures, especially if someone is promoted above their ability and this is exacerbated through frequent changes of managers. There were increasing numbers of operational tours (with problems often starting soon after they return home) and the associated fear factor.

There are also situational pressures such as financial difficulties and accommodation issues, and other major life events such as relationship and family problems. There are regular and sometimes unpopular postings and occupationally attributable separations, and if the wife / partner do not understand the rationale for the disruption and are unhappy, then the result can be ill health in all family members. A failing relationship can have a profound influence, and negatively affect performance irrespective of the contextual surroundings, either in peacetime or on operations, and these disaffected soldiers may leave the Army to restore harmony at home. Their concentration is poor and memory is negatively affected, and confidence and self esteem is eroded and their work performance deteriorates. They experience enduring low mood, appearing very flat and anxious, with notable diurnal variation, although thoughts of

self harm are rare. Sleep disturbance is common; they are always tired and use alcohol to induce sleep. There are changes in diet and their physical state deteriorates. There is a lack of interest, energy and drive and they become increasingly withdrawn and unmotivated. They cannot cope and may act out through anger and aggression, or being insubordinate. They feel their world is imploding, and present with mild to moderate depressive illness. There are also co-morbid presentations, with physical problems and they misuse substances as coping mechanisms, with alcohol, and occasionally illicit drugs, leading to disciplinary problems.

Group 3

Soldiers nearing the end of their career and aged from late 30s onwards that experienced multi factorial situational and occupational stressors but were retained in the Army due to financial incentives and they used alcohol to cope with their stress.

These soldiers have been in the Army for much or all of their working lives. They have faced intensive occupational stressors and have deployed on numerous operational tours, but have re-evaluated their commitment, now focussed on other prioritises such as family life and are tied in by rewards such as good pay and pensions. Their children are either teenagers or adults. These older, senior ranks and Officers feel they should be able to cope, being strong for their troops, even when their MH problems are operationally attributable. To articulate being scared is not comprehended, and they either delay or do not seek help, sometimes for years, trying to resolve problems by themselves.

Occupational issues include harassment associated with personality clashes with pressures exacerbated by rank and hierarchal structures, and tough boundaries. They suffer from the negative impact of micro management which places extreme pressure on the recipient. Despite awareness of ED policies, they feel disempowered and believe there is nothing that can help them, exacerbated by the cognition that they cannot discuss their plight as relatives will not understand their distress, and as their mood lowers they use huge amounts of alcohol. They continue to work, fearing being viewed as a failure and / or weak and drive hard at getting better, but present with a classical depressive illness. They are worried about stigma and do not trust that medical in confidence will be maintained, and are worried about

the occupational implications of reporting ill and the negative impact that a MH assessment will have on their career and promotion. They do not want their unit to know, and Officers in particular seek support from private civilian agencies, and may then be inappropriately commenced on anti depressants yet still deploy on operational tours. As their career nears completion, they find leaving the bosom of the Army stressful.

There are deep seated issues related to relationship problems and whilst they can cope with extreme pressure, often in hostile and challenging environments, they cannot cope with a failing relationship. Older personnel struggle more as their relationships are usually more defined and long standing, and the response is similar to a bereavement reaction and they are in crisis. Often it is the spouse (or sometimes work colleagues) who recognise changes in their loved one's behaviour such as drinking more or being irritable, whilst the soldier denies that anything is wrong. Common in older soldiers' is the expectation that later in their careers they will live away from home, with the parental issues of separation and being away from children being a significant stressor resulting in help seeking behaviour. They have expendable funds and drink huge amounts of alcohol, which has a negative impact on family and relationships. There are also physical problems and some are severely disabled and require a medical discharge.

Operational deployments bring specific problems, with the increasing frequency of high tempo tours leaving insufficient time for family life. Mounting operations place pressure on individuals, families and close partners, and the emotional impact of saying goodbye to loved ones is significant, and they experience adjustment reactions at the point of separation, initially when in theatre, and also on re-integration home. Having deployed on numerous occasions they begin to lose track of the rationale for the Army's involvement, especially if a colleague is injured, resulting in soldiers leaving the Army on return to the UK. They miss family life, and some just do not want to be deployed. They are more likely to develop operational related stress problems such as PTSD due to the sheer intensity of some operations, and are deeply affected by the stress of caring for their men or the impact of colleagues being killed, and because they feel that they cannot let their troops down, and despite the pressures, they are less likely to seek support on operations, hiding symptoms

until they return home, when personnel can then breakdown. They are exhausted, worn out, and do not see their career progressing in the way they intended and feel they are not ready to go on tour again.

They experience enduring low mood, are very flat and anxious, with notable diurnal variation and dysphonic mood. They are deeply unhappy, and describe feeling helpless, useless and hopeless. Their confidence and self esteem is eroded, and they become anhedonic, where life seems pointless and they worry about their future, although thoughts of self harm are rare. Sleep disturbance is common, there are changes in diet and their physical state deteriorates. There is a lack of interest, energy and drive and they become increasingly withdrawn and unmotivated. Their concentration is poor and memory is negatively affected. They feel their world is caving in.

Figure 8.1 provides a summary of these 3 groups.

Women

Women were more likely to require MH support for depression with vulnerability stemming from inherent problems associated with their social background, and being employed within a predominately macho male environment.

Women are more self aware, emotionally expressive, better at confiding in each other and find it easier to access support, being less affected by stigma. Women are more likely to report distress due to relationship problems, being separated from their family and personality clashes or trade related problems. The changing structure of the Army, such as retaining mothers has resulted in the presentation of PND and there are more childcare issues, especially for single mothers, who can be isolated and struggle to integrate. Women can be lonely when there is no-one from the same gender to speak too, and they seek support from the AMS. GPs are more likely to refer a tearful female although this may be inappropriate, as the woman may purely be disclosing her emotions before psychologically moving on.

Private Soldiers aged 18 to 22 years old.

- Present early in their career and want to leave but cannot due to terms and conditions of service; and account for 25% of all MH referrals.
- Multi factorial MH symptomatology in a group who describe being trapped, losing control, imprisoned and angry.
- Often recruited from poor dysfunctional working class areas and have experienced disruptive and abusive backgrounds. Have a history of drug and alcohol misuse, and originate from a culture of seeking support. May be previous school or employment problems.
- Misconceptions of why they enlist, often influenced by a desire to get away from home or civilian related difficulties, and they have unrealistic expectations. They are immature, with poor social and communication skills, and have difficulty developing interpersonal relationships.
- Quickly present as dysfunctional, such as going AWOL, DSH, using illicit drugs resulting in disciplinary problems. They cannot envisage a positive future whilst they remain in the Army.
- Happily access AMHS, and help seeking is dependent on personal gain. However, if they cannot leave the Army they develop MH symptoms.
- They are not clinically depressed, and manipulation of the environment can resolve presenting symptoms. This issue can only be resolved administratively.

NCOs and SNCOs aged late 20's to early 30's.

- Often married with a young family and are taking on extra occupational responsibilities, have deployed, and face multi-factorial stressors that are incremental / accumulative in nature.
- There is increasing numbers of operational tours (with problems often starting soon after they return home) with regular and unpopular postings leading to prolonged separation from wife and family.
- They tackle situational pressures such as financial difficulties and accommodation issues, and they begin to experience major life events such as relationship and family problems, and bereavement.
- Concentration is poor and memory is negatively affected, and confidence and self esteem is eroded and their work performance deteriorates. They experience enduring low mood, appearing very flat and anxious, with notable diurnal variation, although thoughts of self harm are rare. There is a lack of interest, energy and drive and they become increasingly withdrawn and unmotivated. They feel their world is imploding, and present with mild to moderate depressive illness. There are also co-morbid presentations, with physical problems and they misuse alcohol.

Soldiers nearing the end of their career; aged late 30s and upwards.

- Have served in the Army for all their working life, having deployed many times and face intensive occupational stressors. Tied in by financial rewards.
- Feel they must cope and delay seeking help, fearing being stigmatised and do not trust that medical in confidence will be maintained, and believe a MH assessment will negatively affect promotion.
- Relationship pressures are usually more defined and their children who are now teenagers or adults. Growing expectation that they will live away from home, and they drink huge amounts of alcohol. There may be physical problems that effect career opportunities.
- Deployment commitments leave insufficient time for family life and they are deeply affected by the stress of caring for their men or the impact of colleagues being killed. They have a classical depressive illness, and are exhausted, worn out, and experience enduring low mood. They are deeply unhappy, and describe feeling helpless, useless and hopeless. There is a lack of interest, energy and drive and they become increasingly withdrawn and unmotivated. Life can seem pointless and they worry about their future, although thoughts of self harm are rare.

Age	18	25	30	35	40	45
Rank:	Private	Lance Corporal	Corporal	Sergeant	Staff Sergeant	Warrant Officers

Figure 8.1 Typical Presentation of Depression in Men within the British Army

STUDY CONCLUSION

This study has provided information to add to the small quantity of available research in this poorly explored area; such as the most commonly reported cause for a soldier requiring a MH hospital admission was for a depressive illness, whilst PTSD admissions remained low. The presentation of depression is not uniform, or aligned to civilian definitions, and has a unique interpretation within the Army. Other results draw attention to previously unpublished issues such as the plight of the unhappy young soldier, and results that challenge held beliefs such as soldiers with MH problems are stigmatised as weak, and therefore advances knowledge in the area of MMH. This thesis will now conclude with triangulation of the results from the 3 elements of this research and introduce a diagrammatic theoretical model to display the predisposing factors influencing the presentation of depression in the British Army and the patient's clinical pathway.

Within this study, the majority of depressed soldiers who presented to the AMS had multi-factorial problems displayed in a number of different ways. The main causes were relationship problems, family issues and occupational stressors irrespective of rank, age and gender. However, isolation was rated as a lesser issue in the quantitative elements of this study, which challenges the perception that soldiers with MH problems were stigmatised, and implies that even disillusioned soldiers had colleagues who understood their predicament.

The results indicated that the AMS provided an exceptional standard of access to hospital beds, with the majority of in-patients remaining in hospital for a relatively short period of time for assessment and treatment within a safe environment. Hospital admissions had reduced by 34% following the closure of the last MMH hospital and a contributing factor might be that Army DCMHs had been enhanced with extra staff, thus providing a better skill mix which was supported by a clear educational pathway that promoted community based treatment in preference to hospital care. A significant majority of patients were satisfied with the MH care they had received, suggesting that the quality of care provided by AMH clinicians was of a high order.

Over 65% of admissions were by military psychiatrists although there were significant differences in their referral rates indicating that military psychiatrists applied different clinical assessment and management protocols. Twenty per cent of depressive admissions were classified as either low or no risk of self-harm which NICE assessment and management of depressive illness directive stated should have been treated in the community (NICE 2004, 2009). There were also notable differences in the duration of stay in hospital dependent on which of the 18 independent sector hospitals were caring for the patient, with a range from 13 to 42 days, and whilst diagnostic criteria was a significant factor the results appeared to reflect that Priory consultants were not versed with either military doctrine or the high level of easily accessible, multi-disciplinary community care available within military DCMHs. Importantly, the methods outlined in this study; reinforced with a robust significant events reporting system, provided clear visibility of the above differences, resulting in better collaborative working practices.

Operational factors were most commonly reported by Sergeants to Warrant Officers and those aged 30-33 years old. Help seeking behaviour was influenced by the contextual environment of peacetime or military conflict, and whilst it was recognised that deployments place an enormous strain on personnel, it was reported that soldiers also found it easier to access support on operations. The stressors associated with an operational deployment could result in symptomatology that could be misdiagnosed as a MH problem such as PTSD, especially by civilian practitioners, whilst soldiers were often just experiencing a temporary adjustment reaction. However, the mounting number and sheer intensity of operational tours resulted in exhausted, worn out personnel. When treatment was required, the interviewees felt that many patients preferred to be treated by AMS clinical staff, (or those with military experience), perceiving that uniformed personnel with operational experience had better insight and understanding of the causes for their distress.

Female soldiers were significantly more likely to attend for a MH assessment and to be admitted to hospital for a MH disorder, and were more prone to being diagnosed with depression and stress reactions. It would appear than female soldiers were less effected by stigma, and found it easier to seek support because they were more self aware, emotionally expressive, and better at confiding in each other. However, they might have felt cut off with

no-one from the same gender to speak too, and in particular single female parents often struggled. GPs were more likely to refer a tearful woman than a man who disguised his emotions, although this might be inappropriate as the woman might purely be releasing her emotions before psychologically moving on.

This research is the first to quantify the plight of the unhappy young male soldier, where 47% of those who accessed the AMS presented with the 1 stressor of wanting to leave the Army, and this sample were positively linked with self harming ideology. Whilst not previously published, the AMH clinicians recognised that soldiers who were restricted from leaving due to their terms and conditions of service reflected the most common factor leading to a DCMH assessment, with problems stemming from dysfunctional recruitment procedures resulting in the enlistment of personnel who were temperamentally unsuitable for Army service. These patients' help seeking behaviour was often dependent on personal gain and they were not clinically depressed, however, if they were retained in the Services against their will, then their symptoms become more pronounced and distressing.

This sample is one of 3 distinct groups within the Army that presented with depressive symptomatology. The second group were soldiers aged in their mid to late 20s who faced a host of occupational, situational and environmental pressures. The third group were older personnel with a classical depressive clinical presentation. Consistently noted in the second and third groups were that soldiers could cope with extreme pressures, often in hostile and challenging environments, but could not deal with a failing relationship, and some soldiers would simply leave the Army to restore harmony at home. These 3 groups are highlighted in Figure 8.1, whilst the features that influence the onset of depression in the Army can be absorbed into 4 major clusters; predisposing factors, maintaining / precipitating factors, secondary coping mechanisms and help seeking behaviour. There were issues related to the contextual differences of peacetime and operational duties; and the provision provided by the AMS, DCMH and Unit Command and how these influences could either enable or inhibit access to clinical support. These subjects were detailed in depth and initially presented graphically in Chapter 6, but are repeated in Figure 8.2 to remove the need for cross referencing. A clinical aide memoire providing a simplified narrative explanation of Figure 8.2 is presented in Box 8.1.

Over 50% of patients who have Depression are not identified within Primary Healthcare (Mitchell et al, 2009). The majority of depressed soldiers experience multi-factorial problems displayed in a number of different ways. These stressors are influenced by the contextual environments of peacetime or conflict and personnel returning from an operational deployment may exhibit symptoms that could be misdiagnosed as a MH problem such as PTSD, whilst these soldiers were often just experiencing a temporary adjustment reaction. This re-emphasises the importance for a thorough assessment,* which can be enhanced through multiple interviews over a period of time. Often positively manipulating the environment can reduce the stressors and lead to a reduction in symptoms. The notable factors leading to depression can be subsumed into 4 major clusters:

Situational Stressors	Depression is often associated with situational stressors such as relationship problems, family issues and occupational predicaments irrespective of rank, age and gender. The notable exception are the high numbers of unhappy young soldiers who want to leave the Army but are restricted due to their terms and conditions of service.
Precipitating /Maintaining Factors	There are occasions when an individual has been exposed to a traumatic incident that they have failed to resolve or process, the negative effect of which can contribute to the development of depression. The origins might stem from childhood psychological or sexual abuse, to ongoing physical problems or relate to a traumatic event e.g. following a road traffic accident.
Secondary Coping Mechanisms	This classification refers to maladaptive methods utilised by individuals in an attempt to deal with their problems, but which can be detrimental to their health. Examples include the use of alcohol, illicit drugs and isolation that are dangerous and unhealthy, and will exacerbate the depression.
Help Seeking Behaviour	Numerous factors associated with Army life can either promote or deter depressed personnel from seeking appropriate support, including links to personality, age, rank and gender. If a clinician can positively influence the patients problematic issues, or promote a more healthy process then the depression may be resolved. Proactive interventions include health promotion and direction to the chain of command of any emerging trends that can be resolved at a local level, such as over robust micro management or personnel being stigmatised. It is imperative to also acknowledge that the care offered by the medical services is a key factor that will either facilitate or discourage personnel from seeking appropriate clinical support, and AMS personnel must ensure that the services offered are perceived as empathic, appropriate, accessible and free from stigma. Clinical staff should constantly strive for a better insight and understanding of the patient's distress, and assessment should include exploration of common themes. These include that female soldiers are more prone to being diagnosed with depression, often because they are better at seeking support and are emotionally expressive whilst many men will hide their emotions. In addition, older, more senior personnel may refrain from seeking help fearing negative occupational implications and that medical in confidence will not be maintained, and these fears must be acknowledged and addressed.

** Psychometric questionnaires are available to support the assessment of MH disorders. Advice is available from a DCMH.*

Box 8.1 **Predisposing Factors Leading to Depression in the British Army. Clinical Aide Memoire.**

Use in Association with Charts "Factors Leading to Depression in the British Army" and "Typical Presentation of Depression in Men within the British Army" .

The typical profiles for the presentation of depression in men within the Army was presented in Figure 8.1, which combined with the detail of Figure 8.2 and accompanying aide memoire provide the foundations for interpreting the theoretical model in Figure 8.3. This model displays the interface between the 4 major clusters of situational stressors, precipitating / maintaining factors, secondary coping mechanisms and issues that influence help seeking behaviour that may result in a depressed patient attending for a PHC assessment. If the direction offered in the aide memoire is followed, with recognition that factors can be positively manipulated to reduce depressive symptomatology, and these issues addressed within an appropriate multi-layered assessment, then patients can be supported and treated locally. Figure 8.3 continues by illustrating the patients' clinical pathways, and detailing the options available to deal with the types of depressive profiles commonly encountered within the Army. These include appropriate referrals (annotated by black arrows); the handling of inappropriate referrals (brown arrows) that the DCMHs will direct back to PHC and the relationship between DCMHs and the Chain of Command for young unhappy soldiers who wish to leave the Army (red arrows). The intent is that this theoretical model can be utilised at a practical level within PHC and support educational and AMS CPPD programmes, whilst influencing MOD policy, procedures, guidelines and protocols. It is anticipated that findings are transferable to other populations that deal predominately with men's MH, other countries Armed Forces and can stimulate further research in this area.

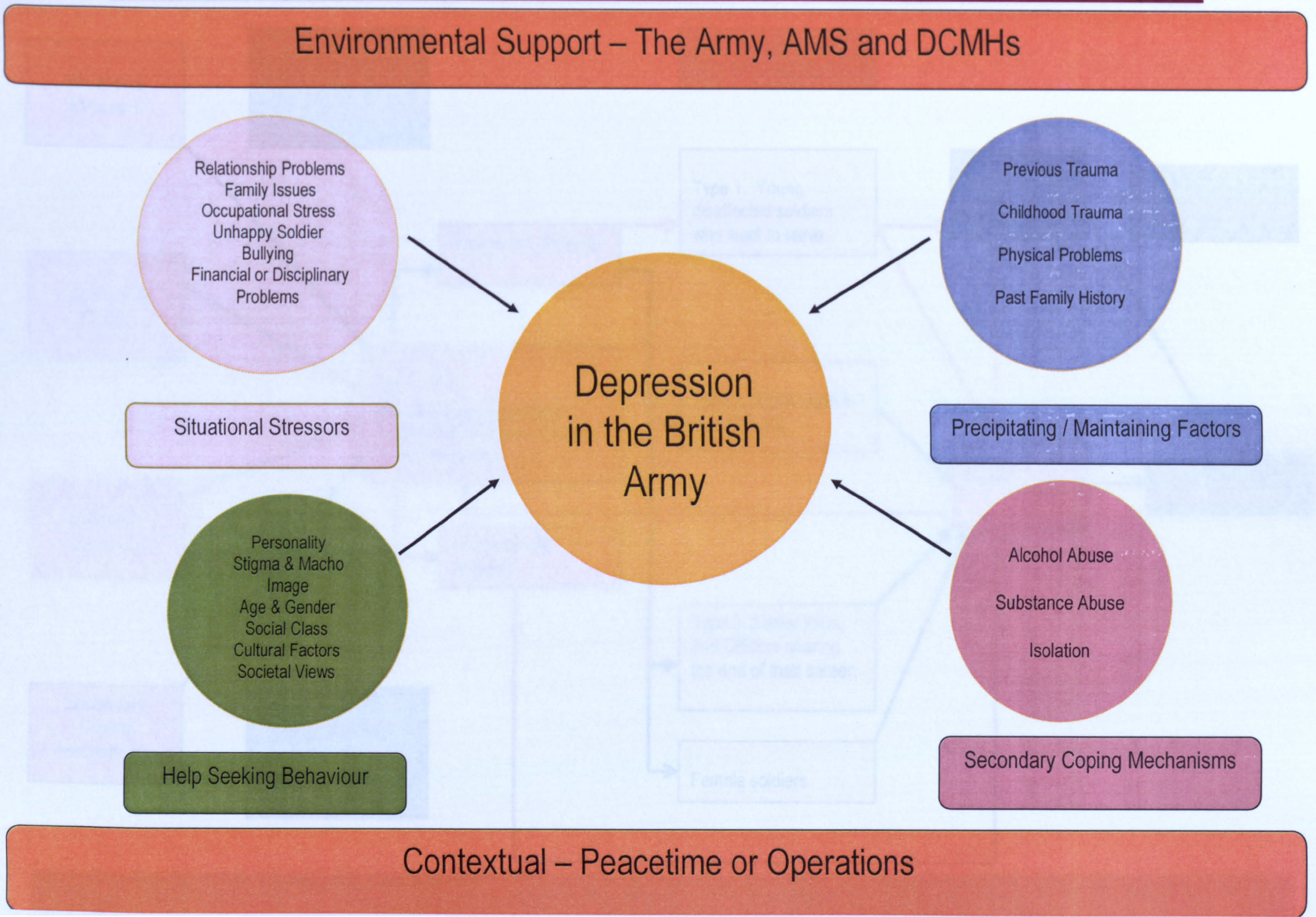
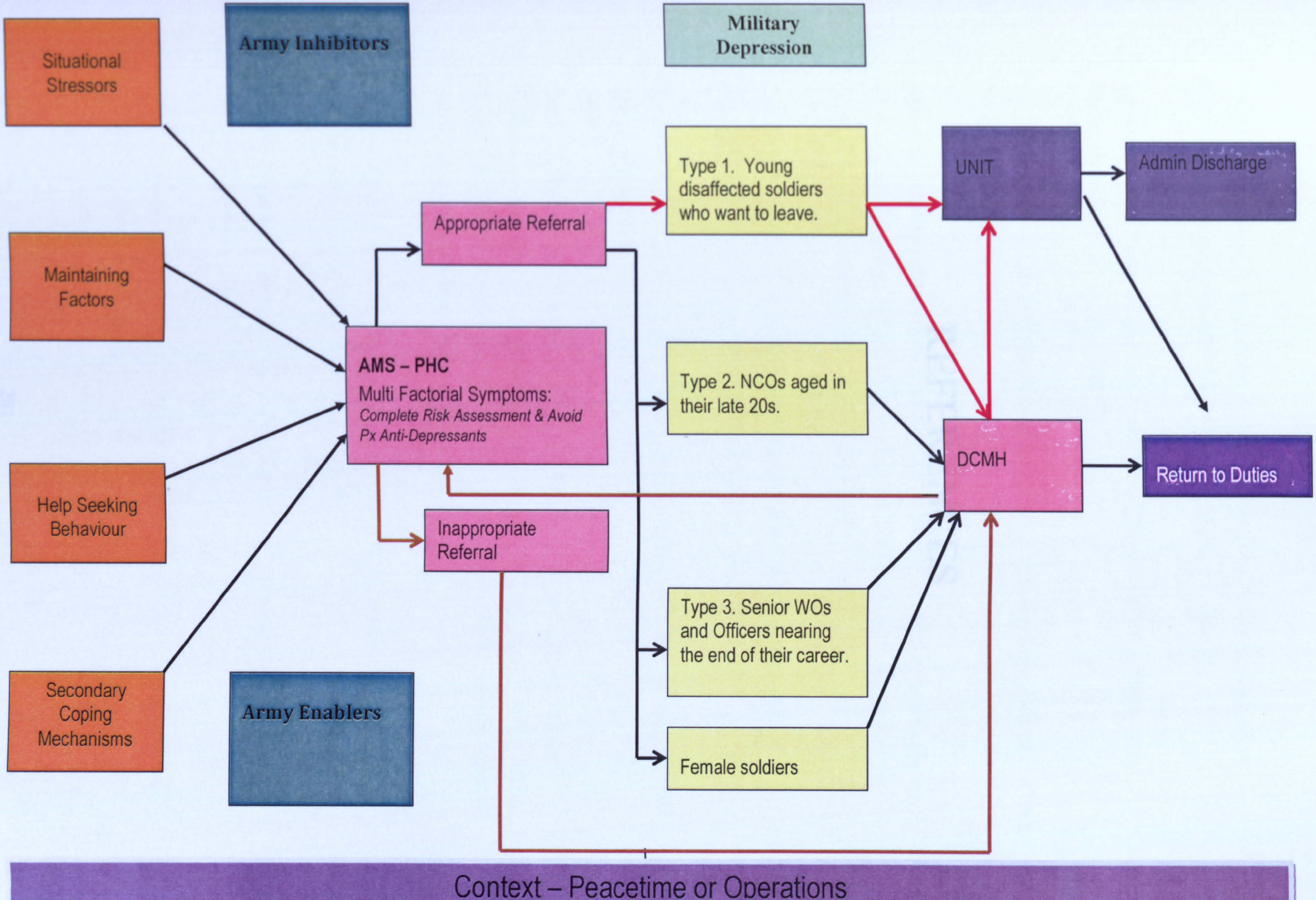

Environmental Support – The Army, AMS and DCMHs
Relationship Problems
Family Issues
Occupational Stress
Unhappy Soldier
Bullying
Financial or Disciplinary Problems
Situational Stressors
Previous Trauma
Childhood Trauma
Physical Problems
Past Family History
Precipitating / Maintaining Factors
Depression in the British Army
Personality
Stigma & Macho Image
Age & Gender
Social Class
Cultural Factors
Societal Views
Help Seeking Behaviour
Alcohol Abuse
Substance Abuse
Isolation
Secondary Coping Mechanisms
Contextual – Peacetime or Operations

Figure 8.3. Factors Influencing the Presentation of Military Depression and the Patient's Clinical Pathway



REFERENCES

Abramowitz, S., Cote, A.A. & Berry, E. (1987). Analysing Patient Satisfaction. A Multianalytic Approach. *Quality Review Bulletin,* 13 (4), pp. 122-130.

Adjutant General's Administrative Instruction. (2004). Suicide Vulnerability Risk Management (SVRM). 3(10), Issue 144.

Age Concern and the Mental Health Foundation. (2006). Promoting Mental Health and Well-Being in Later Life. June. http://www.mentalhealth.org.uk/publications/?entryid5=41185

Ainlay, S.C. (1986). The Encounter with Phenomenology. In: James Davison Hunter, J.D. & Ainlay, S.C. (Eds). Making Sense of Modern Times: Peter L. Berger and the Vision of Interpretive Sociology. London, Routledge & Kegan Paul.

Akiskal, H.S. (1989). New Insights Into the Nature and Heterogeneity of Mood Disorders. *Journal of Clinical Psychiatry,* 50(Suppl.5), pp. 6-12.

Alexander, L.A. & Link, B.G. (2003). The Impact of Contact on Stigmatising Attitudes Towards People with Mental Illness. *Journal of Mental Health,* 12, pp. 271 – 289.

Alonso, J., Codony, M., Kovess, V., Angermeyer, M.C., Katz,S.J., Haro,J.M., De Girolamo, G., De Graaf, R., Demyttenaere, K., Vilagut, G., Almansa, J., Lepine, J.P. & Brugha, T.S. (2007). Population Level of Unmet Need for Mental Healthcare in Europe. *British Journal of Psychiatry,* 190, pp. 299-306.

Alcohol Concern Report. (2008). The Poor Relation – Has the Emphasis on "Localism" Really Improved Alcohol Commissioning. 8 April.

American Psychiatric Association. (1952). Diagnostic & Statistical Manual of Mental Disorders. Washington, DC, APA.

American Psychiatric Association. (1968). Diagnostic & Statistical Manual of Mental Disorders (2nd Edn). Washington, DC, APA.

American Psychiatric Association. (1980). Diagnostic & Statistical Manual of Mental Disorders (3nd Edn). Washington, DC, APA.

American Psychiatric Association. (1994). Diagnostic and Statistical Manual of Mental Disorders (4th Edn). (DSM-IV). Washington, DC, APA.

Anderson, S. (2010). Using Helplines and the Internet. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 241-246.

Andersen, S.M. & Harthorn, B.H. (1990). Changing the Psychiatric Knowledge of Primary Care Physicians. The Effects of a Brief Intervention on Clinical Diagnosis and Treatment. *General Hospital Psychiatry*, 12 (3), pp.177–190.

Angermeyer, M.C., Matschinger, H. & Riedel-Heller, S.G. (2001). What to do About Mental Health Disorder – Help Seeking Recommendations of the Lay Public. *Acta Psychiatric Scandinavca,* 103, pp. 220-225.

Angst, J. (1981). Course of Affective Disorders. In: Sachar, E.J. (Ed). Handbook of Biological Psychiatry, Pt 5. Brain Mechanisms and Abnormal Behaviour, New York, Marcel Dekker, pp. 225 – 242.

Angst, J. (1992). How Recurrent and Predictable is Depressive Illness? In: Montgomery, S & Rouillon, F. (Eds). Long Term Treatment of Depression, Chichester, Wiley, pp. 1 - 13.

Angst, J., Merikangas, K., Scheidegger., P. & Wicki, W. (1990). Recurrent Brief Depression: A New Subtype of Affective Disorder. *Journal of Affective Disorders*, 19, pp. 87-98.

Annells, M. (2006). Triangulation of Qualitative Approaches: Hermeneutical Phenomenology and Grounded Theory. *Journal of Advanced Nursing,* 56 (1) pp. 55-61.

Anonymous – Personal View. (1996). Recovery is Possible. *British Medical Journal,* 313, pp. 560-1561.

Appleby, L. (2010). Foreward. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. ix-xi.

Appleby, L., Shaw, J. & Amos, T. (1997). National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. *British Journal of Psychiatry*, 170, pp. 101-102.

Archibald, H.C. & Tuddenham, R.D. (1965). Persistent Stress Reaction After Combat: A 20 Year Follow-up. *Archives of General Psychiatry*, 12, pp. 475-481.

Artiss, K.L. (1997). Combat Psychiatry: From History to Theory. *Military Medicine*, 162, pp. 605-609.

Aitkinson, J.M. (1978). Discovering Suicide. London, McMillan.

Atkinson, P., Coffey, A. & Delamont, S. (2003). Key Themes in Qualitative Research: Continuities and Changes. New York, Rowan & Littlefield.

Auditor General for Scotland and the Accounts Commission. (2009). Overview of Mental Health Services.

Audit Scotland. (2007). Managing Long-Term Conditions. Audit General for Scotland & the Accounts Commission. Edinburgh.

Aukett, R., Ritchie, J. & Mill, K. (1988). Gender Differences in Friendship Patterns. *Sex Roles*, 19(1-2), pp. 57-66.

Avis, M., Bard, M. & Arthur, A. (1997). Questioning Patient Satisfaction: An Empirical Investigation of Two Out-Patient Clinics. *Social Science & Medicine*, 44(1), pp. 85-92.

Babbington, A. (1983). For the Sake of Example: Capitol Court Martial 1914-1920. New York, St Martin Press.

Backhouse, S. & Brown, Y. (2000). Using a Patient Satisfaction Survey to Close the Theory-Practice Gap. *Nursing Standard*, 14 (38), pp. 32-35.

Baggerley, M. (1998). "Military Munchausen's". Assessment of Factitious Claims of Military Service in Psychiatric Patients. *Psychiatric Bulletin,* 22, pp. 153-154.

Bagley, C. & Ramsey, R. (1986). Sexual Abuse in Childhood: Psychological Outcomes and Implications for Social Work Practice. *Journal of Social Work and Human Sexuality*, 5, pp. 33-47.

Baker, S.L. (1975). Military Psychiatry. In: Freedman, A.M., Kaplan, H.I., & Sadock, B.J. (Eds). Comprehensive Textbook of Psychiatry. Williams & Wilkins, Baltimore.

Bancroft, J.H., Skrimshire, A.M. & Simkin, S. (1976). The Reasons People Give For Taking Overdoses. *British Journal of Psychiatry*, 128, pp. 538-548.

Banks, I. (2001). No Man's Land: Men, Illness and the NHS. *British Medical Journal,* 323, pp. 1058-1060.

Barkow, K., Maier, W., Ustin, T.B., Gansicke, M., Wittchen, H.U. & Heun, R. (2002). Risk Factors for New Depressive Episodes in Primary Health Care: An International Prospective 12-Month Follow-Up Study. *Psychological Medicine*, 32, pp. 595-607.

Barrington, F. (2000). Ex-GI in AP Account Concedes He Didn't See the Korean Massacre. *New York Times, 26 May.*

Bartholomew, J. (2004). The Welfare State We're In. London, Politico.

Baruch, G.K., Biener, L. & Barnett, R.C. (1987). Women and Gender in Research on Work and Family Stress. *American Psychologist*, 42(2), pp. 130-136.

BBC News. (2002a). Deepcut Barracks May be Closed.
www.news.bbc.co.uk/1/hi/uk/2500995.stm. Friday 22 Nov 2002. 0919GMT.

BBC News. (2002b). Families Lobby for Deepcut Inquiry. www.news.bbc.co.uk/1/hi/uk/2370627.stm. Tue 29 Oct; 1447GMT.

Beautrais, A.L. (2000). Risk Factors for Suicide & Attempted Suicide Among Young People. *Australia and New Zealand Journal of Psychiatry*, 34, pp. 420-436.

Bebbington, P.E., Marsden, L. & Brewin, C.R. (1999). The Treatment of Psychiatric Disorder in the Community: Report from the Camberwell Needs for Care Study. *Journal of Mental Health,* 8, pp. 7-17.

Beck, A.T., Ward, C.H., Mendelson, M., Mock, J. & Erbaugh, J. (1961). An Inventory for Measuring Depression. *Achieves of General Psychiatry*, 4, pp. 561-571.

Belenky, G., Noy, S. & Soloman, Z. (1987). Battle Stress, Morale, Cohesion, Combat Effectiveness, Heroism, and Psychiatric Casualties: The Israeli Experience. In: Belenky, G (Ed). Contemporary Studies in Combat Psychiatry, Westport, Greenwood, pp. 11 – 20.

Belle, D. (1990). Poverty & Women's Mental Health. *American Psychologist*, 45(3), pp. 385-389.

Benner, P. (1995). Interpretive Phenomenology: Embodiment, Caring and Ethics in Health and Illness. Thousand Oaks, California, Sage.

Berger, P.L. & Kellner, H. (1981). Sociology Reinterpreted. New York: Doubleday.

Beynon, J. (2004). The Commercialisation of Masculinities: From the "New Man" to the "New Lad". In: Carter, C. & Steiner, L. (Eds). Media and Gender. Maidenhead, Open University, pp. 198-291.

Bishop, G. (1984). Gender, Role, and Illness Behaviour in a Military Population. *Health Psychological*, 3: pp. 519-534.

Bisset, A. & Chesson, R. (2000). Is this Satisfaction Survey Satisfactory? Some Points to Consider in their Planning and Assessment. *Health Bulletin*, 58 (1) pp. 45-52.

Bisson, J. (2005). NICE Guidelines for the Assessment and Treatment of PTSD. Lecture presented at the Annual Combat Stress Conference, London.

Black, D.W., Carney, C.P., Foreman-Hoffman, V.L., Letuchy, E., Peloso, P., Woolson, R.F. & Doebbeling, B.N. (2004). Depression in Veterans of the First Gulf War and Comparable Military Controls. *Annals of Clinical Psychiatry*, 16 (2), pp. 53-61.

Blatchley, N.F., Ward, V.R. & Fear, N.T. (2004). Suicide and Open Verdict Deaths Among Males in the UK Regular Armed Forces, 1984-2003. London, UK: Defence Analytical Services Agency for UK Defence Statistics.

Blumer, H. (1969). Symbolic Interactionisms. Perspective and Method. Englewood Cliffs, New Jersey, Prentice Hall.

Blumer, H. (1979). Comments on George Herbert Mead and the Chicago Tradition of Sociology. *Symbolic Interactions,* 2(2), pp. 21-22.

Bigus, O.E., Hadden, S.C. & Glaser, B.G. (1994). The Study of Basic Social Processes. In Glaser, B.G. (Ed) More Grounded Theory Methodology: A Reader. Mill Valley, California, The Sociology Press.

Boles, M., Pelletier, B. & Lynch, W. (2004). The Relationship between Health Risks and Work Productivity. *Journal of Occupational Environmental Medicine*, 46, pp. 737-45.

Branney, P. & White, A. (2010). In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 7-18.

Braunholtz, S., Davidson, S. & King, S. (2004). Well? What do you Think? The Second National Scottish Survey of Public Attitudes to Mental Health, Mental Well Being and Mental Health Problems. Edinburgh, Scottish Executive Social Research.

Bray, R.M., Fairbank, J.A. & Marsden, M.E. (1999). Stress and Substance Use Among Military Women and Men. *American Journal of Drug Alcohol Abuse*, 25, pp. 239-251.

Bray, R.M., Hourani, L.L., Rae, K.L., Dever, J.A., Brown, J.M., Vincus, A.A., Pemberton, M.R., Marsden, M.E., Faulkner, D.L. & Vandermaas-Peeler, R. (2004). 2002 Department of Defense Survey of Health Related Behaviors Among Military Personnel, Technical Report, RTI/ 7841/006-FR. Research Triangle Park, NC, RTI International, 2003.

British Medical Journal (Editorial). (2006). Mental Health Screening Before Troop Deployment: Is Not Supported by Current Evidence. *British Medical Journal,* 333 Nov, pp. 979-980.

Britt, T.W. & Dawson, C.R. (2005). Predicting Work-Family Conflict from Workload, Job Attributes, Group Attributes and Health: A Longitudinal Study. *Military Psychology,* 17, pp. 203-227.

Brown, G.W. & Harris, T. (1978). Social Origins of Depression. London, Tavistock.

Browne, T., Iverson, A., Hull, L., Workman, L., Horn., O, Jones., M., Murphy, D., Greenberg, N., Rona, R., Hotopf, M., Wessely, S. & Fear, N.T. (2008). How Do Experiences in Iraq Affect Alcohol Use Among UK Armed Forces Personnel. *Occupational & Environmental Medicine*, 65, pp. 628-633.

Brownhill, S., Wilhelm, K., Bradley, L. & Schmied, V. (2005). Big Build: Hidden Depression in Men. *Australian & New Zealand Journals of Psychiatry,* 39, pp. 921-931.

Burawoy, M. (1991). The Extended Case Method. In Burawoy, M., Burton, A., Ferguson, A., Fox, K.J., Gamson, J., Gartrell, N., Hurst, L., Kurzman,C., Salzinger, L., Schiffman,J. & Ui, S. (Eds). Ethnography Unbound. Power and Resistance in the Modern Metropolis. Berkley, University of California Press, pp 271-290.

Burnard, P. (1991). A Method of Analysing Interview Transcripts in Qualitative Research. *Nurse Education Today,* 11, pp. 461-466.

Burns, S. (2006). Stigma and the Law. *The Lancet*, 367, pp. 529-531.

Bush, M. (2010). Men Bereaved Through Suicide. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 106-110.

Busuttil, W. (2010). Combat-Related Stress. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 125-141.

Bushell, J. (2004). Frequency of Consultations and General Practitioner Recognition of Psychological Symptoms. *British Journal of General Practice,* 54, pp. 838-842.

Butchvarov, P. (1970). The Concept of Knowledge. Evanston, Northwestern University Press.

Byrne, P. (2009). Stigma. *The British Journal of Psychiatry*, 195(1), p. 80.

Cantor, C.H. (2000). Suicide in the Western World. In Hawton, K., & Van Heeringen, K. (Eds). The International Handbook of Suicide and Attempted Suicide, Chichester, Wiley. pp. 9–28.

Cape, J. & McCullough, Y. (1999). Patients' Reactions for Not Presenting Emotional Problems in General Practice, *British Journal of General Practice,* 49, pp. 875-79.

Central Office for Research: Ethics Committee. (2005). About Us: www.corec.org.uk/applicants/about/about.hcm.

Cepoiu, M., McCusker, J., Cole, M.G., Sewitch, M., Belzile, E. & Ciampi, A. (2008). Recognition of Depression by Non Psychiatric Physicians. A Systematic Literature Review & Meta-Analysis. *Journal of Geriatric Interment Medicine,* 23, pp. 25-36.

Chodoff, P. (1963). Late Effects of Concentration Camp Syndrome. *Archives of General Psychiatry,* 8, pp. 323-333.

Channel 4. (2006). Dispatches Documentary - Battle Fatigue. 20.00hrs, 22 May.

Charmaz, K. (1990). Discovering Chronic Illness: Using Grounded Theory. *Social Science & Medicine,* 30, pp. 1161-1172.

Charmaz, K. (1991b). Translating Graduate Qualitative Methods Into Undergraduate Teaching: Intensive Interviewing As A Case Example. *Teaching Sociology*, 19, pp. 384-395.

Charmaz, K. (1995). Grounded Theory. In: Smith, J.A., Harre, R. & Van Langenhove (Eds). Rethinking Methods in Psychology. London,Sage. pp. 27-49.

Charmaz, K. (2001). Qualitative Interviewing and Grounded Theory Analysis. In: Gubrium, J.F. & Holstein, J.A. (Eds). Handbook of Interview Research. Thousand Oaks, California, Sage, pp. 675-694.

Charmaz, K. (2003). Grounded Theory. In: Smith, J.A (Ed). Qualitative Psychology: A Practical Guide to Research Methods. London, Sage.

Charmaz, K. (2006). Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. London, Sage.

Cheok, C.S.C., Ang, Y.G., Chew, W.M. & Tan, H.Y. (2000). Adjusting to Military Life – Servicemen with Problems Coping and their Outcomes. *Singapore Medical Journal*, 41(5): pp. 218-220.

Chisholm, D., Sanderson, K., Ayuso-Mateos, J.L. & Saxena, S. (2004). Reducing the Global Burden of Depression: Population-Level Analysis of Intervention Cost-Effectiveness in 14 World Regions. *British Journal of Psychiatry*, 184, pp. 393–403.

Christensen, H., Griffiths, K.M. & John, A.F. (2004). Delivering Interventions for Depression by Using the Internet. Randomised Controlled Trial. *British Medical Journal,* 328, p. 265.

Ciechanowski, P., Walker, E.A., Katon,W.J. & Russo,J.E. (2002). Attachment Theory: A Model for Health Care Utilization and Somatization. *Psychosomatic Medicine*, 64, pp. 660-667.

Cigrang, J.A., Carbone, E.G., Todd, S. & Fiedler, E. (1998). Mental Health Attrition from Air Force Basic Military Training. *Military Medicine,* 163, pp. 834-838.

Clarke, A.E. (2005). Situational Analysis: Grounded Theory After the Postmodern Turn. Thousand Oaks, California, Sage.

Cochran, S. & Rabinowitz, F. (2000). Men and Depression: Clinical and Empirical Perspectives. California, Academic.

Coffey, A. & Aitkinson, P. (1996). Making Sense of Qualitative Data. Complementary Research Strategies. Thousand Oaks, California, Sage.

Collins, K. (1999). Developing Patient Satisfaction Questionnaires. *Nursing Standard,* 14 (11) pp. 37-38.

Collinson, G. (2006). What Makes an Effective Healthcare Leader? Results of the Best Leadership Practices Research in Healthcare in the UK. *Practice Development in Health Care*, 5(2), pp. 81-91.

Colvile, R. (2006). Cost of Priory Clinical Treatment for Army Veterans is £9M. *Daily Telegraph,* 7 Aug, pp. 1-2.

Committee for the Safety of Medicines. (2004). Advice Provide Within National Institute of Clinical Excellence (2004). Depression: Management of Depression in Primary and Secondary care. Clinical Guideline 23. December.

Conrad, D. (2010). Social Capitol and Men's Mental Health. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 26-38.

Conrad, D. & Warwick-Booth, L. (2010). Cultural Representations of Masculinity and Mental Health. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 18-25.

Conrad, D. & White, A. (2010). Promoting Men's Mental Health. Oxford, Ratcliffe.

Cook, S.H., Clancy, C. & Sanderson, S. (2004). Self-Harm & Suicide: Care, Interventions and Policy. *Nursing Standard,* 18(43), pp. 43-52.

Cornelis, C.M., Armeling, E.H. & de Jonghe, F. (1989). Life Events and Social Network in Relation to Onset of Depression: A Controlled Study. *Acta Psychiatrica Scandinavica,* 80, pp. 174-179.

Corrigan, P.W., Edwards, A.B., Green, A., Diwan, S.L. & Penn, D.L. (2001a). Prejudice, Social Distance and Familiarity with Mental Illness. *Schizophrenia Bulletin,* 27, pp. 219–225.

Corrigan, P.W., River, L.P., Lundin., R.K., Penn,D.L., Uphoff-Wasowski, K., Campion, J., Mathisen, J., Gagnon, C., Bergman, M., Goldstein, H. & Kubiak, M.A. (2001b). Three Strategies for Changing Attributions About Severe Mental Illness. *Schizophrenia Bulletin,* 27(2), pp. 187-195.

Coryell, W., Endicott, J. & Keller, M.B. (1991). Predictors of Relapse into Major Depressive Disorder in a Non-clinical Population. *American Journal of Psychiatry,* 148, pp. 1353–1358.

Couture, S.M. & Penn, D.L. (2003). Interpersonal Contact and the Stigma of Mental Illness: A Review of the Literature. *Journal of Mental Illness,* 12, pp. 291–305.

Crawford, M (2004). Depression: International Intervention for a Global Problem. *British Journal of Psychiatry,* 194, pp. 379–380.

Crawford, M.J., Rutter, D., Sharpe, D.B. & Webster, T. (2005). Prevention of Suicide Behaviour Among Army Personnel: In-Depth Interviews with Soldiers & Healthcare Professionals. Imperial College Draft Report. July 2005.

Crawford, M. & Wessely, S. (1998). The Changing Epidemiology of Deliberate Self Harm – Implications for Service Provision. *Health Trends*, 30, pp. 66-68.

Crawford, M., Sharpe,D., Rutter, D. & Weaver, T. (2009). Prevention of Suicidal Behaviour Among Army Personnel: A Qualitative Study. *Journal of the Royal Army Medical Corps,* 155(3), pp. 203-207.

Creswell, J. (1998). Qualitative Inquiry and Research Design. Choosing Among Five Traditions. Thousand Oaks, California: Sage.

Cuff, E. C. (1993). Problems of Versions in Everyday Situations. Lanham, Maryland: University Press of America.

Cuijpers, P. & Smit, F. (2002). Excess Mortality in Depression: A Meta – Analysis of Community Studies. *Journal of Affective Disorders,* 72(3), pp. 227-236

Czaja, R. & Blair, J. (2005). Designing Surveys: A Guide to Decisions and Procedures. London, Sage.

Dandeker, C. (2001). On the Need to be Different: Military Uniqueness and Civil-Military Relations in Modern Society. *RUSI Journal,* 146, pp. 4-9.

Dandeker, C., Wessely, S., Iversen, A. & Ross, J. (2006). What's in a Name? Defining & Caring for "Veterans": The United Kingdom from a Comparative Perspective. *Armed Forces & Society*, 32(2), pp. 161-177.

Dandeker. C., French, C. & Thomas, S. (2008). The Family & Military as Greedy Institutions: Negotiating A Work Life Balance. Economic & Social Research Council. RES-000-22-0764.

Dansak, D.A. (1998). Childhood Abuse & Parental Abuse Reported by Navy Outpatient Mental Health Patients. *Military Medicine,* 163, pp. 510-514.

Data Protection Act (1998). London, Crown.

Deahl, M.P., Srinivasan, M., Jones, N., Thomas, J., Neblett, C. & Jolly, A. (2000). Preventing Psychological Trauma in Soldiers: The Role of Operational Stress Training & Psychological Debriefing. *British Journal of Medical Psychology*, 73, pp. 77-85.

Defence Analytical Service Agency. (2001). UK Armed Forces Full Time Strength and Trained Requirement. 1 Apr 01. London, MOD.

Defence Analytical Service Agency (2007). Suicide and Open Verdict Deaths in the UK Regular Armed Forces 1984-2006. Bath, Defence Analytical Servuices Agency.

Deitz, I.J. (1986). Time-Limited Psychotherapy for Post Traumatic Stress Disorder. The Traumatized Ego & Its Self-Reparative Function. *American Journal of Psychotherapy*, 11(2), pp. 290-299.

Department of Health. (1983). NHS Management Enquiry. The Griffiths Report. London, HMSO.

Department of Health. (1991). The Patients Charter. London, HMSO.

Department of Health. (1999). The New NHS. Modern, Dependable. London, HMSO.

Department of Health. (1999). A First Class Service. London, HMSO.

Department of Health. (2002). National Suicide Prevention Strategy for England. Sept. London, HMSO.

Department of Health. (2004). Guidance for Quality Outcomes Framework.http://www.dh.gov.uk/en/Healthcare/Primarycare/Primarycarecontracting/QOF/DH_4125653.

Department of Health. (2006). Our Health Our Choice Our Say. London, HMSO.

DeRose, K (1992). Contextualism and Knowledge Attributions. *Philosophy and Phenomenological Research*, 15, pp. 213-219.

Deu, N., Srinivasan, M. & Srinivasan, P. (2004). Issues in Temperamental Unsuitability Re-Examining Concepts and Current Practice In The British Army. *Journal of the Royal Army Medical Corps*, 150, pp. 179-181.

Dey, I. (1999). Grounding Grounded Theory. San Diago Academic Press.

Dey, I. (2004). Grounded Theory. In Searle, C., Gobo, G., Gubrium, J.F. & Silverman, D. (Eds). Qualitative Research Practice. London, Sage. pp. 80-93.

Directorate of Personal Services (Army). (2008). Army Support During Estrangement. Ref D/DPS(A)/33/9/PS4(A), 14 Jul.

Dobbs, D. & Wilson, W.P. (1960). Observations on the Persistence of Traumatic War Neurosis. *Journal of Nervous & Mental Disorder*, 21, pp. 40-46.

Dominey, S. & Dominey, P. (2010). Anger Management and Violence Prevention with Men. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 142-149.

Dovidio, J.F., Major, B. & Crocker, J. (2000). Stigma: Introduction & Overview. In: Heatherton, T.F., Kleck, R.E. & Hebl, M.R. (Eds). The Social Psychology of Stigma. New York, Guildford, pp. 1-13.

Dowrick, C. & Buchan, I. (1995). Twelve Month Outcome of Depression in General Practice: Does Detection or Disclosure Make a Difference? *British Medical Journal,* 311, pp. 1274-1276.

Dube, S.R., Anda, R.F., Felitti, V.J., Chapman, D.P., Williamson, D.F. & Giles, W.H. (2001). Childhood Abuse, Household Dysfunction, and the Risk of Attempted Suicide

Throughout the Lifespan: Finds from the Adverse Childhood Experiences Study. *Journal of the American Medical Association,* 286, pp. 3089-3096.

Dubicka, B., Hadley, S. & Roberts, C. (2006). Suicidal Behaviour in Youths with Depression Treated with New-Generation Antidepressants: A Meta Analysis. *British Journal of Psychiatry,* 189, pp 393-398.

Dunning, C. & Silva, M. (1980). Disaster Induced Trauma in Rescue Workers. *Victimology: An International Journal*, 5, pp. 287-297.

Ebmeier, K., Donaghy, C. & Steele, D. (2006). Recent Developments and Current Controversies in Depression. *The Lancet*, 367, pp. 153-167.

Economics and Social Research Council. (1996). Cited in: Silverman, D. (2005). Doing Qualitative Research. Sage, London. p. 143.

Egan, J., Jackson, L. & Eanes, R.A. (1951). A Study of Neuropsychiatric Rejectees. *Journal American Medical Association*, 145, pp. 466-469.

Elliott, T.R. (1914). Transient Paraplegia from Shell Explosions. *British Medical Journal,* ii, pp. 1005-1006.

Emerson, R.M. (1983). Introduction to Part II: Theory & Evidence and Representation. In Emerson, R.M. (Ed). Contemporary Field Research: A Collection of Readings. Boston, Little Brown, pp. 93-107.

Emslie, C., Fuhrer, R., Hunt, K., MacIntyre, S., Shipley, M. & Stansfield, S. (2002). Gender Differences in Mental Health: Evidence from Three Organisations. *Social Science & Medicine,* 54, pp. 621-624.

Equal Opportunities Commission (2005). Then and Now: 30 Years of the Sex Discrimination Act. Manchester, EDC.

Evans, E., Hawton, K. & Rodham, K. (2004). Factors Associated with Suicidal Phenomena in Adolescents: A Systematic Review of Population Based Studies. *Clinical Psychological Review,* 24, pp. 957-579.

Evans, K. & Sullivan, J.M. (2001). Duel Diagnosis. Counselling the Mentally Ill Substance Abuser. New York, Guildford.

Fear, N.T. & Williamson, S. (2003). Suicide and Open Verdict Among Males in the UK Civilian Population. Defence Analytical Services and Advice (DASA), London, DASA.

Fear, N.T., Iversen, A., Meltzer, H., Workman, L., Hull, L., Greenberg, N., Barker, C., Browne, T., Earnshaw, M., Horn, O., Jones, M., Murphy, D., Rona, R., Hotopf, M. & Wessely, S. (2007). Patterns of Drinking in the UK Armed Forces. *Addiction*; 102(11), pp.1749-1759.

Fernandez, W.G., Hartman R. & Olshaker, J. (2006) . Brief Interventions to Reduce Harmful Alcohol use Among Military Personnel: Lessons Learned from the Civilian Experience. *Military Medicine*, 171, pp. 538-543.

Ferguson, D.M., Woodward, L.J. & Horwood, L.J. (2000). Risk Factors & Life Processes Associated with the Onset of Suicidal Behaviour During Adolescence & Early Adulthood. *Psychological Medicine,* 30, pp. 23-39.

Finnegan, A.P. (1995a). Treating Post Traumatic Stress Disorder Using Riehl's Interaction Model. *British Journal of Nursing,* 4(20), pp. 1214-1217.

Finnegan, A.P. (1997). Societal Factors that Negatively Affect the Mental Health Support for the British Army's Service Personnel Involved in Major Trauma. *Journal of the Royal Army Medical Corps,* 143(2), pp. 107-112.

Finnegan, A.P. (1998). Clinical Assessment of Post Traumatic Stress Disorder. *British Journal of Nursing,* 7 (4), pp. 212-218.

Finnegan, A.P. & Finnegan, S.E. (2007). Assessing the Effectiveness of the British Army's Mental Health Service. *British Journal of Nursing*, 16 (12), pp. 725-730.

Finnegan, A.P., Finnegan, S.E. & Gamble, D. (2007). A Review of One Year of British Armed Forces Mental Health Hospital Admissions. *Journal of the Royal Army Medical Corps*, 153 (1), pp. 26-31.

Finnegan, A.P., Finnegan, S.E., Jackson, C., Simpson, R. & Ashford, R. (2010). Predisposing Factors & Associated Symptoms of British Army Personnel Requiring A Mental Health Assessment. *Journal of the Royal Army Medical Corps,* 156(2), pp. 90-96.

Finnegan, A.P., Finnegan, S.E., McGee, P., Srinivasan, M. & Simpson, R. (2010). Predisposing Factors Leading to Depression in the British Army. *British Journal of Nursing,* 19(21), pp. 1355-1362.

First, M.B., Spitzer, R.L., Gibbon, M. & Williams, J.B.W. (1996). Structured Clinical Interview for DSM-IV Axis 1 Disorders: Administration Booklet.

Fitzpatrick R. (1991). Surveys of Patient Satisfaction 1. Important General Considerations. *British Medical Journal,* 302, pp. 887-889.

Foulkes, S.H. (1946). Group Analysis in a Military Neurosis Centre. *Lancet*, (I), pp. 303-307.

Fossom, A. (1988). Family Stress. In Fisher, S. & Reason, J. (Eds). Book of Life Stress, Cognition & Health. London, Wiley, pp. 161-174.

Foster, T., Gillespie, K. & McClelland, R. (1997). Mental Disorders and Suicide in Northern Ireland. *British Journal of Psychiatry,* 170, pp. 175-179.

Freeman, H.L. (1958). Common Stresses in a Military Environment. *Journal of the Royal Army Medical Corps*, 104(1), pp. 31-34.

Freud, S., & Breuer, J. (1895). Studies in Hysteria. London, Hogarth.

Friedman, B., Conwell, Y. & Delavan, R.L. (2007). Correlates of Late-Life Major Depression: A Comparison of Urban & Rural Primary Care Patients. *American Journal of Geriatric Psychiatry,* 15, pp 28-41.

Fruch, B.C., Elhai, J.D., Grubaugh, A.L., Monnier, J., Kashdan, T.B., Sauvageot, J.A., Hamner, M.B., Burkett, B.G. & Arana, G.W. (2005). Documented Combat Exposure of US Veterans Seeking Treatment for Combat-Related Post Traumatic Stress Disorder. *British Journal of Psychiatry*, 186, pp. 467-472.

Futterman, S. & Pumpian-Mindlin, E. (1951). Traumatic War Neuroses Five Years Later. *American Journal of Psychiatry*, 108, pp. 401-408.

Garfinkel, H. & Sacks, H. (1970). The Formal Properties of Practical Actions. In J. McKinney, J. & Tiryakin, E. (Eds.) Theoretical Sociology. New York: Appleton-Century-Crofts. pp. 337-366.

Gibbs, J.T. & Fuery, D. (1994). Mental Health & Well-Being of Black Women: Toward Strategies of Empowerment. *American Journal of Clinical Psychology,* 22, pp. 559-582.

Gilbert, N. & Mulkay, M. (1983). In Search of the Action. In: Gilbert, N. & Abell, P. (Eds). Accounts & Action: Aldershot, Gower.

Gilchrist, G. & Gunn, J. (2007). Observational Studies of Depression in Primary Care: What Do We Know? *BMC Family Practice,* 8, p. 28.

Gillman, P.K. (2006). A Review of Serotonin Toxicity Data: Implications for the Mechanisms of Antidepressant Drug Action. *Biological Psychiatry*, 59, pp. 1946-1051.

Ginzberg, E. (1959). The Lost Divisions. New York, Columbia University Press.

Glaser, B.G. (1978). Theoretical Sensitivity. Mill Valley, California, The Sociology Press.

Glaser, B.G. (1992). Basics of Grounded Theory Analysis. Mill Valley, California, The Sociology Press.

Glaser, B.G. (2001). The Grounded Theory Perspective: Conceptualisation Contrasted with Description. Mill Valley, California, The Sociology Press.

Glaser, B.G. & Strauss, A, L. (1967). The Discovery of Grounded Theory. Chicago, Aldine.

Goffman, E. (1963). Stigma: Notes on the Management of Spoiled Identity. London, Penguin.

Gold, M.R., Stevenson, D. & Fryback, D.G. (2002). HALYs and QUALYs and DALYs. Oh My: Similarities and Differences in Summary Measures of Population Health. *Annual Review of Public Health,* 23, pp. 115-134.

Griffiths, K.M., Christensen, H., Jorm, A.F., Evans, K. & Groves; C. (2004). Effect of Web-Based Literacy and Cognitive-Behavioural Therapy Interventions on Stigmatising Attitudes to Depression. Randomised Controlled Trial. *British Journal of Psychiatry,* 185, pp. 343 – 349.

Griffiths, P. (2006). Being a Research Participant: The Nurse's Ethical and Legal Rights. *British Journal of Nursing*, 15(7), pp. 386-389.

Grinker, R.R. & Spiegel, J.P. (1945). Men Under Stress. New York: Blakiston.

Gubrium, J. (1988). Analyzing Field Reality, Newbury Park, California: Sage.

Gunnell, D., Middleton, N., Whitley, E., Dorling, D. & Frankel, S. (2003). Why are Suicide Rates Rising in Young Men but Falling in the Elderly? A Time-Series Analysis of Trends in England and Wales 1950-1998. *Societal Science Medicine*, 57, pp. 595–611.

Gunnell, D., Saperia, J. & Ashby, D. (2005). Selective Serotonin Reuptake Inhibitors (SSRIs) and Suicide in Adults: Meta-Analysis of Drug Compnay Data from Placebo

Controlled, Randomised Controlled Trials Submitted to the MHRS's Safety Review. *British Medical Journal,* 19, 330(7488), p. 385.

Guttman, L. (1950). The Basis for Scalogram Analysis. In Stouffer, S.A., Guttman, L., Suchman, E.A., Lazarsfeld, P.F., Star, S.A. & Clausen, J.A. (Eds). Measurement and Prediction. The American Soldier: Studies in Social Psychology in World War II, Vol. IV. New York: Wiley

Hacker-Hughes, J., Cameron, F., Eldridge, R., Devon, M., Wessely, S. & Greenberg, N. (2005). Going to War Does Not have to Hurt: Preliminary Findings from the British Deployed to Iraq. *British Journal of Psychiatry*, 186, pp. 536–537.

Hagerty, B.M.K., Williams, R.A., Coyne, J.C. & Early, M.R. (1996). Sense of Belonging and Indicators of Psychological and Social Functioning. *Archives of Psychiatric Nursing*, 10, pp. 235-244.

Hammersley, M. & Atkinson, P. (1995). Ethnography, Principles in Practice: 2nd Edn. London, Routledge.

Handy, C. (1993). Understanding Organisations. London; Penguin.

Hankin, J.R. & Locke, B.Z. (1982). The Persistence of Depressive Symptomology Among Pre-Paid Group Practice Enrollers: An Exploratory Study. *American Journal of Public Health*, 72, pp. 1000-1007.

Harman, J.S., Veazie, P.J. & Lyness, J.M. (2006). Primary Care Physician Officer Visits for Depression in Older Americans. *Journal General Interim Medicine*, 21, pp. 926-930.

Harrison, T. & Clarke, D. (1992). The Northfield Experiment's. *British Journal of Psychiatry*, 160, pp. 698-708.

Hart, L. (1934). A History of the World War, 1914-1919. Trowbridge: Redwood.

Haw, C., Hawton, K., Houston, K. & Townsend, E. (2001). Psychiatric & Personality Disorder in Deliberate Self-Harm Patients. *British Journal of Psychiatry*, 178, pp. 48-54.

Hawton, K. & Fagg, J. (1988). Suicide, and Other Causes of Death, Following Attempted Suicide. *British Journal of Psychiatry*, 152, pp. 359-366.

Hawton, K., Harris, L., Hall, S., Simkin, S., Bale, E. & Bond, A. (2003). A Deliberate Self-Harm in Oxford, 1990-2000. A Time of Change in Patient Characteristics. *Psychological Medicine,* 33, pp. 987-995.

Henderson, A., Langston, V. & Greenberg, N. (2009). Alcohol Misuse in the Royal Navy. *Occupational Medicine,* 59, pp. 25-31.

Hendin, H. (1991). Psychodynamics of Suicide, With Particular Reference to the Young. *American Journal of Psychiatry*, 148, pp. 1150-58.

Henningsen, P., Zimmermann,T. & Sattel, H. (2003). Medically Unexplained Physical Symptoms, Anxiety, and Depression: A Meta-Analytic Review. *Psychosomatic Medicine*, 65, pp. 528–533.

Hernez-Broome, G. & Hughes, R.L. (2005). Leadership Development: Past, Present and Future. *Human Resource Planning,* No 16247: pp. 24-32.

Hesse-Biber, S. & Dupuis, P. (1995). Hypothesis Testing in Computer-Aided Qualitative Data Analysis. In Kelle U (Ed). Computer Aided Qualitative Data Analysis: Theory, Methods & Practice, London, Sage, pp. 129-135.

Hirschfeld, R., Keller, M.B., Panico, S., Arons, B.S., Barlow, D., Davidoff, F., Endicott, J., Froom, J., Goldstein, M., Gorman, J.M., Guthrie, D., Marek, R.G., Maurer, T.A., Meyer, R., Phillips, K., Ross, J., Schwenk, T.L., Sharfstein, S.S., Thase, M.E. & Wyatt, R.J. (1997). The National Depressive & Manic Depressive Association Concesus Statement on the Undertreatment of Depression. *Journal of the American Medical Association,* 277(4), pp. 333-340.

Hoge, C.W., Lesikar, S.E., Guevara, R., Lange, J., Brundage, J.F., Engel, C.C., Messer, S.C. & Orman, D.T. (2002). Mental Disorders Among U.S. Military Personnel in the 1990s: Association with High Levels of Health Care Utilization and Early Military Attrition. *American Journal of Psychiatry*; 159(9), pp. 1576-1583.

Hoge, C.W., Castro, C.A., Messer, S.C., McGurk, D., Cotting, D.I. & Koffman, R.L. (2004). Combat Duty in Iraq & Afghanistan, Mental Health Problems and Barriers to Care. *New England Journal of Medicine*, 351, pp. 13-22.

Holland, J. (2007). Inventing Adulthoods: Making the Most of what you have. In: Helve, H. & Bynner, J. (Eds). Youth & Social Capitol. London, Tufnell, pp. 11-28.

Holliday, A. (2002). Doing and Writing Qualitative Research. London, Sage.

Holmes, E.P., Corrigan, P.W., Williams, P., Canar, J. & Kubiak, M.A. (1999). Changing Attitudes About Schizophrenia. *Schizophrenia Bulletin,* 25(3), pp. 447-456.

Horesh, N., Zalsman, G. & Apter, A. (2004). Suicide Behaviour & Self Disclosure in Adolescent Psychiatric Inpatients. *Journal of Nervous Mental Disorder*, 192, pp. 837-842.

Hotopf, M., David, A., Hull, L., Ismail, K., Unwin, C. & Wessely, S. (2003). The Health Effects of Peacekeeping (Bosnia, 1992-1996): A Cross-Sectional Study-Comparison with Non-Deployed Military Personnel. *Military Medicine*, 168, pp. 408-413.

Hotopf, M., Hull, L., Fear, N.T., Browne, T., Horn, O., Iversen, A., Jones, M., Murphy, D., Bland, D., Earnshaw, M., Greenberg, N., Hacker, H. J.,Tate, A. R., Dandeker, C., Rona, R. & Wessely, S. (2006). The Health of UK Military Personnel who Deployed to the 2003 Iraq War: A Cohort Study. *Lancet,* 367, pp. 1731-1741.

Hourani, L.L., Williams, T.V. & Kress, A.M. (2006). Stress, Mental Health, and Job Performance Among Active Duty Military Personnel: Findings from the 2002 Department of Defence Health-Related Behaviours Survey. *Military Medicine*, 171 (9), pp. 849-856.

House of Commons Defence Committee. (2005). Duty of Care. London, House of Commons Defence Committee.

Hu, ShuFang., Wang, HuiLI., Liu, GuangXiong., Li, huande., Liu, Xinzheng., Deng-Zihe. & Yang-Laigi. (2003). Depression of Army Men in Combat Readiness. *Chinese Mental Health Journal*, 17 (4), pp. 270-272.

Ilsley, J.E., Moffott, A.P. & Carroll, R.E. (1995). An Analysis of Memory Dysfunction in Major Depression. *Journal of Affective Disorder,* 35, pp 1-9.

Institute of Alcohol Studies. (2009). The Impact of Alcohol on the NHS. *Factsheet* 5 May. Cambridge.

Iversen, A., Waterdrinker, A., Fear, N., Greenberg, N., Barker. C., Hotopf. M., Hull, L. & Wessely. S. (2007a). Factors Associated with Heavy Alcohol Consumption in the U.K. Armed Forces: Data from a Health Survey of Gulf, Bosnia, and Era Veterans. *Military Medicine.* 172(9), pp. 956-61.

Iversen, A.C., Fear, N.T., Simonoff, E., Hull, L., Horn, O., Greenberg, N., Hotopf, M., Rona, R., & Wessely, S. (2007b). Influence of Childhood Adversity on Health Among Male UK Military Personnel. *British Journal of Psychiatry,* 191, pp. 506-511.

Iversen, A.C. & Greenberg, N. (2009). Mental Health of Regular and Reserve Military Veterans. *Advances in Psychiatric Treatment*, 15, pp. 100-106.

Iversen, A.C., Staden, L.V., Hacker-Hughes, J., Browne, T., Hull, L., Greenberg, N., Rona, R.J., Hotopf, M., Wessely, S. & Fear, N.T. (2009). The Prevalence of Common Mental Health Disorders and PTSD in the UK Military: Using Data from a Clinical Interview-Based Study. *BMC Psychiatry,* 9, 68 doi.

Jackson, J., Fiddler, M., Kapur, N., Wells, A., Tomenson, B. & Creed, F. (2006) . Number of Bodily Symptoms Predicts Outcome More Accurately than Health Anxiety in Patients Attending Neurology, Cardiology and Gastroenterology Clinics. *Journal of Psychosomatic Research*, 60, pp. 353–359.

Jamison, K.R. (2006). The Many Stigmas of Mental Illness. *The Lancet*, 367, pp. 533-534.

Jenkins, G.R., Hale, R., Papanastassiou, M., Crawford, M.J. & Tyrer, P. (2002). Suicide Rate 22 Years After Parasuicide: Cohort Study. *British Medical Journal*, 325, p. 1155.

John, D. (1989). Mood Disturbances Among Woman Clients Sexually Abused in Childhood. *Journal of Interpersonnel Violence,* 4, pp. 164-184.

Jones, D. (2010). Working with Dads and Lads. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 177- 186.

Jones, D.R. (1985). Secondary Disaster Victims: The Emotional Effects of Recovering & Identifying Human Remains. *American Journal of Psychiatry*, 142(3), pp. 303-307.

Jones, E., Hyams, K.C. & Wessely, S. (2003). Screening for Vulnerability to Psychological Disorder in the Military: An Historical Survey. *Journal of Medicine Screening,* 10, pp. 40- 46.

Jones, E. & Wessely, S. (2003). "Forward Psychaitry" in the Military: It's Origin and Effectiveness. *Journal of Traumatic Stress*, 16, pp. 411–419.

Jones, E. & Wessely, S. (2005). From Shell Shock to PTSD: A History of Military Psychiatry from 1900 to the Gulf War. Chichester, Wiley.

Jones, N., Roberts, P. & Greenberg, N. (2003). Peer-Group Risk Assessment: A Post-Traumatic Management Strategy for Hierarchical Organizations. *Occupational Medicine*, 53, pp 469-447.

Jones, N., Greenberg, N., Fear, N.T., Earnshaw, M., McAllister, P., Reid, G. & Wessely, S. (2008). The Operational Mental Health Consequences of Deployment to Iraq for UK Forces. *Journal of the Royal Army Medical Corps,* 154(2), pp. 102-106.

Kanki, B.G. (1996). Stress and Aircrew Performance: A Team-Level Perspective. In: Driskell JE, Salas E. & Mahwah, NJ (Eds). Stress and Human Performance, New Jersey, Lawrence Erlbaum Associates. pp 127-162.

Kaplan, G.A., Roberts, R.E., Camacho, T.C. & Coyne, J.C. (1987). Psychosocial Predictors of Depression: Prospective Evidence from the Human Population Laboratory Studies. *American Journal of Epidemiology,* 125, pp. 206-220.

Kay, J. (2006). Fury Over 30 Sick Soldiers Sent to Iraq – Desert Rats "Depressed". The Sun Newspaper, Jan 30, p. 21.

Keller, M.B., Shapiro, R.W., Lavori, P.W. & Wolfe, N (1982). Relapse in RDC Major Depressive Disorder: Analysis with the Life Table. *Archives of General Psychiatry*, 39, pp. 911-915.

Kessing, L.V. (1998). Recurrence in Affective Disorder. 1. Effect of Age and Gender. *British Journal of Psychiatry,* 172, pp. 29–34.

Kessing, L.V. (2004). Severity of Depressive Episodes According to ICD-10: Prediction of Risk and Relapse and Suicide. *British Journal of Psychiatry,* 184, pp. 153–156.

Kessler, R.C., Borges, G. & Walters, E.E. (1999). Prevalence of & Risk Factors for Lifetime Suicide Attempts in National Comorbidty Study. *Archives of General Psychiatry*. 56, pp 617-626.

Kessler, R.C., Berglund, P., Demler, O., Jin, R. & Koretz, D. (2003). The Epidemiology of Major Depressive Disorder: Results from the National Co-Morbidity Survey Replication (NCS-R), *Journal of the American Medical Association.* 289(23), pp. 3095 - 3105.

Kiloh, L.G., Andrews, G. & Neilson, M. (1988). The Long-Term Outcome of Depressive Illness. *The British Journal of Psychiatry*, 153, pp 752-757.

Kinder, A. & Boorman, S. (2010). Tackling Stress in the Workplace. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 150-159.

Kirmayer, L.J., Robbins, J.M., Dworkin, M. & Yaffe, M.J. (1993). Somatization and the Recognition of Depression and Anxiety in Primary Care. *American Journal of Psychiatry,* 150, pp. 734–741.

Kirmayer, L.J., Groleau, D., Looper,K.J. & Dominice, D.M. (2004). Explaining Medically Unexplained Symptoms. *Canadian Journal of Psychiatry*, 49, pp. 663-672.

Kite, M. & Rayment, S. (2004). Seven Veterans of Iraq War "Have Committed Suicide". *Daily Telegraph,* 22 February, p. 2.

Kivimaki, M., Virtanen, M., Vartina, M., Elovainio, M., Jahetera, J. & Keltikangas-Jarvinen, L. (2003). Workplace Bullying and the Risk of Cardiovascular Disease and Depression. *Occupational Environmental Medicine,* 60, pp. 779-783.

Klerman, G.L. & Weissman, M.M. (1992). The Course, Morbidity, and Costs of Depression. *Archives of General Psychiatry*, 49, pp. 831-833.

King, M., Dinos, S., Shaw, J., Watson, R., Stevens, S., Passetti, F., Weich, S. & Serfaty, M. (2007). The Stigma Scale: Development of a Standardised Measure of the Stigma of Mental Illness. *British Journal of Psychiatry,* 190, pp. 248-254.

Knox, L.K., Litts, D.A., Talcott, G.W., Feig, J.C. & Caine, E.D. (2003). Risk of Suicide and Related Adverse Outcomes after Exposure to Suicide Prevention Programme in the US Air Force Cohort Study. *British Medical Journal,* 327, pp. 1376-1378.

Koshes R.J. & Rothberg J.M. (1992). Parasuicidal Behaviour on an Active Duty Army Training Post. *Military Medicine*, 157, pp. 350-353.

Kroenke, K., Spitzer, R.L., Williams, J., Linzer, M., Hahn, S., deGruy, F. & Brody, D. (1994). Physical Symptoms in Primary Care. Predictors of Psychiatric Disorders and Functional Impairment. *Archive of Family Medicine,* 3, pp. 774–779.

Kroenke, K,. Spitzer, R,L. & Williams, J.B. (2001). The PHQ-9: Validity of a Brief Depression Severity Measure. *Journal of General Internal Medicine*, 16, pp. 606–613.

Kukull, W.A., Koepsell, T.D., Inui, T.S., Borson, S., Okimoto, J., Raskind, M.A. & Gale, J.L. (1986). Depression & Physical Illness Among Elderly General Medical Clinic Patients. *Journal of Affective Disorders,* 10(2), pp. 153-162.

Kulka, R., Schlenger,W., Fairbank, J., Hough, R., Jordan, B.K., Marmar, C. & Weiss, D. (1990). Trauma and the Veteran War Generation; Report of Findings from the National Vietnam Veterans Readjustment Study. New York, Bruner – Mazel.

Layder, D. (1998). Sociological Practice: Linking Theory and Social Research. London, Sage.

Lee, K., Valliant, G., Torrey, W. & Elder, G.H. (1995). A 50-Year Prospective Study of the Psychological Sequelae of World War II Combat. *American Journal of Psychiatry,* 152(4), pp. 516-522.

Lester, D. (1989). Gun Ownership and Suicide in the United States. *Psychological Medicine*, 19, pp. 519-521.

Levine, M.E. (1982). Depression in Psychiatric Admissions to a Military Medical Center. *Military Medicine*, 147(9), pp. 752-755.

Lifton, R.J. (1967). Death in Life: Survivors of Hiroshima. New York: Simon & Schuster.

Link, B.G., Cullen, F.T., Struening, E., Shrout, P. & Dohrenwend, B.P. (1989). A Modified Labelling Theory Approach in the Area of Mental Disorders: An Empirical Assessment. *American Social Review*, 54, pp. 100-123.

Link, B.G. & Phelan, J.C. (2006). Stigma & It's Public Health Implications, *The Lancet*, 367, pp. 528-529.

Link, B.G., Struening, E.L., Rehav, M., Phelan, J.C. & Nuttbrock, L. (1997). On Stigma and its Consequences: Evidence from a Longitudinal Study of Men and Duel Diagnosis of Mental Illness & Substance Abuse. *Journal of Health & Social Behaviour*, 38, pp. 177-190.

Lofland, J. & Lofland, L.H. (1984). Analysing Social Settings (2nd Ed). Belmont, California, Wadsworth.

London Drug & Alcohol Network. (2005). London Alcohol Statistics Project: Problem Drinkers Waiting Twice as Long for Treatment as Drug Users. Sept 20, www.alcoholpolicy.net/2005/09/london_alcohol.html

Madsen, S.A. & Burgess, A. (2010). Fatherhood and Mental Health Difficulties in the Postnatal Period. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp.74-82.

Madsen, S.A. & Juhl, T. (2007). Paternal Depression in the Postnatal Period. *Journal of Men's Health & Gender,* 4(1), pp. 26-31.

Magne –Ingvar, U., Ojehagen, A. & Traskman-Bendz, L. (1992). The Social Network of People who Attempted Suicide. *Acta Psychiatric Scandinavia*, 86, pp. 153-158.

Malone, K.M., Oquendo, M.A., Haas, G.L., Ellis, S.P., Li,S. & Mann, J.J. (2000). Protective Factors Against Suicidal Acts in Major Depression: Reasons for Living. *American Journal of Psychiatry,* 157, pp. 1084-1088.

Mann, J.J., Waternaux, C., Haas, G.L. & Malone, K.M. (1999). Toward a Clinical Model of Suicidal Behaviour in Psychiatric Patients. *American Journal of Psychiatry,* 156, pp. 181-189.

Mansfield, A.J., Kaufman, J.S., Marshall, S.W., Gaynes, B,M., Morrissey, J.P. & Engel,C.C. (2010). Deployment and the Use of Mental Health Services Among U.S. Army Wives. *The New England Journal of Medicine*, 362(2), pp. 101-109.

Marshall, S.L.A. (1944). Island Victory. New York: Penguin.

Mason, J. (2002). Qualitative Research, 2nd EDN. London: Sage.

Mathers, C.D. & Loncar, D. (2006). Projections of Global Mortality and Burden of Disease from 2002 to 2030. *PLoS Medicine,* 3(11), e442, doi:10.1371/journel.pmed.0030442.

Mays, N. & Pope, C. (1995). Qualitative Research: Rigour and Qualitative Research. *British Medical Journal*, 311, pp. 109-112.

Mazur, A. (1994). Do Cortisol and Thyroxin Correlate with Nervousness and Depression Among Male Army Veterans. *Biological Psychology*, 37(3), pp. 259-263.

McCleod, J. (1994). Doing Qualitative Research. London: Sage.

McFarlane, A.C. (1986). Long Term Psychiatric Morbidity After a Natural Disaster: Implications for Disaster Planners & Emergency Services. *Medical Journal of Australia*, 145, pp. 561-563.

McKeganey, N. & Bloor, M. (1991). Spotting the Invisible Man: The Influence of Male Gender on Fieldwork Relations. *British Journal of Sociology,* 42(2), pp. 195-210.

Merskey, H. (1991). Shell Shock. In Berrios, G.E. & Freeman, H. (Eds). 150 Years of British Psychiatry (1841-1991). London; Gaskell.

Mezey, G.C. & Taylor, P.J. (1988). Psychological Reactions of Women Who Have Been Raped: A Descriptive & Comparative Study. *British Journal of Psychiatry*, 152, pp. 330-339.

Mickelson,K.D. & Kubzansky, L.D. (2003). Social Distribution of Social Support: The Mediating Role of Life Events. *American Journal of Clinical Psychology,* 32 (3-4), pp. 265-281.

Ministry of Defence. (2010a). The Management of Defence: The Mission of the Armed Forces. Army Net, Crown. www.armedforces.co.uk/mod/listings/10002.html

Ministry of Defence. (2010b). Communicating with Home. Army Net, Crown. www.army.mod.uk/operations-deployments/operations/18952.aspx

Mitchell, A.J., Vaze, A. & Bass, S. (2009). Clinical Diagnosis of Depression in Primary Care: A Meta Analysis. *The Lancet,* 374, pp. 609–619.

Monroe, S.M. & Dupue, R.A. (1991). Life Stresses & Depression. In: Becker, J., & Kleinman, A. (Eds). Psychological Aspects of Depression. Hilsdale, New Jersey: Erlbaum.

Morgan, H.G., Burns-Cox, C.J., Pocock, H. & Pottle, S. (1975). Deliberate Self Harm: Clinical & Socio-Economic Characteristics of 368 Patients. *British Journal of Psychiatry,* 127, pp. 564-574.

Morse, J. (1995). The Significance of Saturation. *Qualitative Health Research*, 5, pp. 147-149.

Mott, F.W. (1916). Special Discussion on Shell Shock Without Visible Signs of Injury. *Proceedings of the Royal Society of Medicine (part III, suppl. 9),* pp. 1-44.

Moynihan, C. (1998). Theories in Healthcare and Research: Theories of Masculinity. *British Medical Journal,* 317, pp. 1072-1075.

Murphy, J.M. (1980). Continuities in Community-Based Psychiatric Epidemiology. *Achieves of General Psychiatry,* 37, pp. 1215–1223

Multiple Claimants v The Ministry of Defence. (2003). EWHC, 1134, (QB).

Myers, C.S. (1915). A Contribution to the Study of Shell Shock. *Lancet,* I, pp. 316-320.

Naik, P.C. & Jones, R.G. (1994). Alcohol Histories from Elderly People on Admission. *British Medical Journal*, 308, pp. 608-609.

National Collaborating Centre for Mental Health. (2004). Self-Harm: The Short-Term Physical and Psychological Management and Secondary Prevention of Self-Harm in Primary and Secondary Care. Clinical Guideline 16. London, Gaskell & British Psychological Society.

National Health Service: Centre for Reviews and Dissemination. (1998). Deliberate Self Harm. *Effective Health Care,* 4(6): 1-12. London: HMSO.

National Institute of Clinical Excellence. (2004). Depression: Management of Depression in Primary and Secondary care. Clinical Guideline 23. December.

National Institute of Clinical Excellence. (2009). The Treatment and Management of Depression in Adults. Clinical Guideline 90. October.

National Institute for Clinical Excellence. (2005). Post Traumatic Stress Disorder (PTSD): The Management of PTSD in Adults & Children in Primary & Secondary Care. *Clinical Guideline*, CG 26, March.

National Institutes of Health, National Institute of Mental Health. (2006). http://www.nimh.nih.gov/health/publications/depression/complete-publication.shtml (Accessed on September 17, 2007).

National Resource Centre for Ethnic Minority Health. (2007). Equal Services? Report of Race Equality Assessment of Mental Health in NHS Boards, October.

National Statistics. (2004). National Statistics Code of Practice: Protocol on Professional Competence. London: HMSO.

National Statistics Office. (2005). Census. www.statistics.gov.uk.

Neal, L., Kiernan, M., Hill, D., McManus, F. & Turner, M.A. (2003). Management of Mental Illness by the British Army. *British Journal of Psychiatry*, 182, pp. 337-341.

NHS Information Centre. (2009). Mental Health Bulletin - Third Report from Mental Health Minimum Dataset (MHMDS) annual returns, 2004-2009. Published 25 Nov 2009. http://www.ic.nhs.uk/statistics-and-data-collections/mental-health/nhs-specialist-mental-health-services/mental-health-bulletin--third-report-from-mental-health-minimum-dataset-mhmds-annual-returns-2004-2009

Nindl, B.C., Leone, C.D., Tharion, W.J., Johnson, R.F., Castellani, J.W., Patton, J.F. & Montain, S.J. (2002). Physical Performance Responses during 72 hr of Military Operational Stress. *Medical Science Sports Executive*; 34, pp. 1814-1822.

Norton-Taylor, R. (2008). Pressure on Army Forces Unprecedented, Say MPs. *The Guardian*, Jul 30, p. 7.

Nuyen, J., Volkers, A.C., Verhaak, P.F.M., Schellevis, F.G., Groenewegan, P.P. & Van Den Bos, G.A. (2005). Accuracy of Diagnosing Depression in Primary Care. The Impact of Chronic Somatic and Psychiatric Co-Mordidity. *Psychological Medicine,* 35(8), pp. 1185-1195.

O'Brien, L.S. (1994). What will be the Psychiatric Consequences of the War in Bosnia? A Bad War from the Psychiatric Point of View, Leading to Hidden Pathology. *British Journal of Psychiatry*, 164, pp. 443-447.

O'Brien L. S. (1998). Traumatic Events & Mental Health. Cambridge, University Press Cambridge, pp. 212-213.

O'Conner, D.W., Rosewarne, R. & Bruce, A. (2001). Depression in Primary Care: General Practitioner's Recognition of Major Depression in Elderly Patients. *International Psychogeratrics*, pp. 367-374.

Office of National Statistics. (2000a). Psychiatric Morbidity Among Adults Living in Private Households. London, ONS.

Office of National Statistics. (2000b). Key Health Statistics from General Practice. London, ONS.

Office of National Statistics. (2004). The Mental Health of Young People Looked After by Local Authorities in Scotland, May. ONS.

Office for National Statistics. (2005). Alcohol Related Deaths. www.statistics.gov.uk.

Office for National Statistics. (2008). Mortality Statistics: Deaths Registered in 2007. DR07. London, ONS.

Office for National Statistics. (2009). Suicides. www.statistics.gov.uk.

Oliver, M.I., Pearson, N., Coe, N. & Gunnell, D. (2005). Help-Seeking Behaviour in Men and Women with Common Mental Health Problems: Cross-Sectional Survey. *British Journal of Psychiatry*, 186, pp. 297-301.

Oppenheim, H. (1911). Textbook of Nervous Diseases for Physicians & Students. London: Foulis.

Oppenheim, A.N. (1992). Questionnaire Design, Interviewing and Attitude Measurement. London, Heinemann.

Orasanu, J.M. & Backer, P. (1996). Stress and Military Performance. In: Driskell, J.E., Salas, E. & Mahwah, N.J. (Eds). Stress and Human Performance. NJ: Erlbaum Associates, pp. 89-125.

Osler, W. (1917). Personal Note. *Journal of the American Medical Association*, LXIX (4), July 28, p. 290.

Owens, D., Horrocks, J. & House, A. (2002). Fatal and Non-Fatal Repetition of Self Harm. Systematic Review. *British Journal of Psychiatry*. 181, pp. 193-199.

Page, H.W. (1883). Injuries of the Spine & Spinal Cord Without Apparent Mechanical Lesions & Nervous Shock in Their Medico-legal Aspects. London: Churchill.

Patterson, G. R. (2002). The Early Development of Coercive Family Process. In J. B. Reid, G. R. Patterson, & J. Snyder (Eds.). Antisocial Behavior in Children and Adolescents: A Developmental Analysis and Model for Intervention. Washington, DC: American Psychological Association, pp. 25-44.

Patterson, J.M. (2004). Integrating Family Resilience and Family Stress Theory. *Journal of Marriage & Family,* 64(2), pp. 349–360.

Paykel, E.S., Meyers, J.K., Dienelt, M.N., Klerman, K.G., Lindenthal, J.J. & Pepper, M.P. (1969). Life Events and Depression. *Archives of General Psychiatry,* 21, pp. 753-760.

Paykel, E.S. (1994). Life Events, Social Support, & Depression. *Acta Psychiatrica Scandinavica,* 377, pp. 50-58.

Paykel, E.S. (2002). Mood Disorders: Review of Current Diagnostic Systems. *Psychopathology*, 35, pp. 94–99.

Perlman, D., Gerson, A.C. & Spinner, B. (1978). Loneliness Among Senior Citizens: An Empirical Report, *Essence,* 2, pp. 239-248.

Petronis, K.R., Samuels, J.F., Moscicki, E.K. & Anthony, J.C. (1990). An Epidemiologic Investigation of Potential Risk Factors for Suicide Attempts. *Social Psychiatry Psychiatric Epidemiology,* 25, pp. 193-199.

Pflanz, S. (2001). Occupational Stress and Psychiatric Illness in the Military: Investigation of the Relationship Between Occupational Stress and Mental Illness Among Military Mental Health Patients. *Military Medicine*, 166: pp. 457-462.

Pflanz, S. & Sonnek. S. (2002). Work Stress in the Military: Prevalence, Causes, Relationship to Emotional Health. *Military Medicine*, 167: pp. 877-882.

Pines, M. (1991). The Development of the Psychodynamic Movement. In: Berrios, G.E. & Freeman, H. (Eds). 150 Years of British Psychiatry (1841-1991). London, Gaskell.

Pinfold, V., Huxley, P., Thornicroft, G., Farmer, P., Toulmin, H. & Graham, T. (2003). Reducing Psychiatric Stigma and Discrimination. Evaluating an Educational Intervention with the Police Force in England. *Social Psychiatry and Psychiatric Epidemiology,* 38(6), pp. 337–344.

Platt, S. & Hawton, K. (2000). Suicidal Behaviour and the Labour Market. In: Hawton, K., & Van Heeringen (Eds). Handbook of Suicide & Attempted Suicide. Chichester, Wiley.

Pollock, K. & Grime, J. (2002). Patients' Perceptions of Entitlement to Time in General Practice Consultations for Depression: Qualitative Study. *British Medical Journal,* 325, pp. 687.

Porter, E. J. (1995). The Life-World of Older Widows: The Context of Lived Experience. *Journal of Women & Aging,* 7, pp. 31-46.

Popovic, M. & Petrovic, D. (1964). After the Earthquake, *Lancet,* 28(9), pp. 1169-1171.

Pullen, L. (1992). Psychiatric Hospitalization: Treatment or Triage. *Military Medicine,* 157: pp. 634-636.

Punch, K. (1998). Introduction to Social Research: Quantitative and Qualitative Approaches. London, Sage.

Pursley-Crotteau, S. & Stern. P. (1996). Creating a New Life: Dimensions of Temperance in Perinatal Cocaine Crack Users. *Qualitative Health Research,* 6(3), pp. 350-67.

Queen's Regulations for the Army. (1975). Chapter 9: Section 3: Manning; "Discharge from the Colours Administrative Instructions" (includes 9.414) and Section 5: "Soldiers Mentally or Temperamentally Unsuitable" (includes 9.434). Reprinted 1996 (amendments 1-19), Dec 2003 (amendments 20-26).

Ramana, R., Paykel, E.S., Cooper, Z., Hayhurst, H., Saxty, M. & Surtees, P.G. (1995). Remission and Relapse in Major Depression: A Two-Year Prospective Follow Up Study. *Psychological Medicine,* 25, pp. 161–176.

Rayment, S. (2006). I Didn't Join the British Army to Conduct American Foreign Policy. *Sunday Telegraph,* Mar 12, p. 6.

Reason, P. & Rowan, J. (1981). Human Inquiry: A Sourcebook of New Paradigm Research, Chichester, Wiley.

Regier, D.A., Farmer, M.E., Rue, D.S., Locke, B.Z., Keith, S.J., Judd, L.L. & Goodwin, F.K. (1990). Comorbidity of Mental Disorders with Alcohol and Other Drug Abuse. *Journal of the American Medical Association,* 264 (19), pp 2511-2518.

Roberts, P. (2006). Temperamental Unsuitability and Soldiers. Presented at the Military Psychiatric Conference @ Fort Blockhouse in Gosport. 4 Sept.

Robson, C. (1993). Real World Research. Oxford, Blackwell.

Rona, R.J., Hooper, R., Jones, M., French, C. & Wessely, S. (2004). Screening for Physical and Psychological Illness in the British Armed Forces: III: The Value of a Questionnaire to Assist a Medical Officer to Decide who Needs Help. *Journal of Medical Screening*, 11(3), pp. 158-161.

Rona, R.J., Hyams, K.C. & Wessely, S. (2005). Screening for Psychological Illness in Military Personnel. *Journal of the American Medical Association,* 293 (10), pp.1257-1260.

Rona, R.J., Hooper, R., Jones, M., Hull, L., Browne, T., Horn, O., Murphy, D., Hotopf, M. & Wessely, S. (2006a). Mental Health Screening in Armed Forces Before the Iraq War & Prevention of Subsequent Psychological Morbidity: Follow-Up Study. *British Medical Journal,* 333, pp. 991-994.

Rona, R.J., Fear, N.T., Hull, L., Greenberg, N., Earnshaw, M., Hotopf, M. & Wessely, S. (2006b). Mental Health Consequences Of Overstretch in the UK Armed Forces: First Phase of a Cohort Study. *British Medical Journal,* Online First, bmj.com, pp. 1–7.

Rona, R.J., Hooper, R., Greenberg, N., Jones, M. & Wessely, S. (2006c). Medical Downgrading, Self-Perception of Health, and Psychological Symptoms in the British Armed Forces. *Occupational and Environmental Medicine*, 63, pp. 250-254.

Rose, G. (2001). Sick Individuals and Sick Populations. *International Journal of Epidemiology*. 30, pp. 427-432.

Rosenfield, S. (1997). Labelling Mental Illness: The Effects of Received Services & Perceived Stigma on Life Satisfaction. *American Social Review*, 62, pp 660-672.

Rosenheck, R. & Fontana, A. (1994). Long Term Sequelae of Combat in World War II, Korea & Vietnam: A Comparative Study. In Ursano, R., MaCaughey, B., Raphael, B., & Fullerton, C. (Eds). Individual & Community Responses to Trauma & Disaster: The Structure of Human Chaos, Cambridge, Cambridge University Press, pp 330-359.

Rost, K., Smith, R., Matthews, D.B. & Guise, B. (1994). The Deliberate Misdiagnosis of Major Depression in Primary Care. *Achieves of Family Medicine,* 3, pp. 333-337.

Rost, K., Zhang, M., Fortney, J., Smith, J., Coyne, J. & Smith, R. (1998). Persistently Poor Outcomes of Undetected Major Depression in Primary Care. General Hospital Psychiatry, 20, pp. 12-20.

Royal College of Nursing. (2005a). Research Ethics. RCN Guidance for Nurses, London, RCN.

Royal College of Nursing. (2005b). Informed Consent in Health & Social Care. London, RCN Research Society.

Royal College of Psychiatrists. (2008). No Health Without Mental Health. The Supporting Evidence. Royal College of Psychiatrist Report.

Rush, L.L. (1998). Affective Reactions to Multiple Social Stigmas. *Journal of Social Psychology,* 138, pp. 421-430.

Russell, B. (1919). *The Problems of Philosophy*, New York: Oxford University Press.

Russell, C.K. (1919). War Neurosis: Some Views on Diagnosis & Treatment. *Archives of Neurological Psychiatry*, 25, pp. 25-38.

Russo, C.A, Hambrick, M.M. & Owens, P.L. (2005). Hospital Stays Related to Depression, 2005Agency for Healthcare Research and Quality, Statistical Brief 40.

Ryan, C.S., Robinson, D.R. & Hausmann, L.R.M. (2001). Sterotyping Among Providers and Consumers of Public Mental Health Services – The Role of the Perceived Group Variability. *Behaviour Modification,* 25, pp. 406 – 442.

Sainsbury Centre for Mental Health. (2007). Mental Health at Work: Developing the Business Case. London, Sainsbury Centre for Mental Health.

Salmon, T.W. (1917). The Care & Treatment of Mental Diseases & War Neuroses ("Shell Shock") in the British Army. *Mental Hygiene,* I, pp. 509-547.

Salmon, T.W. (1919). The War Neuroses and their Lesson. *New York State Journal of Medicine,* 59, pp. 601-607.

Saltini, A., Mazzi, M.A., Del Piccolo, L. & Zimmermann, C. (2004). Decisional Strategies for the Attribution of Emotional Distress in Primary Care. *Psychological Medicine,* 4, pp. 729-739.

Sayers, D. (2010). Men and Suicide. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 96-105.

Schmidtke, A., Bille-Brahe, U., Deleo, D., Kerkhof, A., Bjerke, T., Crepet, P., Haring, K., Hawton, K., Lonnqvist, J., Michel, K., Pommereau,X., Querejeta, I., Phillipe,I., Salander-Renberg, E., Temesvary, B., Wasserman, D., Fricke, S., Weinacker, B. & Sampaio-Faria, J.G. (1996). Attempted Suicide in Europe; Rates, Trends, & Sociodemographic Characteristics of Suicide Attempters During the Period 1989-1992. Results of the WHO / EURO Multicentre Study on Parasuicide. *Acta Psychiatric Scandinavia,* 93, pp. 327-338.

Schnyder, U., Valach, L., Bichsel, K. & Michel, K. (1999). Attempted Suicide. Do We Understand the Patients Reasons? *General Hospital Psychiatry,* 21, pp. 62-69.

Schwalbe, M. & Wolkomir, M. (2002). Interviewing Men. In Gubrium, J.F., & Holstein, J.A. (Eds) Handbook of Interview Research. Thousand Oaks, California, Sage. pp. 203-219.

Scott, M.J. & Stradling, S.G. (1992). Counselling for Post Traumatic Stress Disorder. London, Sage.

Scottish Development Centre for Mental Health. (2005). Equal Minds, October, Scottish Executive.

Scottish Executive. (2003). Mind the Gaps: Meeting the Needs of People with Co-Occurring Substance Misuse and Mental Health Problems.

Scottish Public Health Observatory. (2008). Suicide Statistics, http://www.scotpho.org.uk .

Secker-Walker, J. & Taylor-Adams, S.T (2001). In: Vincent, C. (Ed). Clinical Risk Management. London. British Medical Journal, pp. 419–438.

Seidman, I.E. (1997). Interviewing in Qualitative Research: A Guide for Researchers in Education and the Social Sciences, (2nd Ed). New York, Teachers College Press.

Shah,P.J., Ebmeier,K.P., Glabus, M.F. & Goodwin, G.M. (1998). Cortical Grey Matter Reductions Associated with Treatment-Resistant Chronic Unipolar Depression. Controlled Magnetic Resonance Imagining Study. *British Journal of Psychiatry,* 172, pp. 527-532.

Shapiro, F. (1995). Eye Movement Desensitization and Reprocessing: Basic Principles, Protocols and Procedures. 2nd Edn. Guildford Press, London.

Sheline, Y.I., Wang, P.W., Gado, M.H., Csernansky, J.G., & Vannier, M.W. (1996). Hippocampal trophy in Recurrent Major Depression. Proceedings of the National Academy of Sciences USA, 93, pp 3908-3913.

Shepherd, B. (2000). A War of Nerves, Soldiers and Psychiatrists 1914-1994. London, Cape.

Silverman, D. (1998). Harvey Sacks: Social Science and Conversation Analysis. New York: Oxford University Press.

Silverman, D. (2001). Interpreting Qualitative Data: Methods for Analysing Text, Talk & Interaction, 2nd Edn. London, Sage.

Silverman, D. (2004). Analysing Conversation. In Searle, C. (Ed). Researching Society & Culture, 2nd Edn, London, Sage.

Silverman, D. (2005). Doing Qualitative Research. London, Sage.

Simon, O.R., Swann, A.C., Powell, K.E., Potter, L.B., Kresnow,M.J. & O'Carroll, P.W. (2001). Characteristics of Impulsive Suicide Attempts & Attempters. *Suicide Life Threat Behaviour,* 32, pp. 49-59.

Simpson, M.A. (1993). Traumatic Stress & the Bruising of the Soul: The Effects of Torture & Coercive Interrogation. In: Wilson, J.P. & Raphael, B (Eds). International Handbook of Traumatic Stress Syndromes. London: Plenum, pp 667-684.

Singleton, M., Bumpstead, R., O'Brian, M., Lee, A. & Meltzer, H. (2001). Psychiatric Morbidity Amongst Adults Living in Private Households. Office for National Statistics, The Stationary Office.

Sixsmith, J. & Boneham, M. (2002). Men and Masculinities: Accounts of Health and Social Capitol. In: Swann, C. & Morgan, A. (Eds). Social Capitol for Health: Insights from Qualitative Research. London, Health Development Agency.

Skegg, K. (2005). Self Harm. *The Lancet*, 366, pp. 1471–1483.

Smith, M. (1999). The Nature of Rehabilitation. In Smith M (Ed), Rehabilitation in Adult Nursing Practice. London, Churchill Livingstone.

Social Work Inspection Agency, (2009). Service Users Survey; From 24 Council Inspections; http://www.swia.gov.uk/swia/591.147.html).

Solomon, Z. (1989). A 3-year Prospective Study of Post-Traumatic Stress Disorder in Israeli Combat Veterans. *Journal of Traumatic Stress,* 2, pp. 59-73.

Soullier, D., Britt, D.W. & Maines, D.R. (2001). Conceptual Modelling as a Toolbox for Grounded Theorists. *Sociological Quarterly,* 42(2), pp. 253-269.

Spencer, L., Ritchie, J., Lewis, J. & Dixon, J. (2003). Quality in Qualitative Evaluation: A Framework for Assessing Research Evidence. London: Government Chief Social Researcher's Office.

Staner, L., Tracy, A., Dramaix, M., Genevrois, C., Vanderelst, M., Vilane, A., Bauwens, F., Pardoen, D. & Mendlewicz, J. (1997). Clinical and Psychosocial Predictors of Recurrence in Recovered Bipolar and Unipolar Depressives: A One-Year Controlled Prospective Study. *Psychiatry Research,* 69 (1), pp. 39–51.

Stallard, P. (1996). The Role and Use of Customers Satisfaction Surveys in Mental Health Services. *Journal of Mental Health*, 5 (4), pp. 333–348.

Stern, P.N. (1994). The Grounded Theory Method: Its Uses and Processes. In: Glaser, B.G. (Ed) More Grounded Theory Methodology: A Reader. Mill Valley, California, The Sociology Press.

Strauss, A.L. (1987). Qualitative Analysis for Social Scientists. New York,Cambridge University Press.

Strauss, A.L. & Corbin, J. (1998). Basics of Qualitative Research. Grounded Theory Procedures and Techniques (2nd Edn). Thousand Oaks, California, Sage.

Strecker, E.A. & Appel, K. (1946). Psychiatric Contrasts in the Two World Wars. In: Edaugh, F.G., Solomon, H.C., & Bamford, T.E. Military Neuropsychiatry. Proceedings of the Association for Research in Nervous & Mental Disease. New York; Williams & Wilkins, pp. 38-47.

Strong, P. (1979). The Ceremonial Order of the Clinic, London, Routledge.

Sullivan, P.F., Neale, M.C. & Kendler, K.S. (2000). Genetic Epidemiology of Major Depression: Review & Meta-Analysis. *American Journal of Psychiatry,* 157, pp. 1552-1562.

Sully, P. & Dallas, J. (2005). Essential Communication Skills for Nursing Practice. London, Mosby.

Tarn, M. (2006). Common Stresses in a Military Environment. *Journal of the Royal Army Medical Corps,* 152, pp. 177-180.

Taylor, A.J.W. & Frazer, A.G. (1982). The Stress of Post Disaster Body Handling & Victim Identification Work. *Journal of Human Stress*, 8, pp. 4-12.

The Sun Newspaper (Editorial). (2006). Lost Legions, *The Sun Newspaper,* 30 Jan, p 8.

Thompson, C., Ostler, K., Peveler, R.C., Baker, N. & Kinmonth, A.I. (2001). Dimensional Perspective on the Recognition of Depressive Symptoms in Primary Care: The Hampshire Depression Project 3. *British Journal of Psychiatry*, 179, pp. 317-323.

Thoresen, R.J. & Goldsmith, E.B. (1987). The Relationship Between Army Families' Financial Well-Being and Depression, General Well-Being, and Marital Satisfaction. *Journal of Social Psychology*, 127 (5), pp. 545-547.

Townend, M. (2000). Quantitative Measurement of Service User Preference for Mental Health Care: a Comparison between Consumer Satisfaction Surveys and Conjoint Analysis. *Journal Psychiatric & Mental Health Nursing*, 7 (3), pp. 287-288.

Townsend, E., Hawton, K., Altman, D.G., Arensman, E., Gunnell, D., Hazell, P., House, A. & Van Heeringen, K. (2001). The Efficacy of Problem Solving Treatments After Deliberate Self-Harm: Meta-Analysis of Randomized Controlled Trials with Respect to Depression, Hopelessness and Improvement in Problems. *Psychological Medicine*, 31, pp. 979-988.

Trimble, M.R. (1985). Post Traumatic Stress Disorder: History of a Concept. In: Figley, C.R. (Ed). Trauma & Its Wake. New York: Brunner-Mazel, pp. 5-14.

Turner, M.A., Kiernan, M.D., McKechanie, A.G., Finch, P.J.C., McManus, F. & Neal, L.A. (2005). Acute Military Psychiatric Casualties from the War in Iraq. *British Journal of Psychiatry*, 186, pp. 476-479.

Turner, R. (1974). Ethnomethodology: Selected Readings. Baltimore: Penguin.

Ulmer, A.S., Range, L.M. & Galem T.R. (1992). Loneliness and Depression Related to Reasons for Living in Military Personnel. *Death Studies*, 16 (2), pp. 183-189.

Ursano, R.J. & McCarroll, J.E. (1990). The Nature of a Traumatic Stressor: Handling Dead Bodies. *Journal of Nervous & Mental Disease*, 178(6), pp. 396-398.

Ustin, T.B., Ayuso-Mateos, J.L., Chatterji, S., Mathers, C. & Murray, C.J.L. (2004). Global Burden of Depressive Disorders. *British Journal of Psychiatry*, 184, pp. 386-392.

Vincent, C. (2001). Clinical Risk Management. London. British Medical Journal.

Wallace, A.E., Wallace, A. & Weeks, W.B (2008). The US Military as a Natural Experiment: Changes in Drinking Age, Military Environment, and Later Alcohol Treatment Episodes among Veterans. *Military Medicine,* 173, pp. 619-625.

Warner, J. (2006). Satisfaction Surveys are a Scandalous Waste of NHS Resources. *Nursing Times*, 102 (21), p. 14.

Warner, V., Weissman, M.M., Fendrich, M., Wickramaratne, P. & Moreau, D. (1992). The Course of Major Depression in the Offspring of Depressed Parents. *Archives of General Psychiatry,* 49, pp. 795-801.

Warren, A, (1988). Gender Issues in Field Research, Newbury Park, California, Sage.

Waterman, G.S (2006). Does the Biopsychosocial Model Help or Hinder our Efforts to Understand and Teach Psychiatry? *Psychiatric Times*, 23 (14), pp. 12-13.

Webb, Y., Clifford, P., Fowler, V., Morgan., C. & Hanson, M. (2000). Comparing Patients' Experience of Mental Health Services in England: a Five-Trust Survey. *Journal of Health Care Quality Assurance*, 13 (6), pp. 273 – 281.

Weber, M. (1946). Methodology of the Social Sciences, New York, Free Press.

Wells, J.E., Robins, L.N., Bushnell, J.A., Jarosz, D. & Oakley-Browne, M.A. (1994). Perceived Barriers to Care in St Louis (USA) and Christchurch (NZ) Reasons for not Seeking Professional Help for Psychosocial Distress. *Social Psychiatry and Psychiatric Epidemiology,* 29, pp. 155-164.

Wessely, S. (2005). Risk, Psychiatry & the Military. *British Journal of Psychiatry,* 186, pp. 459-466.

White, A. (2007). Men's Health – What's it all About? In: Conrad, D. & White, A. (Eds). Men's Health – How to do it. Oxford, Ratcliffe, pp. 9-26.

White, A. (2010). Introduction. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp.1-6.

White, A.K. (2006). Personal Perspective: Men and Mental Well Being Encouraging Gender Sensitivity. *Mental Health Review Journal.* 11(4), pp. 3-6.

White, A. & Conrad, D. (2010). Conclusion. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 256-262

White, L. (2004). Foundations of Basic Nursing. London, Delmar.

Whittey, P. & Gilbody, S. (2005). NICE, but will they Help People with Depression? The New National Institute for Clinical Excellence Depression Guidelines. *British Journal of Psychiatry,* 186, pp. 177-178.

Wichstrom, L. & Rossow, I. (2002). Explaining the Gender Difference in Self-Reporting Suicide Attempts: A Nationally Representative Study of Norwegian Adolescents. *Suicide Life Threat Behaviour,* 32, pp. 101-116.

Wiles, R. (1996). Quality Questions. *Nursing Times*, 92 (44), pp. 38-40.

Wilkin, D., Hallam, L. & Doggett, M.A. (1992). Measures of Need and Outcome for Primary Health Care. Oxford, Oxford Medical Publications.

Williams, J. & Pollock, L. (2000). The Psychology of Suicidal Behaviour. In Hawton, K., & Van Heeringen, K. (Eds). The International Handbook of Suicide and Attempted Suicide, Chichester, Wiley.

Williams, R.A., Hagerty, B.M., Yousha, S.M., Hoyle, K.S. & Oe, H. (2002). Factors Associated with Depression in Navy Recruits. *Journal of Clinical Psychology,* 58(4), pp. 323-337.

Williamson, R.T. (1917). Treatment of Neurasthenia & Psychasthenia Following Shell Shock. *British Medical Journal,* ii, pp. 713-715.

Wilson, J.P. (1980). Conflict, Stress and Growth: The Effects of War on Psychological Development Among Vietnam Veterans. In: Figley, C.R & Leventman, S. (Eds). Strangers at Home: Vietnam Veterans Since the War. New York: Praeger.

Winkler, D., Pjrek, E. & Kasper, S. (2005). Anger Attacks in Depression – Evidence for a Male Depressive Syndrome. *Psychotherapy & Psychosomatics,* 74, pp. 303-307.

Wittchen, H.U., Hofler, M. & Meister, W. (2001). Prevalence & Recognition of Depressive Syndromes in German Primary Health Care Settings: Poorly Recognised & Treated. *International Clinical Psychopharmacology*, 16, pp. 121-135.

Wittchen, H.U., & Pittrow, D. (2002). Prevalence, Recognition & Management of Depression in Primary Care in Six Countries. The Depression 2000 Study. *Human Psychopharmacology*, 17 (Supp 1), pp 1 – 11.

Wolfsohn, J.M. (1918). The Predisposing Factors of War Psychoneurosis. *Lancet,* 1, pp. 177-180.

Woodall, J. (2010). Working with Prisoners and Young Offenders. In: Conrad, D. & White, A. (Eds). Promoting Men's Mental Health. Oxford, Ratcliffe, pp. 195-203.

World Health Organisation. (1992). The ICD 10 Classification of Mental and Behavioural Disorders. Descriptions and Diagnostic Guidelines. Geneva, WHO.

World Health Organisation. (1996). Diagnostic and Management Guidelines for Mental Disorders: ICD 10, Geneva; WHO.

World Health Organisation. (2002). The Work Report 2002: Reducing Risks- Promoting Health. Geneva, WHO.

World Health Organisation. (2003). World Health Report 2003, Geneva, WHO.

World Health Organisation. (2004). Guide to Mental & Neurological Health in Primary Care. Geneva,WHO.

World Medical Association. (2005). Declaration of Tokyo, www.wma.net/e/ethicsunit/helsinki.htm

Wright, K.M., Huffman, A.H. & Adler, A.B. (2002). Psychological Screening Program Overview. *Military Medicine,* 167, pp. 853-861.

Young, A. (1995). The Harmony of Illusions: Inventing Post Traumatic Stress Disorder. Princeton New Jersey, Princeton University Press.

Young, A. (2002). The Self- Traumatised Perpetrator as "Transient Mental Illness". *Evolution Psychiatry*, 67, pp. 1–21.

Zastrow, A., Faude, V., Seyboth, F., Niehoff, D., Herzog, W. & Lowe, B. (2008). Risk Factors of Symptoms Underestimation By Physicians. *Journal of Psychosomatic Research,* pp. 543-551.

Zigmond, A.S. & Snaith, R.P. (1983). The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandinavica.* 67(6), pp. 361-370.

Zimmerman, F.J., Christakis, D.A. & Stoep, A.V. (2004). Tinker, Tailor, Soldier, Patient: Work Attributes and Depression Disparities Among Young Adults. *Social Science & Medicine*, 2004, 58 (10), pp. 1889-1901.

ABBREVATIONS

American Psychiatric Association	APA
Analysis of Variance	ANOVA
Army Mental Health	AMH
Army Medical Services	AMS
Army Mental Health Services	AMHS
Army Primary Healthcare Service	APHCS
Absence Without Leave	AWOL
Adjutant General Administrative Instruction	AGAI
Birmingham City University	BCU
Computer Software for Qualitative Research	CASQAS
Cognitive Behavioural Therapy	CBT
Commanding Officer	CO
Community Psychiatric Nurse	CPN
Confidence Interval	CI
Continuing Personal and Professional Development	CPPD
Civilian Medical Officers	CMO
Defence Analytical Services Agency	DASA
Defence Medical Services	DMS
Defence Medical Services Department	DMSD
Defence Mental Health Services	DMHS
Deliberate Self Harm	DSH
Department of Community Mental Health	DCMH
Department of Health	DOH
Diagnostic & Statistical Manual	DSM
Duchess of Kent's Psychiatric Hospital	DKPH
Electro Convulsive Therapy	ECT
Equality & Diversity	ED
Eye Movement Desensitization and Reprocessing	EMDR
Far East Prisoners of War	FEPOW
Field Mental Health Team	FMHT
General Practitioner	GP
International Classification of Diseases	ICD
Independent Service Provider	ISP
Juniors Non Commissioned Officers	JNCOs
Medical Officer	MO
Medically Unexplained Symptoms	MUS
Mental Health	MH
Military Mental Health	MMH
Ministry of Defence	MOD
National Health Service	NHS
National Institute for Clinical Excellence	NICE
North Atlantic Treaty Organisation	NATO
Northern Ireland	NI
Past Family History	PFH
Performance Indicator	PI

Population at Risk	PAR
Post Natal Depression	PND
Post Traumatic Stress Disorder	PTSD
Primary Health Care	PHC
Proximity, Immediacy & Expectancy	PIE
Quality & Outcomes Framework	QOF
Queen Alexandra's Royal Army Nursing Corps	QARANC
Royal Army Medical Corps	RAMC
Royal College of Psychiatrists	RCP
Regimental Sergeant Major	RSM
Royal College of Nursing	RCN
Secondary Health Care	SHC
Selective Serotonin Reuptake Inhibitors	SSRI
Serotonin – Noradrenalin Reuptake Inhibitors	SNRI
Service Liaison Officer	SLO
Services No Longer Required	SNLR
Suicide Vulnerability Risk Management	SVRM
Surgeon General's Department	SGD
Standard Deviation	SD
Territorial Army	TA
Trauma Risk Management	TRiM
Temperamental Unsuitability	TU
Unit Medical Officer	UMO
Unit Welfare Officer	UWO
United Kingdom	UK
United States of America	USA
World Health Organisation	WHO
World War I	WWI
World War II	WWII

ORIGINAL PAPERS

A review of one year of British Armed Forces mental health hospital admissions

A Finnegan*, S Finnegan, D Gamble**

* Officer Commanding Nursing, Royal Centre for Defence Medicine, Selly Oak Hospital, Raddlebarn Rd, Birmingham, B29 6JD; ** Consultant Advisor in Psychiatry (Army)

Abstract

Objectives The paper provides a review of one year of military Mental Health (MH) hospital admissions. This includes an exploration into demographic trends, differences in clinical opinion and how information gained is used to improve the service and ensure appropriate, cost effective care in the optimum environment.

Methods The sample group is entitled military MH hospital admissions from 1 April 2005 to 31 March 2006. Data was collected on questionnaires with SPSS used for the management and analysis of the quantitative data, with the information exposed to descriptive and inferential statistical analysis.

Results There were 344 admissions. The paper contains a detailed review of a number of variables. Depression was the most common diagnosis resulting in 112 (33%) hospital admissions and Post Traumatic Stress Disorder accounted for 23 (7%). There were statistically significant differences that may be attributable to gender with more women admitted with depression and more men with alcohol related disorders. The average length of stay was 21 days, with 48% of patients discharged within 3 weeks. 45% of all returns included significant events reporting that highlighted written evidence of good and poor practice.

Conclusion This study is part of an extensive monitoring programme of military MH hospital admissions. Depression is the most common MH problem leading to hospital admission. The results indicate that Service-personnel have access to a highly responsive service that provides brief assessment and treatment within a safe therapeutic environment. 45% of returns included significant event information that resulted in policy changes, leading to improved patient care and a better interface with the NHS. Bench-marking, both internally between military Departments of Community Mental Health and externally have improved visibility and self awareness leading to better GP induction programmes, PHC educational seminars and the establishment of MH web-pages. The Armed Forces need an effective MH service that is accessible, readily available, non-stigmatised and which positively advocates a duty of care. The results highlight the importance of further studies regarding depression to ensure that the Armed Forces are in a better position to maximise the use of MH resources.

Introduction

The British Defence Mental Health Services (DMHS) aim to maximise the psychological support to Service personnel by providing immediate Mental Health (MH) provision with the expectation that staff will return to duty. The DMHS focus is on meeting the operational imperative of producing a capable workforce, able to undertake their military duties without mental health problems. Military MH is high profile, and is frequently highlighted within the media, sometimes in a less that positive light (1-3).

On the 1 April 2004, the British Armed Forces psychiatric in-patient facility, the Duchess of Kent's Psychiatric Hospital (DKPH), was closed and the Defence Medical Services Directorate (DMSD) acquired responsibility for the DMHS in the United Kingdom. The aim was to provide a clearly defined integrated care pathway between Primary Health Care (PHC), military Departments of Community Mental Health (DCMHs) and Secondary Health Care (SHC). There are 15 DCMHs in the United Kingdom, and Service personnel serving in Germany, Cyprus and Gibraltar are supported in their host country or can evacuate back to Great Britain.

To replace the void left by the closure of the DKPH, a contract for the provision of in-patient care was established with an Independent Sector Provider (ISP), the Priory Group of Hospitals, following the completion of a tendering process. This agreement does not dilute the responsibilities of the National Health Service which can still be accessed for psychiatric emergencies. A clear advantage of the Priory Group over the DKPH is the extensive geographic clinical provision throughout Great Britain that ensures that the military philosophy of proximity, immediacy and expectancy (4) is maintained by providing hospital care close to military units.

Background

Performance indictors and military satisfaction surveys indicate that the British Armed Forces MH service is of a very high standard (5). In over 95% of occasions, urgent MH referrals

Corresponding Author: Lt Col A Finnegan, Officer Commanding Nursing, Royal Centre for Defence Medicine, Selly Oak Hospital, Raddlebarn Rd, Birmingham B29 6JD
Telephone: 0121 627 8811
Email: alan.finnegan@uhb.nhs.uk

Diagnosis	Primary Diagnosis* Total (%)	Single diagnosis** Total (%)	Co-morbidity† Total (%)
Depression	112 (33)	81 (32)	147 (34)
Alcohol Related	93 (27)	73 (29)	112 (26)
Adjustment Reaction	46 (13)	34 (14)	55 (13)
Psychotic Illness	29 (8)	26 (10)	29 (7)
PTSD	23 (7)	8 (3)	29 (7)
DSH	9 (3)	5 (2)	9 (2)
No Psych Diagnosis	8 (2)	8 (3)	8 (2)
Substance Abuse	6 (2)	5 (2)	8 (2)
Anxiety Related	6 (2)	3 (1)	6 (1)
Personality Disorder	4 (1)	2 (1)	11 (3)
PND	2 (0.5)	1 (0.5)	2 (0.5)
Eating Disorders	2 (0.5)	2 (1)	8 (2)
OCD	2 (0.5)	1 (0.5)	1 (0.25)
Acute Stress Reaction	2 (0.5)	1 (0.5)	2 (0.5)
TOTAL	**344**	**250**	**427**

Table 1 Breakdown of admissions by primary diagnosis, single diagnosis and co-morbidities.

**Main diagnosis leading to admission ** Admitted with only one MH diagnosis †The number of times condition diagnosed in all admissions*

receive a DCMH assessment within one working day, routine cases are seen within 20 working days, and when required, the Priory provides a hospital bed within four hours. This provides a robust service that significantly reduces risk and minimises the stressors on PHC clinicians. The first author has responsibility for monitoring the MOD / Priory Hospital clinical interface and since December 2003 there have been over 1,000 hospital admissions. However, the details of these admissions have not previously been published, and the media interest focuses on Post Traumatic Stress Disorder (PTSD) (6) and military suicides (7, 8).

Post Traumatic Stress Disorder. Colville (6) reported that "an estimated 1,500 troops who served in Iraq have required treatment for PTSD" and that "800 personnel had been treated in the Priory" since the first inpatient was admitted in December 2003. The article quoted the Chair of the Gulf Veterans and Families Benevolent Association who stated that "Soldiers were being discharged before being given proper treatment" into a NHS system "which did not have the specialist psychiatrists necessary". Wessely (9) has highlighted there is no widespread outbreak of PTSD within the British Armed forces, although within the media "there has certainly been an epidemic of stories about PTSD". The results below will assist in clarifying the position, indicating that PTSD is a relatively uncommon cause for hospital admissions.

Deliberate Self-Harm (DSH), Suicides and Depression. Self-harming behaviour within the UK is the highest is Europe (10), resulting in one of the 5 main reasons for acute medical admissions (11), and leading to 150,000 hospital admissions (10). Suicide accounts for approximately 5,000 deaths in England (12) each year. The effect on family and close friends is devastating, and within the Army it is a highly sensitive issue, especially in recognition that 72% of under 25s who commit suicide have a past history of self-harming (12). Whilst the social contexts and causes of self-harming behaviour are complex (13), media reports suggests that DSH within the Army is due to trauma related factors, institutional bullying or racism (7). Relatives will often state, rightly or wrongly, that the Army has failed in its duty of care (8). MH care remains the target of media comment without telling the whole story. Headlines such as *"Desert Rats Depressed – Fury Over 30 Sick Soldiers Sent to Iraq"* (1) resulted in an editorial stating *"It's a sorry state of affairs when an Army is so short of soldiers it has to send sick men to the front line."* (14). This article stated that 30 soldiers were *"ordered to Iraq"* despite being diagnosed as suffering from depression. This paper will detail the measures that MOD has introduced to ensure an effective MH service to provide troops with an appropriate, safe, clinical pathway, especially for those identified as being at high risk of self-harming.

Aim

The aim of this paper is to provide a detailed summary of military hospital admissions during a one-year period. This will include an exploration into areas such as demographic trends, differences in clinical opinion and how information gained is being utilised to improve the service and ensure appropriate, cost effective care is provided in the optimum environment.

Method

The sample group are entitled personnel admitted to a Priory hospital from 1 April 2005 to 31 March 2006. The information gained from this cross-sectional survey was provided by the 15 UK based DCMHs, where an experienced nurse is nominated as a Service Liaison Officer (SLO) and then has responsibility for supporting hospital admissions. SLOs complete a questionnaire that was designed to answer operational questions and identify trends such as which DCMH has admitted patients, the length of stay and diagnosis. Questionnaires were chosen as this method has been recognised as a useful data-collecting tool that can reach large samples spread over significant geographical areas (15, 16). A new questionnaire was designed for this purpose, as no "off the shelf" version was available and includes a section for significant events reporting. SPSS was used for the management and analysis of the quantitative data with the information exposed to descriptive and inferential statistical analysis.

Results

During the reporting period of the 1 April 2005 to 31 March 2006 there were 344 admissions.

Diagnosis. Table 1 presents the admissions during the study period for 14 diagnostic categories, further categorised as to whether the condition was the primary or single MH diagnosis or whether there were MH co-morbidities. A patient admitted with only one diagnosis, for instance depression, would be counted in both the primary diagnosis and single diagnosis columns for depression, whereas a patient presenting primarily with depression but also having PTSD and an alcohol related disorder would be entered in the primary diagnosis / depression cell, whilst the other two diagnoses are counted in the appropriate cells in the co-morbidities column.

The most common diagnosis resulting in 112 (33%) hospital admissions was depressive illness. 93 (27%) admissions were for alcohol related disorders, 46 (13%) for adjustment reactions, 29 (8%) with a psychotic illness and 23 (7%) with PTSD.

Gender. The Armed Forces population is 90% male. There were 282 (82%) male and 62 (18%) female admissions. Binominal, non parametric tests were applied to assess variances in diagnosis and gender, with results indicating statistically significant differences with 25% of admissions for depression being female ($p < .001$), and 96% of alcohol related disorders were male ($p < .001$) (Table 2).

Age, Service and Rank. The median age of admissions was 29 years old. The distribution of admissions were representative of

Diagnosis	Length of stay				Service				Gender			Age		
	Total	Mean	Range	SD	RN/RM	Army	RAF	Other	Male	Female	P Value*	Mean	SD	Range
Depression	112	36	1 -174	33.3	34	42	32	4	83 (74%)	29 (26%)	<.001	29	7.53	16-49
Alcohol Related	93	19	1-84	13.8	29	33	31		89 (96%)	4 (4%)	.049	31	8.47	19-53
Adjustment Reaction	46	21	2-106	20.4	10	28	8	0	38 (83%)	8 (17%)	.077	30	7.55	17-45
Psychotic Illness	29	31	1-98	25.1	4	22	3	0	25 (86%)	4 (14%)	.355	26	7.41	19-52
PTSD	23	50	4-98	27	1	18	4	0	21 (91%)	2 (9%)	.592	30	8.73	19-49
DSH	9	13	2-50	9.2	0	8	1	0	8 (89%)	1 (11%)	.613	24	8.08	17-41
No Psych Diagnosis	8	8	2-20	6	1	4	3	0	6 (75%)	2 (25%)	<.001	28	8.73	18-45
Substance Abuse	6	13			2	4	0	0	5 (83%)	1 (17%)		21	1.26	19-22
Anxiety Related	6	25			1	4	0	1	3 (50%)	3 (50%)		28	4.45	21-33
Personality Disorder	4	25			0	2	2	0	2 (50%)	2 (50%)		24		
PND	2	26			0	2	0	0	0	2 (100%)		22		
Eating Disorders	2	100			0	2	0	0	0	2 (100%)		22		
OCD	2	9			1	1	0	0	0	2 (100%)		36		
Acute Stress Reaction	2	21			0	2	0	0	2 (100%)	0		30		
TOTAL	**344**				**83**	**172**	**84**	**5**	**282**	**62**		**29**		

Table 2 Hospital stay, service, gender and age according to diagnosis

*Non Parametric Test - Binomial Empty cells indicate sample size too small to analyse

the Service population with 172 (50%) being Army personnel, 83 (24%) Royal Navy (RN) / Royal Marine (RM), 84 (24%) Royal Air Force (RAF) and 5 (2%) others (Table 2). Military Rank, expressed as the equivalent Army rank for all three services, indicated that of the 342 known results (including recruits), 165 (48%) were private soldiers, 84 (25%) were Lance Corporal / Corporals, 68 (20%) Sergeant to Warrant Officer Class One, 20 (6%) were Officers and 5 (2%) were civilian.

Length of Stay. From 344 patients, 24% (N=83) stayed in hospital for 10 days or less, 48 % (N=167) were discharged within 20 days, 69% (N= 237) within 30 days, 81% (N=280) within 40 days and 87% (N=300) within 50 days. The remaining 13% (N=44) received in-patient care for more than 50 days. Patients admitted from outside Great Britain stayed in hospital for the longest periods with Northern Ireland admissions averaging 42 days compared with 27 days for GB admissions. There were differences in how quickly different Priory hospitals discharged patients back to the local DCMH, with some departments waiting on average 37 days and others only 12 days.

Admissions Source. 300 (87%) patients were admitted from within the UK and 44 (13%) from overseas. There were 11 Service personnel admitted from Iraq and they remained in hospital for an average of 11 days each. Of these 11 evacuations, 4 had adjustment disorders, 3 psychotic episodes, 2 depression, and one each with an alcohol related disorder and PTSD. There were no admissions from Afghanistan.

Results detail variances between different DCMHs' hospital admission rates. The measurement to assess these differences was to compare departments who serve similar populations at risk (PAR), and have matching referral rates. The most extreme difference highlighted one department admitting 10.5% (N=36) compared to a similar department that admitted 3.2% (N=11). There was no obvious reason for this disparity.

Risk Assessment & Significant Events Reporting. Risk assessment for depressive illness graded the probability of a patient self-harming. Information was provided on 111 patients, and indicated that 20% (N=22) were either low or no risk was detected. Of these 22 patients, 27% (N=6) were admitted out of normal working hours by a General Practitioner. 45% of SLO returns included significant events information which highlighted policy, administrative and

clinical problems. Examples are detailed in the following discussion.

Discussion

The most common cause for military MH health hospital admissions is for mood disorders, and this correlates with the highest cause for operational evacuation (17) and reflects day to day referrals to Military DCMHs. Depression and mood disorders are therefore the most significant MH problems in reducing the capability of the British Armed forces. PTSD accounted for 7% (N=23) of primary admissions and 3% (N=8) of patients with a single diagnosis.

Condition	%
Neurotic, Stress related and Somatoform	33
Alcohol or drug misuse	27
Psychosocial and Environmental Problems	13
Depressive Episodes	12
Personality Disorders	10
Schizophrenia, Schizotypal and Delusional Disorders.	3
Organic Personality Change	1
Bipolar Affective Disorder	1

Table 3: Distribution of primary psychiatric disorders from 309 Army personnel admitted to the Duchess of Kent's Psychiatric Hospital from 1 Jan 96 to 1 Jan 99.

Published data available from the last military psychiatric hospital, the Duchess of Kent's Psychiatric Hospital (DKPH) (18) indicates that rates of admission by diagnosis amongst Service personnel have altered (Table 3). Certain criteria such as alcohol related disorders have remained stable, accounting for approximately 27% of admissions, but depressive illness has risen from 12% to the current figure of 33%. Some colleagues believe that this is due to differences in recording patterns and the tendency of civilian psychiatrists to diagnose a condition as depression rather than an adjustment disorder. However, there are a number of ex-military Consultant Psychiatrists working within the Priory Hospitals who would identify the differences between these conditions so this may not be the case. What is commonly perceived by military MH clinicians, although the results in this paper may suggest otherwise, is that there has not been a significant change in the type of MH disorders within the Armed Forces population, despite the notable increase in operational commitments since 2003.

The number of admissions by Service is representative of the military population with approximately 50% being Army personnel. However, at the DKPH, the Army averaged 260 admissions per year (18) compared with 172 admissions in this report, reflecting a reduction of 34%. A contributing factor could be that Army DCMHs have been enhanced with extra staff, thus providing a better skill mix which is supported by a clear educational pathway that promotes community based treatment in preference to hospital care. Unfortunately, this is a dynamic medium, and under-manning, increased operational tempo, reduction in morale and mounting workloads could result in a reversal in this positive trend. The higher percentage of junior ranks admitted to hospital was expected as this group form the critical mass of Military personnel, with certain difficulties associated with the adaptation to military life.

There were notable differences attributable to gender. 10% of the Armed Forces are women but female represented 18% of hospital admissions and this represents a striking difference to DKPH admissions where the rate was 6.5%. It is acknowledged that civilian research has identified similar discrepancies, such as women significantly more likely to develop depression (19), or men being more than twice as prone to die from an alcohol related disorder (20), and these findings correlate to the statistically significant results within this study. However, the exact reason for the overall greater proportion of female admissions is unclear. Whether women face greater stressors, are more isolated, are less effected by stigma, or are just more willing to seek support are all potential reasons, a valid basis for future military MH research, but outside the scope of this paper.

The Armed Forces strive to provide a safe and responsive MH service focused on community care. When a patient has required admission, performance data available from 2004/2005 indicate that on more than 95% of occasions, a bed was identified within four hours of referral. In this survey, the average length of stay was 21 days, with 48% of patients discharged within 3 weeks, and only 13% (N=44) staying in hospital for more than 50 days. These results suggest a service where GPs and MH clinicians do not have to take excessive risks, having access to a highly responsive service that provides brief assessment and treatment within a safe therapeutic environment. It is notable that the average length of stay is now less than previous admissions to DKPH.

From a clinical governance perspective, the importance of significant event reporting in highlighting problems is widely acknowledged (21). This non-punitive technique permits individuals to express their concerns in an independent way and can demonstrate the actions taken to resolve the issues (22). 45% of SLO returns included significant events information that resulted in a number of policy changes which have improved patient care, and may be a factor in reduced admission rates and for producing a better interface with the NHS. Reports have highlighted isolated instances of patients remaining in hospital for extended periods for non clinical reasons, a lack of communication between DCMHs and problems with appropriate transport, all of which have been addressed.

The results and significant events reporting are important factors in identifying ways of further improving military MH, and provide indication of the predisposing factors that precipitate the MH condition. There are biopsychosocial factors that influence the onset of MH disorders. Any type of change or new demand may cause stress and influence a person's ability to deal with the impact of challenging psychological and social life events associated with military life. How a person reacts to difficult experiences will depend on the individual's coping mechanisms, and it is these that will dictate how a person handles stress or everyday problems. MH difficulties are linked to the individuals social interaction, and their response to their environment, which for the military has special considerations as both peacetime and operational settings are often unique to this population. Identified stressors within the general population that lead to depression such as isolation (23), family stresses (24), relationship problems (25), childhood abuse (26), and the effects of alcohol (27) also affect service personnel. In addition, there are emotional issues particular to the military such as unresolved psychological adjustment to operationally linked traumatic events (28) or the MH problems exhibited in personnel wishing to leave the Armed Forces but facing extended periods of notice to leave (29).

Improving the lot of the unhappy soldier, whilst simultaneously promoting further community based care, is reliant on addressing the significant factor of military MH stigma (30), and requires the commitment of military managers. MH personnel have identified a number of potential developing themes for discontented Service personnel who live in a unique working environment where postings, often into a new setting, occur every 2 or 3 years, with the turbulence often compounded by an operational tour. During a military career, Service personnel report meeting a host of excellent senior staff who care for their troops and provide grass roots security and friendship

that can dissipate MH problems before they manifest themselves. However, poor leadership, excessive workload, and micro management, all of which are well recognised for their negative impact in reducing mood and increasing anxiety (31), can also affect performance in any walk of life. MH clinicians encounter distressed Service personnel who have / recall a line manager who fits this model but feel disempowered within an Armed Forces system of rank and annual reporting that may make detection of these shortfalls difficult. In the authors' experience, these stereotypes are uncommon, but where they exist the result can be an unhappy serviceman who may wish to leave the Services (if terms and condition permit), or face the long wait for either their line manager or themselves to be posted. The Armed Forces have a robust equal opportunity policy and utilise anonymous staff surveys that permit personnel to air their views, without fear of reprisal or disciplinary action, and this is one of many tools to identify such issues. However, these surveys tend to be an assessment at a strategic level, and fear of damaging a career has a reduced effect in airing problems at grass roots level. Local surveys and independent sensitivity meeting may improve matters, and whilst acknowledging the significant leadership training that is provided for troops at all levels, greater utilisation of methods used in civilian organisational management, such as the 360 degree assessments (32,33) could provide managers with insight into the impact of their management style, promote self awareness, and address some unit MH issues before they commence.

This paper also highlights an area that is both under-researched and not frequently attributed as a significant factor in MH admissions, that being the role of clinical competencies and opinion. Data available to this study indicates that there are significant differences regarding DCMH admission rates taking into account factors such as PAR and referral rates, and there is a possibility that the admission rates are directly linked to differing clinical assessment and management. The authors are not suggesting that lower admission rates equate to appropriate care, as it could be an indication of excessive risk-taking. However, individual results, although not published here by department, have been relayed back to each DCMH and provide clear visibility of differences, promoting communication and bench-marking. The results for the first 9 months of 2006/2007 show that there has been a 17% reduction in MH hospital admissions, and improved communication may be a contributing factor. Differing clinical opinion is also reflected in the fact that 26% (N=21) of depressed patients presented with either low or no risk of self-harm. These admissions on face value may appear to be contrary to the National Institute for Clinical Excellence (NICE) guidelines that advocate watchful waiting and community care (34). However, there are a number of prudent clinical reasons why this has occurred, and the short hospital stays indicate a service that provides military patients with a temporary safe haven whilst a more detailed assessment is obtained. To promote further awareness, stringent methods have been developed leading to better GP induction programmes, PHC educational seminars based on the latest evidence based research, and the establishment of MH web-pages that include NICE and WHO guidelines. A MH nursing peripatetic service to provide local evidence-based guidance regarding risk management has further enhanced this in some areas.

There were also notable differences in length of stay dependent on which of the 18 independent sector hospitals was caring for the patient, with the median range varying from 12 to 37 days. Obviously diagnostic criteria was a significant factor but the results also appear to be partly attributable to a learning process whereby SLOs needed time to develop their liaison skills, and the Priory consultants to become fully aware of military doctrine, and of the high level of easily accessible, multi-disciplinary community care available within military DCMHs. The important aspect is that clear visibility of these differences, both across military DCMHs and the Priory executive, reinforced with a robust significant events reporting system has further improved the service and has led to recent reductions in the length of hospital based care. The authors' aim is to detail these developments within a future review for the year following this report.

Conclusion

This study is part of an extensive monitoring programme of MH hospital admissions that has led to significant policy changes in the way the MOD supports MH practice. Outside of the diagnostic criteria, is has been possible to identify differences in DCMH admission rates, which has enabled the RN, Army and RAF to have the opportunity to compare and contrast differences in interventions and approach. This has resulted in better induction programmes and educational support to both MH and PHC clinicians.

This aim of intensely monitoring the Priory contract is to produce a dynamic medium, where problematic trends are identified quickly. In response to this, the survey questionnaire was updated in April 06, and over a 12 month period will collect information regarding predisposing factors that are impacting on the admissions. These results, although at a very early stage, have reflected civilian studies that indicate multi-factorial causes with relationship difficulties featuring in over 50% of admissions. These results will be the subject of a separate paper.

The Armed Forces need an effective MH service that is accessible, readily available, non-stigmatised and which positively advocates a duty of care. The results from this study highlight the importance of military MH undertaking further studies regarding low mood / depression. The first author is completing a doctoral research study consisting of an exploration and critical analysis of relevant predisposing factors with the aim of producing a theoretical model to support local unit interventions. As a result, the Armed Forces may then be in a better position to maximise the use of resources, preferably before the Serviceman / woman's problems are exacerbated to the extent that any MH assessment is required.

Acknowledgements.

To the military DCMHs and the SLOs who have provided the data for this paper.

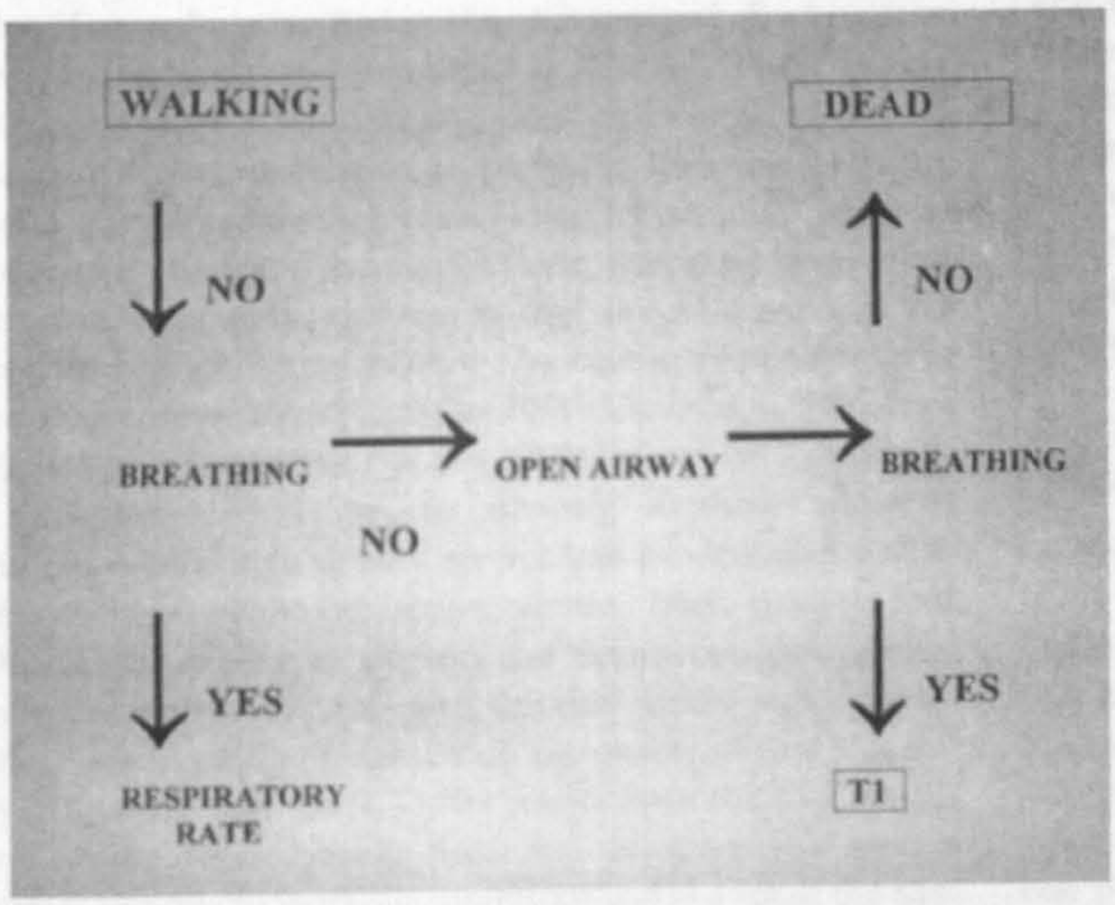
References.

1. Kay J. Fury Over 30 Sick Soldiers Sent to Iraq – Desert Rats "Depressed". The Sun, Jan 30, 2006; 21.
2. Rayment S. Injured Troops put into Mixed Civilian Wards. The Sunday Telegraph, Sept 17, 2006; 1 & 4.
3. Channel 4. Dispatches Documentary - Battle Fatigue. 20.00hrs, 22 May, 2006.
4. O'Brien LS. Traumatic Events & Mental Health. Cambridge: University Press Cambridge, 1998; 212-213
5. Finnegan AP, Finnegan SE. Satisfaction Surveys to Assess the Effectiveness of the British Army's Mental Health Service. Br J Nurs 2007. In press.
6. Colville R. Cost of Priory Clinical Treatment for Army Veterans is £9M. Daily Telegraph, 7 Aug, 2006; 1-2.
7. BBC News Families Lobby for Deepcut Inquiry. www.news.bbc.co.uk/1/hi/uk/2370627.stm. Tue 29 Oct 2002a; 1447GMT
8. BBC News (2002b). Deepcut Barracks May be Closed. 0919GMT, www.news.bbc.co.uk/1/hi/uk/2500995.stm. Friday 22 Nov 2002.
9. Wessely S. Risk, Psychiatry and the Military. Br J Psychiatry 2005; 186: 459-466.
10. National Health Service: Centre for Reviews and Dissemination. Deliberate Self Harm. *Effective Health Care* 1998;4(6): 1-12.
11. Hawton K, Fagg, J. Trends in Deliberate Self-Poisoning and Self-Injury in Oxford. *BMJ* 1992; 304(6839): 1409-1411.
12. Department of Health. National Suicide Prevention Strategy for England. DOH, Sept 2002.
13. Cook SH, Clancy C, Sanderson S. Self-Harm & Suicide: Care, Interventions and Policy. *Nurs Standard* 2004; 18(43): 43-52.

14. Editorial. The Sun 2006, 30 Jan.
15. Oppenheim AN. Questionnaire Design, Interviewing and Attitude Measurement. London, Heinemann. 1992.
16. Czaja R, Blair J. Designing Surveys. A Guide to Decisions and Procedures. London, Sage; 2005.
17. Turner MA, Kiernan MD, McKechanie AG, Finch PJC, McManus F, Neal L. Acute Military Psychiatric Casualties from the War in Iraq. *Br J Psychiatry* 2005; **186**: 476 - 479.
18. Neal L, Kiernan M, Hill D, McManus, F, Turner, MA. Management of Mental Illness by the British Army. Br J Psychiatry 2003; 182: 337 – 341.
19. Kessler RC, Berglund P, Demler O, Jin R, Koretz, D. The Epidemiology of Major Depressive Disorder: Results from the National Co-Morbidity Survey Replication (NCS-R). *JAMA* 2003; **289**(23): 3095 - 3105.
20. Office for National Statistics. Alcohol Related Deaths. www.statistics.gov.uk. 2005.
21. Vincent C. Clinical Risk Management. London. BMJ. 2001.
22. Secker-Walker J, Taylor-Adams ST. In Vincent C. Clinical Risk Management. London. **BMJ**. 2001: 419 - 438
23. Kaplan GA, Roberts RE, Camacho TC, Coyne JC. Psychosocial Predictors of Depression: Prospective Evidence From the Human Population Laboratory Studies. *Am J Epidemiol* 1987; **125**(2): 206 - 220.
24. Fossom A. Family Stress. In Fisher S, Reason J. EDS. Handbook of Life Stress, Cognition & Health. London: Wiley, 1988; 61-174.
25. World Health Organisation. Diagnostic and Management Guidelines for Mental Disorders: ICD 10, Geneva; WHO; 1996.
26. Bagley C, Ramsey R. Sexual Abuse in Childhood: Psychological Outcomes and Implications for Social Work Practice. *J Soc Work and Human Sexuality* 1986; **5**: 33-47.
27. Haw C, Hawton K, Houston K, Townsend E. Psychiatric and Personality Disorders in Deliberate Self Harm Patients. *Br J Psychiatry* 2001; **178**, 48-54.
28. Scott MJ, & Strading SG. (1992). Counselling for Post Traumatic Stress Disorder. London, Sage. 1992.
29. Roberts, P. Temperamental Unsuitability and Soldiers. Presented at the International Military Psychiatric Conference @ Fort Blockhouse in Gosport. 2006, Sept.
30. Finnegan AP. Societal Factors that Negatively Affect the Mental Health Support for the British Army's Service Personnel Involved in Major Trauma. *J R Army Med Corps* 1997; **143**, 107-111.
31. Handy C. Understanding Organisations. London; Penguin. 1993
32. Collinson G. What Makes an Effective Healthcare Leader? Results of the Best Leadership Practices Research in Healthcare in the UK. *Practice Development in Health Care* 2006; **5**(2); 81-91.
33. Hernez-Broome G, & Hughes RL. Leadership Development: Past, Present and Future. *Human Resource Planning* 2005; No 16247: 24-32.
34. National Institute of Clinical Excellence. Depression. Management of Depression in Primary and Secondary Healthcare. Clinical Guideline. London: NICE, 2004.

Correction

Figure 1 in Tong JL, Taylor A, House J, Smith JE. Assessing airway patency and breathing in NBC category 4R - the RG method. JR Army Med Corps 2006; 152(3): 139-42 was reproduced incorrectly. The arrow in the top right of the figure was the wrong way round. The correct figure is reproduced below.



Assessing the effectiveness of the British Army's mental health service

Alan Finnegan, Sarah Finnegan

Abstract

The Ministry of Defence's commitment to modernizing and improving mental health (MH) care for Armed Forces personnel has resulted in considerable changes to frontline services. The last remaining United Kingdom (UK) military psychiatric hospital closed on 1 April 2004 with the move to a clear, integrated care pathway between primary healthcare, military departments of community mental health (DCMHs) and secondary healthcare. The Army's eight UK DCMHs provide a patient-centred, occupational MH service grounded in the military MH philosophy of local, easily accessible, effective treatment (O'Brien, 1998). These MH services have been exposed to significant media interest and this article will attempt to quantify the correct state of affairs through patient, customer and staff satisfaction surveys. Clinical groups in the customer survey recorded a satisfaction rate of 87%, the staff survey 72% and the patient survey 94%. The Army has excellent access to specialist MH support and a common theme emerging in these surveys is the perception that the MH teams provide a high quality of service. The three surveys provide valuable direction to improve patient care and highlight strengths such as 97% of patients receiving appointments compatible with their duties.

Key words: Defence nursing ■ Mental health ■ Military ■ Satisfaction surveys

Military mental health (MH) provision must generate a service that ensures personnel are fit for task and able to complete full operational duties. It is therefore imperative that in addition to providing skilled clinical support, there are also performance indicators (PIs) to demonstrate the military philosophy of proximity, immediacy and expectancy is being achieved. These PIs monitor whether urgent MH referrals are assessed within one working day and routine referrals within 20 working days as directed within Ministry of Defence (MoD) policy. Military departments of community mental health (DCMHs) also provide urgent support or advice during working hours and a national support line during other periods while the independent sector providers (ISPs) are contracted to identify an admission bed within 4 hours and all admissions are closely monitored (Finnegan et al, 2007). These PIs are achieved in over 95% of occasions and testify to a gold standard service in relation to access. In addition, the Army has a strong continuing professional educational pathway to ensure that MH personnel have the appropriate skill sets and competencies. Despite this, the MH services are frequently highlighted within the media, sometimes in a less that positive light (Colville, 2006; Channel 4, 2006; Kay, 2006; Rayment, 2006; *The Sun*, 2006).

This article attempts to identify if these apparent indicators of a high quality service can be demonstrated as effectively through satisfaction surveys. Staff, patients and DCMH customers, i.e. doctors and nurses, completed three independent surveys. Of note, the staff survey will only be referenced regarding feedback on the quality of care and the overall satisfaction levels. Other results from the staff survey will not be detailed, as the focus was on operational aspects such as improving working conditions and as a result the staff questionnaire was significantly different to the customer and patient surveys.

Satisfaction surveys

The Department of Health's (DH's) recognition of the importance of involving customers and measuring user satisfaction within the health services has been developing for a considerable time (Department of Health and Social Security (DHSS), 1983; DH, 1991, 1997). Health providers have been directed to listen more closely and clearly to customers' views in planning and evaluating services (DH, 1999), with the result being a proliferation in satisfaction surveys. However, although measuring satisfaction appears a useful way of evaluating outcome and monitoring service quality there are significant methodological shortfalls that limit the conclusions of many studies (Smith, 1999). Robson (1993) stated that the results are superficial, Wilkin et al (1992) that there is a lack of consensus of what satisfaction means, and Wiles (1996) that the results can provide a false positive picture leading to no action being taken where a problem exists. Ambramowitz et al (1987) and Avis et al (1997) have concluded that the results inevitably indicate high levels of gratification and Warner (2006) that satisfaction surveys are a waste of NHS resources. Issues of reliability and validity are significant

Alan Finnegan is Defence Specialist Nursing Advisor (Mental Health), British Army, Royal Centre for Defence Medicine, Selly Oak Hospital, Birmingham and Sarah Finnegan is Practice Nurse, Lache Health Centre, Chester

Accepted for publication: March 2007

factors and many studies have been one-off events (Backhouse and Brown, 2000) which make comparisons between or within services difficult.

However, satisfaction surveys are recorded as being a useful method from which to proactively improve patient care (Fitzpatrick, 1991; Backhouse and Brown, 2000) and there importance in evaluating mental health services and supporting patient orientated research is well established (Stallard, 1996; Townend, 2000; Webb et al, 2000).

In recognition of observations regarding survey limitations, this independent study includes three surveys from three difference sources with the results triangulated to improve validity and reliability (Silverman, 2005). Accessing views from three different cohorts, distributed over wide geographic areas, made this method a viable option by providing an appropriate framework for respondents to give feedback on a wide range of personal views and agendas and allowing staff, customers and most importantly patients with active participation in the care planning process. Of note, despite an extensive literature search, the authors were not able to detect any previous MH satisfaction survey results where the British Army provided the sample.

Aims and objectives

The aim of the study is to gather and critically analyse information that will enable an improvement in the MH support offered to Army personnel. The objectives are to:

a. Identify the level of staff, customer and patient satisfaction
b. Highlight good practice, identify areas for development, and provide the foundation for future survey and research.

Methodology

The surveys were anonymous and confidential with views captured on specifically designed questionnaires with the questions constructed following consultation with clinical and non-clinical staff, service users and following the published guidelines (Collins, 1999; Bisset and Chessan, 2000). The customer survey was sent to 85 Army medical centres and the staff survey to the total population of 55 DCMH employees. The patient group were a convenience sample who completed the survey at the final appointment with the intention of obtaining 40 questionnaires from each of the eight DCMHs, giving a total of 320.

Table 1. Customer satisfaction survey results

Ser	Question	Poor/very poor	Average	Good/very good	Total
1	Speed of appointments	5 (8.2%)	15 (24.6%)	41 (67.2%)	61
2	Assessment	1 (1.7%	8 (13.3%)	51 (85%)	60
3	Treatment	1 (1.6%)	6 (9.8%)	54 (88.5%)	61
4	Follow-up care	2 (3.3%)	8 (13.1%)	51 (83.6%)	61
5	Discharge processes	2 (3.3%)	10 (16.4%)	49 (80.4%)	61
6	Quality of care	0	9 (14.8%)	52 (85.2%)	61
7	Documentation - quality	2 (3.3%)	7 (11.5%)	52 (85.3%)	61
8	Documentation – speed produced	7 (11.6%)	19 (31.7%)	34 (57.7%)	60

Questionnaires were used as this method has been recognized as a useful data-collecting tool for gauging satisfaction, moods, beliefs and attitudes (Oppenheim, 1992; Czaja and Blair, 2005). Mixed methods were used with quantitative data obtained from Likert scale/tick box responses and qualitative information from hand written text boxes replies. Completed questionnaires were sent directly to the author (AF) and pilot studies were completed in all three studies.

Quantitative data were coded and inserted onto a SPSS database (version 10) for analysis. Descriptive statistics are used throughout, predominately with frequency distributions and percentages, although there is some cross-tabulation to identify differences in stratified groups, in particular in the customer survey between different rank, civilian status and clinical background. Qualitative responses were subjected to content analysis (Burnard, 1991) based on a modified grounded theory approach (Glaser and Strauss, 1967; Backhouse and Brown, 2000; Charmaz, 2006) that included: constructing analytical codes and categories from the data and not from preconceived suppositions; using the constant comparative method to construct comparisons during each stage of the analysis, and memo-writing to elaborate between categories, specify their properties, define correlations and identify gaps.

Satisfaction surveys have traditionally been viewed as a quantitative measure (Collins, 1999), however, triangulation and mixed quantitative and qualitative methods incorporating grounded theory (Annells, 2006; Charmaz, 2006) have become increasingly popular, leading to significant developments for patients (Charmaz, 2006).

Results

Customer survey

Sixty-three (74.1%) staff from the 85 Army Primary Healthcare Service (APHCS) medical centres returned questionnaires in time to be included within the study and a further seven after the closure date. The covering letter requested a senior general practitioner (GP) or a nominated representative to complete the questionnaire and from the returns, 41 (65.1%) were doctors, 8 (12.7%) nurses, 11 (17.5%) practice managers and 3 (4.8%) other clinical staff.

Likert scale questions assessed a number of fields including speed of appointments, MH assessment, treatment, follow-up care, discharge processes and quality of care. (Assessment referred to the first appointment only, satisfaction being gauged by communication with the DCMH and the recommended care plan.) There were also two documentation questions, one addressing the quality and the second the speed that documentation was produced. The results are in *Table 1*.

A final question was added to gauge the overall satisfaction rating and indicated that of the 60 DCMH customers who replied, 86.7% (52/60) were satisfied/very satisfied or extremely satisfied and 13.3% (8/60) were not very satisfied with the service provided. No one replied that they were not satisfied at all. In an attempt to improve validity and reliability, a number of cross tabulations including clinical

background, military status, and rank, were undertaken to establish that these subsets did not skew the results. There were no statistically significant differences except with the satisfaction rates of civilian / junior doctors where 100% (4/4) were satisfied compared with 73.3% (11/15) of senior GPs. Nursing and administrative staff reported 100% (11/11) satisfaction.

Two questions in the customer survey invited respondents to provide written comments with the first collecting views on how to improve service provision. Fifteen respondents did not complete the section and another seven took the opportunity to provide positive comments such as:

> **'I don't think it can be improved, I have always found them (DCMHs) extremely efficient and helpful.'**

Of the trends that did appear, the most common suggestions were to provide a peripatetic Community Psychiatric Nurse service to local units, faster production of DCMH documentation, immediate access to MH clinical advice and increased manning. More detail is in *Box 1*.

The second question asked APHCS medical centre staff to identify the best aspects of the MH service provision. Five trends emerged regarding the quality of care, accessibility, strong communication, good documentation and approachable staff. Comments are in *Box 2*.

Patient survey

Each of the eight DCMHs were requested to return 40 questionnaires - 283 (88.4%) were returned in time for inclusion in the patient survey and a further 34 were returned after the closure date. Of the 281 respondents who detailed their gender, 210 (74.7%) were male and 71 (25.3%) female, and from the 279 responses who detailed their rank, 223 (79.9%) were ranked private soldiers to corporal, 45 (16.1%) sergeant to warrant officer and 11 (3.9%) officers. The age group ranged from two soldiers under 18 to two over 52. Of the 281 who supplied their age, 158 (56.2%) were aged 18–27 years with the median age range being 18–22. Out From 278 returns, 177 (63.7%) patients reported being treated by a nurse, 58 (20.9%) a psychiatrist, 13 (4.7%) a combination of a nurse and psychiatrist, 10 (3.6%) either a psychologist/social worker, and 19 (6.8%) did not know the professional background of the clinician.

Four questions asked for feedback on support leading to the first appointment. Of 258 patients, 196 (76%) patients received route details providing directions to a DCMH and 62 (24%) did not. Two hundred and fifty-two (97.7%) appointments were compatible with work duties compared with 8 (3.1%) when the appointment caused some difficulty. Two hundred and fifty-three (97.7%) appointments were provided in a timely fashion and 7 (2.7%) were not. Eighty-four (32.6%) reported being unaware of how to make a complaint. Likert scales were used to annotate satisfaction with administration and facilities, quality of care and quaility of information with the results annotated in *Table 2*. The final question asked 'Overall how would you rate the service provided by the DCMH?' One hundred and seventy-six out of two hundred and eighty (62.9%) ticked the highest grade of very good, 86 (30.7%) as good, 13 (4.6%) average, 2 (0.7%) as poor and 3 (1.1%) as very poor.

Satisfaction levels were assessed against the professional background of the clinician and psychiatrists, of which 40 out of 50 (80%) patients rated the care as very good, were the most popular (see *Figure 1*).

Patients were invited to reply to the question 'How do you think you could improve the service?' Seventy respondents provided written comments and although a negatively loaded question, the most frequently reported item was the high quality of care. After this, the emerging themes in order of priority were to improve facilities, provide MH support within unit lines and improve communication (*Box 3*).

Staff survey

As stated above, quality of care was addressed in a staff survey and is included for comparison with the patient and customers surveys. Of the 55 questionnaires sent out,

Box 1. Customers views: improving departments of community mental health (DCMH) service provision

- **Liaison Service**: Eleven wanted to improve the liaison service and requested support and guidance within the local health centre. Comments included: 'Provision of community psychiatric nurses (CPNs) in the community to see patients at medical centres'.
- **Documentation**: Nine desired better documentation although this predominately referred to the speed in which DCMH documentation was received and to lengthy gaps between receiving assessment documentation and further instruction/update
- **Accessibility**: Eight noted the difficulty caused when accessibility to a DCMH clinician is not available. A request included: 'speedier appointments and return letter/opinions'.
- **Manning**: Seven made direct reference to manning issues such as: 'more CPN trained staff' and 'increase staff numbers'

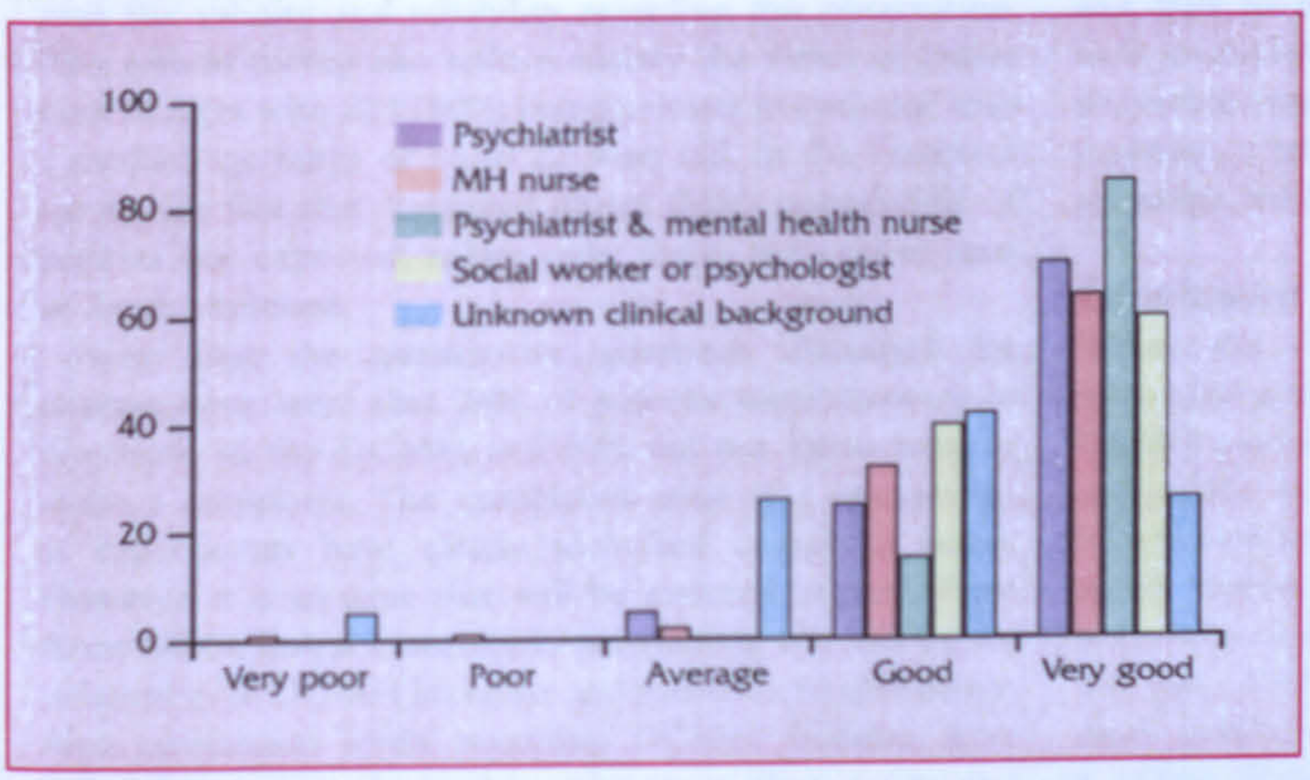
Box 2. Customer views: best aspects of the departments of community mental health (DCMH) service provision

- **Quality of care**: Fourty-eight cited the high standard of care with five reporting that their responses were generated from positive patient feedback
- **Accessibility**: Thirty-seven stated that the speed and ease of access to mental health clinicians was a major positive aspect. One reply referred to patients being 'seen on the same day if required'.
- **Communication**: Twenty-three commented on the excellent communication with the DCMH. In particular, ten referenced the helpful telephone advice such as 'helpful staff at the end of the phone'.
- **Documentation**: Seventeen highlighted the high quality of the written documentation including 'good, informative out patients department letters'
- **Approachability**: Thirteen described the approachability and friendliness of DCMH staff. Comments included 'approachable staff who are very willing to advise on numerous subjects (gradings, paperwork, etc.)'.

Table 2. Patient satisfaction survey results

Ser	Question	Poor/very poor	Average	Good/very good	Total
1	Administration support	3 (1%)	20 (7%)	257 (92%)	280
2	DCMH facilities	11 (4%)	68 (24%)	200 (72%)	279
3	Quality of Care	2 (1%)	19 (7%)	260 (93%)	281
4	Quality of DCMH information	2 (1%)	17 (6%)	260 (93%)	279
5	Overall satisfaction	5 (3%)	13 (5%)	262 (93%)	280

Figure 1. Patient satisfaction rates by clinical background.



Box 3. Patients' views on improving the mental health service (n=70)

High class service: Regarding the mental health service, 32 (46%) took the opportunity to add a positive comment. One patient stated that 'The service and help I received were outstanding and helped me stand back and identify problems. I don't think you can improve on that service'. Others added 'The service I received was fantastic. I would like to thank Cpl xxx for her help and support during this traumatic time' and 'I have received excellent and effective treatment here. This is an invaluable service to soldiers'.

Facilities: 16 (23%) stated that departments of community mental health (DCMH) facilities needed to be improved. These comments are obviously influenced by which of the eight DCMHs the patient attended but some general trends were identified. Certain aspects should be fairly simple to address such as 'more mags(sic) in the waiting room', 'waiting drinks' or to have a 'television in the waiting area"'. It will come as no surprise to certain DCMHs that the advice was more direct in certain areas such as 'needs painting'.

Communication and Awareness: The third most referenced area was in relation to communication, in particular informing units of the existence of DCMHs and for more advice and information on MH disorders. Nine patients added similar comments such as 'More information on the whereabouts of the DCMH. Also people to be made more aware about depression and stress related illnesses in the work place, what the signs are, etc'. Another added 'Just to make it more common knowledge of the facilities and for people who need the help and understanding that it is good and rewarding to talk about the problems and stress incurred in the services and by relationship problems'.

85.5% (47) of DCMH staff returned questionnaires in time to be included within the survey and a further two after the closure date. From the 38 clinical staff who replied, 81.6% (31) reported the quality of care as either very good or good and only 5.3% (2) as poor. The overall satisfaction rates, from both clinical and non-clinical staff indicated that 71.1% (32/45) were satisfied and 28.9% (13/45) were not satisfied. The prime causes of dissatisfaction were attributable to poor manning against establishment and a perception that the working environment was inadequate, although the latter views were obviously dependent on which DCMH was being reported.

Discussion

Some areas require further investigation or immediate action to address shortfalls in service. For example, clinical groups in the customer survey recorded a satisfaction rate of 86.7%, however, the stratified sample of senior military doctors reported a reduced rate of 73%, and although the power of this observation is affected by the small sample of 15 GPs, an explanation will still be sought in a repeat study planned for late 2007. Additional issues raised by customers such as difficulty in accessing MH services, poor DCMH documentation and improving the visiting liaison service are being addressed.

Apart from the overall satisfaction levels, the quality of care was the only criterion where similar data were gathered from all three sources of patients, customers and staff. Eighty-one per cent of staff and 85.2% of customers reported that the quality of care provided by the Army MH services was of a high standard. In arguably the most important group, 93.6% of patients rated their care as either very good/good and only 1.8% as either very poor/poor. These results were qualified with numerous written comments within all surveys that described the positive quality of care, to the extent in grounded theory terms that saturation was achieved. Triangulation of the views on quality of care from the three surveys, as highlighted in *Figure 2*, improves the reliability and validity of the results and supports the comparison of information gained from different methods of questionnaires and interviews.

Silverman (2005) states that:

> **'Having a cumulative view of data drawn from different contexts may, as in trigonometry, be able to triangulate the "true" state of affairs by identifying and exploring where the different datasets intersect.'**

The perception emerging from three surveys and the potential true state is that the quality of care provided by the Army MH clinicians is of a high order. However, this is only one benchmark and the credibility of the findings would have been enhanced if all three questionnaires contained exactly the same questions. This was not undertaken in this period, as the imperative, particularly in the staff survey, was to determine the current state and identify problematic areas at an operational level.

The surveys also highlighted certain results that were not part of the initial study aim but are of interest. In the patient

survey, the gender mix was unexpected with 71 (25.3%) being female rather than the 10% that would have been representative of the population at risk (Defence Analytical Services Agency (2006). It is acknowledged with gender that there are MH conditions where the distribution is disproportional. For example, certain studies have indicated that women are up to twice as likely to develop depression (Kaplan et al, 1987, Kessler et al, 2003) and men are more than twice as prone to die from an alcohol related disorder (Office for National Statistics, 2005). These aspects would affect the spread of the gender results, but not to the extent identified in this study. However, the convenience sample used, i.e. not random, is not ideal and leads to questions over the validity and reliability regarding this observation. The patient survey also reflects mainly the views of junior rank soldiers with 223 (80%) being privates to corporal with a median age range of 18 to 22 years old. In the customer survey, the fact that registered nurses (MH) treated 64% of patients was expected, as this cadre forms the critical mass of Army clinicians.

Areas that the quantitative questions identified for improvement were that 24% of patients were unaware of directions to the DCMH and 30% did not know how to make a complaint. The complaints issue was unexpected as departments have clearly identified complaint boxes. However, it is an issue that will be revisited as part of the Army MH Clinical Governance programme and will be re-inforced in all DCMH literature and patient correspondence. Also, satisfaction levels regarding DCMH facilities were lower than scores obtained in relation to clinical care and 31% felt that the facilities were very good, 24% as average and 5% as poor/very poor. There are significant variations in the standard of infrastructures and facilities within the eight APHCS DCMHs, and internal analysis of the results indicate that certain departments were regularly identified as being in poor condition. These results have been inserted back into the military system.

It is a concern that 19 patients stated that they did not know the clinical background of the staff and this group reported less satisfaction with their care. DCMHs are addressing this issue with picture boards displaying staff and their clinical background although this can be further enhanced with name badges and recognition that a problem exists. Ninety-four per cent of patients reported that administration support was of a high standard and reflects the hard work of the clinical staff and the collaborative functioning of all DCMH personnel.

Ninety-seven per cent of patients reported that appointments were compatible with their duties and provided in a timely fashion. Harmonious appointments are very positive, not only for the matter of convenience, but also demonstrating that military units are supporting Army personnel with MH issues. In previous years, DCMH appointments were occasionally cancelled due to service duty or lack of unit support, and therefore this result is warmly welcomed. The timely appointments is a reflection of the MH staff's hard work and an improvement in DCMH manning. The Army is established for 54 uniformed registered nurses (MH) and in January 2005 there was a chronic problem with the cadre 45% undermanned, and senior staff leaving, with the vacuum being filled by newly qualified nurses. The staff survey indicated that 28.9% (13) were dissatisfied, and staff shortages were a significant factor, exacerbated by the considerable change that occurred following the closure of the military MH hospital. However, the efforts of Director Army Nursing Services, nursing recruiters, educators and the author (AF) have resulted in significant improvements in manning. Over the past 2 years, no senior RNs (MH) have been lost to the Army, the projected recruiting estimate is favourable, and there have been an increased uptake of student nurse places. These increases will enhance the capability of the MH teams and lead to implementation of survey recommendations such as improving the peripatetic service, and for speedier documentation. However, the negative impact of poor manning, whether due to excessive additional duties or poor retention, has been identified.

Conclusion

Before the commencement of the patient satisfaction survey, the general view of military MH colleagues was that DCMH patients are often experiencing situational stressors attributable to military life, and that dissatisfaction would be reflected in negative results. Such findings would mirror media reports where the armed forces MH service has been criticized (Colville, 2006; Kay, 2006; Rayment, 2006; *The Sun*, 2006), and television programmes that focus on small numbers of dissatisfied Service-personnel (Channel 4, 2006). While colleagues' perceptions and media reports are obviously important, the results from all three surveys

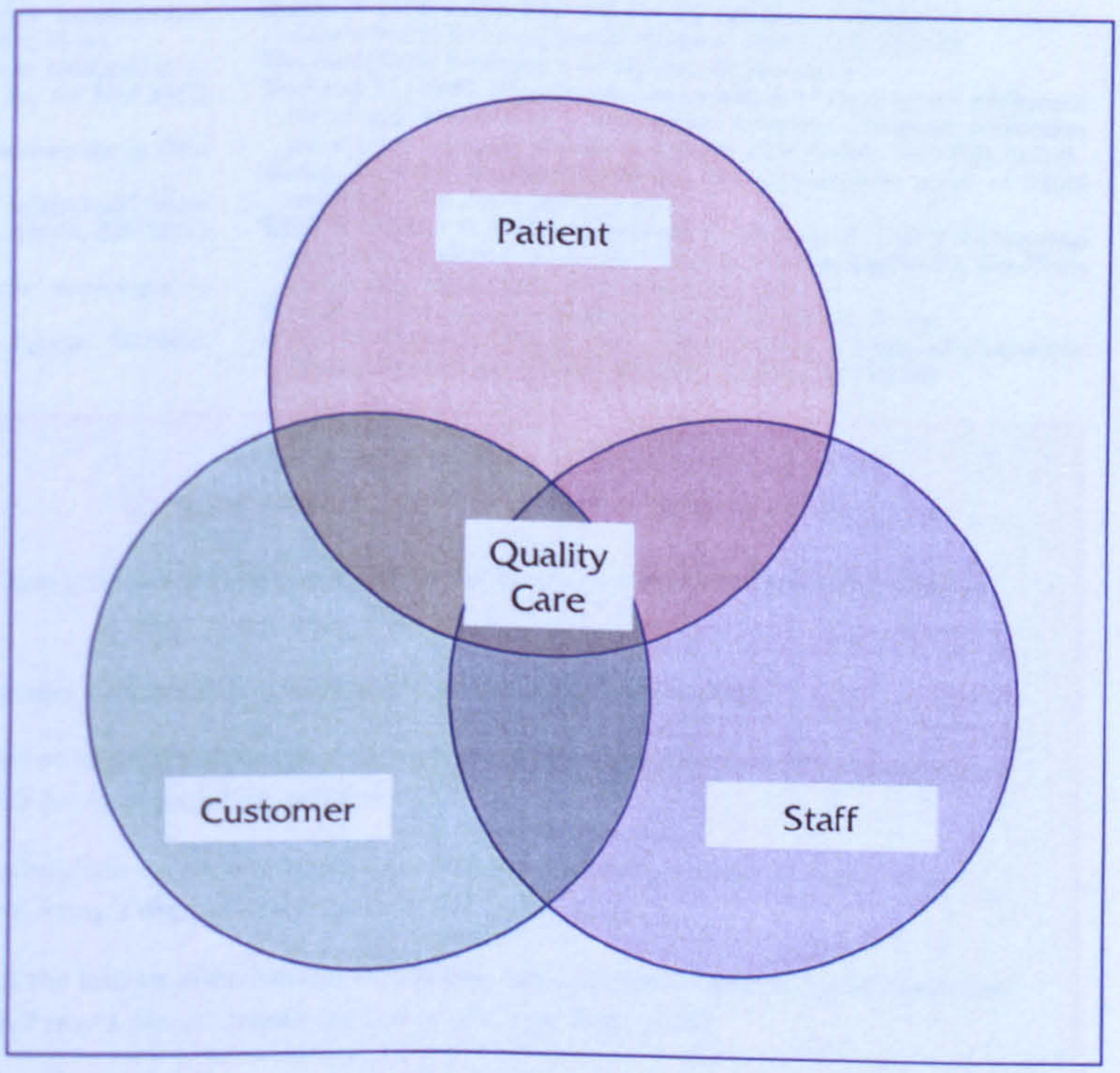


Figure 2. Triangulation of results to indicate quality of care.

indicate that the quality of care is very good, and while some areas need to be addressed, other aspects of service provision are excellent.

The customer and patients' positive remarks provide valuable direction to improve care. This can be obtained initially through the implementation of easily achievable interventions, such as providing patients with improved route directions and ensuring they are aware of the complaints procedures and providing medical centres with speedier discharge information. Other issues such as providing a robust peripatetic occupational MH service within local medical centres will be addressed with vigour. All surveys will be repeated to assess the effectiveness of the subsequent development plans, and identical questions will be introduced, where possible, to support triangulation.

The natural progression for these surveys is to critically analyse the emerging themes through research studies, in particular exploring the effectiveness of the interventions in terms of outcome. If the quality of care expressed within this paper can be shown to improve operational capability by returning soldiers and officers to full working duty, then the value of the Army's MH service will be confirmed. That aside, the survey's positive results, combined with the known effectiveness of fast and easy access to MH clinical support, provides mounting evidence that the British Army's MH service is of a very high order. BJN

Conflict of Interest: Alan Finnegan is the British Army's Most Senior Mental Health Nurse. The views expressed are those of the authors not the Ministry of Defence.

Abramowitz S, Cote AA, Berry E (1987) Analysing patient satisfaction. A multianalytic approach. *Qual Rev Bull* **13**(4): 122–30

Annells M (2006) Triangulation of qualitative approaches: hermeneutical phenomenology and grounded theory. *J Adv Nurs* **56**(1): 55–61

Avis M, Bard M, Arthur A (1997) Questioning patient satisfaction: an empirical investigation of two out-patient clinics. *Soc Sci Med* **44**(1): 85–92

Backhouse S, Brown Y (2000) Using a patient satisfaction survey to close the theory-practice gap. *Nurs Stand* **14**(38): 32–5

Bisset A, Chesson R (2000) Is this satisfaction survey satisfactory? Some points to consider in their planning and assessment. *Health Bull* **58**(1): 45–52

Burnard P (1991) A method of analysing interview transcripts in qualitative research. *Nurs Educ Today* **11:** 461–6

Channel 4 (2006) Dispatches Documentary - Battle Fatigue. 20.00hrs, 22 May

Charmaz K (2006) *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis.* Sage, London

Collins K (1999) Developing patient satisfaction questionnaires. *Nurs Stand* **14**(11): 37–8

Colville R (2006) Cost of priory clinical treatment for army veterans is £9m. *Daily Telegraph* **7 Aug:** 1–2

Czaja R, Blair J (2005) *Designing Surveys. A Guide to Decisions and Procedures.* Sage, London

Defence Analytical Services Agency (2006) *UKDS 2006: Strength of UK Regular Forces by Sex and Rank*. DASA. Available at: http://www.dasa.mod.uk/natstats/ukds/2006/c2/table212.html (last accessed 20 June 2007)

Department of Health (1983) *NHS Management Enquiry. The Griffiths Report*. HMSO, London

Department of Health (1991) *The Patients Charter.* HMSO, London

Department of Health (1997) *The New NHS. Modern, Dependable.* HMSO, London

Department of Health (1999) *A First Class Service.* HMSO, London

Finnegan A, Finnegan S, Gamble D (2007) A review of one year of British armed forces mental health hospital admissions: 1 April 2005 to 31 March 2006. *J R Army Med Corps* **153**(1): 26–31

Fitzpatrick R (1991) Surveys of patient satisfaction 1. Important general considerations. *Br Med J* **302:** 887–9

Glaser BG, Strauss AL (1967) *The Discovery of Grounded Theory.* Aldine, York

Kaplan GA, Roberts RE, Camacho TC, Coyne JC (1987) Psychosocial predictors of depression: prospective evidence from the human population laboratory studies. *Am J Epidemiol* **125**(2): 206–20

Kay J (2006) Fury over 30 sick soldiers sent to Iraq – desert rats 'depressed'. *The Sun* **Jan 30:** 21

Kessler RC, Berglund P, Demler et al (2003) The epidemiology of major depressive disorder: results from the National Comorbidity Survey Replication (NCS-R). *J Am Med Assoc* **289:** 3095–105

O'Brien LS (1998) *Traumatic Events and Mental Health.* Cambridge University Press, Cambridge: 212–16

Office for National Statistics (2005) *Alcohol-Related Deaths.* ONS, London. Available at: www.statistics.gov.uk/cci/nugget.asp?id=1091 (accessed 18 June 2007)

Oppenheim AN (1992) *Questionnaire Design, Interviewing and Attitude Measurement.* Heinemann, London

Rayment S (2006) Injured troops put into mixed civilian wards. *The Sunday Telegraph* **Sept 17:** 1, 4

Robson C (1993) *Real World Research.* Blackwell, Oxford

Silverman D (2005) *Doing Qualitative Research.* Sage, London: 121

Smith M (1999) The nature of rehabilitation. In: Smith M, ed. *Rehabilitation in Adult Nursing Practice.* Churchill Livingstone, London

Stallard P (1996) The role and use of customers satisfaction surveys in mental health services. *Journal of Mental Health* **5**(4): 333–48

The Sun (2006) Editorial. Lost legions. 30 January: 8

Townend M (2000) Quantitative measurement of service user preference for mental health care: a comparison between consumer satisfaction surveys and conjoint analysis. *J Psychiatr Ment Health Nurs* **7**(3): 287–8

Warner J (2006) Satisfaction surveys are a scandalous waste of NHS resources. *Nurs Times* **102**(21): 14

Webb Y, Clifford P, Fowler V, Morgan C, Hanson M (2000) Comparing patients' experience of mental health services in England: a five-Trust survey. *Int J Health Care Qual Assur* **13**(6): 273–81

Wiles R (1996) Quality questions. *Nurs Times* **92**(44): 38–40

Wilkin D, Hallam L, Doggett MA (1992) *Measures of Need and Outcome for Primary Health Care.* Oxford Medical Publication, Oxford

KEY POINTS

- Military mental health provision must generate a service that ensures personnel are fit for task and able to complete full operational duties.
- Patients wanted an improved liaison service and support and guidance within the local health centre.
- The operational aim to improve patient care made it imperative that the authors made use of extensive knowledge of service provision and focused questions to areas of particular concern.
- If the quality of care expressed within this article can be shown to improve military capability by returning soldiers to full operational duty then the worth of the Army's mental health service will be enhanced.
- The survey's positive results, combined with the known effectiveness of fast and easy access to mental health services provides mounting evidence that the British Army's mental health service is of a very high order.

ORIGINAL PAPERS

Predisposing factors and associated symptomatology of British soldiers requiring a mental health assessment

A Finnegan[1], S Finnegan[2], C Jackson[3], R Simpson[4], R Ashford[5]

[1]OC Nursing Royal Centre for Defence Medicine, Selly Oak Hospital, Birmingham; [2]Practice Nurse, Tree Tops PHC, Wirral; [3]Head of Division of Psychology and Professor in Occupational Health Psychology; Birmingham City University; [4]Joint Defence Professor of General Practice, Royal Centre for Defence Medicine; [5]Director of Postgraduate Research Degrees, Birmingham City University.

Abstract

Objectives To critically evaluate the predisposing factors and symptomatology that resulted in serving officers and soldiers requiring a Mental Health (MH) assessment.

Methods 317 regular Army personnel who required a formal MH assessment completed a survey that detailed the predisposing factors and symptoms leading to the referral. SPSSv10 was used for data management and analysis of the data by descriptive and inferential statistical methods.

Results Three quarter presented with at least two predisposing factors, the commonest being family issues (42%), relationship problems (40%) and general military stress (39%). Up to half of young male Soldiers required a MH assessment as a result of wanting to leave the Army, and were positively associated with self harming ideology. Female soldiers are significantly over represented. No-one reported feeling isolated.

Conclusion The majority of personnel accessing the Army MH Services present with multi-factorial problems and symptoms that should result in colleagues being aware of their distress, and every effort must be made to support these soldiers within unit lines. That no one reported feeling isolated, challenges the perception that soldiers with MH problems are stigmatised. In those young male soldiers who wish to leave the Army there are indicators that significant periods of notice to leave can have a negative impact on MH. It is unclear why females are more likely to require support. If the emerging themes noted in this study are addressed, and the lessons learnt encapsulated within a predictive theoretical model, then the result could be an improvement in operational capability through the early return of Army personnel and Officers to full duty.

Introduction

Lord Darzi's review of the quality of care in the British health services identified the need to invest in interventions that can tackle medical problems before they occur [1]. Within military Mental Health (MH) care systems, the use of predictive models and screening have proven unreliable [2] and there is a requirement to identify predisposing factors and the associated symptoms that can be beneficial in shaping theoretical models to tackle MH problems before they manifest into disorders requiring specialist care.

Background

The Army has eight Departments of Community Mental Health (DCMHs), which are dispersed across the UK and located in areas of high Army populations. These DCMHs are patient centred, occupational facilities consisting of multi-professional clinical staff of psychiatrists, nurses and sessional support from psychologists and social workers [3]. DCMHs aim to provide a robust, effective and easily accessible service that ensures all military personnel are occupationally fit for role, and able to complete full operational duties. MOD Performance Indicators demonstrate that the military philosophy of proximity, immediacy and expectancy [4] is achieved in over 95% of occasions and testify to an outstanding standard of service delivery in relation to facilitating access [3]. From an operational perspective it is vitally important that soldiers value the Army MH Services (AMHS), for if they view the service as poor, then they are unlikely to access care. Ninety three percent of patients rated the care provided as either very good / good and only 2% as either very poor / poor, suggesting that the quality of care provided by Army MH clinicians is of a high order [5].

Predisposing Factors and Symptoms.

There are numerous biopsychosocial factors that may overwhelm Army personnel and influence the onset of MH disorders, and any significant alteration in a person's lifestyle or new demands may cause stress and influence the ability to function. How individuals respond will depend on their coping mechanisms [3]. MH difficulties originate from social interactions and responses to the environment, which for the military are contextually influenced by peacetime and operational settings. Recognised civilian stressors leading to MH problems such as isolation [6], family stresses [7] relationship problems [8], childhood abuse [9], and the effects of alcohol [10] would be expected to be similarly reflected within the military population. There are also stressors unique to the military workforce such as psychological adjustment to operationally linked traumatic events [11] or symptomatolgy exhibited in personnel wishing to leave the Armed Forces, while facing extended periods

Corresponding Author: Lt Col Alan Finnegan MSc BN CPN [Cert] PGCE QARANC, OC Nursing Royal Centre for Defence Medicine, Selly Oak Hospital, Birmingham B17 0JJ
Email: alanfinnegan167@hotmail.com
Tel: 07894526872

of notice to leave [12]. The aim of this study was to identify and evaluate the predisposing factors and symptoms that result in British Army officers and soldiers requiring a formal MH assessment.

Methods

Due to the geographical dispersion of serving personnel an anonymous confidential questionnaire survey was used to gather information from officers and soldiers at the final appointment at the completion of a formal MH assessment at the eight UK DCMH's during 2006-7. The questionnaire, which has previously been shown to be a useful data-collecting tool for gauging satisfaction, moods, beliefs and attitudes [13, 14], was designed following consultation with clinical and non-clinical staff and service users and following a pilot study and published guidelines [15, 16]. Respondents were asked to indicate which predisposing factors and associated symptoms were applicable as well as the opportunity to add any additional information as free text. Completed responses were immediately inserted into a sealed envelope and returned to the first author, who coded the data and inserted onto an electronic database.

Statistical Analysis

Correlations between predisposing factors and symptoms was obtained through multi-variant inferential statistical examination utilising Pearson's Correlation Bivariate and Chi Square tests using SPSS Version 10 (SPSS Woking, England).

Results

It was intended to obtain 40 responses from each of the eight DCMH's; 317 were returned but not all were fully completed. Two hundred and thirty three of 314 respondents were male (74.2%). The rank of respondents were divided into 3 groups (Figure 1) and ages into five year cohorts (Table 1).

The number of predisposing factors identified ranged from 0 to 8 with over 75% of soldiers reporting two or more factors, and 30% highlighting the median number of 2 (Table 2). The most common predisposing factors were related to family issues (42%), relationship problems (40%) and experiencing general military stress (39%) - factors that affected all age groups, gender and ranks. MH conditions that generate significant media interest were less evident, with 17% reporting childhood problems, 14% unresolved trauma and 12% operationally attributable issues, whilst 25% wanted to leave the Army (Table 3). The number of symptoms described ranged from 0 to 12, and over 90% had 2 or more; with a median of 3 (Table 2). The most highly reported symptom was low mood (61%), followed by sleep disturbance (58%) and loss of confidence (42%); 31% reported self harming ideology (Table 4). The statistically significant correlations between predisposing factors and symptoms are provided in Table 5.

Low mood was significantly associated with general military stresses ($p<0.001$) and relationship problems ($p<0.002$). Operational factors were not closely associated with any symptoms, and unresolved trauma is associated with pain and sleep disturbance. General military stresses is the predisposing factor that is most likely to be represented by significant numbers of symptoms, which in addition to low mood include tiredness ($p<0.005$) and lack of confidence ($p<0.001$). Family stresses are linked to tiredness and sleep disturbance ($p<0.001$) and relationship problems are correlated with low mood ($p<0.004$), and hopelessness ($p<.006$). The association with self harming ideology is with soldiers who wish to leave the forces ($p<0.001$), who also report lack of interest ($p<0.001$) and childhood factors ($p<0.001$). Alcohol abuse was not reported in association with any other symptom and no respondents reported being isolated.

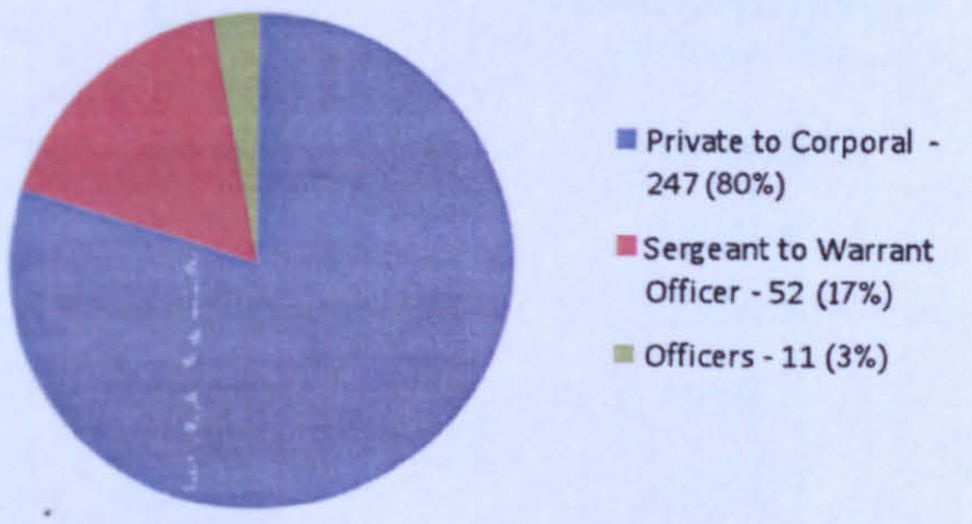


Figure 1. Respondent's rank

Age	Number (%)
Under 18	5 (1.6)
18-22	101 (32.1)
23-27	74 (23.5)
28-32	47 (14.9)
33-37	48 (15.2)
38-42	27 (8.6)
43-47	8 (2.5)
48-52	3 (1)
53-57	1 (0.3)
58-62	1 (0.3)
Total	315 (100)
Range 18 – 58yrs. Mode 18 – 22yrs	

Table 1. Respondents age

Number of Predisposing factors	Number of respondents describing number of predisposing factors (%)	Number of Symptoms	Number of respondents describing number of symptoms (%)
0	6 (1.9)	0	4 (1.3)
1	71 (22.5)	1	28 (9)
2	96 (30.4)	2	53 (17)
3	74 (23.4)	3	63 (20.2)
4	45 (14.2)	4	52 (16.7)
5	14 (4.4)	5	38 (12.2)
6	6 (1.9)	6	19 (6.1)
7	1 (0.3)	7	19 (6.1)
8	3 (0.9)	8	15 (4.8)
		9	9 (2.9)
		10	9 (2.9)
		11	2 (0.6)
		12	1 (0.3)
Total	316 (100)	Total	312 (100)

Table 2. Number of predisposing factors and symptoms described by individual respondents.

Rank	Predisposing Factor	Number who reported it (%)
1	Family Stresses	134 (42.4)
2	Relationship Problems	126 (39.9)
3	Other Military Stresses	123 (38.9)
4	Alcohol Abuse	89 (28.1)
5	Wants to Leave the Army	78 (24.8)
6	Childhood Factors	54 (17.1)
7	Physical Problems	49 (15.6)
8	Unresolved Trauma	45 (14.2)
9	Financial Problems	45 (14.2)
10	Operational Factors	37 (11.7)
11	Cultural Problems	8 (2.5)
12	Legal problems	2 (0.6)
13	Past Family History	1 (0.4)
14	Substance Abuse	1 (0.3)
15	Isolated	0
16	Not Known	9 (2.8)

Table 3. Predisposing factors ranked by incidence. (All data extracted from either 315 or 316 replies except for substance abuse (307) and past family history (282))

Symptom	Number describing its presence (%)
Low Mood	191 (61.2)
Sleep Disturbance	182 (58.3)
Loss of Confidence	130 (41.7)
Tiredness	125 (40.1)
Loss of Interest	123 (39.4)
Feeling of Hopelessness	112 (35.9)
Thoughts of Self Harm	97 (31.1)
Alcohol Abuse	94 (30.1)
Poor Concentration	85 (27.2)
Change in Appetite	76 (24.4)
Physical Symptoms	39 (12.5)
Pain	23 (7.4)
Other	21 (6.7)

Table 4. Presenting Symptoms by prevalence. (All from 312 replies)

Correlation: Factors & Symptoms	PC	P Val	Correlation: Factors & Symptoms	PC	P Val	Correlation: Symptoms & Symptoms	PC	P Val	Correlation: Symptoms& Symptoms	PC	P Val
Operational / Trauma	.338	.001	Family / Sleep Problem	.147	.009	Physical / Pain	.338	.001	Low Mood / Hopelessness	.335	.001
Trauma / Pain	.203	.001	Family / Relationship	.168	.003	Tiredness / Sleep	.412	.001	Low Mood / Poor Concentration	.177	.002
Trauma / Sleep	.176	.002	Family / Finance	.238	.001	Tiredness / Low Mood	.248	.001	Low Mood / Lack of Confidence	.166	.003
Trauma / Operations	.338	.001	Family / Alcohol	.284	.001	Tiredness / Lack of Interest	.251	.001	Lack of Interest / Changes in Appetite	.260	.001
Leave Army / Lack of Interest	.216	.001	Relationship / Low Mood	.165	.004	Tiredness / Changes in Appetite	.313	.001	Lack of Interest / Hopelessness	.203	.001
Leave Army / Self Harm	.202	.001	Relationship / Hopelessness	.155	.006	Tiredness / Hopelessness	.152	.007	Lack of Interest / Poor Concentration	.361	.001
Leave Army / Family	.412	.001	Relationship / Finance	.176	.002	Tiredness / Poor Concentration	.249	.001	Changes in Appetite / Hopelessness	.245	.001
Leave Army / Relationship	.248	.001	Relationship / Physical	335	.001	Tiredness / Lack of Confidence	.317	.001	Changes in Appetite/Poor Concentration	.189	.001
Leave Army / Childhood Issues	.251	.001	Relationship / Alcohol	.177	.002	Sleep / Low Mood	.168	.003	Changes in Appetite/Lack of Confidence	.217	.001
Leave Army / Finance	.313	.001	Childhood Issues/ Self Harm	.149	.008	Sleep / Changes in Appetite	.283	.001	Hopelessness / Self Harm	.205	.001
Leave Army / Physical	.152	.001	Childhood Issues / Finance	.260	.001	Sleep / Poor Concentration	.284	.001	Hopelessness / Lack of Confidence	.248	.001
Leave Army / Alcohol	.249	.001	Childhood Issues / Physical	.203	.001	Sleep / Lack of Confidence	.213	.001	Poor Concentration/ Lack of Confidence	.198	.001
Mil Stress / Tiredness	.153	.007	Childhood Issues / Alcohol	.361	.001	Low Mood / Changes in Appetite	.176	.002	Self Harm / Lack of Confidence	.149	.009
Mil Stress / Low Mood	.190	.001	Finance / Tiredness	.156	.006						
Mil Stress / Lack of Confidence	.220	.001	Finance / Physical	.245	.000						
Family / Tiredness	.238	.001	Finance / Alcohol	.189	.001						

PC = PEARSON CORRELATION. P Val = Chi Sq Test - Significant 2 – Tail.

With correlation analysis, it is not always the P value that is of the highest interest, but the coefficient bivariate, or correlation value, with significance represented by a high Pearson's Correlation value. Examination of this value did not disclose strong correlations, but a number of low to medium links were noted and generally aligned to the P value.

Table 5. Significant correlations between predisposing factors and symptoms.

Factor Analysis

Utilising principals component extraction method for analysis of the 10 principal predisposing factors (Table 3) identified four emerging trends of

- Family stresses, relationship problems & financial problems
- Unresolved trauma and physical problems
- Operational factors, other military stresses and alcohol abuse
- Wanting to leave the Army and childhood factors.

These factors are therefore likely to be grouped together, with the similar outcome of requiring a MH assessment. The same process was utilised for symptoms and predisposing factors. The symptoms with a primary association indicated a high multi-symptom presentation of tiredness, sleep disturbance, low mood, alteration in appetite, feelings of hopelessness, poor concentration and loss of confidence, indicating that Army personnel are presenting with the biological symptoms of depression. Thoughts of self harm are associated with operational factors, and wanting to leave the Army. Factor analysis incorporating gender, age and rank indicated that the association between alcohol changes over time, until from the early 30's age group onwards, when most personnel are advancing through the ranks, then alcohol appears as a standalone symptom.

Univariant Analysis

Univariant analysis utilising percentages and nonparametric inferential tests was completed across gender, rank and age. The results contained expected statistically significant associations such as between pain with physical problems, and sleep disturbance with tiredness, which would indicate that the respondents have answered the questions diligently and honestly, and suggests the results are valid and reliable.

Males presented with significantly higher levels of alcohol abuse ($p<0.001$) and wanting to leave the Army ($p<0.001$) and females with MH problems related to physical problems (Table 6). Nearly one third (31%) of junior ranks wished to leave the Army, and thoughts of self harm were high in this group as a whole (37%). Only three WO and SNCOs (6%) and no officers stated that a predisposing factor was 'wanting to leave the Army (Figure 2). Low mood increased incrementally with rank and over 70% of all Sergeants and above reported low mood. Officers reported high levels of poor concentration (Figure 3). Predisposing factors and symptoms vary across the age groups. Half of the 28-42 age group reported relationship problems and more than half of the 33-42 age group reported military stresses. Alcohol abuse and physical problems were both highest in those 43–47 years (37%). Those wanting to leave the Army were predominately younger with 47% of 18-22 year olds but only 4% of 33-42 year olds wanting to leave. No-one older than 42 wanted to leave. Sixty percent of those under 18 had problems originating in childhood, whereas unresolved trauma as a precipitating factor ranged from 9% in the 23-27 year old group to 21% in the 28-32 year olds, except for the small numbers of over 48's who reported a 60% rate. Low mood is more prevalent in the older age groups, peaking at 77% in those aged 38-42 years and 80% of those 48 years old or above. Forty five percent of 18–22 year olds reported loss of interest and an equal number had self harming thoughts. Physical symptoms were highest in the 38-42 age group at 23%.

Factor	Present	Male (%)	Female (%)
Family Stresses	133	101 (76)	32 (24%)
Relationship Problems	124	97 (78)	27 (22)
Other Military Stress	121	93 (77)	28 (23)
Alcohol*	88	76 (86)	12 (14)
Wants to Leave Army*	77	67 (87)	10 (13)
Childhood Factors	53	34 (64)	19 (36)
Physical Problems*	48	32 (67)	16 (33)
Unresolved Trauma	45	33 (73)	12 (27)
Financial Problems	44	33 (75)	11 (25)
Operational Factors	37	31 (84)	6 (16)

Table 6. *The 10 commonest predisposing factors by gender compared using Chi Square test with significance at $p<0.05$*. All from 315 replies*

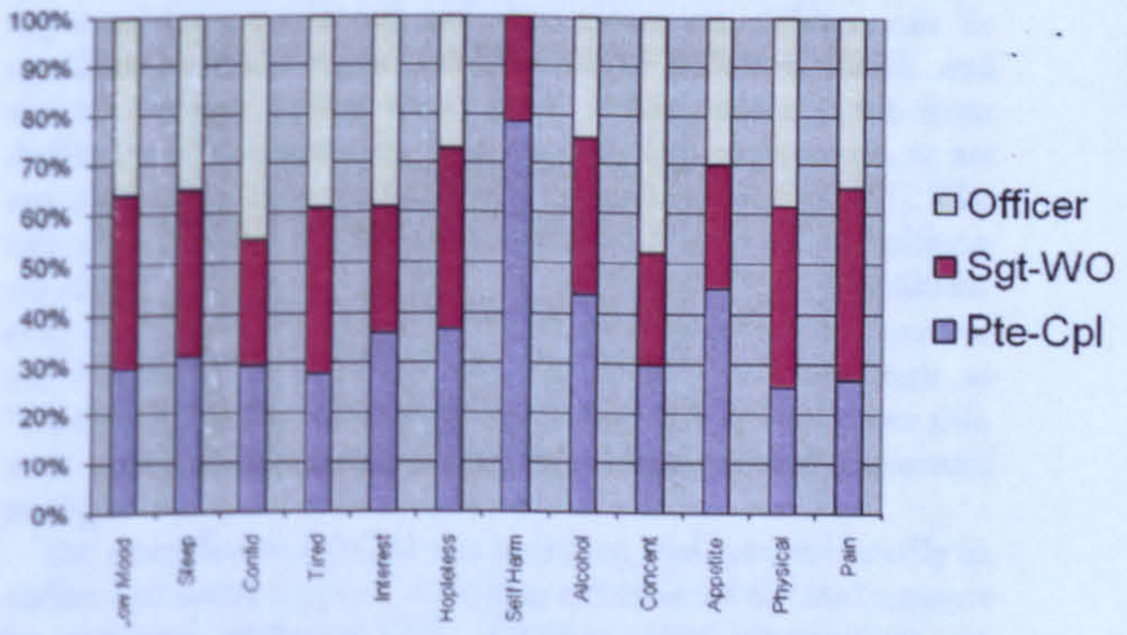


Figure 3. *100% stacked column chart comparing the percentage that each rank contributes to a total across the symptoms categories.*

Discussion

The majority of respondents had multiple predisposing factors and presenting symptoms suggesting this is a highly distressed group of individuals. Relationship problems showed the highest number of statistically significant correlations with wanting to leave the army, financial problems, and family problems. Family and relationship problems as primary causative factors are prevalent within the general population [7, 8], and suggest that it is not necessarily service life "per se" that causes distress, although the association with wanting to leave their job suggests that the environment and context of the affective stressors are likely to be very different. There appeared to be several emerging themes from our data.

Support in Unit Lines

The majority of patients accessing the AMHS have multiple, identifiable stressors and symptoms, indicating an extremely distressed cohort. Symptoms such as tiredness, lack of interest and self harming ideology were common and are incompatible in a military workforce that must be focussed, fit, able to take quick and decisive decisions; this will likely negatively effect operational capability.

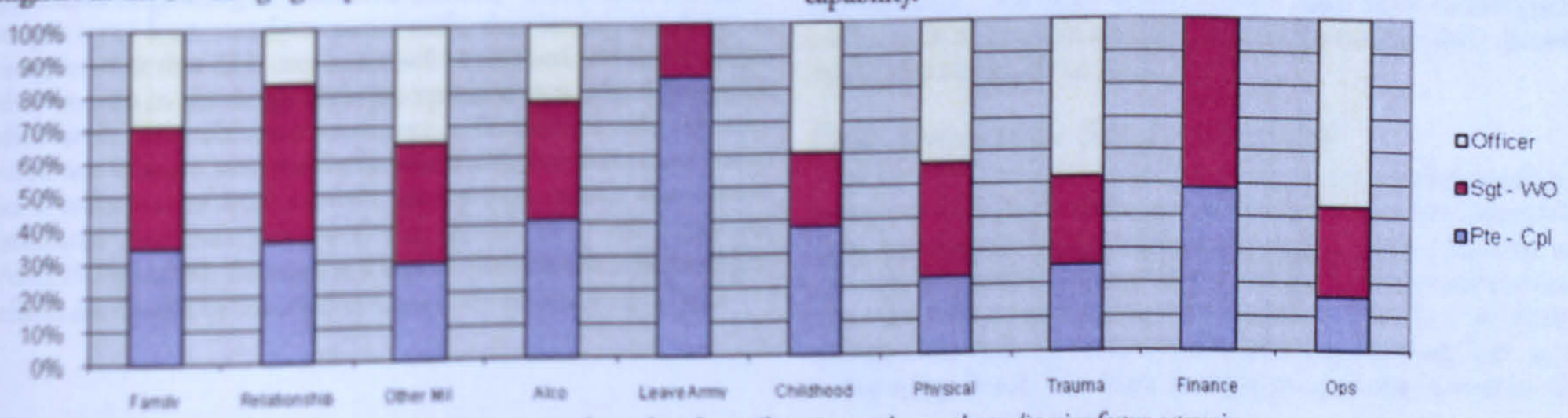


Figure 2. *100% stacked column chart comparing the percentage that each rank contributes to a total across the predisposing factors categories.*

The British Army has robust welfare and health systems in place, with most units containing Welfare and Health committees who are responsible for maintaining risk registers of vulnerable individuals as part of the British Army's Suicide Vulnerability Risk Management Policy [17]. Therefore, it might be expected that Soldiers experiencing or displaying significant mood and behavioural changes would be noticed, with support offered at unit level before the need for a MH assessment. The most common factors such as relationship and family problems are likely to be known by the Soldier's peer group and as 'general military stressors' was the predisposing factor most likely to be significantly associated with several symptoms, may reinforce the distressed presentation at work. This does not necessarily mean that distraught soldiers are known to the unit hierarchy, or the medical services, as some may believe that medical confidentiality will not be maintained, or that accessing the AMHS will negatively affect their career. Therefore the possibility exists that current measures fail to identify at risk individuals, or alternatively that distressed individuals are noticed, and are being actively directed to the Unit Medical Officer. These possibilities will be examined in a planned future study.

Wanting to Leave the Army

Nearly half of young, junior rank, male soldiers access the AMHS because they wish to leave the Army. Extrapolated across all UK based military personnel this would generate approximately 750 new referrals per year. There is a small but significant link in the 18-22 age group between operational factors and wanting to leave the Army that could indicate a potential fear of tours or not coping well on their initial tour. However, the primary predisposing factors remain family stresses, relationship problems, childhood issues and financial problems. The Army's recognition of the issues means that support is available; however, the soldiers' perception seems to be that leaving the Army is the only answer. The terms and conditions of service within the Armed Forces are not reflected within any other UK based employment group, with young soldiers required to serve up to 3 years notice to leave. These soldiers may therefore make a conscious decision to enter the AMHS as a means of fast tracking a discharge from the Army, unaware that this is not within the remit of the AMHS, and soldiers may have to wait a long time to be discharged.

The consequences of retaining these disenchanted and uninterested personnel must be considered. Not only are they required to undertake important duties such as perimeter guards, but are likely to have regular access to guns; our data suggests that there is a significant correlation between these young disaffected soldiers and self-harming ideology. Suicide rates in the Armed Forces are lower than similar civilian cohorts in all age groups and gender except for young males (under the age of 24) in the Army [18], and it would appear that soldiers retained in the Army against their will is a contributing factor. Whilst an extended period of notice merely limits the future employment opportunities for most leavers, for nearly half of the young soldiers in this study, the result is a mixture of self-harming, destructive behaviour, associated with depressive symptoms. This cohort show a strong correlation of problems originating in childhood and may have joined the Army to get away from social-economic strife, thus leaving the Army is no guarantee that their core issues will be resolved. However, whilst they remain in the Army, their perception is that they will remain distressed; less prohibitive restrictions, reflected in a reduced term of notice to leave, may resolve the distressing symptoms and result in a reduction of MH referrals. Interestingly, whilst this cohort indicated disenchantment with the military, they still rated the AMHS highly [5], although it is highly questionable whether MH clinicians should be involved in what is an administrative issue.

The Impact of Military Life and Relationship Problems

The link between family / relationship problems, and military stresses were consistently reported irrespective of rank, age and gender. The pressures on a military family are well recognised [19, 20]. In this study, 50% of the 27-42 age group reported relationship problems and 46% reported military stresses; there is also a correlation in the middle ranking, mature age group of operational and childhood factors, although this group are likely to refer to their own children rather than unresolved childhood trauma. Employment stressors stem from frequent operational tours, overseas duties and military exercises, combined with long working hours originating from manpower shortages and increasing levels of responsibility. To compound the issues, there are postings every two to three years; to not only different areas but often to a different country. Spouses own employment opportunities are reduced and the impact on children can be significant, often living a nomadic life in different schools and without defined civilian social links. If the parents come from dysfunctional backgrounds, have poor coping mechanisms, or are not compatible, then the likelihood of problems is high [21]. The risk obviously increases as more stressors such as financial problems are added to the mix, resulting in the presentation of tiredness, sleep disturbance, low mood, and feelings of hopelessness. Some of the comments in the free text exemplify the issues such as "*Relationship problems due to Service factors such as short notice jobs, extra workload and extra working hours imposed*" and "*unwanted posting*".

The Army has recognised this problem, and invested heavily in welfare and social support, including extensive advice and support for estranged personnel [22]. Whether these interventions are successful is unclear, although the high levels of associated problems indicate that there is room for improvement as some of the British Army's workforce are suffering, not only from a MH perspective but with deteriorating personal relationships. A positive response to this would be for the AMS to formally recognise that the correlation of relationship problems, family issues and military stresses is reflected in primary health care (PHC) assessment and continuing professional development programmes, and reinforced throughout the chain of command by policy change.

Female Soldiers

Of 317 respondents, 26% were female whereas only 9% of the Army in general are female. The reasons for this relative excess of women is unclear and may be a reflection of them being less affected by any potential stigmatisation by seeking MH input or that they genuinely suffer more MH problems in a male-dominated profession. Alternatively, women may find disclosure easier or have a greater faith in the AMS, believing medical confidentiality will be maintained. Women presented more frequently with physical problems and symptoms of pain, poor concentration and loss of confidence. The physical problems may reflect that women now have to complete the same training as their male peers, but do not normally have the same inherent strength or endurance. Of note, females share their male counterparts presentation of multiple stressors, and reinforces that their distress should also be notable at work.

Post Traumatic Stress Disorder

Of all the MH conditions associated with recent military conflicts, none generate as much media and public interest as Post Traumatic Stress Disorder (PTSD), although the impact of this disorder in reducing the operational capability of the British Army appears less than other MH conditions such as depression.(23, 24) Our results confirm this, with traumatic incidents being relatively low as a predisposing factor, but high enough to generate attention in

certain groups, in particular the 21% of 28-32 year olds and 27% of officers. A key component of PTSD is avoidance behaviour [25], where the sufferer takes extensive steps to evade reminders that will stimulate a memory of the traumatic event. This may result in a soldier leaving the Army, or in patients attending PHC with a somatisation disorder to evade disclosing the root cause of their distress [26]. However, in this relatively small survey, where the details of subject's operational experiences was not collected, makes it very difficult to draw any meaningful conclusions.

Depression

Low mood, the classical indicator linked with depression, is the most commonly reported symptom in this study, and strongly associated with general military stresses, relationship problems, and numerous other symptoms such as tiredness, sleep disturbance, change in appetite, lack of concentration and lack of confidence. There are significant differences between the presentation of depression depending on age, rank and gender, although a notable trend is that low mood increases incrementally with age and rank, with over 70% of all Sergeants and above reporting low mood. The results indicate three distinct groups emerging with depressive symptoms.

The first are young males with self harming ideology and numerous symptoms who want to leave the Army. This group have depressive symptoms as a direct response to one situational stressor, and if this is removed then the symptoms are likely to disappear. This group are likely to welcome being identified as having MH issues, and referral to the AMHS services may be part of their exit strategy. They are also likely to want to access the medical services at an early stage, without reservations of the stigma of being labelled.

The second group are older soldiers, progressing through the ranks who report considerably less self harming ideology but increasing numbers of classical depressive symptoms. By the time they reach 28 years old, the low mood is no longer caused by a single situational stressor but originates from multiple factors associated with work issues, unresolved trauma and other military stresses. This group are likely to be moving through the ranks, and given more responsibility and pressure, increasing numbers of operational tours and regular periods away from home. In the experience of the military authors this group are less likely to access support, for fear of harming their career, and may try to deal with these issues through alcohol, which exacerbates their distress and leads to strain within the family and financial problems.

The third group are the older, more senior ranks and officers, reporting low mood in 77% of cases and who present with the most classical clinically diagnostic depression symptoms of tiredness, loss of interest, poor concentration, some thoughts of self harm and attestations of pain and alcohol abuse. Whilst the younger groups are very keen to leave the Army, this group is not. There is the potential that this group have tried to cope with their problems, without external support, for a considerable period of time and the problems have been manifesting slowly in intensity, in a soldier reluctant to seek MH support. This group also reports the highest amount of physical symptoms which may be a means of accessing support with a psychosomatic presentation.

From the age of 33, there is a correlation between the feeling of hopelessness, operational factors and childhood factors. These childhood problems may relate to their own children rather than unresolved adolescent experiences, and demonstrates the multiple stressors associated with being a parent and spending large periods of time away from home on dangerous duties. The issues change from 38 to 42 years old, when most soldiers are nearing the end of their career, and low mood is associated with relationship and financial problems. Many of these soldiers have been in the Army since their teenage years and the adjustment reaction associated with the impending move to civilian life is often stressful.

Alcohol & Substance Abuse

Alcohol was associated with 28% of DCMH admissions, (Table 3) which remains consistent with previously published figures [3, 24], and excessive alcohol consumption in the British Armed Forces is higher in both males and females than the civilian counterparts [27], closely aligned to military social activities, and generally accepted as part of military life [28]. The drinking patterns and levels of addiction are likely to reflect recognised UK Anglo Saxon social trends, commencing with periods of heavy, socially based drinking in young males [27]. However, whilst there are cultural and social issues, alcohol might also be used as a maladaptive coping mechanism to deal with everyday stressors, gradually leading to the insidious development of addiction witnessed after many years of abuse.

Our study population is largely of white male Soldiers, often from socially deprived areas of the UK [19], living away from home and with a large expendable income. Significant numbers of junior ranks recognise their alcohol abuse, linking the misuse to military stresses. However, the association between alcohol and symptoms changes over time, until from the early 30's age group onwards, alcohol is reported as a stand alone issue, which may indicate that alcohol abuse becomes a hidden activity to prevent detection, perhaps for fear of disciplinary action, or loss of employment; and is therefore difficult to detect, yet alone treat. This presentation is not unique to the Army, and alcoholics often mask their behaviour and hide their abuse [29, 30]. Whilst acknowledging that military culture may accommodate alcohol misuse, the military have recognised the risk, and consistently attempted to address this problem with policies and initiatives, leading to alcohol awareness training and education that has been mandatory in unit lines for many years. Our results may indicate that the AMHS provide a robust and accessible service to alcohol abusers, and soldiers access support much quicker than in civilian healthcare practice [31, 32]. Alternatively, these results may show that current initiatives are ineffective, and there is room for significant improvement. If this is the case, then extended interventions to the wider family group may be an option, as they are in a position to notice behavioural changes not readily recognisable within unit lines.

Only one soldier reported drug abuse, and as the Army take a strong disciplinary stance regarding drug abuse, and regular compulsory drug testing ensures that detection is high, then drug abuse would be expected to be low. However, another reason is that patients distrust the AMHS, and fear that an admission for drug abuse would result in disciplinary action.

Isolation

It was an unexpected result that no one reported feeling isolated. Considering that this cohort is predominately young adults, away from their normal social support networks and constructs, this result seems highly unlikely. Coupled with the presumed stigma of MH issues within the Army's macho image [33], then no one being isolated seems even more improbable. The widespread perception that Soldiers with MH problems experience reduced peer support, are stigmatised as being weak, and are not part of the "team", is not supported by the results. This indicates that Soldiers accessing AMHS remain part of a group, although the reason for this is unclear. One hypothesis is that the Army's stance in promoting MH and reducing stigma is working. Alternatively, there may be empathy within unit lines, and recognition that the level and intensity of operational tours, combined with long working hours, has a significant impact on families and relationships, and could lead to anyone requiring help. Another hypothesis is that it is this group that have accessed MH support that report not being isolated, but these perceptions are not reflective of non-service users.

Study Limitations

This survey did not gauge symptoms present at discharge, and

therefore those items listed in this study may be transient / situational stressors or maintaining factors that are resolved during treatment. The questionnaire tick boxes listed symptoms associated with depression, and may have resulted in patients presenting with disorders such as anxiety or PTSD under reporting, although this was compensated with the option for respondents to add additional factors or symptoms through free text. There was also the possibility that personnel highlighting relationship problems and family problems may be double reporting.

These views are taken from UK DCMH attendees in a peacetime setting, and may not be reflective of personnel deployed on operations. In addition, the number of respondents within certain age groups was small, in particular the under 18s (n=5), 43–47 years old (n=8) and over 48 (n=5), and only 3.5% (n=11) were officers. Only 282/317 personnel provided details regarding a past family history of MH problems, and only one reported substance abuse. These results may reflect a fear that a false attestation during the recruitment process regarding a history of MH problems or a disclosure of drug abuse would lead to disciplinary procedures.

It is acknowledged that some of these factors may have developed into maintaining factors by the time the soldier or officer had accessed a DCMH. The timing of questionnaire completion presented the potential for bias but was the best option for obtaining a high response rate and removed any need to contact the MH client after discharge. To combat this potential bias, the cohort were assured that the survey was anonymous and confidential and that they would not be contacted at a future point.

Conclusion

The most common predisposing factors are family issues, relationship problems and general military stress. Factors commonly reported in the media such as childhood problems, unresolved trauma and operationally attributable issues were less prevalent. This detail should influence the priorities within unit lines, and be reflected in the personal training and educational programmes for PHC clinicians, as the focus should be on areas that have the greatest impact on operational effectiveness rather than issues escalated through media interest. The majority of soldiers requiring a MH assessment have multi-factorial problems displayed in a number of different ways and should mean that colleagues are aware that something is wrong, and every effort must be taken to support them within unit lines before the need for a MH assessment occurs. The one notable exception is the high number of male soldiers acknowledging alcohol abuse, which is not associated with any other symptom, and raises the question of how to identify this behaviour at unit level. The momentum with alcohol research, education and awareness programmes should be extended where possible to family members.

Up to 50% of young male Soldiers who require a MH assessment as a result of wanting to leave the Army, and this group are positively associated with thoughts of self harm. The Army's fast and easy access to highly rated MH clinicians is excellent, but these professionals cannot facilitate the soldiers release except to recommend an administrative discharge. Whilst noting the operational imperative to have visibility and continuity of personnel, it is clear that significant periods of notice have a negative impact on the MH of young soldiers. A notable finding is that no one reported being isolated which challenges the perception that soldiers with MH problems are stigmatised

This study has generated a number of questions such as why do such a high proportion of female soldiers access the AMHS, and how much pressure is the current military working environment placing on soldiers? The themes that have emerged from this study will be the subject of a further qualitative research study utilising experienced military MH clinicians as the research cohort. The eventual aim is to both address shortcomings identified and incorporate these and subsequent findings into a theoretical model to predict MH vulnerability to improve operational capability by returning serving personnel to full working duty. This would produce improved support to Army personnel and enhance the value of the AMHS.

References

1. Darzi Report. High Quality Care for All: NHS Next Stage Review. Crown Copyright . 2008
2. Rona RJ., Hyams KC, Wessely S. Screening for Psychological Illness in Military Personnel. JAMA 2005; 293 (10): 1257-1260.
3. Finnegan AP, Finnegan SE, Gamble D. A Review of One Year of British Armed Forces Mental Health Hospital Admissions. J R Army Med Corps 2007; 153 (1): 26-31.
4. O'Brien LS. Traumatic Events & Mental Health. Cambridge, University Press Cambridge. 1998: 212 - 213.
5. Finnegan AP, Finnegan SE. Assessing the Effectiveness of the British Army's Mental Health Service. Br J Nurs 2007; 16 (12): 725-730.
6. Kaplan GA, Roberts RE, Camacho TC, Coyne JC. Psychosocial Predictors of Depression: Prospective Evidence from the Human Population Laboratory Studies. Am J Epidemiol 1987; 125 (2): 206-220.
7. Fossom A. Family Stress. In Fisher S, Reason J. (Eds). Handbook of Life Stress, Cognition & Health. London: Wiley, 1988; 61-174.
8. World Health Organisation. Diagnostic and Management Guidelines for Mental Disorders: ICD 10, Geneva; WHO; 1996.
9. Bagley C, Ramsey R. Sexual Abuse in Childhood: Psychological Outcomes and Implications for Social Work Practice. J Soc Work Human Sexuality 1986; 5: 33-47.
10. Haw C, Hawton K, Houston K, Townsend E. Psychiatric and Personality Disorders in Deliberate Self Harm Patients. Br J Psychiatry 2001; 178, 48-54.
11. Scott MJ, Strading SG. Counselling for Post Traumatic Stress Disorder. London, Sage. 1992.
12. Roberts, P. Temperamental Unsuitability and Soldiers. Presented at the International Military Psychiatric Conference @ Fort Blockhouse in Gosport. 2006, Sept.
13. Oppenheim AN. Questionnaire Design, Interviewing and Attitude Measurement. London, Heinemann. 1992.
14. Czaja R, Blair J. Designing Surveys. A Guide to Decisions and Procedures. London, Sage. London. 2005.
15. Bisset A, Chesson R. Is this Satisfaction Survey Satisfactory? Some Points to Consider in their Planning and Assessment. Health Bulletin 2000; 58 (1): 45-52.
16. Collins K. Developing Patient Satisfaction Questionnaires. Nurs Standard 1999; 14 (11): 37-38.
17. AGAIs. Suicide Vulnerability Risk Management (SVRM). Volume 3: Chapter 10; Issue 144. 2004.
18. Blatchley NF, Ward VR, Fear, NT. Suicide and Open Verdict Deaths Among Males in the UK Regular Armed Forces. DASA. 2004
19. Dandeker C, French C, Thomas, S. The Family & Military as Greedy Institutions: Negotiating A Work Life Balance. Economic & Social Research Council. RES-000-22-0764. 2008
20. Norton-Taylor R. Pressure on Army Forces Unprecedented Say MPs. The Guardian, Jul 30, 2008; 7.
21. Patterson JM. Integrating Family Resilience and Family Stress Theory. J Marriage & Family; 2004, 64(2): 349 – 360.
22. Directorate of Personal Services (Army). Army Support During Estrangement. Ref D/DPS(A)/33/9/PS4(A), 14 Jul, 2008.
23. Iversen, AC, Staden, LV, Hacker-Hughes, J et al. The Prevalence of Common Mental Health Disorders and PTSD in the UK Military: Using Data from a Clinical Interview-Based Study. BMC Psychiatry ,2009: 9:68.
24. Neal L, Kiernan M, Hill D, McManus F, Turner, MA. Management of Mental Illness by the British Army. Br J Psychiatry 2003; 182: 337-341.
25. American Psychological Society. The Diagnostic & Statistical Manual of Mental Disorder, Vol 4. 1994 APA.
26. Finnegan AP. Clinical Assessment of Post Traumatic Stress Disorder, Br J Nurs, 1998; 7 (4), 212-218.
27. Fear NT, Iversen A, Meltzer H et al.. Patterns of Drinking in the UK Armed Forces. Addiction 2007; 102(11): 1749-1579.
28. Browne T, Iverson A, Hull L et al. How Do Experiences in Iraq Affect Alcohol Use Among UK Armed Forces Personnel. Occupational & Environmental Medicine 2008; 65: 628-633.
29. Anonymous – Personal View. Recovery is Possible. BMJ 1996; 313, 560-1561.
30. Naik PC, Jones RG. Alcohol Histories from Elderly People on Admission, BMJ 1994; 308, 608-09
31. London Drug & Alcohol Network. London Alcohol Statistics Project: Problem Drinkers Waiting Twice as Long for Treatment as Drug Users. Sept 20, www.alcoholpolicy.net/2005/09/london_alcohol_.html 2005
32. Alcohol Concern Report. The Poor Relation – Has the Emphasis on "Localism" Really Improved Alcohol Commissioning. 8 April, 2008.
33. Finnegan AP. Societal Factors that Negatively Effect the Mental Health Support for the British Army's Service Personal Involved in Major Trauma. J R Army Med Corps 1997; 143: 107-10.

Predisposing factors leading to depression in the British Army

Alan Finnegan, Sara Finnegan, Paula McGee, Mike Srinivasan, Robin Simpson

Abstract

Few studies have explored the predisposing factors leading to depression within the British Army, and this qualitative investigation provides a novel approach to advance knowledge in this poorly researched area. Information was provided by army mental health (MH) clinicians, with results aligned to theoretical groupings under the headings of: occupational stressors; macho culture, stigma and bullying; unhappy young soldier; relationships and gender. These issues were influenced by peacetime and operational settings; the support offered by the Army Medical Services and unit command. The results indicate that Army personnel are exposed to multi-factorial stressors that are incremental/accumulative in nature. Soldiers can cope with extreme pressures, often in hostile environments, but often cannot cope with a failing relationship. Officers were worried about the occupational implications of reporting ill, and the negative impact on their career, and might seek support from private civilian agencies, which have potentially dangerous ramifications as they may still deploy. GPs refer female soldiers more frequently for a mental health assessment because women express their emotions more openly then men. Young disillusioned soldiers who want to leave the Army form the main group of personnel accessing mental health support, although often they are not clinically depressed.

Key words: Defence nursing ■ Mental health ■ Depression ■ Army

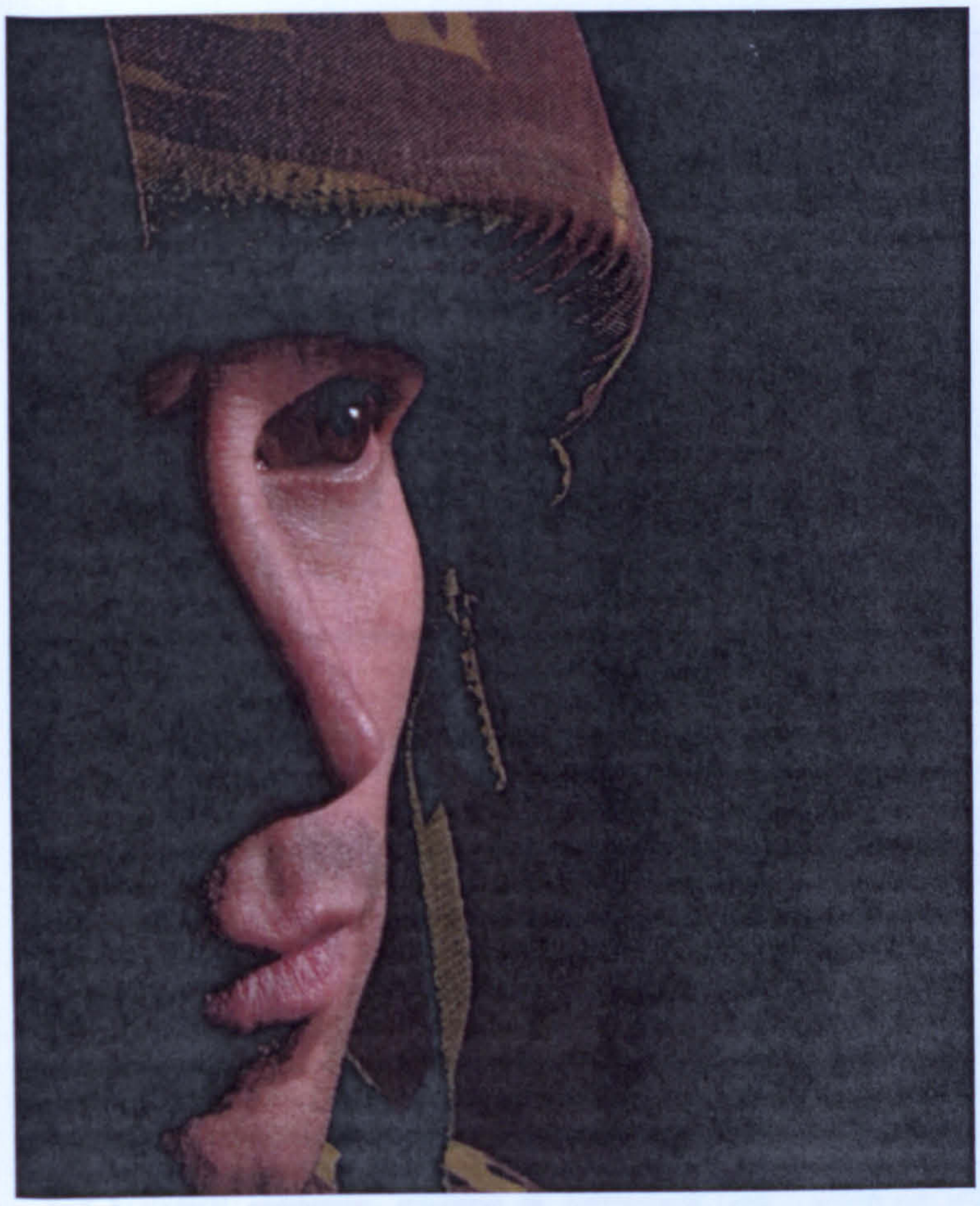
The British Army cannot function without a robust workforce, and the army mental health service (AMHS) aims to maximize the psychological support to army personnel by providing immediate mental health care with the expectation that soldiers will return to duty (O'Brien, 1998). This support is shaped around eight departments of community mental health (DCMH), strategically located in areas of military populations, and consisting of multidisciplinary clinical staff providing care to predominantly fit young men (Finnegan et al, 2010).

Depression is an operational diagnosis that encompasses different presentations, and is classified as mild, moderate or severe based on severity and frequency (World Health Organization (WHO), 2007). Depression is a dynamic condition and the term can also be used descriptively, based on signs and symptoms that can manifest as a reaction to an event, a reactive unhappiness, or as a complaint of a feeling of low mood. Depression is a common mental health problem affecting British troops (Finnegan et al, 2007; Iversen et al, 2009). Within this study, the authors will refer to a combination of all of the above descriptions, and it is this complexity and the difficulty of accommodating the continuous variation in depression severity into a categorical definition that poses problems to clinicians when diagnosing depression (Mitchell et al, 2009). Managing depression requires a detailed understanding of many factors that predispose and precipitate the condition (Finnegan et al, 2010). These may include stressors originating in civilian life such as isolation (Conrad, 2010), childhood abuse (Bagley and Ramsey, 1986), poverty (Belle, 1990), and the negative effects of alcohol (Fear et al, 2007). There are also stressors unique to the macho military workforce (Finnegan, 1997), such as psychological adjustment to operationally linked traumatic events (Scott and Stradling, 1992), serving in operational areas (Hoge et al, 2004), and the symptoms exhibited by personnel who wish to leave the armed forces but are restricted by their terms and conditions of service (Finnegan et al, 2010).

The pressures on a military family are also well recognized, and relationship problems have an adverse effect on mental health (Dandeker et al, 2008). These factors are not a uniform phenomena, but take on a particular meaning influenced by environment, media, political views, local contexts and local cultures (Silverman, 2001), and factors causing depression in peacetime are likely to be significantly different to stressors on operations (Wessley, 2005). Soldiers may not disclose this information, believing that admitting to psychological distress indicates weakness (Busuttill, 2010). Therefore, while factors affecting mental health are recognized within the armed services (Finnegan et al, 2010), there is very little research examining them in detail. This study aimed to address this issue by exploring aspects of depression within the British Army and reporting the views of AMHS clinicians.

Lt Col Alan Finnegan is completing a MOD-funded research project within the Post Graduate Department of Research, Birmingham City University; Sara Finnegan is Practice Nurse, Eastham General Practice, Wirral; Professor Paula McGee is Professor of Nursing, Faculty of Health, Birmingham City University; Lt Col (retired) Mike Srinivasan is Consultant Psychiatrist, Department of Community Mental Health, Colchester; and Colonel Robin Simpson is Joint Defence Professor of General Practice, Royal Centre for Defence Medicine, Birmingham.

Accepted for publication: September 2010



Aim

The aim of this study was to evaluate AMHS clinicians' views regarding the predisposing factors that resulted in British Army personnel being diagnosed with depression.

Theory

A grounded theory approach was selected (Silverman, 2005), as this facilitated discovery of the problem from the participants' perspectives and the categorization of emerging factors that could be classified into broader comparisons to provide new insight into the phenomena under study (Charmaz, 2006). Underpinning this choice of approach was the core assumption pertaining to the epistemological position that knowledge is relative; that there are multiple perspectives on reality; and that knowledge is constructed by each individual. Epistemology is the investigation into the grounds and nature of knowledge itself, focusing on the means for acquiring comprehension and how people can differentiate between truth and pretence. In this study, it relates to AMHS clinicians' views of truth, belief and justification in a context of assessing depression among soldiers.

Method

The research sample was drawn from 61 AMHS personnel with 5 or more years' AMHS clinical experience. Information was gathered through semi-structured, in-depth interviews conducted by the first author. These began in July 2006, with respondents providing detail on aspects of army life including military ethos, operational experience, help-seeking behaviour, stigma and team cohesion. At the end of the interview, the respondent completed a questionnaire that was specifically designed for this study, and subject to extensive external consultation and a pilot study. This questionnaire contained a Likert scale detailing commonly associated predisposing factors leading to depression, and this data was used to endorse the triangulation of information and improve validity and reliability. Analysis was performed using SPSS version 17.

Each participant was interviewed once only because geographical limitations restricted the opportunity for repeated meetings. Informed consent was obtained as required by UK guidelines (Central Office for Research, 2005); ethical approval was provided by the UK Ministry of Defence (MOD) Research Ethics Committee. All interviews were digitally recorded and transcribed by the first author, and continued until saturation was achieved in August 2007 (Charmaz, 2006). The first author's experience in the AMHS provided familiarity with both the phenomena and the clinical and military nuances of language.

Nineteen AMHS personnel agreed to take part. Interviews lasted between 32–63 minutes and produced nearly 14 hours of information. The mean age of respondents was 42.79 years, with a median of 42 years and mode of 47 years. Seventy-nine percent (n=15) of the respondents were male and 21% (n=4) were female. In terms of clinical background 84% (n=16) were nurses and 16% (n=3) were consultant psychiatrists. The mean and median number of years in the MOD was 20 years, mode of 16 years, and 95% (n=18) had been deployed on an operational tour of duty, with the mean being 3.6 tours, and the median and mode being 3 years.

Results

Initial coding indicated 27 categories, and analysis of these elements led to the identification of four major clusters:

- Predisposing factors
- Precipitating/maintaining factors
- Secondary coping mechanisms
- Help-seeking behaviour.

There were issues related to peacetime and operational setting, and the support provided by the army medical services (AMS), DCMHs and Unit Command. These are presented graphically in *Figure 1*. These factors led to theoretical groupings under the headings of:

- Occupational stressors
- The macho culture, stigma and bullying
- The unhappy young soldier
- Relationships
- Gender.

Presentation of the findings is intended to protect the anonymity of respondents by coding their responses, for example AA, BB; and no further information is provided.

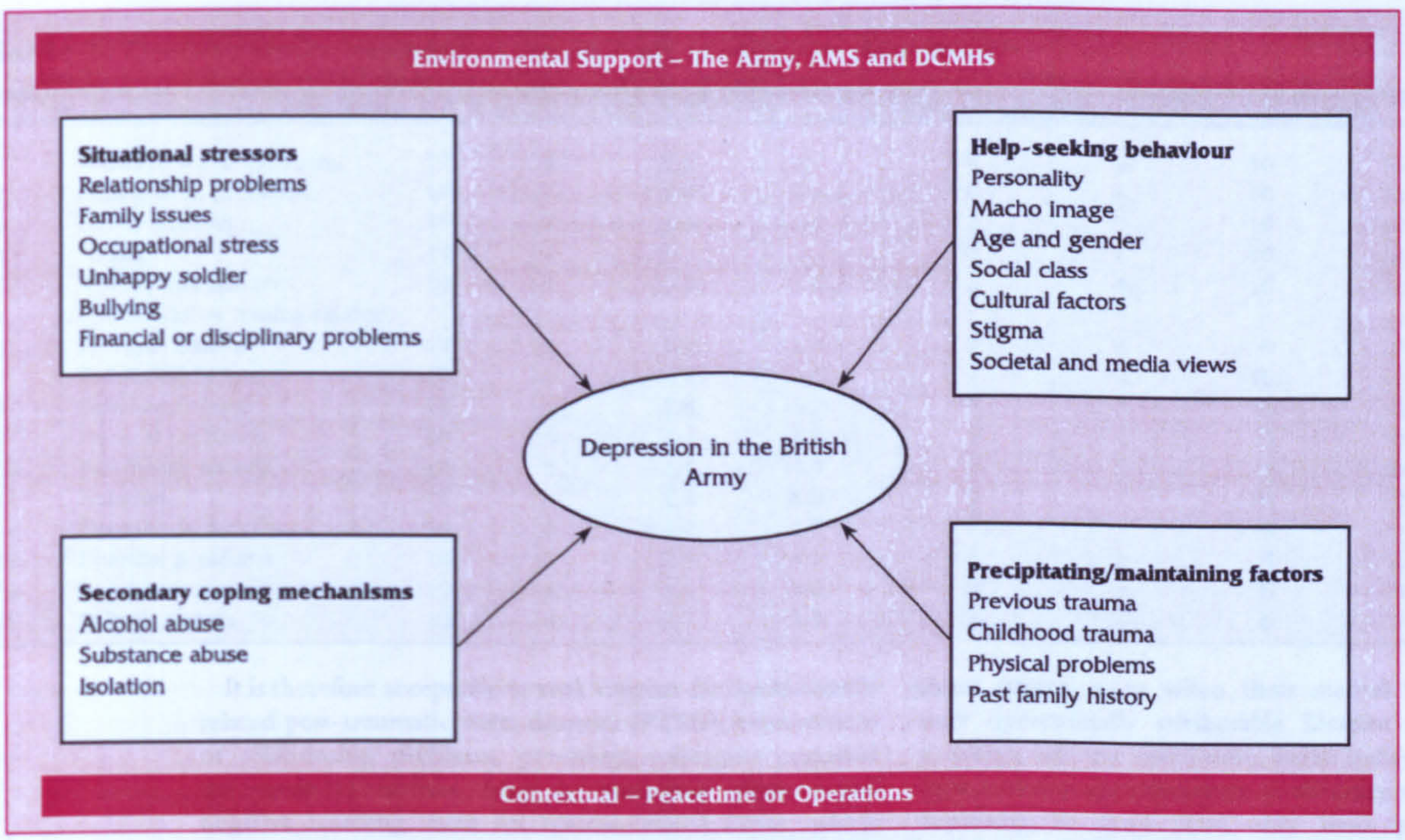


Figure 1. Predisposing and influencing factors leading to depression within the British Army

Discussion

Military service combined with lifestyle problems results in unique multi-factorial stressors that are often incremental and accumulative in nature and can result in depression. These factors can lead to a number of psychological and biological symptoms, resulting in behavioural and personality changes. The interviewees highlighted that soldiers often cope with these stressors through alcohol misuse, operating within a military culture that tolerates this behaviour. Depressed soldiers describe their state of mind in fairly negative terms, and speak of feeling deeply unhappy, irritable, helpless, useless and hopeless. The respondents indicated that these soldiers feel their world is 'caving in', and if the stresses become high enough, then the soldier may self-harm, although rarely with the intent of taking his/her own life.

Occupational stressors

Army lifestyle was described by the interviewees as one of constant turmoil and changes in employment, role, environment and accommodation. Occupational issues included the working environment, heavy workload and long working hours. In this situation, incentives designed to reward soldiers, such as promotion, brought extra pressures, especially if someone was elevated above their ability. For example:

> **'Promotion can mean a posting. It can mean extra responsibility; it can of course mean doing a job, perhaps, which you were not prepared for. Either you haven't had the training or you feel that you do not have the confidence. So it can be more stressful.' (KK)**

The disruption associated with regular postings was said to place pressures on soldiers not faced by many civilian counterparts. These were exacerbated by unpopular moves or redeployments soon after an operational tour, at a time when soldiers require continuity of friends and commanders. There were mounting numbers of hostile operational tours and increasing numbers of soldiers with operationally attributable physical injuries. Soldiers are exposed to situational stressors such as disciplinary problems and, like anyone else, to financial issues and distressing life events such as relationship and family problems and bereavement; however, in the soldier's case these issues can be exacerbated by occupationally-related demands and separation from loved ones.

The macho culture, stigma and bullying

In the army's competitive, predominantly young male environment, interviewees reported an expectation that soldiers do not give way to emotion and apply stoicism, summed up the motto 'big boys don't cry'. However, some interviewees reported that the stigma of mental health problems is no worse than in the general population, and there are fewer negative connotations because soldiers were regularly involved in stressful and hostile tours of duty:

> **'Gone are the days when generals could use phrases such as 'lack of moral fibre', 'they are completely weak'...it's much more tolerant. From the very top the culture is changing, towards the suitability of mental health [awareness].'(DD)**

Table 1. Questionnaire responses on factors leading to depression

Serial	Predisposing factor	Reply	Median	s.d.	Variance	Range	Minimum	Maximum	Sum	Mean
1	Wants to leave the Army	19	8	2.6	6.7	8	2	10	138	7.3
2	Relationship problems	19	7	1.6	2.4	6	4	10	133	7
3	Family stresses	19	7	1.8	3.2	7	3	10	129	6.8
4	Alcohol	19	7	2	4	8	2	10	125	6.6
5	Military stresses (not operational or trauma-related)	19	6	1.7	2.8	6	4	10	119	6.3
6	Previous trauma	19	6	1.9	3.4	7	2	9	114	6
7	Childhood factors	19	6	1.7	2.8	7	3	10	111	5.8
8	Substance abuse	18	6	1.8	3.2	5	3	8	103	5.7
9	Physical problems	18	6	2	3.9	7	2	9	102	5.7
10	Past family history	18	5.5	2.1	4.3	7	2	9	100	5.6
11	Isolation	19	5	2.2	4.8	9	1	10	104	5.5
12	Operational factors	19	6	1.9	3.7	7	1	8	102	5.4
13	Financial problems	18	5	2.1	4.5	6	2	8	86	4.8
14	Legal factors	19	4	2.4	5.6	8	0	8	80	4.2
15	Cultural factors	18	4	2.3	5.3	7	1	8	72	4

It is therefore acceptable to seek support for operationally related post-traumatic stress disorder (PTSD), bereavement or relationship problems, providing colleagues regarded the cause as serious. Men in particular often feared negative labelling, even for trauma-related issues, which acted as a barrier to seeking mental health support. The leadership of the commanding officer (CO) and senior unit personnel was vitally important, as addressing stigma at local level could prevent the need for referral to the AMHS, but there is a fine line between such leadership, robust management and bullying. Rank, hierarchical structures and tough boundaries exacerbate pressures, where a common form of harassment is associated with personality clashes and individuals feeling unfairly treated. In common with most occupations, the army has its share of weak managers. The negative impact of poor management places extreme pressure on the recipient, with a soldier often being labelled as a 'problem' in such cases, and as someone who does not fit in, and this can directly lead to mental health referrals.

Soldiers being treated differently by their peers was said to have an enormous negative impact. The MOD is sensitive to equality and diversity (ED) problems, yet despite general awareness of these policies and guidelines, soldiers still feel disempowered, and sometimes believe they deserve the criticism for being weak. Some units did not tolerate those who confronted the chain of command, and penalized personnel who tried to apply ED policy. Therefore, there was little confidence in the ED system. Soldiers reported being known to the ED officer, and acquiring a label that followed them from unit to unit. Of note, the respondents stated that discrimination is rare; however, the interviewees described cases of 'serial bullying' in which personnel repeatedly reported being bullied wherever they went, and constantly adopted the victim role.

The idea that senior rank offers protection from mental health problems was dismissed as a myth. Senior-ranking soldiers often felt they had an image to uphold of being strong for their troops. They were more worried about stigma, even when their mental health problems were operationally attributable. Despite facing extensive pressures, officers and senior ranks believed they should cope, and that any admission of difficulty would be viewed negatively. In their view, only weak people discussed emotional issues; admitting to being afraid was not done. They worried about the occupational implications of reporting ill, and the negative impact that a mental health assessment could have on their careers and promotion, now and in the future; secrecy was essential for them. They did not want to be the focus of rumours, and either delayed or did not seek help, sometimes for years. They tried to resolve issues alone, and sometimes rationalized their symptoms in terms of there being nothing that could help them. Often living away from home, with expendable funds, they found themselves socially isolated and their deteriorating mood led them to drink huge amounts of alcohol. NN described the spiral towards a classical depressive illness:

> **'They can't manage anymore. They can't cope, they can't face it. But they can't leave either because they are in the pension trap, as they see it. They are having problems at work, and they are drinking more. Their relationship is breaking up; the wife they have been married to for 7 years has been unfaithful. The kids are leaving home, they are not needed anymore, and they are not necessary. Life seems to be caving in on them.'**

There is little peer support for senior army personnel. Deference to rank resulted in their obviously deteriorating health not being challenged by junior staff, while the sergeants' and officers' messes could be protective, providing a 'Masonic'-type environment. Concerns about confidentiality led to excuses and avoidance of mental health appointments, as some soldiers believed that confidential medical information would be disclosed to other agencies which corresponded with the CO through forums such as unit health committees. Officers therefore might not want to be seen locally, especially when work had attributed to

their distress, and they sought support from private civilian agencies because:

> **'They [officers] would rather come to an outside agency where they see a stranger... [They prefer] talking to a stranger in the hope that [issues they discuss within] the boundaries of medical confidence are not going to go back to their medical centre... [There are] a lot of issues of people not trusting their medical centres, and medical confiden[tiality].' (MM)**

Others choose civilian help hoping to get a different outcome, such as certified sick leave, although they might be inappropriately began taking antidepressants. Participants regarded these possibilities as undesirable, as they could affect occupational ability and safety on tour were they to be deployed.

The unhappy young soldier

A soldier's personality and preparation before enlistment impacts on his/her ability to cope with military life, and may increase the propensity for developing depression. Up to 50% of young, male disillusioned soldiers are referred for mental health assessment as a result of wanting to leave the army (Finnegan et al, 2010). Many have to wait up to 4 years before they can leave due to the terms and conditions of service, and such a prolonged wait can feel like an eternity to these young men.

In the interviews, problems were attributed in part to the recruitment and enlistment process. The majority of recruits were from working class backgrounds, often in deprived areas. A history of drug and habitual alcohol misuse was not uncommon. Their parents were often separated, and unemployed. Dysfunctional and abusive backgrounds with unresolved childhood abuse and violence became evident in behavioural and emotional problems, and difficulty in developing interpersonal relationships. These recruits join to get away from home or civilian related problems; others are pressurized by their families, especially where there are relatives already serving in the army. Unrealistic expectations, such as a belief that they will fly through the ranks, compound problems and many young soldiers were unaware of even the basic aspects of military life. RR provided an insight when she described:

> **'A lot of people join the army because they want to get away from their dysfunctional background. They run away from what they are leaving behind but they run into something that they have no idea of what they are getting themselves into.'**

Participants argued that some people were just not cut out to be soldiers; they were temperamentally unsuitable, too immature, had poor social and communication skills, felt anxious, and developed acute problems in integrating into army life. Some were quiet individuals, who did not conform, failed to make friends, and became socially isolated and questioned their ability. They could only envisage a positive future outside the army, and spiralled towards melancholy, telling external friends they were depressed, trapped, losing control, imprisoned, angry, and frustrated; yet at work, they do not have the confidence to articulate their distress. KK observed:

> **'They made a wrong career choice, and they appear to present with low mood, not necessarily a depressive illness as such but a depressive adjustment reaction. They are deeply unhappy, and feel trapped in the organization. Can't get out, because they have missed their window of opportunity. The so-called temperamental unsuitability.'**

According to the interviewees, these soldiers failed to cope with their job, disliked military life, and felt that they were being treated unfairly by a military hierarchy that did not understand them. They quickly presented as dysfunctional, using their considerable expendable funds and spare time to consume large amounts of alcohol or illegal drugs, and go AWOL and/or self-harm. This led to disciplinary problems which they believed would hasten their discharge, but which actually resulted in a judicial sentence and detention.

Interview participants emphasized the importance of the enlistment medical in identifying applicants with a mental health history, yet there were instances of recruits enlisting with a previous history of depression or psychotic illness. These issues are missed owing to an over-reliance on recruits' self-attestation, insufficient assessment by the GP, NHS GPs not providing the required information, and previous mental health issues not being recorded in the medical records. The recruiting process should channel recruits into appropriate trades within the army, but inadequate advice was available. Recruits were misled about what to do and were discouraged from leaving during basic training. Rather than allow recruits to leave, recruiters and trainers told them that life would get better once basic training was completed, that they could change trades if they wished. By the time the recruits realized that leaving was no longer an option, the only avenue open to them was to report to an army GP. Their help-seeking was thus motivated by personal gain rather than therapeutic; some were said to misuse and manipulate medical services by exacerbating or even fabricating symptoms.

If these soldiers were refused discharge their symptoms became more pronounced and distressing; while the depressive symptoms were real, the soldiers were not clinically depressed. Time at home quickly resolved their symptoms and so early discharge seemed the best solution. The issue can only be resolved administratively, and the longer these soldiers stay in the army, the more their mental health will deteriorate, irrespective of how much mental health intervention they receive:

> **'[An] 18-year-old who has got in has to serve 3 years before he can sign off. [That] might not seem like a long time to you or I, but to a young lad who is looking out on life that is a long, long time, and if he feels nothing can change, that can be the person who can self-harm and take their**

own life: they just think that there is no hope, no help because nothing can be done.' (TT)

Relationships

Relationship and family problems were cited both in the study questionnaire and in the interviews as common factors in the development of low mood and depression. Many soldiers could cope with extreme pressures, often in hostile and challenging environments, but could not deal with a failing relationship:

'You know a soldier can run into a burning oil field with his life and his guns blazing, but if his wife leaves him he falls to pieces. They are not prepared for the human factor.' (SS)

As soldiers aged, relationship problems changed; marriage and children could make life more complex. Difficulties in long-standing relationships had a negative impact on a soldier's performance, irrespective of the contextual surroundings, either in peacetime or on operations. Common in older soldiers is the expectation that, later in their careers, they will live away from home, and for parents the issues of separation from children was a significant source of stress. Frequent operational tours and military exercises afford them limited time at home, and problems were exacerbated by a feeling that they could not discuss their plight, as partners or relatives would not understand their distress. Partners were an important part of the situation; if they and the family were happy, then a soldier would function well, irrespective of the environment, and put up with almost anything, including regular tours:

'If we can retain and keep the families happy then generally we can hold onto the soldier. You can deploy the soldiers lots, to really terrible and scary places, as long as he is not phoned every 20 minutes to say the kids have been kicked out of school, or you know, I have to drive 50 minutes to the nearest Tesco's and the house is falling apart.' (DD)

Where partners or family were unsettled or did not understand the rationale for the latest disruption, and their concerns were not addressed, then the result could be ill-health in all family members, and some soldiers simply left the army to restore harmony at home.

Operational tours

Help-seeking behaviour is influenced by how a soldier responds while operating within an often hostile environment. Units on deployment were described as cohesive, with people living, eating and working together as a team, towards a common goal. Members were deemed physically and mentally fit (Hacker-Hughes et al, 2005), with medically downgraded personnel, including those clinically depressed, excluded from operations. Deployment could offer escape from day-to-day problems at home and, if the soldier wanted to be there, provided an environment in which people could excel. Team members looked out for each other, and performed the duties for which they were trained. In contact situations, when teamwork is valued and vital, and when their friends are in need, then they will not let colleagues down. Problems are addressed within the team, in an environment where unit support was sometimes better than elsewhere, and there were fewer stigmas. Soldiers labelled 'problem children' in peacetime could, in the right environment, shine, taking the opportunity to independently make decisions. Then, as the tour progresses, respondents reported that soldiers' morals, beliefs and personalities change positively, and they develop new life skills within this challenging environment. However, operations also place extreme pressure on individuals, partners and families. Saying goodbye to a loved one was emotionally taxing. As a result, there are adjustment reactions at the point of separation, again when initially in theatre, and also on re-integration home:

'The operational issues are massive pressure before the troops go on tour, massive pressure on relationships, saying goodbye to their children, their wives, to their girlfriend... The kind of pre-tour issues with the taking of medication, the taking of vaccines, trying to sort your kit out, 6 months, trying to find someone to look after your car, find someone to look after your house, trying to find someone to go to the bank to sort all your debt issues out, so that massive pressure before people go, as well as the goodbyes, followed by the 6 months separation, in an environment where a lot of people don't actually understand what is happening, and then coming back into an environment where you have a different perception, a different attitude from your spouse, your partner.' (CC)

This normal reaction can be misdiagnosed as a mental health problem by civilian practitioners, and add weight to the view that anyone who goes on operations automatically develops mental health problems. Once in theatre, the same problems that affect personnel at home in the UK cause distress on operations, although the stresses are more intense, exacerbated by the difficulties of communicating from distance.

The mounting number and sheer intensity of operational tours as a result of ongoing operations in Iraq and Afghanistan are, in the respondents' views, resulting in exhausted, worn-out personnel. Officers and senior ranks in particular struggled with the pressures and the stress of caring for their troops and the impact of colleagues being injured or killed. Older personnel felt that they could not let their troops down, and were thought to hide symptoms until they return home, when their distress quickly emerged and they broke down, leading to PTSD and/or depression. They also perceive that being sent home from operations for a mental health issue could have a negative effect on their career.

Gender

Female soldiers are more likely to attend for a mental health assessment (Finnegan et al, 2007; Finnegan et al, 2010), but

some participants felt that men, especially infantry soldiers, were more vulnerable to mental health issues as a result of greater personal threat during deployments and higher rates of alcohol misuse. Discrimination against women was regarded as rare, although isolated single mothers often struggle and experienced childcare issues, or might have been seen as a threat by soldiers' wives. Participants argued that women, whether in the army or civilian life, were more self-aware, emotionally expressive and less affected by stigma, and confided in each other. They were more likely to report distress and found it easier to seek and access support. When there are few women in a unit then support is sought within the medical services, where it is recognized that clinicians often overestimate or underestimate levels of distress of their patients (Zastrow et al, 2008). GPs were more likely to refer a tearful woman than a man who hides his emotions, in the respondents' views, although this might be inappropriate and of no therapeutic value:

> **'Females are far more expressive emotionally than males are...and that sometimes can have an effect on the referring person. He [the GP] will say, when she was in my surgery she just cried all the time. You know, what he or she didn't realize is that they actually helped this person to unload the thing emotionally. So when that person is actually referred here they might be fine.' (EE)**

Army primary health care

The army provides excellent medical care and mental health support (Finnegan and Finnegan, 2007), but only if a soldier is willing to seek and accept help. The key factor, according to the respondents, is that soldiers are provided with competent and proactive treatment, and a GP's competencies, motivation, experience, strengths and weaknesses are key elements in determining whether a patient is correctly diagnosed and referred for a specialist mental health assessment.

GPs might quickly produce mental health referrals for occupational health advice regarding deployments, including patients with generalized low mood who were not clinically depressed, which National Institute for Health and Clinical Excellence (NICE) guidelines direct should be supported in primary health care (NICE, 2009). While the GP may have acted in the patient's best interests in recognition that AMHS clinicians have time to develop a deep therapeutic relationship, army GPs were also aware that military DCMHs would accept any referral, which is not the case in the NHS, and that this is not always appropriate. There is a significant transitory workforce of locum GPs who only occasionally work within the AMS, and they may—in the opinion of some respondents—have poor motivation and little insight into military occupational health requirements, which presents considerable problems. These civilian GPs may refer quicker and more frequently owing to their contracted hours, leaving insufficient time for an assessment and treatment, although for some this is self-imposed, and a reluctance to engage with the military chain of command. Other factors raised in the interviews are less easy to rationalize, such as GPs being more likely to try to support officers and senior ranks in primary health care, although this may reflect a fear that a mental health referral could negatively influence a soldier's career.

Inexperienced uniformed GPs may be influenced when the patient is a senior officer, and be less willing to probe into the patient's problem. In addition, if GPs are not assertive with regard to patient confidentiality, then they may inadvertently report medical details to the non-medical chain of command, reaffirming the soldier's suspicion that confidential medical information will be disclosed. Then there are external forces, including negative media and the need to do something, resulting in patients who are not clinically depressed being prescribed antidepressants. On participant raised issues regarding GP competencies:

> **'I think with the more junior GPs, just qualified, come in, beginning their professional life, there is a feeling that you have to do something, and part of doing that in the arsenal of a GP is his prescription pad. So the patients listen to you, he is given something, and the GP then says I think I have done the right thing.' (EE)**

Limitations of the study

The lead author is was known to the interviewee group as a colleague, which introduced the potential for bias. This possibility was addressed through a strategy based on self-awareness, an open mind, and mentorship. It is also important to acknowledge that AMH clinicians are an intelligent, professional group, who would presumably understand the objectives of the research.

The results are only related to a British Army population, and may not be transferable to other nations' armed forces personnel or to a non-military audience.

Conclusions

Quantitative studies examining predisposing factors and symptoms leading to army personnel presenting with depression have not provided a depth of insight into this subject area, and the opinions of the experienced AMH clinicians who treat these depressed personnel provides a valuable and original insight that advances knowledge in this area. The most common factor leading to a DCMH admission is for young disaffected soldiers who want to leave the army, but cannot because of restrictive terms and conditions of service, and AMH clinicians cannot facilitate the soldiers' release except to recommend an administrative discharge. While noting the operational imperative to have visibility and continuity of personnel, it is clear that the significant periods of notice required to leave the army has a negative impact on the mental health of young soldiers.

Army personnel face unique multi-factorial stressors, and a soldier's personality impacts on his/her ability to cope with military life, and the propensity for developing depression. The perception that mental health problems equate to weakness is changing, although stigma occurs, especially in light of poor local leadership. Officers were worried about the occupational implications of reporting ill, and

the negative impact that a mental health assessment would have on their career. They might seek support privately from civilian health agencies, and this can have potentially dangerous ramifications should a soldier concealing a mental health problem be deployed.

No clear reason was ascertained as to why women presented in greater numbers, although isolated single mothers often struggled, and GPs may be more likely (however inappropriately) to refer a tearful woman than a man who hides his emotions. On operational tours, many personnel excel and are supported by more cohesive units. However, operations placed extreme pressure on individuals, and there were adjustment reactions at the point of separation, again when initially in theatre, and also on re-integration home, that could be misdiagnosed as a mental health problem.

The key issues emerging from this study provide pointers to a number of areas for further exploration that might result in an improvement in operational capability. BJN

KEY POINTS

- A soldier's personality affects his/her ability to cope with the unique multi-factorial stressors of military life, and the propensity for developing depression
- Young, disillusioned soldiers that wanted to leave the army are the main group seeking mental health support, and many are temperamentally unsuitable for army service rather than clinically depressed
- Many soldiers can cope with extreme pressures, often in hostile and challenging environments, but cannot deal with a failing relationship, and some soldiers will simply leave the army to restore harmony at home
- Gender discrimination against females is rare. Women are more emotionally expressive than men and less affected by stigma, and find it easier to seek support. GPs are more likely to refer a tearful female than a male who hides his emotions, although this might be inappropriate
- Help-seeking behaviour is influenced by the contextual environment of peacetime or operations. On tour many find it easier; however, operations place extreme pressure on individuals, and there are adjustment reactions at the point of separation, again when initially in theatre, and also on re-integration home that can be misdiagnosed as a mental health problem, especially by civilian practitioners
- Officers worry about the occupational implications of reporting ill, and the negative impact that a mental health assessment would have on their career

Lt Col Alan Finnegan, Lt Col (Retd) Mike Srinivasan and Col Robin Simpson are serving within the Army Medical Services. The views expressed are those of the authors, not the Ministry of Defence.

Bagley C, Ramsey R (1986) Sexual abuse in childhood: Psychological outcomes and implications for social work practice. *J Soc Work and Human Sexuality* **5:** 33–47

Belle D (1990) Poverty and women's mental health. *Am Psychol* **45**(3): 385–9

Busuttil W (2010) Combat-related stress. In: Conrad D, White A, eds. *Promoting Men's Mental Health*. Ratcliffe, Oxford: 125–41

Central Office for Research: Ethics Committee (2005) Informed consent. http://tiny.cc/vhc3h (accessed 17 November 2010)

Conrad D (2010) Social capitol and men's mental health. In: Conrad D, & White A, eds. Promoting Men's Mental Health. Ratcliffe, Oxford: 26–38

Charmaz K (2006) *Constructing grounded theory: a practical guide through qualitative analysis*. Sage, London

Dandeker C, French C, Thomas S (2008) The family and military as 'Greedy Institutions': negotiating a work–life balance. Economic & Social Research Council. RES-000-22-0764. http://tiny.cc/64wxx (accessed 17 November 2010)

Fear NT, Iversen A, Meltzer et al (2007) Patterns of drinking in the UK armed forces. *Addiction* **102**(11): 1749–59

Finnegan AP (1997) Societal factors that negatively affect the mental health support for the British Army's Service personnel involved in major trauma. *J R Army Med Corps* **143**(2): 107–12

Finnegan AP, Finnegan S (2007) Assessing the effectiveness of the British army's mental health service. Br J Nurs, 16(12): 725–30

Finnegan AP, Finnegan SE, Gamble D (2007) A review of one year of British armed forces mental health hospital admissions. *J R Army Med Corps* **153** (1): 26–31

Finnegan AP, Finnegan SE, Jackson C, Simpson R, Ashford R (2010) Predisposing factors and associated symptoms of British army personnel requiring a mental health assessment. *J R Army Med Corps* **156**(2): 90–6

Hacker-Hughes J, Cameron F, Eldridge R, Devon M, Wessely S, Greenberg N (2005) Going to war does not have to hurt: Preliminary findings from the British deployed to Iraq. *Br J Psychiatry* **186:** 536–7

Hoge CW, Castro CA, Messer SC et al (2004) Combat duty in Iraq and Afghanistan, mental health problems and barriers to care. *N Engl J Med* **351:** 13–22

Iversen AC, Staden LV, Hacker-Hughes J et al (2009) The prevalence of common mental health disorders and PTSD in the UK military: Using data from a clinical interview-based study. *BMC Psychiatry* **9:** 68

Mitchell AJ, Vaze A, Bass S (2009) Clinical diagnosis of depression in primary care: A meta analysis. *Lancet* **374:** 609–19

National Institute for Health and Clinical Excellence (2009) Depression: the treatment and management of depression in adults. http://tiny.cc/8r50v (accessed 8 November 2010)

O'Brien LS (1998) *Traumatic events and mental health*. Cambridge University Press, Cambridge

Scott MJ, Strading SG (1992) *Counselling for post traumatic stress disorder*. Sage, London

Silverman D (2001) *Interpreting qualitative data: Methods for analysing text, talk and interaction*. 2nd Edn. Sage, London

Silverman D (2005) *Doing Qualitative Research*. Sage, London

Wessley S (2005) Risk, psychiatry and the military. *Br J Psychiatry* **186:** 459–66

World Health Organization (2007) International Statistical Classification of Diseases & Related Health Problems. http://tiny.cc/305k6 (accessed 8 November 2010)

Zastrow A, Faude V, Seyboth F et al (2008) Risk factors of symptom underestimation by physicians. *J Psychosom Res* **64**(5): 543–51