Towards a Broader Conceptualization of Need, Stigma, and Barriers to Mental Health Care in Military Organizations: Recent Research Findings from the Canadian Forces

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ABSTACT

While mental health treatments are more effective than ever, data from both military and civilian settings have consistently shown that only a minority of those with mental disorders actually receives care. Untreated mental disorders have important implications with respect to readiness, operational effectiveness, and force sustainability. Many of the efforts to overcome barriers to care have focused on a single attitudinal barrier (stigma) and only on the population with a diagnosable mental disorder. This presentation will review data from the Canadian Forces and elsewhere that argue for a broader conceptualization of need and barriers to care. For example, substantial numbers of personnel with occupational impairments are found in those without an apparent mental disorder. Such individuals presumably have sub-threshold conditions that are still having an impact on the organization. Among those with a disorder, the most prevalent barrier is not perceived stigma but instead that they appear to not realize that they have a disorder for which help is available—these individuals acknowledge symptoms but don't recognize unmet need. And among those who do identify unmet need, the leading barrier is not stigma per se but instead the preference to manage their condition on their own. Finally, significant numbers of personnel drop out of care before they achieve remission, but this group has been little studied. This broader conceptualization of need and barriers to care implies the need for a broader and more flexible range of countermeasures. Key knowledge gaps need to be closed before effective countermeasures can be developed.

BACKGROUND

Mental Health Problems in Military Organizations:

The Canadian Forces (CF) is one of the largest employers in Canada, with approximately 65,000 Regular Force and 25,000 Primary Reserve personnel. Like any large employer, the CF recognizes that mental health problems (MHP's) are leading causes of impaired productivity [1], absenteeism [1], and turnover [2;3].

But mental health problems in the military also have a special significance in at least three ways: First, difficult military deployments are associated with an increased risk for a broad range of mental health problems, including post-traumatic stress disorder (PTSD) [4;5], depression (Stimpson et al. 2003), and alcohol use disorders [6;7]. Second, the unusual demands of military work are such that impairment in functioning due to mental health problems can threaten the safety and success of military operations [8].

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14. ABSTRACT
While mental health treatments are more effective than ever, data from both military and civilian settings have consistently shown that only a minority of those with mental disorders actually receives care. Untreated mental disorders have important implications with respect to readiness, operational effectiveness, and force sustainability. Many of the efforts to overcome barriers to care have focused on a single attitudinal barrier (stigma) and only on the population with a diagnosable mental disorder. This presentation will review data from the Canadian Forces and elsewhere that argue for a broader conceptualization of need and barriers to care. For example, substantial numbers of personnel with occupational impairments are found in those without an apparent mental disorder. Such individuals presumably have sub-threshold conditions that are still having an impact on the organization. Among those with a disorder, the most prevalent barrier is not perceived stigma but instead that they appear to not realize that they have a disorder for which help is availablethese individuals acknowledge symptoms but dont recognize unmet need. And among those who do identify unmet need, the leading barrier is not stigma per se but instead the preference to manage their condition on their own. Finally, significant numbers of personnel drop out of care before they achieve remission, but this group has been little studied. This broader conceptualization of need and barriers to care implies the need for a broader and more flexible range of countermeasures. Key knowledge gaps need to be closed before effective countermeasures can be developed.

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Finally, in addition to being an employer, military organizations like the CF also *deliver* mental health care.

While mental health treatments are more effective than ever, studies in both military and civilian settings [9-12] demonstrate that only a minority of those with an apparent mental disorder actually seek care. A broad range of structural and attitudinal barriers to care have been reported [10-13].

Organizational Consequences of Mental Problems in Military Organizations

Many service members with mental health problems report that their problems affect their performance. Recent data from the US showed that deployed personnel with symptoms of mental health problems were more likely to report having committed ethical violations (such as mistreatment of non-combatants) while deployed [8]. Mental health problems are also associated with an increased risk of separation from military service for both medical and non-medical reasons [2;14]. Military organizations can ill-afford losing large numbers of well-trained and experienced personnel at a time of high operational demands.

Mental Health Services Renewal in the CF

In the late 1990's it became apparent that the CF was not capable of providing a high volume of quality clinical services for the growing number of personnel with traumatic stress disorders related to certain difficult deployments in the early 1990's (e.g., the Persian Gulf, the former Yugoslavia, Somalia, and Haiti). In response to these deficiencies, the CF undertook a comprehensive renewal of its mental health services. Many new initiatives were undertaken, including:

- The standing-up of 5 regional Operational Trauma and Stress Support Centres, to serve as centres of excellence for the evaluation and treatment of service-related Mental Health Problems (MHP's);

- The founding of a Deployment Health Section, tasked specifically with understanding and mitigating deployment-related health problems, with a special focus on MHP's and medically unexplained physical symptoms;

- Initiation of clinical screening for MHP's pre-deployment, post-deployment, and periodically throughout a service member's career;

- The establishment of the Canadian Forces Member Assistance Program, providing up to 10 sessions of completely confidential assistance from civilian mental health providers for CF members and their families;

- The dramatic expansion of the number of CF mental health personnel, with the target being a total of 457 positions serving approximately 65,000 Regular Force members—this brings the number of mental health professionals per capita to approximately 1 per 200, which is twice the ratio for the Canadian general population;

- Deployment of a robust clinical mental health team on major operations;

- Development and implementation of a comprehensive and coordinated mental health training program, which is delivered across the deployment and career cycles—the main objectives of the program are to increase mental health literacy, provide self-management tools for subclinical levels of psychological distress, reinforce peer, leader, and family support, decrease mental illness stigma, and challenge barriers to mental health care;

- Development of an innovative peer support program for service members and veterans with service-related mental health problems (the Operational Stress Injury Social Support or OSISS Program, www.osiss.ca); and

- Strengthening confidentiality protections for personnel who seek mental health care.

The fundamental goal of these and other efforts was to decrease unmet mental health care need by:

- Overcoming structural and attitudinal barriers to care;

- Increasing the fraction of those with MHP's in care;

- Decreasing the substantial delay between symptom onset and first care [15]; and

- Increasing the effectiveness of care for those who seek it.

Conventional Conceptualizations of Need, Stigma, and Barriers to Care

These efforts at mental health service renewal were guided by conventional conceptualizations of these issues over the previous decade:

"Need"

"Need" was generally defined as having a major Axis I psychiatric disorder, such as major depression or post-traumatic stress disorder (PTSD) [9-11]. This is the approach that is usually taken with the general population as well [12;16], and it does have intuitive appeal: This is a group for whom diagnosis-specific, evidence-based treatments are available, and by definition this group is experiencing either role dysfunction or clinically significant distress. The problems of those with subclinical levels of distress or non-diagnostic conditions are less impactful, and their treatment needs are more poorly understood. Where mental health resources are constrained, it makes sense to target those with the most overt disorders. Consistent with this perspective, "unmet need" for care was generally perceived to be limited to those with a major Axis I disorder. Some authors have recently used a broader definition that includes those who perceived a need for care in the absence of an overt disorder [11], but the potential needs of those who have subclinical levels of distress in the absence of perceived unmet need have been largely ignored.

"Barriers to Care"

Even in industrialized countries such as Canada that offer universal health insurance, significant structural barriers to care continue to prevent those with needs from accessing effective care in a timely manner. Problems with wait times, getting time off work for treatment, availability of specialists, transportation, language barriers, and insurance coverage are not uncommon [12;17]. With the exception of deployed settings (where logistical and other challenges make delivery of mental health services especially difficult [18]), structural barriers are presumed to not be pertinent to military organizations: Within the CF, wait time for even routine mental health care is well below civilian benchmarks, time off work for treatment is guaranteed, specialists are abundant, transportation for care is a covered benefit, services are available nationwide in both official languages, and all treatment costs are covered at no expense to the service member. For this reason, attention has focused almost exclusively on attitudinal barriers to care.

"Stigma"

Stigma has been identified as the most significant barrier to mental health care in military organizations, and it has also been asserted that service members suffer disproportionately because of the culture of mental

toughness that pervades military life [13;19-24]. Up until very recently, other potential attitudinal barriers to care have neither been assessed [10;11] nor targeted in the CF's mental health education program. Educational programming focused exclusively on decreasing negative social attitudes toward those with mental illnesses, with the central focus being to cast mental illnesses as injuries (particularly when operationally-related). It has also been assumed that perceived stigma about care-seeking on the part of those with mental health problems reflected an accurate picture of social attitudes and that those who perceived more stigma were in fact less likely to seek care as a result. Finally, mental health providers tended to target stigma solely as a barrier to care, failing to consider additional consequences of stigma such as discrimination, erosion of social support, and the imposition of an additional burden on those already struggling with mental illness.

Towards a Broader Conceptualization

This paper will review recent research findings from the CF that argue for a broader conceptualization of need, stigma, and barriers to care. First, the data source themselves will be described. Then, selected findings that highlight the limitations of conventional thinking about need, stigma, and barriers to care will be presented. After each finding, policy, program, and research implications will be discussed. Finally, early data suggesting the effectiveness of the CF's recent efforts in response to this broader conceptualization will be highlighted, with an emphasis on the role the mental health screening can play in reversing unmet need for care.

METHODS

Data Sources

The data sources used for the analyses presented below are described briefly in Table 1. All data sources have substantial sample sizes and adequate response rates.

RESULTS

"Need": There is Substantial Need for Enhanced Psychological Support in Those without a Major Axis I Disorder

The Evidence

The first indication of this came from the CF's in-theatre mental health needs assessment, the OMHA [25]. This survey was modelled after the US Army's Soldier Well-being Survey [18] used in its periodic in-theatre mental health surveys, termed "Mental Health Assessment Teams" (MHAT's). The US chose to use a more stringent cut-off for its screening instruments than are used in civilian settings, reasoning that it was most essential to focus on those in greatest need of mental health care. Moreover, some level of distress is to be expected in combat troops.

In order to assess whether the more stringent (US MHAT) or less stringent (civilian) cut-offs were more appropriate, three questions on perceived occupational dysfunction due to psychological problems (e.g., that psychological problems had made the respondent work less carefully over the previous 30 days) were explored. As expected, those who exceeded the less stringent cut-off for depression, acute traumatic stress, or generalized anxiety over the previous 30 days were much more likely to report some occupational

dysfunction than those who were below the cut-off (48% vs. 9%, p < 0.0001 by univariate chi-squared test [25]). But surprisingly, two-thirds of all individuals who reported some occupational dysfunction were in the group *below* the cut-off (that is, the group *without* an apparent mood or anxiety disorder). Exploration of the post-deployment screening data showed the same phenomenon, even though this questionnaire also assessed suicidal ideation, panic disorder, and minor depression: 60% of those who reported some role dysfunction or more than minimal social dysfunction were in the group *without* an apparent mental disorder [26]. Finally the in-theatre survey showed that 59% of those who were interested in receiving professional help were in the group *without* an apparent mood or anxiety disorder [25]. These are counter-intuitive findings, but they reflect a common phenomenon in public health in which much of the overall burden of illness is seen in the larger number of more mildly affected individuals as opposed to the smaller number of more seriously ill individuals.

Implications

These findings demonstrate the potential benefits to the organization of some sort of enhanced psychological "care" for the large group of distressed but not necessarily mentally ill personnel. It is clear that mitigating distress in this group should pay dividends in terms of operational effectiveness.

What is less clear is what precise form of "care" this group needs: Clearly, options other than professional care in a clinical setting need to be considered. Options to consider would include:

- Education to provide personnel with better tools for coping and self-care;

- Strengthening buddy care, peer support, and cohesion;

- Leadership training to foster behaviours known to help buffer the effects of stress [27;28];

- Encouragement of spiritual practices [29];

- Use of computer-based psychotherapeutic [30;31] interventions;

- Telemedicine services [32]; and

- Informal clinical care ("therapy by walking around") [33].

Non-clinical approaches (or novel clinical approaches such as telemedicine) have particular appeal on deployed operations where connecting clinicians and patients faces special obstacles. However, the strongest argument for these comes in the form of the observation from the CF in-theatre mental health survey [25] that only a quarter of those with apparent mental health problems were even interested in receiving professional help, the US MHAT's showed similar findings [18]. Enhanced efforts to overcome barriers to care can, it is hoped, make some progress. But it would be naïve to believe that we will ever reach a point in which *everyone* with a mental health problem will be interested in care at just the right moment. We need to develop other acceptable and effective ways of meeting their needs.

Enthusiasm for psychologically-oriented resilience training has never been stronger [34;35]. This is often framed as an alternative to formal mental health care, with the intent being to prevent the emergence of a full-blown disorder requiring clinical care [35]. The philosophy here is "We can't afford [operationally, financially] to let people get sick and then wait for them to get better in care." The problem is that while resilience training is supported by sound theory, findings from the laboratory, epidemiological data, a few small programs in civilian settings, and extensive clinical experience on individual psychotherapy, there are as of yet no population-based programs that have been convincingly shown to prevent mental disorders in military personnel subject to deployments [36]. For this reason, it is essential that enthusiasm for prevention

not distract military organizations from efforts to overcome barriers to care for those who will inevitably succumb to mental illness at some point in their lives. In addition, it is essential that efforts to make personnel admirably more self-reliant (or more reliant on non-clinical supports) not have the undesired effect of driving people away from care when they could benefit from it.

These findings also have research implications: In the context of an occupational mental health system (such as those in military organizations), occupational dysfunction is the clearest indicator of the need for some sort of additional psychological support. Commanding officers presumably don't care whether a soldier scores about a certain cut-off on a symptom scale: They are concerned first and foremost about how they are performing, especially when the stakes are as high. Thus, careful measurement of occupational functioning is essential in mental health surveys. In addition, scales that can capture a broader range of distress (e.g., continuous scales like the General Health Questionnaire [37] or the K10 [38]) are needed in order to better characterize this phenomenon of occupational dysfunction in the sub-clinically distressed. Finally, as alluded to above, the effectiveness (and safety) of resilience training needs urgent validation.

A Broader Conceptualization of Barriers to Care

The Evidence

Perceived Barriers to Care in Those with Perceived Unmet Need for Care

The CF's 2002 Mental Health Survey (CCHS) was the most rigorous mental health prevalence survey undertaken by a military organization [39]. It led to precise 12-month and lifetime prevalence estimates for common mental health problems using accepted diagnostic criteria [9;11;40]. A very similar survey was administered using the same methodology to the Canadian general population [41], permitting comparisons between the military and its source population [9;42]. Unfortunately, two problems with the survey meant that it provided only limited insight into barriers to care: First, barriers were only assessed in only that small minority of people who identified unmet need for care (Figure 1); the leading barrier, by far, was that most people seemed not to realize that they had a problem for which help was available [10]. That is, they acknowledged clinically significant distress or dysfunction but failed to voice an unmet need for care. This group comprised 8.5% of the whole population and was many times larger than the group that identified an unmet need for care; The same phenomenon (large number of people with an apparent disorder who do not recognize an unmet need for care) has also been seen in the general population [12] and in the CF's more recent Health and Lifestyle Information Survey [43]. The second problem was that the response choices for possible barriers were neither exhaustive nor clear: "Other" was one of the leading response categories, and the other prevalent response was "lack of confidence in the CF's administrative, medical, or social services." Neither of these provides enough insight into the phenomenon of perceived unmet need to permit the development of useful counter-measures.

In order to better understand the full range of potential barriers to care under the CF's current mental health system, a broader list of potential barriers to care was included in the 2008/2009 Health and Lifestyle Information Survey [43]. The list of barriers (Table 2) were taken from a civilian survey and augmented with some items that were relevant to the military context. As shown in Figure 3, this list of barriers proved to be far more exhaustive—only 6% indicated "other" as a barrier. The most prevalent barrier (seen in 64%) was that respondents preferred to manage their problems on their own—this barrier was not assessed in 2002, and it presumably accounts for a significant fraction of the "other" responses in that survey. The next most prevalent barriers appeared to reflect stigma, such as concerns that others in their unit would find out

about their getting help. Other than concerns about career impact, structural barriers such as wait times, problems with transportation, not knowing where to go for help, etc. were distinctly uncommon.

Another Approach to Assessing Barriers Seeking Mental Health Care

As alluded to above, an important limitation of this approach to the assessment of barriers to care is that they can only be assessed in those who perceive an unmet need for care—this approach is blind to the much larger group of individuals who appear to have a disorder but do not recognize an unmet need for care. One approach to get around this limitation is to have all respondents answer a series of items on potential structural or attitudinal barriers, with the lead-in being to ask respondents to indicate their level of agreement regarding "factors that might affect your decision to receive mental health counselling or services should you ever have a problem." This approach was used on the evaluation form for participants completing Canada's Third-location Decompression program on their way home from deployment in support of the mission in Afghanistan. As shown Table 3, attitudes towards mental health care were largely favourable: Few (6%) indicated that they would think less of a team member receiving mental health counselling, but a larger fraction (21%) indicated they would be concerned about what others might think. This survey did not cover structural barriers to care well, but relatively few (5%) reported that they didn't know where to get help.

This same approach was used in the in-theatre mental health needs assessment [25]; that survey also included assessment of mental health problems, permitting some comparison in barriers in those with and without a mental health problem. As shown Figure 4 and Figure 5, perceived stigma was a more frequently-endorsed barrier than perceived structural barriers. In addition, those with a psychological problem endorsed each and every structural and attitudinal barrier more frequently; others have noted this phenomenon in other nations [21]. Other attitudinal barriers were also not uncommon: For example, "I don't trust mental health professionals," and "getting mental health treatment should be the last resort" were endorsed in 32% and 26% of those with a psychological problem, respectively [25]. As expected, structural barriers to care were much more common in more forward locations on deployment (Figure 6), likely reflecting the reality that care was genuinely less accessible there. No association was seen between stigma and deployment location (data not shown).

Barriers to Persistence in Mental Health Care

Barriers to care appear to also influence *persistence* in care: Data from the CF's 2002 mental health survey showed that only 30% of those who terminated care did so because they "felt better;" 20% reported that they did so because they completed the course of treatment [40]. Data from 2008/2009 were more favourable, with 50% terminating treatment because they "felt better" and 24% because they had completed the course of treatment [43].

Potential Approaches to Overcome Barriers to Care

Participants who identified an unmet need for care in the 2008/2009 survey were asked to identify organizational interventions that might make it more likely to seek care for a mental health problem (Figure 7). The most frequently identified interventions were better assurance that getting help would not affect their career, being able to access care without an appointment, and education on self-management of mental health problems, identified by 42%, 36%, and 24% of respondents, respectively. Not infrequently, respondents identified programs that are already available (e.g., confidential civilian mental health services and peer counselling, 21% and 11%, respectively).

Implications

The data presented above demonstrate that there is a broad range of attitudinal and structural barriers to care in the Canadian Forces. Those with mental health problem (that is, those who need help the most), are much more likely to perceive both structural and attitudinal barriers to care. In garrison, structural barriers are less common than attitudinal ones, and important barriers seen in the general population (such as being unable to pay for care) are distinctly uncommon in the military. Barriers to care also appear to interfere with persistence in therapy.

The failure to perceive a need for professional care in the face of a mental disorder appears to be the most prevalent barrier to care. Among those who identify unmet need, a desire to manage one's problems on one's own was the most prevalent barrier. While only a minority of respondents were concerned that they would be perceived as weak if they sought care, about a quarter were concerned about others in their workplace finding out about their having sought care and about the potential impact of care-seeking on their career. Structural barriers were uncommonly reported in garrison, respondents proposed structural solutions such as walk-in services as being potentially helpful.

The implications of these findings are as follows:

- First and foremost, the broad range of potential barriers to care suggest that a broad range of interventions will be required to overcome these—simply targeting one or two barriers is unlikely to be effective.

- Effective interventions to increase the perceived need for care in those with mental disorders are desperately needed. However, little is known about *why* these individuals fail to perceive an unmet need for professional care. Do they fail to recognize their symptoms as pathological? Do they misjudge their severity or impact? Is this really just another expression of the desire to manage one's problems on their own? Or is this just another manifestation of stigma? Without a clearer understanding of what is driving this failure to recognize the need for care, designing and evaluating effective interventions will be difficult. As long as the failure to perceive unmet need remains such a prominent barrier to care, the research approach of only assessing barriers in those who do perceive unmet need will always provide a very incomplete picture. Hence, other approaches (such as assessing potential barriers in all respondents) are required.

- The frequent and strong preference to self-manage mental health problems in lieu of turning to professional help needs further study. Many attitudes could underlie this, including stigma, a personal need for autonomy, sensitivity to criticism, sensitivity to interpersonal control, a desire for social isolation, discomfort with personal disclosure, fear of potential harms of treatment, or beliefs that professional care would be unhelpful. Without a better understanding of the structure of self-management preference, it will be difficult to target in educational interventions.

- Concerns about career impact need to be addressed—this remains and important barrier, and CF members believe that better assurances about the lack of career impact be helpful to overcome that barrier to care. Conceptually, this barrier likely has both an attitudinal component (stigma) and a structural component (the human resources policies on medical employment limitations and accommodation). It is unclear whether or not members have an accurate picture of the likely impact of care-seeking (and failure to seek care where needed) on their career. CF members enjoy very strong confidentiality and career protections under current policies, so research to understand how their perceptions compare with the reality are essential if effective counter-measures are to be developed.

- Access to care is a real problem in forward areas on deployment—genuine logistical barriers make outreach by mental health professionals infrequent and unpredictable. However, the limited interest in getting professional help suggests that outreach alone is not the solution: Instead, a comprehensive approach to enhancing the awareness of the need for care and overcoming prominent attitudinal barriers is required.

- While attitudinal barriers predominate in garrison, structural changes (e.g, walk-in care) have some promise for overcoming these. Walk-in care might make it easier for personnel to seek care without their unit knowing about it. Stronger confidentiality protections (or more accurate perceptions of already strong protections) don't *eliminate* stigma, but they do provide a way *around* stigma.

- More research is needed on how barriers interfere with persistence is care for those who do seek it. It makes intuitive sense that the same barriers that interfere with seeking care will also interfere with persistence in care, but this has been little studied. This assertion is supported by data (Figure 2) showing that the pattern of perceived barriers was similar in those with unmet need and partially met need. While clinicians are waiting for guidance from research in this important area they should systematically assess and address potential barriers to care starting at the first visit. Systematic efforts to assure follow-up are also indicated.

A Broader Conceptualization of Stigma

The Evidence

This 2002 survey included a single response category that reflected perceived stigma ("afraid of what others might think"), which was identified as a barrier in 12% and 20% of those with a disorder who had partially and completely unmet need, respectively. A similar item was endorsed at similar rates in the general population survey administered at the same time [12]. This was the first indication that the notion that service personnel have a special burden of stigma compared to civilians needed further investigation.

The data presented above do suggest that perceived stigma does remain a perceived barrier to mental health care both in garrison and on deployment, particularly among those with mental health problems. Nevertheless, it is increasingly clear that most CF members (particularly the majority who do not have a mental health problem) now hold largely forward-thinking attitudes about mental health care. Figure 8 compares the results of two attitude questions posed on the Third-location Decompression evaluation: "I would be perceived as weak" and "I would think less of a team member receiving mental health counselling." Only 3% of respondents held the most negative view (agreeing with both statements). The largest group with negative attitudes was those who agreed that they would be perceived as weak but disagreed that they personally would think less of a team member receiving care (8% of the population). This suggests that there is some mismatch between the attitudes people hold personally and their perceptions of the attitudes of their peers.

While many of those with mental health problems clearly report that stigma is a barrier to seeking care, analysis of the association between stigma and care-seeking paints a more complicated picture: Data from the in-theatre mental health survey [25] (Figure 9) show that those with mental health problems who report high levels of stigma are no more and no less likely to actually seek care.

Anti-stigma efforts in the CF have, up until quite recently, focused principally on efforts to de-stigmatize developing a mental disorder after a deployment by framing these as "Operational Stress Injuries." A central strategy has been to educate mentally healthy individuals to, in essence, treat the mentally ill more compassionately by recognizing that mental illness is not their fault. Seeking care for mental illness was

framed as being acceptable because the illness was not a sign of weakness or lack of moral fibre. It is not clear from research whether the stigma surrounds *having succumbed to mental illness* or *being unable to solve one's problems on one's own.* Data from the Enhanced Post-deployment Screening process suggest that there is more stigma around care-seeking than about being ill: Approximately 12% of those screened acknowledged symptoms suggestive of mental health problems during their non-anonymous screening process, suggesting that many members are willing to disclose their problems. However, many of those who were currently receiving care *within the CF's own mental health system* were unwilling to answer the question on current mental health care on their screening questionnaire—10% of those who acknowledged past care refused to acknowledge current care, but they were willing to disclose their symptoms on the same questionnaire.

Implications

These findings suggest that stigma surrounding mental health problems in the CF is more complicated than is commonly portrayed: The limited available data refute the common assertion that service members suffer disproportionately from stigma, and recent CF data suggest that there is some mis-match between the *perception* that stigma interferes with care and its actual *impact* on care-seeking. Stigma appears to be more strongly associated with seeking care for problems than for having a problem in the first place. Finally, most CF members now appear to hold largely forward-thinking attitudes about mental health care, but there is some mis-match between the prevailing attitudes and the prevailing *perceptions* of those attitudes.

Nevertheless, perceived stigma does remain a barrier for some, and continued attention is required to overcome it:

- It is important to keep in mind that stigma is also much more than a barrier to care: It also serves as a mechanism for unfair discrimination in the workplace, erodes needed social support for those with mental disorders, and is an unfair additional burden to place on those who are already suffering. These are important issues, but their solution lies largely outside of the world of clinical medicine. These are problems that need to be solved by military human resource specialists and, more importantly, by leaders in every military unit.

- Additional research on stigma is clearly needed. The most pressing priorities are 1) to confirm that stigma about care-seeking is a greater problem than stigma about having a disorder; 2) to explore the effect that stigma has on care-seeking; and 3) to better understand the potential mis-match between prevailing attitudes about care-seeking and the prevailing *perceptions* of those attitudes among those who are mentally ill.

- Public messages to the effect that stigma remains rampant in the Canadian Forces are becoming increasingly untrue and increasingly destructive. At some point, the message needs to change to reflect the reality that most members now hold largely forward thinking attitudes about mental health care. Otherwise, those providing mental health education risk becoming part of the problem rather than part of the solution.

- Additional research is also needed to explore the reasons for the much greater perceived stigma in those with mental disorders. The conventional explanation for self-stigma is that it is an internalization of social stigma. An alternative explanation (and one more requiring entirely different counter-measures) is that self-stigma is the projection of the devalued self onto others. Self-stigma could in fact be a cognitive distortion or a primary manifestation of the underlying disorder, particularly depression. If this is the case, then efforts to convince others to treat the mentally ill with more compassion, while well-intentioned, are likely to have limited efficacy.

CONCLUSIONS

Summary of Key Findings

Recent findings from the Canadian Forces challenge conventional thinking on need, stigma, and barriers to care in military organizations: First, evidence was presented to demonstrate that there is substantial need for care outside of the group with an overt Axis I disorder. Failing to meet the needs of these individuals represents a missed opportunity to enhance readiness, support operational effectiveness, and assure force sustainability. Second, a broad range of largely attitudinal barriers to mental health care are seen in military organizations. Even where structural barriers are prominent (e.g., in forward locations on deployment), attitudinal factors are presumably driving the limited interest in receiving care, suggesting that attention to these factors is essential if outreach is to be effective. Conversely, structural changes (such as walk-in mental health services and stronger confidentiality protections) offer the potential to overcome (or circumvent) attitudinal barriers. Finally, while stigma remains a problem, addressing it in its current form will require a better understanding of it.

The CF's Response

The CF is currently planning a large population-based mental health survey similar to the one done in 2002. The primary goal is to understand how the opposing effects of the difficult mission in Afghanistan and mental health services renewal have influenced the current level of need for mental health care. More detailed exploration of need, stigma, and barriers to care guided by the research findings presented above will be a key portion of the survey.

The CF has also begun to implement a broader approach to overcoming the full range of potential barriers to care. Mental health education has started to emphasize barriers other than stigma and to give participants practice at challenging these in themselves and in their peers and subordinates.

The CF's mental health screening programs have intuitive appeal as a tool to overcome barriers to care. Screening addresses the most prevalent barrier (failure to recognize a need for care) and to challenge whatever attitudinal or structural barriers a particular individual may be facing, including the leading ones (self-management preference, fear of career impact) that we do not yet understand well enough to reliably address in mental health education.

Preliminary Evidence of Success

Data from the CF's post-deployment screening program provide some preliminary evidence that these efforts are paying off: Approximately half of those who report symptoms of PTSD or of depression are already in care at the time of their screening, which takes place on average only 5 months after return. Data from a single brigade have shown that about 32% of those who deployed sought mental health care in the first year

after their return [44]. These findings suggest that the totality of the efforts to encourage care-seeking are paying off.

Three other recent findings are also encouraging:

- While data from the US suggest that those with multiple deployments experience worrisome increases in the apparent prevalence of mental disorders [45], data from the CF's post-deployment screening (Figure 10) show only a small increase of 0.2 percentage points in the fraction showing symptoms of PTSD and/or depression with each subsequent deployment. This suggests that the totality of the CF's policies and programs are working as they should to keep the cumulative mental toxicity of multiple deployments at operationally acceptable levels.

- Even more encouraging is data showing that the fraction reporting symptoms of PTSD and/or depression at post-deployment screening has been declining steadily from 2006 through 2009 (Figure 11). This is not due to random fluctuation or to simple confounding, and it does not appear to be due to a significant decline in the traumatic nature of the deployment over this period.

- Finally, a recently cross-national comparison [21] showed that Canadian Forces personnel appear to have fewer problems with stigma and barriers than their counterparts in the US, the UK, Australia, or New Zealand.

In Closing

While the limitations of the conventional conceptualizations of stigma and barriers to care have been highlighted in this paper, it is important to keep in mind that the current picture has almost been influenced by those same conventional conceptualizations. That is, stigma appears to be less of a problem precisely because of the single-minded focus on this in the past. The message that stigma (and unmet need for care) were rampant in the CF saw to it that needed resources and attention were directed to the problem. Future efforts need to be respectful of these efforts while still showing flexibility in addressing the barriers that have come to light as structural barriers and stigma have been lessened significantly.

Finally, it is essential to point out that these findings pertain only to the Canadian Forces. The picture of need, stigma, and barriers in each country is likely to be particularly sensitive to local policies, programs, and culture. Each military must study these phenomena in their own population if local efforts to mitigate mental disorders are to be successful. Such research must be ongoing: As one barrier is overcome, others are certain to become apparent. Above all else, it should be clear that without a richer understanding of need, stigma, and barriers to care, our efforts to overcome these are likely to amount to a series of well-intentioned stabs in the dark.

Table 1: Summary of Data Sources

Data Source (Abbreviation)	Context	Year(s) of Data Collection	Survey Method	Sampling Approach and Sample Size (Response Rate)
Canadian Forces Supplement to the Canadian Community Health Survey Cycle 1.2—Mental Health and Well-being (CCHS 1.2) [39]	In-garrison, Regular and Reserve Forces	2002	Confidential computer-assisted personal interview using the WMH-CIDI instrument [46]. Performed by Statistics Canada on behalf of the CF.	Stratified random sample, N = 8,400 (81%)
Enhanced Post-deployment Screening (EPDS) [26]	3 to 6 months after return from 6-month deployments in support of the CF's mission in Kandahar, Afghanistan	2005 – 2009	Confidential screening questionnaire with validated instruments followed by a mandatory 40-minute interview with a mental health professional.	Near census, N = 17,600 (77%)
Third-location Decompression Program Evaluation (TLD) [47]	Immediately following a TLD program in Cyprus for personnel returning from 6-month deployment in Kandahar, Afghanistan; program included mental health training on stigma and barriers to care	2006 – 2009	Voluntary, anonymous paper survey using stigma and barriers items validated by Walter Reed Army Institute of Research [48]	Census, N = 11,500 (93%)
Health and Lifestyle Information Survey (HLIS) [43]	In-garrison, Regular Forces only	2008 – 2009	Voluntary, anonymous paper survey	Stratified random sample, N = 2,300 (53%)
Operational Mental Health Assessment (OMHA) [25]	Just past the mid-point of a 7-month deployment in Kandahar, Afghanistan	2010	Voluntary, anonymous paper or electronic survey based on the US Army's Soldier Well-being Survey [18]; approximately 60% of respondents spent most of their time in forward areas.	Near census of a single troop rotation, N = 1,600 (57%)

Table 2: Perceived Barriers to Care Assessed during the 2008/2009 Health and Lifestyle Information Survey [43]

- Preferred to manage it myself

- Didn't think anything more could help

- Didn't know how or where to get help

- Afraid to ask for help or of what others might think

- Couldn't afford to pay

- Problems with things like transportation, child care or scheduling

- Professional help not available in the area

- Professional help not available at the time required (e.g., doctor on holidays, inconvenient hours)

- Waiting time too long

- Didn't get around to it/didn't bother

- Language problems

- Personal or family responsibilities

- Afraid that my supervisor would find out that I was getting help

- Afraid that others in my unit would find out that I was getting help

- Afraid that health care providers would not keep my care confidential

- Afraid that it would affect my military career

- Went on training or deployment

- Other

Table 3: Potential Barriers to Care Reported by Third-location Decompression Participants

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	%	%	%	%	%
I don't know where to get help	1.2%	3.9%	8.2%	46.4%	40.4%
It would harm my career	2.6%	9.6%	20.6%	41.0%	26.2%
I would be seen as weak	2.7%	11.3%	20.7%	40.1%	25.2%
I would think less of a team member who was receiving mental health counselling	1.8%	4.5%	13.8%	37.6%	42.3%
I would be concerned about what others might think	3.3%	17.7%	21.6%	32.7%	24.7%
There would be difficulty getting time off from work for treatment	3.9%	13.7%	22.9%	36.8%	22.7%
Mental health care doesn't work	1.2%	3.9%	21.6%	41.9%	31.5%
If I had mental health problems, I would want to deal with them on my own	3.6%	15.6%	30.0%	34.7%	16.2%
Members of my unit might have less confidence in me	3.9%	19.2%	25.4%	33.6%	17.9%
I don't trust mental health professionals	2.3%	7.0%	25.3%	40.5%	24.9%

Figure 1: Need and Perceived Unmet Need, 2002 Canadian Forces Supplement to the Canadian Community Health Survey (Data Taken from Sareen et al [11])
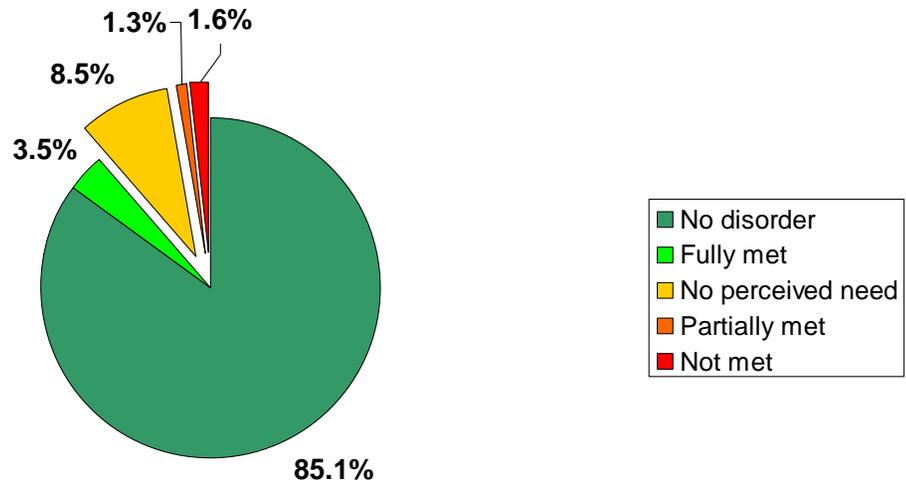
Figure 2: Perceived Barriers to Care in Those with a 12-month Disorder Who Identified an Unmet or Partially-met Need for Care (Data from Sareen et al [49])
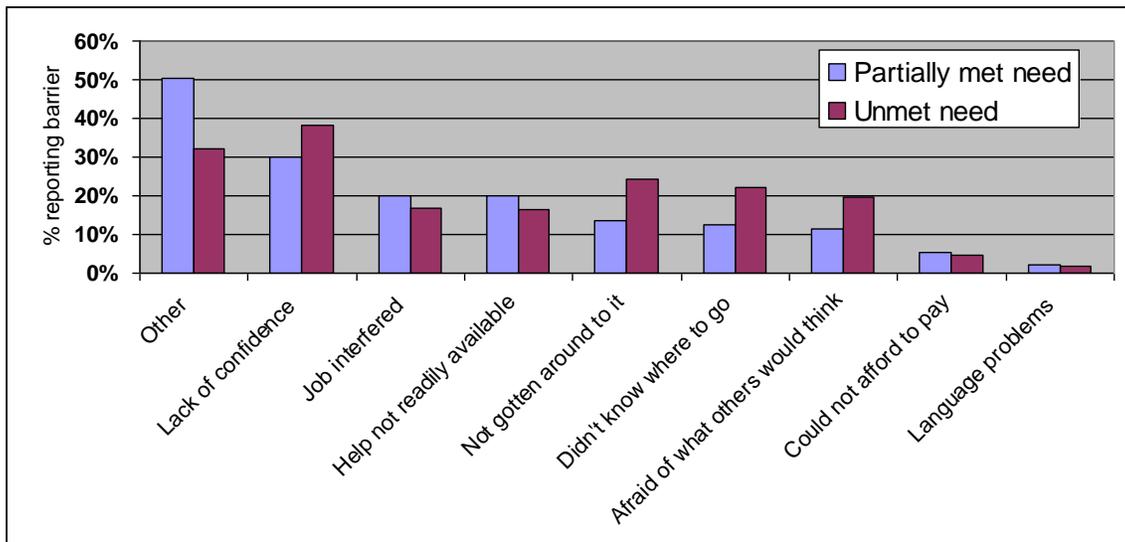
Figure 3: Perceived Barriers to Care in Those with a Perceived Unmet Need for Care [43]*
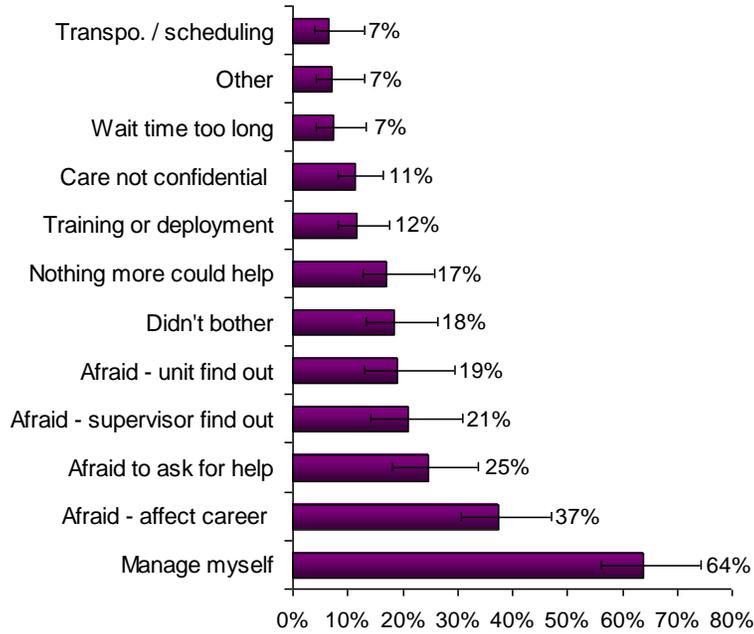

Figure 4: Stigma as a Perceived Barrier to Care in Those with and without a Psychological Problem [25]
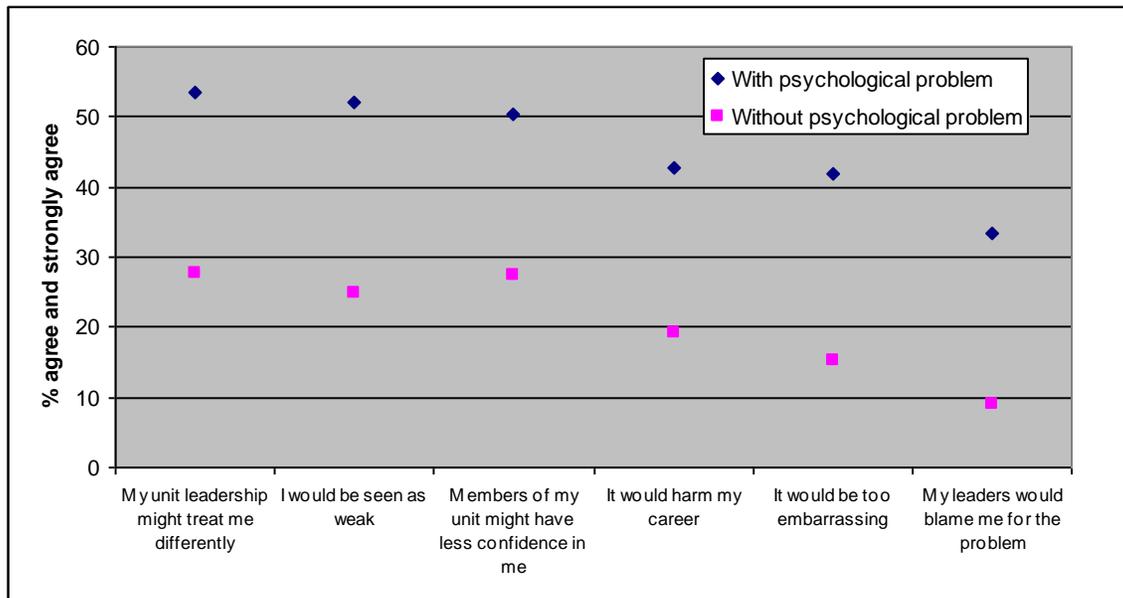
Figure 5: Perceived Structural Barriers Reported in Those with and without a Psychological Problem [25]
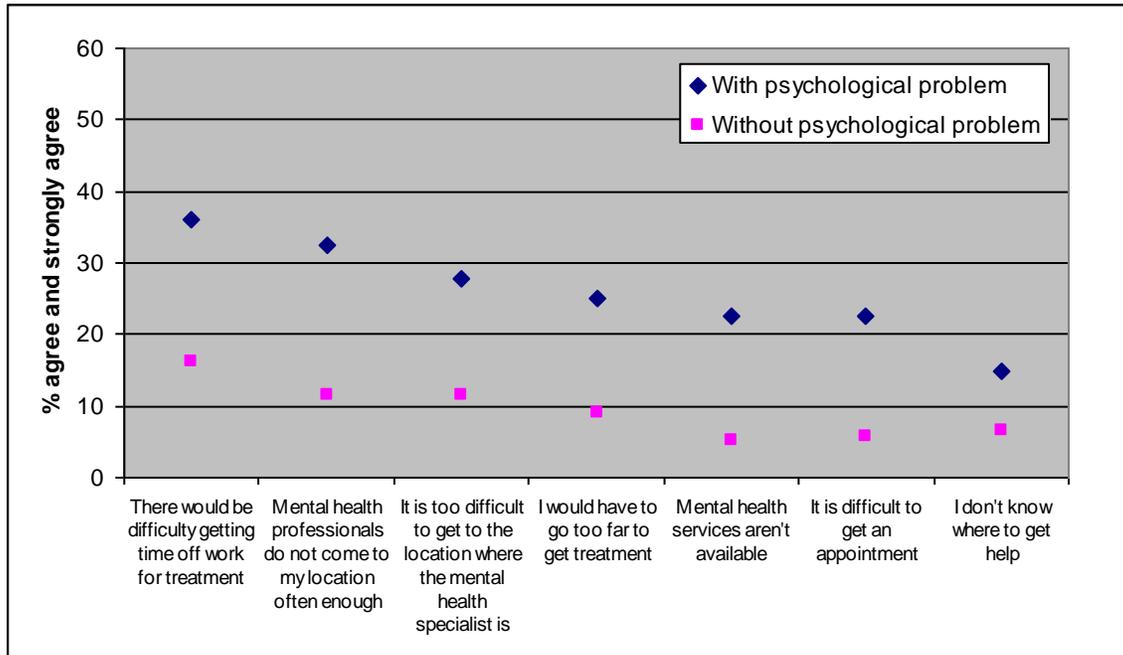
**Figure 6: Association of Perceived Structural Barriers with Primary Deployment Location [25]**
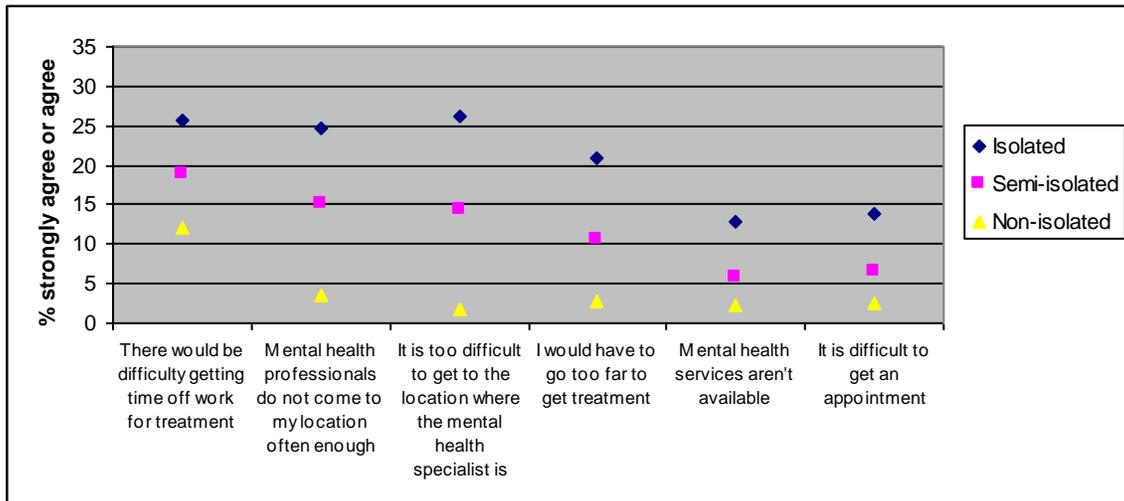
**Figure 7: Interventions That Might Help Overcome Barriers to Care [43]**
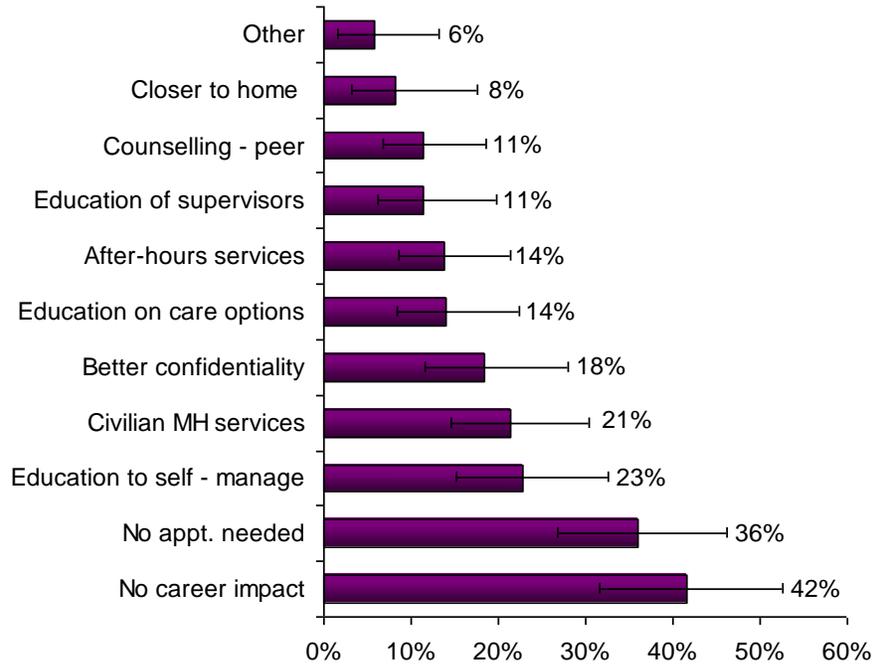
**Figure 8: Perceived Stigma as a Perceived Barrier to Care (Data Collected during Third-location
Decompression)**
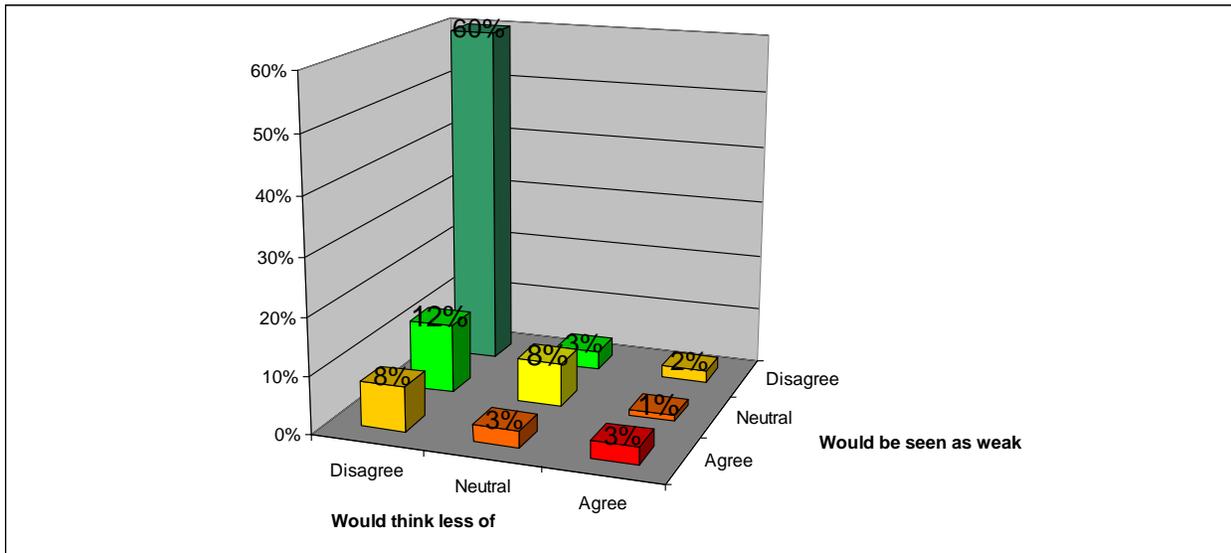
**Figure 9: Perceived Stigma in Those Who Do and Do Not Seek Mental Health Care [25]**
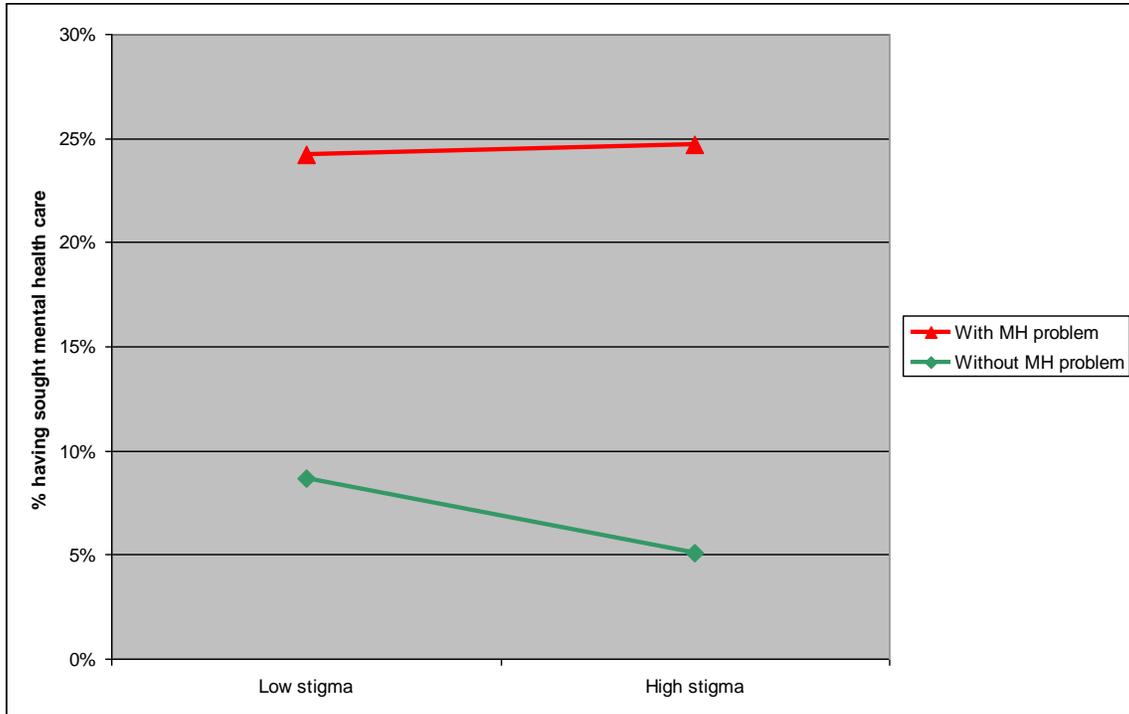
**Figure 10: Effect of Multiple Deployments on the Proportion Reporting Symptoms of PTSD and/or
Depression at Post-deployment Screening [26]**
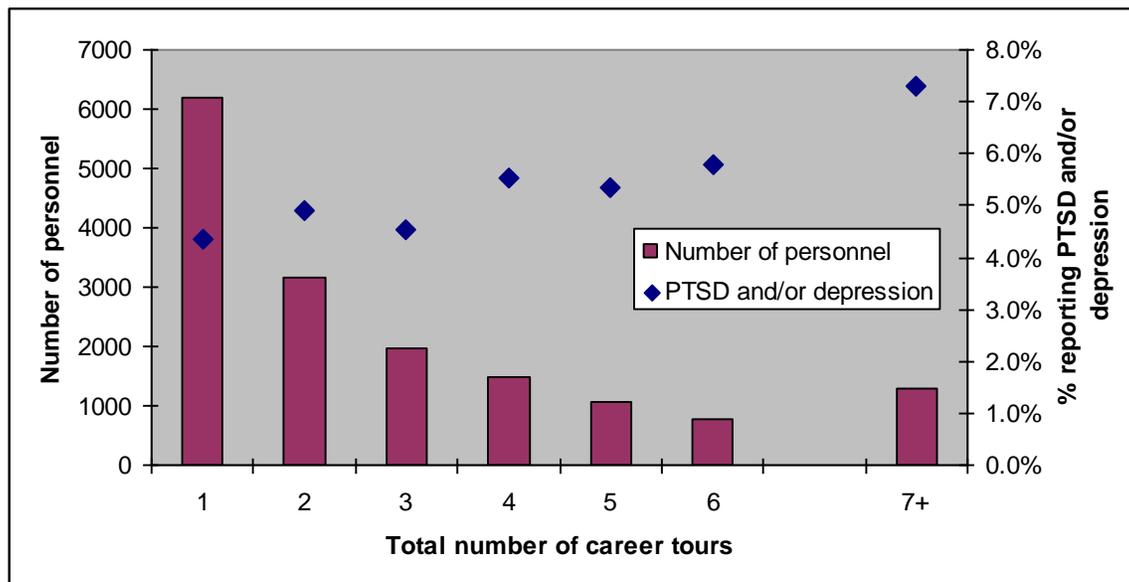
Figure 11: Trend in the Prevalence of Mental Health Problems at Post-deployment Screening, 2006 – 2009 [26]
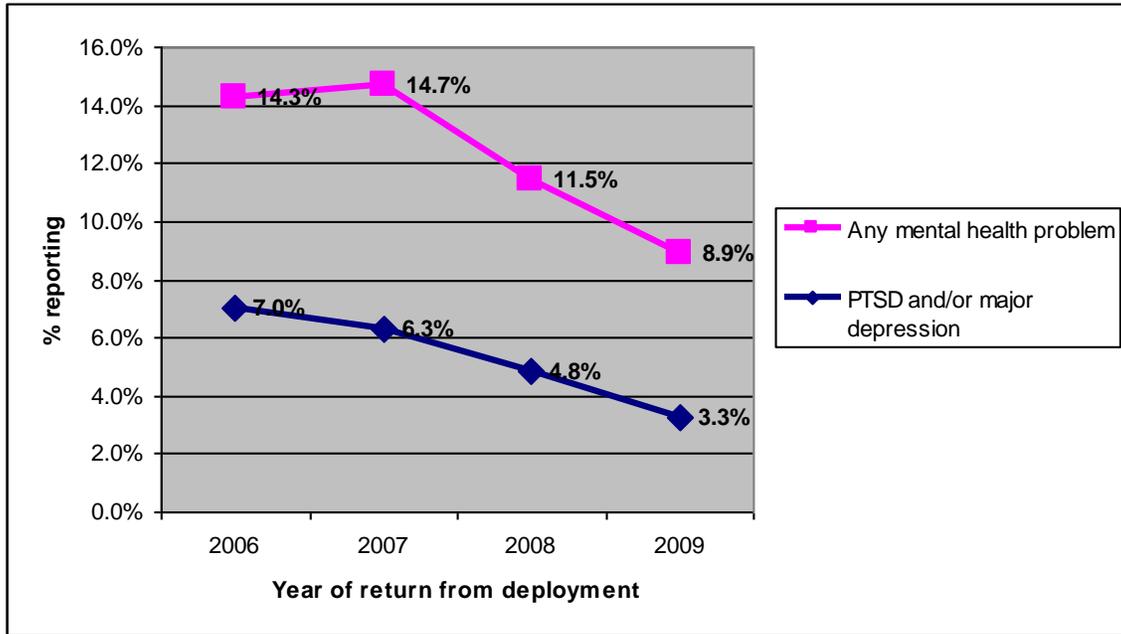
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