https://doi.org/10.34883/PI.2025.16.2.001

Aliyeva G.
Khazar University, Baku, Azerbaijan

The Importance of Mental Health Literacy in the Military Service

Conflict of interest: nothing to declare.

Acknowledgements: the author is deeply appreciative of the soldiers who willing to contribute the research effort, and also the personnel that support the study.
Institutional review board statement: the study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board (or Ethics Committee) of the Khazar University, 2024.
Informed consent statement: informed consent was obtained from all subjects involved in the study.
The article is published in author's edition.

Submitted: 03.02.2025
Accepted: 14.04.2025
Contacts: gulshen.kovser@gmail.com

Abstract

Education, knowledge enhancement, and enlightenment are constantly emphasized in military high schools, military academies and universities. The physical and mental health of soldiers is in the focus of the states.
Mental health state of the soldiers is playing crucial role in the formation of each of these soldiers' personalities and this influence effects the interpersonal relationships among military staff. Stress factor, and the soldiers' coping strategies are one of the main factors that influence effectiveness of military service.
Purpose. The aim of this study to measure stress factor of the soldiers who are serving in the special units of the guard regiment of the Service.
Materials and methods. The measurement scale (Perceived stress scale) was chosen according to the interpretive constructive methodology. It was a population-based, descriptive study of the cohort of 117 soldiers, who were selected based on simple random sampling. The study was realized between February-July in 2024, in Baku.
Results. There is a positive correlation between the items related to being upset, being unable to control the situation, and feeling nervous and stressed (r=0,595**; r=0,372**, r=0,240**, p=0,000). There next positive correlation found among coping difficulties, being outside of their control, pilling up so high problems (r=0,367**; r=0,335**, r=0,484**, p=0,000). It is clear that stress symptoms can significantly affect their interpersonal relationship, and occupational skills and can be observed affecting psychological, emotional, and cognitive aspects. Participating in different traumatizing situations that can occur unpredictably, influences their coping abilities, and managing events.
Conclusion. According to the study, it would be suggested to explore the research in more diverse and large sample of military staff.
Keywords: military service, mental health of soldiers, stress disorder, perceived stress, coping skills, literacy, post-traumatic stress disorders, psychological support

Алиева Г.
Университет «Хазар», Баку, Азербайджан

Важность грамотности в вопросах психического здоровья на военной службе

Конфликт интересов: не заявлен.
Статья опубликована в авторской редакции.

Подана: 03.02.2025
Принята: 14.04.2025
Контакты: gulshen.kovser@gmail.com

Резюме

Образование, повышение знаний и просвещение постоянно подчеркиваются в военных вузах. Физическое и психическое здоровье солдат находится в центре внимания государств.

Состояние психического здоровья солдат играет решающую роль в формировании личности каждого из этих солдат, что влияет на межличностные отношения среди военнослужащих. Фактор стресса и стратегии совладения солдат являются одними из основных факторов, которые влияют на эффективность военной службы.

Цель. Измерение фактора стресса у солдат, служащих в специальных подразделениях охранного полка службы.

Материалы и методы. Шкала измерения (шкала воспринимаемого стресса) была выбрана в соответствии с интерпретационной конструктивной методологией. Это было популяционное, описательное исследование когорты из 117 солдат, которые были отобраны на основе простой случайной выборки. Исследование было реализовано в период с февраля по июль 2024 г. в Баку.

Результаты. Существует положительная корреляция между пунктами, связанными с расстройством, неспособностью контролировать ситуацию и чувством нервозности и стресса (r=0,595**; r=0,372**, r=0,240**, p=0,000). Следующая положительная корреляция обнаружена между трудностями совладания, нахождением вне своего контроля, накоплением больших проблем (r=0,367**; r=0,335**, r=0,484**, p=0,000). Очевидно, что симптомы стресса могут существенно влиять на их межличностные отношения и профессиональные навыки, психологические, эмоциональные и когнитивные аспекты. Участие в различных травмирующих ситуациях, которые могут возникнуть непредсказуемо, влияет на их способность справляться и управлять событиями.

Заключение. Согласно исследованию, было бы предложено изучить данную тему на более разнообразной и большой выборке военнослужащих.

Ключевые слова: военная служба, психическое здоровье солдат, стрессовое расстройство, воспринимаемый стресс, навыки совладания, грамотность, посттравматические стрессовые расстройства, психологическая поддержка

■ INTRODUCTION

SD and PTSD in military personnel are observed in different part of the world, where the war, and military conflicts took place.

Military personnel, and soldiers are among the most at-risk populations for exposure to traumatic events and the development of stress disorder [1]. Moreover, various of research, and articles support the idea that we have a new generation of veterans with high levels of stress, PTSD and related mental health symptoms [2, 3]. Thus, it is of utmost importance to measure mental health of soldiers and realize effective treatment programs for military-related stress disorders, and future post traumatic stress disorders.

The next problem related to stigma. Stigma and organizational barriers have been identified as factors for the reason of psychological support. In the article by Paul Y. Kim and colleagues examined the mental health problems' of soldiers who deployed to Afganistan and Iraq.

During the study researchers asked soldiers with psychological problems questions about stigma, organizational barriers, negative attitudes toward treatment, and whether they sought treatment for their psychological problems. It was found that negative attitudes about psychological problems effected future treatment seeking.

Litz mentioned that after some years operations in Afghanistan and Iraq, the number of military personnel reporting psychological problems upon after the deployment, and these symptoms develop. For the authors opinion it will likely result in a new generation of veterans at risk for chronic mental health problems [4].

Different factors as stressors: being shot at, killing an enemy, or seeing human remains are frequently mentioned by soldiers and its affect their mental health [2, 3, 5]. Indeed, various researches show that military personnel suffer from some type of mental health problem, such as posttraumatic stress disorder (PTSD), major depression, or anxiety 3 to 6 months following after the deployment [2, 3, 5, 6].

Authors reported that these rates tend to increase in the months following deployment [7–10]. Additionally, according to Department of the Army of the USA, additional risks for behavioral health problems were observed majority of soldiers.

Hoge and others reported that only a few soldiers asked professional support, wanted to receive help [2]. Authors mentioned that nearly 23–40% soldiers received psychological help who suffered various mental health problems [2, 3]. But this figure fluctuated between 13 to 27% in the study by Kim and colleagues [11, 12].

According to literature materials the next problem that observed in mental health of military service personnel is stigma. It is the main cause why so few numbers of soldiers seek treatment, or why majority of them avoid psychological service.

What is stigma? – American Psychiatric Association reported that stigma often comes from lack of understanding or fear. Moreover stigma not only directly affects patients who suffer mental health problems, but also the family members, and relatives. Inaccurate or misleading information contribute to this factor. A review of studies on stigma shows that although there are a lot of studies, reports about mental health disorder and the need for treatment, rehabilitation programs, unfortunately many people still have a negative approach of those with mental illness [13]. It was highlighted that racial and ethnic diversity can be next barriers to people who seek mental health service (American Psychiatric Association, 2024) [14]. This fact can be observed in some Asian cultures, related to cultural issues of strong family, emotional restraint and avoiding shame. In

some cases, for some cultures trust problems related to the mental healthcare system can also be a reason of avoiding to ask for psychological and social help.

According to review of research found that self-stigma leads to negative effects on recovery among people diagnosed with severe mental illnesses. These effects can be reducing hope, lower level of self awareness, self-esteem, and difficulties in interpersonal relationships as a kind of isolation, work problems, and increasing psychiatric symptoms (American Psychiatric Association, 2024) [14].

Corrigan and others examined stigma problem in military service officers and soldiers, and concluded that it is operationalized by way of public beliefs, prejudices, and stereotypes that may damage self-esteem and prevent treatment seeking [4, 13]. That research shows that stigma associated with cognitive impairment as incompetency, and generalized sentiments of "badness" [12].

In different years, and different researchers mentioned that soldiers struggle with the stigma associated with admitting psychological difficulties [15]. Britt searched that problem and found significantly relation between stigma and its influence to treatment of psychological problems [5].

During the survey, when the soldiers were asked about treatment, majority of them reported such as "It would be shamecfor them", "I am afraid of other opinion how they will react to me" [4]. According to the study by Kim and colleagues the stigma scores of active duty soldiers were higher than National Guard soldiers, while active duty soldiers refuse to get any professional psychological support [11, 12].

The next challenge and barrier related to psychological service is organizational barriers in the military [5]. These difficulties are related to an appointment, getting time off for treatment, and the cost of mental health care [4, 5]. In this situation like stigma, organizational barriers can adversely impact their quality of life domains, also seeking professional psychological care. Britt et al. (2008) mentioned that organizational barriers to professional care can be reason of depression among soldiers [5].

Fikretoglu, Guay, Pedlar, and Brunet (2008) are the authors of the study that examined Canadian Force members [6]. And, other researchers supported this idea, too. Stecker, Fortney, Hamilton, and Ajzen (2007) found that the belief that related to this situation was the most frequently meet barrier to mental health care among soldiers returned from Iraq. These studies highlight the in some cases the soldiers had negative attitude about mental health care service. They don't believe the effectiveness of this service [2, 3].

When the literature materials were searched on publication about the social and psychological program in Azerbaijan, it was got that within the framework of this package different programs were implemented by the Ministry of Labor and Social Protection of the Population. The figures were summarized in the table:

It is mentioned that social payments aimed at the families of martyrs and those with war-related disabilities have been increased every year, monthly pensions have been assigned to war veterans; In the post-war period, the mentioned social support package covered 124,000 people, and 300,000 support-oriented services were provided to them; (Ministry of Labor and Social Protection of Azerbaijan, 2023) [16].

Majority of the statistics and researches in Azerbaijan were covered social programs, the materials related to psychological service aren't sufficient.

Table 1
After-war support programs' details

Program direction	Results
Social payments	115,000 monthly social payments were assigned to 103,000 members of martyr families and war veterans, insurance payments were made to 3,793 people
Housing program	The housing program for the families of martyrs and persons with war-related disabilities was expanded 5 times, 5,100 apartments and private houses were provided to them, and 324 cars were provided to persons with war-related disabilities (in the past period, 13,900 apartments and private houses were provided to those in these categories, due to the war more than 7,500 cars were given to people with related disabilities)
Social-psychological support and rehabilitation services	Social-psychological support and rehabilitation services (more than 47,500) were provided to 11,000 members of families of martyrs and war participants
Rehabilitation tools	1,963 people with war-related disabilities were provided with 41,300 rehabilitation tools, including 435 people with 454 high-tech modern prostheses
Employment programs	19,200 people, members of families of martyrs and war participants, were provided with employment, including 10,100 people involved in the self-employment program

Research Problem

Studies show that mental literacy in military system is one of the main aspects in the service. Emotional disorders, anxiety, depression, stress, PTSD symptoms, behaviour patterns can be observed in the mental state of the officers and soldiers. However, stigma and different barriers that related to psychological support prevent the soldiers to ask mental service and treatment program. So this problem was examined in this study, and the recommendation according to literature review and survey statistics were prepared for the future researches in this field. The result will help officers, and administration of the military groups to understand the need for mental health service and solve this barrier problems for psychological support.

Research Aim and Questions

In this study we explore perceived stress factor, that is the one of the mental health problems of the soldiers. During the survey the participants were asked some additional question related their approach to mental health care service, and how they seek this help service. Previous literature materials, different studies results were used as supporting sources.

Finally, it was examined the attitudes of soldiers about psychological care service in Azerbaijan.

The first research question (RQ1) is "What is the stress level of the soldiers? How they perceived this stress factor?"

The second question (RQ2) is "Is there any interrelation among stress items? Can they be trigger for each other?"

To answer these questions special questionnaire was chosen and realized with soldiers. The result help the author to get more clear description about their literacy how to seek psychological service.

Research Methodology

The research methods – structure interview was prepared according to interpretive constructive research methodology.

Research Focus

Data from 117 soldiers based on simple random sampling from different active duty teams were collected from multiple sessions in February and July 2024. Firstly the participants were provided with a general description of the study, the aim and the future steps. These sessions included information regarding the ethic rules- anonymity of their responses and confidentiality of the data, so they weren't asked to mention any identifiable information. Then the questionnaires were distributed. The Perceived stress scale is self-report assessment. The assessment tool has been adapted for general population, but it hasn't been standardized for military service, yet.

General background of the method: Structured survey material – The "Perceived stress scale" was used to measure the soldiers' stress level. The Perceived Stress Scale (PSS) is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives.

The tool, while originally developed in 1983, remains a popular choice for helping us understand how different situations affect our feelings and our perceived stress [17]. The questions in this scale ask about the patients' feelings and thoughts during the last month. In each case, they will be asked to indicate how often they felt or thought a certain way. Although some of the questions are similar, there are differences between them and the participants should treat each one as a separate question. The best approach is to answer fairly quickly. That is, the participants were asked not to try to count up the number of times they felt a particular way; rather indicate the alternative that seems like a reasonable estimate.

The items are easy to understand, and the response alternatives are simple to grasp. Moreover, the questions are of a general nature and hence are relatively free of content specific to any subpopulation group. The questions in the PSS ask about feelings and thoughts during the last month. In each case, respondents are asked how often they felt a certain way.

Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress [17].

- Scores ranging from 0–13 would be considered low stress.
- Scores ranging from 14–26 would be considered moderate stress.
- Scores ranging from 27–40 would be considered high perceived stress.

Limitation

The study material has some limitations, first of them related to number of the participants. The limited group of the soldiers were group members of them. The next limitation is the study prevents the survey results about perceived stress symptoms of the soldiers. Other psychological issues, stigma, and other mental health problems can be examined in future researches.

■ RESULTS AND CONCLUSION

As it mentioned the participants were 117 soldiers. But when the survey result were analyzed 3 of them were invalid, so 114 survey materials were examined, and added to SPSS program. Each of the 10 items, and total score as scale and ordinal measure form signed. The total score were fluctuated between 0 and 37 (Mean+SD 14,7±8,4). Moreover these figures were mentioned from low level till high level of perceived stress symptoms. The results were described in following table.

When it was described according to the level of perceived stress, 46,5% of participants results were moderate level of stress symptoms. The results were shown in the bar chart.

According to SPS questionnaire each of the questions results were examined and described in the following charts.

The first question is "In the last month, how often have you been upset because of something that happened unexpectedly?". The half of the participants (50%) mentioned that it had never happened in their lives, but 12,3% of the soldiers noted fairly often and often frequencies.

The third question is related to feeling nervous and stress and the result were described in the following bar chart. Analyzing the figures, totally 27.2% mentioned that they didn't feel (never and almost never) nervous and stressed in their last month. But majority of them 35,1% and 30.7% of them noted that these facts had happened sometimes and often in their daily lives.

Some of the items (2, 6, 9, 10) described the participants approach how they can manage stressful events in their lives, and their coping difficulties. The results were shown in the following pictures.

2. In the last month, how often have you felt that you were unable to control the important things in your life?

6. In the last month, how often have you found that you could not cope with all the things that you had to do?

9. In the last month, how often have you been angered because of things that happened that were outside of your control?

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? (According to Sh. Cohen).

Table 2
The Distrubution of PSS results

N	114
Missing	0
Mean	14,7807
Median	14,0000
Mode	17,00
Std. Deviation	8,14553
Skewness	0,516
Std. Error of Skewness	0,226
Kurtosis	–0,123
Std. Error of Kurtosis	0,449
Minimum	0,00
Maximum	37,00

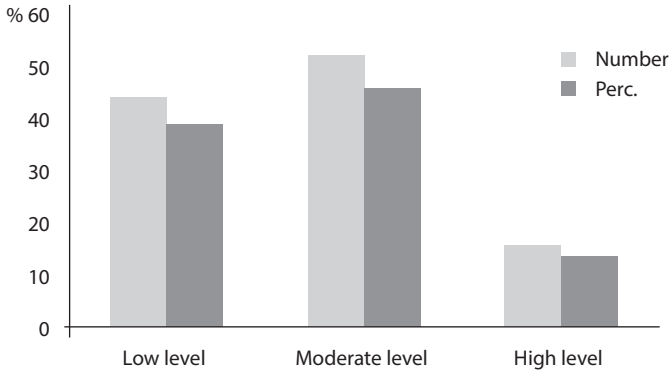

Fig. 1. Level of perceived stress scale

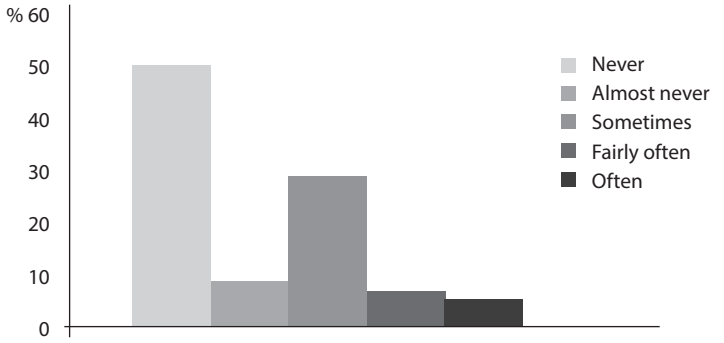

Fig. 2. In the last month, how often have you been upset because of something that happened unexpectedly?

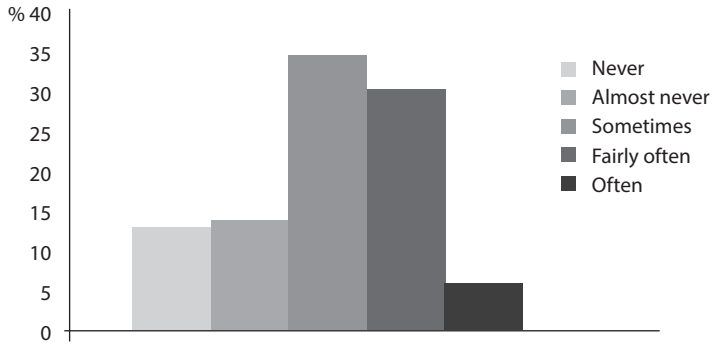

Fig. 3. In the last month, how often have you felt nervous and stressed?

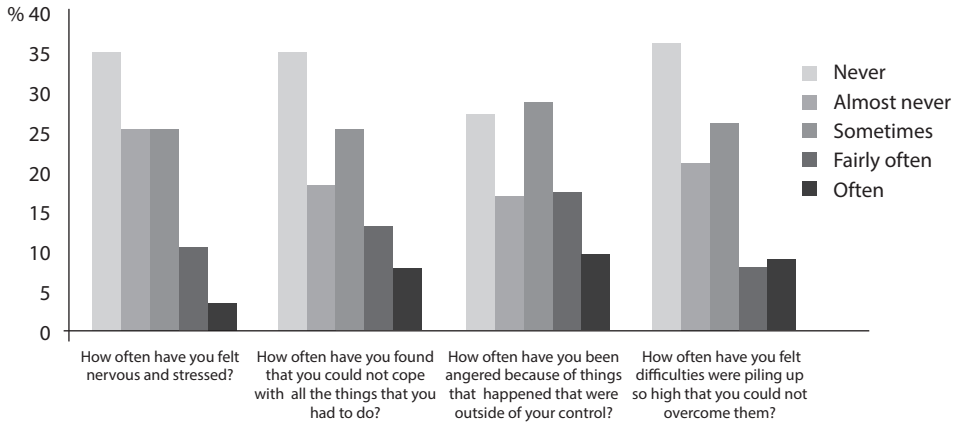

Fig. 4. Stressful events managing features

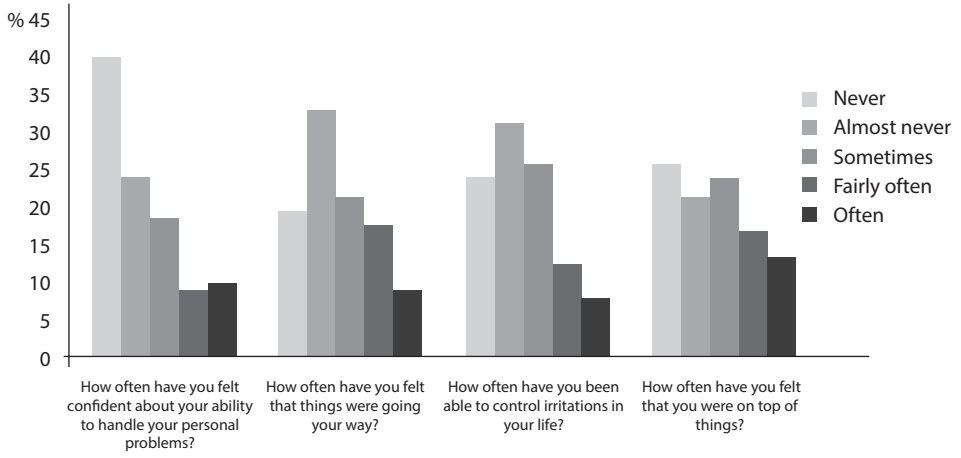

Fig. 5. Successful handle stressful situation, controlling, and coping abilities

The next questions number 4, 5, 7 and 8 are revised questions that help the psychologist to check participants approach to the same situation from opposite side. These items includes how the participants are successful handle stressful situation, controlling, and coping abilities.

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

5. In the last month, how often have you felt that things were going your way?

7. In the last month, how often have you been able to control irritations in your life?

8. In the last month, how often have you felt that you were on top of things? (According to Sh. Cohen).

CONCLUSIONS AND IMPLICATIONS

While comparing the statistics with the same content, there was contradiction. 7,9% of the participant mentioned that they couldn't cope the difficult situations (question 6), it often happened in their lives, and 35,1% mentioned it never happened. But for the same content 39,5% of them answered they never felt confident to handle personal problems, while only 9,6% of them thought they often handle their personal issues (question 4). 54,4% of them mentioned they never, almost never were able to control irritation in their lives (question 7). The perceived stress figures were were mentioned from low level till high level of perceived stress symptom (14,7±8,4) (RQ1).

There is positive correlation between the items related to being upset, being unable to control the situation and feeling nervous and stress (r=0,595**; r=0,372**, r=0,240**, p=0,000). There next positive correlation found among coping difficulties, being outside of their control, pilling up so high problems (r=0,367**; r=0,335**, r=0,484**, p=0,000) (RQ2).

According to literature review and PSS results, it can be summarized that stress symptoms can significantly disrupt their interpersonal and occupational skills and can be observed affecting psychological, emotional, cognitive aspects. Participating in different traumatizing situation that can occur unpredictably, influence their coping abilities, and managing events.

Pharmacotherapy, non-pharmacological therapy, combination therapies can be used as a treatment program. According to Marlyn J. Moore treatment for PTSD should be initiated soon after diagnosis when symptoms have persisted for at least 4 weeks, although most of the patients present with the symptoms months or years later. First-line treatment primarily involves psychotherapy, while medications can be considered a reasonable alternative or adjunctive strategy based on patient preference or when psychotherapy is not accessible [18, 19]. Authors mentioned that successful PTSD psychotherapies include exposure therapy, cognitive processing therapy (CPT), trauma-focused cognitive behavioral therapy (TF-CBT), and eye-movement desensitization and reprocessing (EMDR).

These intervention programs should involve the patient and, after the some sessions if it is appropriate, the family members can be involved to the program, as part of the treatment team [20, 21]. Because the soldiers need social support for recovery of these disorders. Employing these methods, and asking family members support will lead to better patient outcomes.

Suggestions for Future Research

Summarizing literary review and the study material some of the suggestion have been made for future research and military service psychologist. It can be helpful for next researches, too. The first of the is to solve awareness and literacy problem. Each of the officers need to get information about mental health service, in this case they can differentiate soldiers' mental issues, and offer them psychological support. This approach can handle the barrier, and stigma about how to seek psychological service.

Prevention is a set of strategies, special part of treatment, aimed at achieving a state of good psychological health, particularly in the context of population mental health. For soldiers with some mental disorders, treatment should include prevention elements to lower the likelihood of relapse as well as associated negative outcomes. Universal prevention strategies should be offered to the soldiers groups. Selective prevention

strategies can be targeted to subpopulations identified as being at elevated risk for a disorder, for example, those being deployed to a war zone.

■ REFERENCES

1. Prigerson HG, Maciejewski PK, Rosenheck RA. Population attributable fractions of psychiatric disorders and behavioral outcomes associated with combat exposure among US men. *American journal of public health.* 2002 Jan;92(1):59–63. Available at: https://doi.org/10.2105/AJPH.92.1.59
2. Hoge CW, Auchterlonie JL, Milliken CS. Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Jama*. 2006 Mar 1;295(9):1023–32. Available at: https://doi.org/10.1001/jama.295.9.1023
3. Hoge CW, Grossman SH, Auchterlonie JL, et al. PTSD treatment for soldiers after combat deployment: Low utilization of mental health care and reasons for dropout. *Psychiatric services.* 2014 Aug;65(8):997–1004.
4. Litz BT, Engel CC, Bryant RA, Papa A. A randomized, controlled proof-of-concept trial of an Internet-based, therapist-assisted self-management treatment for posttraumatic stress disorder. *American journal of psychiatry.* 2007 Nov;164(11):1676–84. Available at: https://doi.org/10.1176/appi.ajp.2007.06122057
5. Bray RM, Pemberton MR, Hourani LL, et al. 2008 Department of Defense survey of health related behaviors among active duty military personnel. Report prepared for TRICARE Management Activity, Office of the Assistant Secretary of Defense (Health Affairs) and US Coast Guard. 2009 Sep. Available at: https://apps.dtic.mil/sti/citations/ADA465678
6. Fikretoglu D, Guay S, Pedlar D, Brunet A. Twelve month use of mental health services in a nationally representative, active military sample. *Medical care*. 2008 Feb 1;46(2):217–23. DOI: 10.1097/MLR.0b013e31815b979a
7. Thomas JL, Adrian AL, Penix EA, Wilk JE, Adler AB. Mental health literacy in US soldiers: Knowledge of services and processes in the utilization of military mental health care. *Military Behavioral Health.* 2016 Apr 2;4(2):92–9. Available at: https://doi.org/10.1080/21635781.2016.1153541
8. Thomas JL, Adrian AL, Wood MD, et al. Mental health and stress among army civilians, spouses, and soldiers in a closing military community. *Armed Forces & Society.* 2019 Oct;45(4):612–36. Available at: https://doi.org/10.1177/0095327X18771004
9. Wright KM, Cabrera OA, Bliese PD, Adler AB, Hoge CW, Castro CA. Stigma and barriers to care in soldiers postcombat. *Psychological Services*. 2009 May;6(2):108. Available at: https://doi.org/10.1037/a0012620
10. Williams J, Brown JM, Bray RM, et al. Unit cohesion, resilience, and mental health of soldiers in basic combat training. *Military Psychology.* 2016 May 16;28(4):241–50. Available at: https://doi.org/10.1037/mil0000120
11. Kim PY, Thomas JL, Wilk JE, et al. Stigma, barriers to care, and use of mental health services among active duty and National Guard soldiers after combat. *Psychiatric Services.* 2010 Jun;61(6):582–8. Available at: https://doi.org/10.1176/ps.2010.61.6.5
12. Kim PY, Britt TW, Klocko RP, et al. Stigma, negative attitudes about treatment, and utilization of mental health care among soldiers. *Military psychology.* 2011 Jan 1;23(1):65–81. Available at: https://doi.org/10.1080/08995605.2011.534415
13. Corrigan PW, Mittal D, Reaves CM, Haynes TF, Han X, Morris S, Sullivan G. Mental health stigma and primary health care decisions. *Psychiatry research.* 2014 Aug 15;218(1–2):35–8. Available at: https://doi.org/10.1016/j.psychres.2014.04.028
14. American Psychiatric Association, 2024. Available at: https://www.psychiatry.org/
15. Britt TW, Adler AB, Bliese PD, Moore D. Morale as a moderator of the combat exposure-PTSD symptom relationship. *Journal of Traumatic Stress.* 2013 Feb;26(1):94–101. Available at: https://doi.org/10.1002/jts.21775
16. Ministry of Labour and Social Protection of Population of the Republic of Azerbaijan. Available at: https://sosial.gov.az/?hl=en
17. Cohen S, Williamson G. Perceived stress in a probability sample of the US In The Social Psychology of Health: Claremont Symposium on Applied Social Psychology; Spacapam, S., Oskamp, S., Eds.
18. Moore MJ, Shawler E, Jordan CH, Jackson CA. Veteran and military mental health issues. InStatPearls [Internet] 2023 Aug 17. StatPearls Publishing. Available at: https://www.ncbi.nlm.nih.gov/sites/books/NBK572092/
19. Naifeh JA, Colpe LJ, Aliaga PA, et al. Barriers to initiating and continuing mental health treatment among soldiers in the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS). *Military medicine.* 2016 Sep 1;181(9):1021–32. Available at: https://doi.org/10.7205/MILMED-D-15-00211
20. Rae Olmsted KL, Brown JM, Vandermaas-Peeler JR, et al. Mental health and substance abuse treatment stigma among soldiers. *Military Psychology*. 2011 Jan 1;23(1):52–64. Available at: https://doi.org/10.1080/08995605.2011.534414
21. Silverman JJ, Galanter M, Jackson-Triche M, et al. The American Psychiatric Association practice guidelines for the psychiatric evaluation of adults. *American Journal of Psychiatry.* 2015 Aug 1;172(8):798–802. Available at: https://doi.org/10.1176/appi.ajp.2015.1720501