

Psychosocial aspects of participation of the Polish Armed Forces in combat missions

Beata Karakiewicz¹, Beata Rozmarynowska², Monika Paszkiewicz¹,
Paulina Zabielska¹

¹Chair and Department of Public Health, Pomeranian Medical University in Szczecin

²Student Scientific Association at the Chair and Department of Public Health,
Pomeranian Medical University in Szczecin

Summary

Aim. The military service of Polish soldiers on missions abroad began in 1953. Many years of experience of the Polish army as well as the armed forces of other countries show that being in a mission area has a significant impact on soldiers' mental health. Soldiers experience problems with anxiety disorders, depression and posttraumatic stress, which is associated with a difficult return to family life. The aim of the paper was to analyze psychosocial aspects of participation of the Polish Armed Forces in combat missions outside the country.

Material and methods. The study involved a group of 102 soldiers serving in the Military Unit No. 4092 in Walcz, Military Unit No. 4094 in Walcz, and the Military Academy of Land Forces in Wrocław. All subjects are veterans of missions outside Poland. The research method was the diagnostic survey method. Three standardized research tools were used: the State-Trait Anxiety Inventory (STAI), NEO-FFI Personality Inventory, Beck's Depression Scale, and the author's questionnaire.

Results. The studies have shown relationships between the level of anxiety in soldiers – veterans of missions abroad and strong battlefield stressors to which they had been subjected, and their family situation and non-institutional methods of psychological support they had received during their stay in the mission area. During the studies a factor was distinguished that contributes to the feeling of incomprehension of soldiers by their relatives after returning home.

Conclusions. 1. A higher level of anxiety is observed in soldiers who had experienced life-threatening situations during their missions. 2. Having children is a factor that increases the level of anxiety in veterans on missions abroad. 3. Regular contact with families left behind in the country is associated with a lower sense of fear in soldiers.

Key words: soldier, mission, anxiety, depression, personality

Introduction

The Polish Armed Forces has been an active participant in missions in international structures for several decades [1]. At first, Polish soldiers participated as observers but as years passed their role has evolved, which was influenced by changes in global politics and the emergence of new threats, especially terrorism. More than 100,000 people participated in over 80 combat missions (soldiers and civilian army staff) [2, 3].

So far, 120 Polish soldiers were killed in combat missions outside the territory of Poland [4]. There is no accurate data on the subject of health effects of participation in missions but it is estimated that by the year 2002, approximately 400 people who had participated in combat missions experienced health damage, injuries, and even disability. Another 400 Polish soldiers were injured as a result of the conflicts in Iraq and Afghanistan. Moreover, there is no reliable data on the psychological trauma. Estimates show that approximately 10% of veterans experience symptoms of posttraumatic stress disorder – PTSD. For medical reasons, 1.5% of soldiers from every 1,000 in Afghanistan were rotated. 0.05% of soldiers from every 2,000 – due to posttraumatic mental disorders. In this case, the real number may be higher, since it is allowed to rotate a soldier from the region of mission at the soldier's request [5].

Since July 2005, the Psychiatry and Combat Stress Clinic at Szaserow Street in Warsaw has treated 206 soldiers. The total number of hospital admissions in our country was approximately 300. The first studies on posttraumatic stress in Poland were carried out in the above-mentioned clinic. More than 160 soldiers (former soldiers), participants of peacekeeping missions, were interviewed. Only 10% of them admitted having problems in their family and professional life [6].

Many years of experience of the Polish Armed Forces in formation of sub-units to serve in the Polish Military Contingents showed that a proper selection and mental preparation of soldiers to serve outside the country is very important. This facilitates adaptation to mission conditions to a great extent and improves communication between soldiers at the time of delegation. For this purpose, in 2010, at the initiative of the Ministry of National Defense, a psychological protection program for participants of missions outside the country and their families was created. It includes both departing soldiers and their families who stay in Poland [7, 8]. Psychological and preventive activities during a mission are especially important because they take place at the same time the stressors are active. Soldiers in combat zones are accompanied by a psychological prevention consultant who works individually and in groups with mission participants [8–10].

Numerous clinical observations and results of research conducted on veterans of the Vietnam War, as well as victims of the Holocaust, gave birth to the term PTSD – posttraumatic stress disorder. The diagnosis was introduced into the DSM – the Diagnostic and Statistical Manual of Mental Disorders – by the American Psychological Association in 1980. DSM-IV [11] defines the following criteria for PTSD: exposure

to life-threatening experience; repetition of trauma; persistent avoidance or reduction of overall reactivity; persistent symptoms of increased arousal [12, 13].

PTSD is a mental disorder from the group of anxiety disorders, the source of which is a deeply traumatic experience that may constitute a serious threat to life or health. In the current assumptions of the military-medical doctrine in the Polish Armed Forces, it is assumed that psyche-related health loss in military operation zones may concern only 0.1–1% of soldiers. Other assumptions by NATO armies show that cases of stress on the battlefield may concern approximately 20% of health loss [6].

Two types of tools are used for PTSD measurement – structured interview and standardized self-assessment questionnaires. Interview is a better way to measure the level and intensity of posttraumatic reactions, however it can be used only by psychiatrists and clinical psychologists, after appropriate training. Interview is also a long-term method, the time of its implementation is from 1 to 2 hours. It is therefore more common to use standardized questionnaires that are useful for studying the stress associated with various traumatic situations [14].

Mission areas have various types of stressors. Some of them, which are very strong, can be overpowering. They are most often associated with the fear of own death or the death of others, because it is often a violent death or death associated with extreme physical pain. Other stressors are weaker, often subtle but long-lasting. Their effects accumulate in the body and can weaken the body's defense mechanisms. There are often situations where a relatively minor event, e.g., a quarrel with a friend or a small health problem, can be the cause of a behavior that is inappropriate to a given situation, for example, aggression [8, 15].

Aim

The aim of the paper was to analyze psychosocial aspects of participation of the Polish Armed Forces in combat missions outside the country.

Material and method

The study involved a group of 102 soldiers – veterans of missions outside Poland serving in Military Unit No. 4092 in Walcz (46 people; 45.1%), Military Unit No. 4094 in Walcz (16 people; 15.7%), and the Military Academy of Land Forces in Wrocław (MALF) – 40 (39.2%). At the MALF the study included participants of courses held at the school. Socio-demographic data for the study group is shown in Table 1.

Table 1. Socio-demographic data for the study group

Socio-demographic data	n	%
Gender		
Woman	8	7.8
Man	94	92.2

table continued on the next page

Place of residence		
Village	17	16.7
City up to 50,000 residents	39	38.2
City over 50,000 residents	46	45.1
Level of education		
Higher	58	56.9
Secondary	44	43.1
Marital status		
Divorced	11	10.8
Married	67	65.7
Single	13	12.7
Casual relationship	11	10.8
Children		
Yes	91	89.2
No	11	10.8
Structure of the respondents' membership of the Polish Armed Forces corps		
Privates	5	4.9
Non-commissioned officers	69	67.6
Officers	28	27.5
Participation in a combat mission		
1 mission	33	32.4
2 missions	27	26.5
3 missions	20	19.6
4 missions	22	21.6

The study was performed using the diagnostic survey method. The State-Trait Anxiety Inventory (STAI), NEO-FFI Personality Inventory, Beck Depression Inventory, and the author's questionnaire were used. The collected material was subjected to a statistical analysis using the SPSS statistical bundle, version 15. The significance of probability was at the level of $p < 0.05$.

Results

The results of the NEO-FFI and the STAI (X-1, X-2) for the entire sample were shown in tables illustrating the frequency of distribution (Tables 2 and 3).

Table 2. Results of the NEO-FFI

Name	Mean	Std. Dev.	Min.	Max.	n	KS statistics	Significance of the KS test	Skewness	Kurtosis
Neuroticism	3.873	1.633	1	7	102	1.403	0.039	-0.055	-0.71
Extraversion	7.000	1.791	1	10	102	1.683	0.007	-0.538	0.54
Openness to experience	5.225	1.723	1	9	102	1.356	0.051	-0.026	-0.42
Agreeableness	5.451	2.003	1	10	102	1.296	0.070	0.119	-0.30
Conscientiousness	7.157	1.892	2	10	102	1.522	0.019	-0.257	-0.14

Table 3. Results of the STAI

Name	Mean	Std. Dev.	Min.	Max.	n	KS statistics	Significance of the KS test	Skewness	Kurtosis
State anxiety(X-1)	32.94	8.67	20	56	102	0.693	0.722	0.346	-0.51
Trait anxiety(X-2)	35.65	8.15	20	56	102	0.793	0.556	0.304	-0.37

The studies have shown that the incidence of sense of increased symptoms of depression as a mild depressive episode was 5.9%. More serious forms of depression have not been observed (Table 4).

Table 4. The incidence of sense of increased symptoms of depression in the entire sample

Variable	Mild depressive episode		No depression		Total
	n	%	n	%	n
Sense of increased symptoms of depression	6	5.9%	96	94.1%	102

To determine the psychological support that the respondents had had while on a mission, both the institutional support (a psychologist), as well as the non-institutional support (brothers in arms and family in Poland), the respondents identified the type of obtained help. As much as 92.2% of the respondents was in regular contact, at least 3 times a week, with close ones. The majority of the respondents (54.9%) reported having received peer support, and 12.7% received counseling from a psychologist (Table 5).

Table 5. Types of psychological support received by the respondents

Variable	Yes		No		Total
	n	%	n	%	n
Maintained regular contact with family	94	92.2	8	7.8%	102

table continued on the next page

Was supported by brothers in arms in difficult times	56	54.9	46	45.1%	102
Consulted a psychologist	13	12.7	89	87.3%	102

The respondents mentioned all types of support they received

To determine whether the respondent had been subjected to strong stressors during their missions, the respondents were asked about a number of possible events during their stay in the area of operations. The vast majority of soldiers had to leave the base, which was associated with an increased risk of injury or death (97.1%). What is more, most soldiers (88.2%) were exposed to stress due to their bases being under attack. A total of 85.3% of the respondents feared for their life at least once. Almost a half (41.2% and 39.2%) witnessed the injury or death of a comrade or a civilian. A total of 21.6% of the respondents lost a comrade during missions outside Poland. Wounded soldiers in the course of military activities accounted for 5.9% of the respondents. In the studied group 2 (1.9%) respondents admitted that they had been diagnosed with PTSD (Table 6).

Table 6. **Strong stressors to which soldiers were subjected during a mission**

Variable	Yes		No		Total
	n	%	n	%	n
Left the base	99	97.1	3	2.9	102
The base was attacked	90	88.2	12	11.8	102
Experienced a life threatening situation at least once	87	85.3	15	14.7	102
Was wounded	6	5.9	96	94.1	102
Witnessed the injury or death of a brother in arms	42	41.2	60	58.8	102
Witnessed the injury or death of a civilian	40	39.2	62	60.8	102
His comrade died	22	21.6	80	78.4	102
Felt the need to immediately return home	6	5.9	96	94.1	102

multiple choice

The relationship between the level of anxiety (state and trait) and stressors was examined. It has been shown that the effect of strong stressors associated with risk to health, life and risk of death, influences the level of anxiety (Table 7).

Table 7. The relationship between stressors and anxiety

	Did he experience a life threatening situation at least once? (with state anxiety)		Did he experience a life threatening situation at least once? (with trait anxiety)		His comrade died (with state anxiety)
	No	Yes	No	Yes	Did not die
Mean	26.4	34.1	30.1	36.6	33.8
Standard deviation	6.5	8.5	6.3	8.1	8.5
Significance of the Levene's test	0.221		0.232		0.860
Variances in both groups are	equal		equal		equal
t-statistics	-3.32		-2.98		1.99
Degrees of freedom	100		100		100
Cohen's d	-2.11		-1.85		0.53
Significance of the t-test(two-tailed)	0.0013		0.0036		0.0490
95% confidence interval of difference	min.	-12.3		-10.9	0.0
	max.	-3.1		-2.2	8.2

The relationship between the level of anxiety (state and trait) and having children was examined. It has been shown that having children increases the level of anxiety in soldiers (Table 8).

Table 8. The relationship between anxiety and having children

Name	Mean	Std. Dev.	Min.	Max.	n	KS statistics	Significance of the KS test	Skewness	Kurtosis
State anxiety(X-1)	32.94	8.67	20	56	102	0.693	0.722	0.346	-0.51
Trait anxiety(X-2)	35.65	8.15	20	56	102	0.793	0.556	0.304	-0.37

The relationship between the level of anxiety (state and trait) and mental support was examined. It has been found that soldiers who maintained regular contact with home while on a mission, having emotional support from their loved ones, show a lower level of state and trait anxiety (Table 9).

Table 9. The relationship between mental support and anxiety

SUPPORT OF COMRADES IN DIFFICULT TIME									
Variable	No		Yes		Significance of the Levene's test	Variances in both groups	t-statistics	Cohen's d	Significance of the t-test (two-tailed)
	Mean	Std. Dev.	Mean	Std. Dev.					
State anxiety	32.70	9.72	33.14	7.78	0.109	equal	-0.26	-0.07	0.7968
Trait anxiety	36.04	8.89	35.32	7.55	0.339	equal	0.44	0.11	0.6584
CONSULTATION WITH A PSYCHOLOGIST									
Variable	No		Yes		Significance of the Levene's test	Variances in both groups	t-statistics	Cohen's d	Significance of the t-test (two-tailed)
	Mean	Std. Dev.	Mean	Std. Dev.					
State anxiety	32.62	8.83	35.15	7.32	0.524	equal	-0.99	-0.30	0.3268
Trait anxiety	35.63	8.23	35.77	7.85	0.859	equal	-0.06	-0.02	0.9542
IRREGULAR AND REGULAR CONTACT WITH HOME									
Variable	Irregular		Regular		Significance of the Levene's test	Variances in both groups	t-statistics	Cohen's d	Significance of the t-test (two-tailed)
	Mean	Std. Dev.	Mean	Std. Dev.					
State anxiety	41.5	10.9	32.2	8.1	0.180	equal	3.02	2.33	0.0032
Trait anxiety	44.1	10.4	34.9	7.6	0.184	equal	3.20	2.41	0.0018

It was verified whether there were significant differences in the number of missions in the group of men and women. Significant differences were not demonstrated ($p = 0.125$). The relationship between the number of missions and the severity of depression was studied. The number of missions does not affect the incidence of severe depressive symptoms (Table 10). The relationship between the number of missions and the sense of fear has also been verified. Also in this case no relation was found ($p = 0.873$).

Table 10. Relationship between the number of missions and the sense of increased depressive symptoms

Number of missions		Beck Depression Inventory	
		No depression	Mild depressive episode
1	n	33	0
	%	100.00	0.00
2	n	25	2
	%	92.59	7.41
3	n	17	3
	%	85.00	15.00
4 and more	n	21	1
	%	95.45	4.55
Total	n	96	6
	%	94.12	5.88

Mann-Whitney *U* Test; $Z = -1.3$; $p = 0.194$

Discussion

Due to the nature of their work, soldiers who serve in the army are likely to experience a variety of stressful situations. The causes of stress, and the resulting disorders, may vary depending on whether a soldier is on duty within the boundaries of their own country or abroad. The studies have shown that the incidence of sense of increased symptoms of depression was 5.9%. More serious forms of depression did not occur. To determine whether the respondent had been subjected to strong stressors during his/her missions, the respondents were asked about a number of possible events during their stay in the area of operations. The vast majority of soldiers had to leave the base, which was associated with an increased risk of injury or death (97.1%). What is more, most soldiers (88.2%) were exposed to stress due to their bases being under attack. A total of 85.3% of the respondents feared for their life at least once.

Purcell et al. [16], in their study, interviewed 26 veterans about the effects of murder on their lives. Interviews show that killing provokes moral conflict with a permanent impact on their sense of self, spirituality, and relationships with others. The studies by Rychcińska et al. [17] have demonstrated the differences between the sources and the intensity of stress that occurs in the conditions of service in the Republic of Poland and those that occur in soldiers who participate in stabilization or peace missions. The subjects were participants of the Polish Military Contingent who had the opportunity to serve in both environments, taking part in missions in Chad, Lebanon, Iraq or Afghanistan. Attention was paid to such aspects as general conditions of military service, healthcare, compensation, and sense of safety. What is more, to identify stress

factors that occur in conditions of service abroad, the following criteria were adopted: concerns that are associated with worsening relations with the family; assessment of access to sanitary facilities; assessment of quality and organization of nutrition; inconvenience related to the weather; concerns associated with threats sourced in the local population; environmental hazards; and fear of threats related to military service outside Poland. Due to the participation of the Polish Military Contingent in missions outside the country, long-term effects of strong stress, which is associated with participation in military missions, have recently been the subject of interest.

At present, the phenomenon of increased posttraumatic stress is observed, which is studied in the case of Polish soldiers who participate in missions outside the country, and understood as a very positive change – the result of an obviated crisis (e.g., surviving a traumatic situation on the battlefield) the effect of which is not the return to the state from before the event but an increase in psychosocial competencies, and a qualitative change in functioning [18]. Without a doubt, the disorganizing and destructive power of stress, underlying many psycho-emotional disorders, must be mentioned. According to Korzeniowski [19], as many as 200 soldiers who participated in the Iraqi Freedom mission in 2004 experienced psychological difficulties associated with participation in the operation, and 91 of them were diagnosed for PTSD. This data has been challenged by other researchers of this issue who emphasize that these indications were the result of an incorrect diagnosis which does not refer to DSM-IV or ICD-10 [19–21]. Post-traumatic stress includes long-term psychological changes that develop from approximately a few days up to 6 months (or even longer) after a traumatic event. The most common symptoms include recurrent images, intrusive thoughts and nightmares, as well as constant fear, insomnia, and inability to concentrate. A specific symptom which shows the strength of trauma is the so-called phenomenon of dissociation, i.e., orientation disorders, a feeling of unreality, stupor, and even disturbance of consciousness [16, 22–25]. Therefore, the practical application of aids preventing different effects of war trauma in the Armed Forces should routinely cover the richest possible practical programs, before a soldier is sent to serve beyond the borders of his/her country. A matter of urgency is to provide soldiers with appropriate support after returning from missions outside the country, but most of all – before they are affected by traumatic events and their consequences.

While analyzing the cases and statistics of soldiers with symptoms of combat stress, returning from military missions, a growing concern is aroused by the fact that it is possible that the protection of mental health at the moment is inadequate. In most instances, such cases have so far been treated in hospitals, with the use of medication and psychotherapy. Unfortunately, this occurs when the symptoms become more severe [24, 26].

At the Psychiatry and Combat Stress Clinic, approximately 60% of patients are soldiers, of whom approximately 40% are veterans of the Polish Military Contingent. From January 2006 to June 2012, the Clinic treated 260 soldiers, some of them had been treated several times. Anxiety disorders were diagnosed in approximately 38.9%

of veterans, and adjustment disorders in approximately 26.9%, whereas neurotic disorders and somatic disorders in approximately 19.6%. An important factor that affects the motivation of veterans to treat themselves, especially in military psychiatric institutions, is the fear of the stigma of a mentally ill person, and negative effects of this stigma on their military careers [24, 27, 28].

Interpersonal difficulties in veterans diagnosed with PTSD are directly related to difficulties in their relationships with family members. Ruscio et al. [29] believes that children of Vietnam veterans, compared to children whose fathers did not participate in war, have more problems with their behavior and show a lower self-esteem, aggressive behaviors, poorer social relationships, and have an ambivalent attitude towards their mothers. These children perceive their families as less closer to each other, and assess communication as vague and evasive, as well as indirect. Other studies have shown that children of veterans diagnosed with PTSD have a more negative view of the world and more unpleasant mental experiences than children of veterans without PTSD. According to Pospiszyl [30], fathers – veterans diagnosed with PTSD – tend to spoil their children, especially daughters.

Every soldier who goes on a mission and returns, undergoes health tests, however, a questionnaire that relates to mental health has been introduced quite recently. Unfortunately, not all soldiers who return from a mission admit having health problems. Experts agree that military service on missions is destructive to the human psyche and a person becomes less resistant to stress [30]. Studies of Lipari et al. [31], conducted among 2,100 fathers – veterans and 13,100 non-war veterans showed that children of the former ones smoked cigarettes and used psychoactive substances more often. Fathers who are not veterans talked more often with their children about the dangers of using psychoactive substances.

Military missions last for six months, however, after returning home men have difficulties adapting to normal life. For the initial period after returning home, a father/husband is a stranger – a family has already gotten used to living without him. Their wives believe they also have PTSD because living with a traumatized man is impossible to bear.

In order to determine psychological support that the respondents had had while on a mission, both the institutional support (a psychologist), as well as the non-institutional support (brothers in arms and family in Poland), the respondents identified the type of obtained help. As much as 92.2% of the respondents was in regular contact with close ones (at least 3 times a week). A few psychologists have gone to Iraq on missions (approximately one per 400 men). For the one-hundred-thousand Polish army, there are 350 mental health specialists, which is too few.

A mission is a stressful experience for every soldier because it involves service-related responsibilities, completion of objectives in life-threatening situations, being in a different (in terms of culture) environment, and in a different climate, far from their loved ones. It also happens that stress exceeds a soldier's adaptive capabilities, becoming the so-called traumatic stress, and a specific form of combat trauma. Tworus

[32] says that any change in the behavior of a soldier on his return from a mission should be considered a reason for seeing a specialist.

Conclusions

1. The level of anxiety is noticeably higher in soldiers who experienced a traumatic stressor, such as a life-threatening situation. Therefore, such persons should be under special supervision of a psychologist and an Immediate Psychological Support Team, which also includes a nurse.
2. Having children increases the level of anxiety in soldiers leaving on a mission, which is an indication to provide support for his family remaining in the country and arousing a sense of confidence of that fact among soldiers.
3. Maintaining regular contact with the family unit during a mission reduces anxiety levels, therefore focus should be put on allowing soldiers to maintain such contacts, providing appropriate technical measures.

References

1. *Polacy w służbie pokoju 1953–2003*. Warsaw: CB Publishing house; 2003.
2. Kowalczyk R. *Rola i zadania kontyngentu Wojska Polskiego w operacji pokojowej UNEF II*. In: *Wojsko Polskie w międzynarodowych operacjach pokojowych i stabilizacyjnych*. Warsaw: National Defense Academy; 2011.
3. Politowski B. *Na obczyźnie dla ojczyzny*. Polska Zbrojna. Kurier Weterana 2 „Nikt nie zostaje”. Warsaw: Military Publishing Institute; 2012.
4. *Wojsko pamięta o poległych na misjach*. <http://www.polska-zbrojna.pl/home/articleshow/18007> (retrieved: 6.01.2016).
5. Ilnicki S. *Doświadczenia Kliniki Psychiatrii i Stresu Bojowego Wojskowego Instytutu Medycznego w leczeniu weteranów Polskich Kontyngentów Wojskowych*. Conference materials, 1.12.2011.
6. Zawisza A. *Misja się kończy, trauma zostaje*. Tygodnik Przegląd, 4th March 2012. <http://www.tygodnikprzeglad.pl/misja-sie-konczy-trauma-zostaje/> (retrieved: 26.04.2016).
7. *Program osłony uczestników misji poza granicami państwa i ich rodzin*. Warsaw: Ministry of National Defense, Department of Education and Defense Promotion, Inspectorate of the Military Health Service; 2010.
8. Figley CR, Nash WP. *Stres bojowy. Teorie, badania, profilaktyka i terapia*. Warsaw: Polish Scientific Publishers PWN, Military Medical Institute; 2010.
9. Madajewski M, Szlagura W, Patoka J, Potracki F, Głowacka E, Jabłońska I. *Psychologiczne przygotowanie żołnierzy – uczestników misji poza granicami kraju*. Warsaw: Ministry of National Defense, Department of Education and Defense Promotion; 2006.
10. Badura-Madej W. *ABC interwencji kryzysowej*. Warsaw: Ministry of National Defense, Department of Education and Defense Promotion; 2009.
11. *Kryteria diagnostyczne według DSM-IV-TR*. Redakcja wydania polskiego Jacek Wciórka. Elsevier Publishing House; 2008.

12. Lis-Turlejska M. *Stres traumatyczny. Występowanie, następstwa, terapia*. Warsaw: Academic Publishing House; 2002.
13. Kulka RA, Schlenger WE, Fairbank JA, Hough RL, Jordan BK, Marmari CR et al. *Trauma and the Vietnam War generation: Report of findings from the National Vietnam Veterans Readjustment Study*. New York: Brunner/Mazel; 1990.
14. Juczyński Z, Ogińska-Bulik N. *Pomiar zaburzeń po stresie traumatycznym – polska wersja Zrewidowanej Skali Wpływu Zdarzeń*. *Psychiatria*. 2009; 6(1): 15–25.
15. Lemanowicz P, Daroszevska T. *Vademecum stresu i pomocy psychologicznej w misjach wojskowych*. Warsaw: Ministry of National Defense, Department of Education and Defense Promotion; 2004.
16. Purcell N, Koenig CJ, Bosch J, Maguen S. *Veterans' perspectives on the psychosocial impact of killing in war*. *J. Couns. Psychol.* 2016; 44(7): 1062–1099.
17. Rychcińska K, Jeżewski P, Rychciński J. *Porównanie stresu żołnierzy zawodowych wykonujących zadania w kraju i poza granicami*. *Zeszyty Naukowe WSOWL*. 2013; 3(169): 30–46.
18. Biegańska J. *Czynniki sprzyjające wystąpieniu wzrostu potraumatycznego u polskich żołnierzy uczestniczących w misjach pokojowych*. In: Kaiser A, Mrozowiak M. ed. *Zdrowotne i psychospoleczne aspekty służb mundurowych*. Warsaw: Polish Scientific Society for Physical Culture; 2013.
19. Korzeniewski K. *Zaburzenia psychiczne na współczesnym polu walki*. *Polski Merkuriusz Lekarski*. 2008; 24(44): 572–575.
20. Golinowska D, Florkowski A, Juszcak D. *Analiza przyczyn i uwarunkowań reakcji na ciężki stres oraz zaburzeń adaptacyjnych u pacjentów poradni zdrowia psychicznego*. *Polski Merkuriusz Lekarski*. 2010; 28(167): 387–394.
21. Gruszczyński W. *Klasyfikacja zaburzeń psychicznych u żołnierzy w czasie misji pokojowych i działaniach wojennych*. *Polski Merkuriusz Lekarski*. 2008; 25(1): 55–58.
22. Florkowski A, Gruszczyński B, Gruszczyński W. *Kontrowersje w sprawie rozpoznawania ostrego zaburzenia stresowego (ASD) i zespołu stresu pourazowego (PTSD) u żołnierzy pełniących misję pokojową w Iraku*. In: *Służba żołnierzy i funkcjonariuszy służb państwowych wykonujących zadania w warunkach ekstremalnych*. Warsaw: Polish Scientific Society for Physical Culture; 2004.
23. Kloczkowki M, Kiciński Ł. *Zdrowotne i psychospoleczne skutki udziału żołnierzy WP w misjach poza granicami kraju*. Warsaw: Military Office for Social Research; 2010.
24. Solomon Z, Mikulincer M. *Trajectories of PTSD: A 20-year longitudinal study*. *Am. J. Psychiat.* 2006; 163(4): 659–660.
25. Decision No. 434/MON of the Minister of National Defense of 24 December 2013 on the introduction of a preventive health program in the national defense ministry “Program of support and education in posttraumatic stress disorder syndromes in psychological and psychiatric approach”, Warsaw, 27 December 2013. Item 389, Inspectorate of the Military Health Service.
26. Hall Brown TS, Akeeb A, Mellman TA. *The role of trauma type in the risk for insomnia*. *J. Clin. Sleep Med.* 2015; 11(7): 735–739.
27. Truszczyński O. *Skuteczność terapii PTSD obejmującej wsparcie dla rodzin*. In: Łuniewska M, Goluch R. ed. *Człowiek ponad wszystko. Funkcjonowanie służby psychologicznej oraz opieka i pomoc socjalna rodzinom żołnierzy wykonujących zadania poza granicami kraju*. Szczecin: Zapol; 2005.
28. Heszen-Niejodek I. *Teoria stresu psychologicznego i radzenia sobie*. In: Strelau J. ed. *Psychologia. Podręcznik akademicki*, vol. III. Gdansk: Gdansk Psychological Publishing House; 2005.

-
29. Ruscio A, Weathers F, King L, King D. *Male war-zone veterans' perceived relationships with their children: The importance of emotional numbing*. J. Trauma. Stress. 2002; 15(5): 351–357.
 30. Pospiszyl K. *Ojciec a wychowanie dziecka*. Warsaw: Academic Publishing House Żak; 2012.
 31. Lipari R, Palen LA, Silber Ashley O, Penne M, Kan M, Pemberton M. *Examination of veteran fathers' parenting and their adolescent children's substance use in the United State*. Subst. Use Misuse. DOI: <http://dx.doi.org/10.1080/10826084.2016.1253748>.
 32. PAP. *Dla wielu weteranów trudy misji nie kończą się po powrocie do domu*. (retrieved: 19.12.2014).

Address: Paulina Zabielska
Chair and Department of Public Health
Pomeranian Medical University in Szczecin
71-210 Szczecin, Żołnierska Street 48