The article presents the characteristics of posttraumatic stress disorder (PTSD), a kind of mental disorder that can occur after experiencing a traumatic event such as war. It was described the types of events that can lead to PTSD, the way of development of the disorder, its symptoms and risk factors that increase susceptibility to developing the disease. It was analyzed the issue of combat stress as one of the possible sources of PTSD, typical for men, and the problem of suicide attempts among soldiers and veterans was also presented. The examples of preventive and therapeutic measures undertaken both in Poland and abroad were discussed.

**ABSTRACT**

The article presents the characteristics of posttraumatic stress disorder (PTSD), a kind of mental disorder that can occur after experiencing a traumatic event such as war. It was described the types of events that can lead to PTSD, the way of development of the disorder, its symptoms and risk factors that increase susceptibility to developing the disease. It was analyzed the issue of combat stress as one of the possible sources of PTSD, typical for men, and the problem of suicide attempts among soldiers and veterans was also presented. The examples of preventive and therapeutic measures undertaken both in Poland and abroad were discussed.

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**GENERAL CHARACTERISTICS OF PTSD**

Posttraumatic stress disorder (PTSD) is a mental health problem that can occur after someone goes through a traumatic event like war, assault, or disaster. The main symptoms of such stress include flashbacks, emotional numbness, hypersensitivity, aggressive behavior, and depression. It can develop following a traumatic event that threatens safety or makes feel helpless. Any overwhelming life experience can trigger PTSD, especially if the event feels unpredictable and uncontrollable, but in men military combat is the most common cause. Posttraumatic stress disorder can affect those who personally experience the catastrophe, those who witness it, and those who try to repair emotional or other damage afterwards, including emergency workers and law enforcement officers. It can even occur in the friends or family members of those who went through the actual trauma.

PTSD develops differently from person to person. While the symptoms of PTSD most commonly develop in the hours or days following the traumatic event, it can sometimes take weeks, months, or even years before they appear. Traumatic events that can lead to PTSD include: war, rape, natural disasters, kidnapping, car or plane crashes, assault, terrorist attacks, sexual or physical abuse, sudden death of loved one, childhood neglect or any shattering event that leaves someone feeling helpless and hopeless. There is the significant difference between PTSD and a normal response to trauma. The
traumatic events that lead to posttraumatic stress disorder are usually so overwhelming and frightening that they would upset anyone. Following a traumatic event, almost everyone experiences at least some of the symptoms of PTSD. Normal reaction to abnormal events, when sense of safety and trust are shattered, is to feel disconnected, or numb. It’s very common to have bad dreams, feel fearful, and find it difficult to stop thinking about what happened. For most people, however, these symptoms are short-lived. They may last for several days or even weeks, but they gradually disappear. But if somebody has posttraumatic stress disorder, the symptoms do not decrease. This person does not feel a little better each day, even may start to feel worse. After a traumatic experience, the mind and the body are in shock, but people usually come out of it, as they make sense of what happened and process their emotions. With posttraumatic stress disorder, however, they remain in psychological shock.\(^1\) Start of disorder occurs after a period of latency, which can last from several weeks to several months. We can start calling it PTSD when symptoms persist for more than a month and hamper daily functioning. There are three types of PTSD: acute, chronic, and delayed onset. In acute PTSD symptoms last less than 3 months, in chronic PTSD symptoms last 3 months or more, in delayed onset PTSD symptoms first appear at least 6 months after the traumatic event. In some people, the disorder can persist for many years and - untreated - go to a permanent change of personality (chronic form of the disorder develops in about 30% of people experiencing PTSD).\(^2\)

The symptoms of posttraumatic stress disorder can arise suddenly, gradually, or come and go over time. Sometimes symptoms appear suddenly from nowhere, at other times, they are triggered by something that reminds of the original traumatic event, such as a noise, an image, certain words, or a smell. There are three main types of symptoms: re-experiencing the traumatic event, avoiding reminders of the trauma and increased anxiety and emotional arousal. Re-experiencing the traumatic event relies on intrusive, upsetting memories of the event, flashbacks (acting or feeling like the event is happening again), nightmares (either of the event or of other frightening things), a feeling of intense anxiety during recall of trauma and intense physical reactions to reminders of the event (e.g. pounding heart, rapid breathing, nausea, muscle tension or sweating). Avoidance and numbing rely on avoiding activities, places, thoughts, or feelings that remind of the trauma, inability to remember important aspects of the trauma, loss of interest in activities and life in general, feeling detached from others and emotionally numb, and sense of a limited future (traumatised person does not expect to live a normal life span, get married, or have a career).\(^3\) Increased anxiety and emotional arousal are revealed in difficulty falling or staying asleep, irritability or outbursts of anger, difficulty concentrating, hypervigilance, feeling nervous and easily startled. Other common symptoms of PTSD are: anger and irritability, depression and hopelessness, guilt, shame, or self-blame, suicidal thoughts and feelings, substance abuse, feeling alienated and alone, feelings of mistrust and betrayal, physical aches and pains which can finally lead to poor

While it’s impossible to predict who will develop PTSD in response to trauma, there are certain risk factors that increase the vulnerability. Many risk factors revolve around the nature of the traumatic event itself. Traumatic events are more likely to cause PTSD when they involve a severe threat to the life or personal safety: the more extreme and prolonged the threat, the greater the risk of developing PTSD in response. Intentional, human-inflicted harm - such as rape, assault, and torture - also tends to be more traumatic than unintended or more impersonal accidents and disasters. The extent to which the traumatic event was unexpected, uncontrollable, and inescapable also plays a role. Other risk factors for PTSD include: previous traumatic experiences, history of depression, anxiety, or another mental illness, family history of PTSD or depression, high level of stress in everyday life, history of physical or sexual abuse, history of substance abuse, lack of support after the trauma and lack of coping skills.

**COMBAT STRESS INJURY**

Combat stress is the reaction of normal people (in this case - soldiers) on the abnormal situation (e.g. bombardment, shooting, the first use of weapon or defense). It accompanies every warfare - the more intense it is, the greater the stress. Soldier fighting the enemy has to suppress his emotions for some time and avoid identifying with him, feeling remorse or compassion due to inflict suffering. This attitude is very difficult to start, but also difficult to extinguish. In other words, combat stress is a reaction to the constant threat to life and health, the horrors of war, longing for loved ones in the country, as well as the difficult living conditions in the mission. Stress does not always have to be pathological. It becomes such when it comes to a sudden mental crisis, the collapse or exhaustion of soldier's psychological and biological defense mechanisms. According to prof. Stanisław Ilnicki, the former head of the Department of Psychiatry and Combat Stress of the Military Medical Institute in Warsaw, in such circumstances we are dealing with posttraumatic stress disorder (PTSD).

Lt. Col. MD Wojciech Żarowski, Deputy Head of Department of Psychiatry in Clinical Military Hospital in Krakow, describes the symptoms of combat stress: the presence of a very strong anxiety, hyperactivity, explosiveness or withdrawal, reliving the traumatic situation, intrusive memories, nightmares, returning in thought to the event which increases the neurotic symptoms, emotional numbness, withdrawal from contact, inability to experience pleasure, hypersensitivity, aggressive behavior, low mood, lack of ability to enjoy, increased heart rate, increased pressure, fainting, depression and, in extreme cases, suicidal thoughts.

Strong participation of Polish soldiers in missions in the Balkans, Lebanon, Iraq and Afghanistan have caused that the mental health problems of returning veterans are particularly important also in Poland. In 2005 in Warsaw was opened the Department of

Psychiatry and Combat Stress of the Military Medical Institute. The purpose of this unit is psychiatric and psychological assistance for Polish Army soldiers with symptoms of post traumatic stress disorder, their families and other victims, such as victims of terrorist attacks. Since 2005, in the Department have been hospitalized more than 290 soldiers, some of them several times. The total number of hospitalizations by 2014 is more than 440 militaries. Since 2014 the veterans and their families can also benefit from a nationwide telephone helpline, launched at the Department. According to estimates, posttraumatic stress affects about 10% of the veterans of the Polish military contingents. It is estimated that worldwide about 30% of veterans who served in Vietnam, have experienced symptoms of PTSD. In addition, about 20 to 25% of Vietnam War veterans experienced PTSD symptoms later in their lives. PTSD was also observed in the group of veterans of other wars. It is estimated that the disorder affected about 10% of veterans of the Gulf War, 6 to 11% of the soldiers involved in the mission in Afghanistan and 12 to 20% of the soldiers serving in Iraq.

Lt. Col. MD Radosław Tworus, Head of the Department of Psychiatry and Combat Stress of the Military Institute of Medicine in Warsaw says that in the clinic of all patients-veterans classic PTSD is diagnosed only in 30% of people. Others suffer from various types of adjustment disorders associated with prolonged stay in the area covered by hostilities. Most of the veterans were not hurt, does not have the typical PTSD, but require treatment. Combat stress can cause a variety of mental health problems - from classic PTSD by different forms of anxiety disorders, anxiety-depressive disorders, depressive disorders, emotional, behavioral and sleep disorders (e.g. isolation from other people, a lack of sensitivity or emotional dullness, nightmares), to abuse or addiction to alcohol and drugs. Often various mental problems occur at the same time. Combat stress also affects the disclosure or severity of mental disorders that occurred before military missions. Each of them requires different forms of psychotherapeutic and pharmacological assistance.

Soldiers taking part in foreign missions are subjected to prolonged combat stress that begins even before they leave. The first stress period begins upon receipt of information about departure, the next is during the mission, and the third one appears immediately after returning to the country and takes the longest, up to two years after the end of the mission. In each of these periods another group of stressors affect the soldier: in the first one appears the fear of separation from loved ones, new and unknown place, interpersonal relations and threat to life and health; the second period is dominated by anxiety and other emotional reactions resulting from direct risk of own and colleagues lives, associated with a view of death, disability, suffering, and connected with the responsibility for the death of an enemy. In the third, the longest period, comes to pooling the emotions of the first and second stages and emotions related to the finding in the former roles: at home and in the unit.

According to regulations, a soldier can stay in the mission no longer than six months, followed by another six months of resting, and after a further six months of preparation.

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he can go on another mission. In practice, the rotation is faster, soldiers are over-exploited, and while still in the fight they incur large losses. The long absence also has an impact on family life, which is subject to change in the absence of a soldier. Impact on family breakdown after returning from the mission also have other problems often comorbid with PTSD, such as violence, alcoholism, depression and suicide attempts.  

SUICIDES AMONG SOLDIERS
Suicide attempts among soldiers are unfortunately not uncommon. According to data released by the Ministry of National Defence, in 2012 as a result of suicide died eleven Polish militaries. Taking into account that in the entire armed forces (professional soldiers, candidates for professional soldiers and National Reserve Forces) served at this time 105.4 thousand people, the number of suicides per 100 thousand of uniformed is 10.4, which is the same as in the general population. So officially in the Polish army commit suicide far less soldiers than in the U.S. military, but there are not conducted statistics on veterans. Research from the U.S. and Great Britain shows that those who leave the army, commit suicide more often than the rest of the population, are also more likely to develop mental disorders and tend to cope worse with debilitating addictions.

The U.S. Army suicide rate is steadily growing and in the first half of 2013 reached alarming number of 29 per 100 thousand uniformed, while among civilians in a similar age group was 18.5 per 100 thousand people. Data published in the American Journal of Public Health show that the risk of committing suicide by an American veteran is two times higher than for the rest of society. 13 In 2012 about 6,500 of them took their lives away. This is 20% of all suicides that occurred at that time in the United States. If the veteran has less than 25 years, the risk even increases up to four times. 14 In turn, prof. Nav Kapur from The Centre for Suicide Prevention, studied veterans of the British Army. In the age group under 24 years of age the risk of suicide of former soldiers is three times higher than of their peers. Only among older veterans it decreases significantly and is no different from the rest of society. 15

In the Israel Defense Forces in the 90s, according to government information, 39 soldiers per year took their own lives, and in 2003 it was 43 active uniformed - much more than died of natural causes or were killed in a battle. They were mostly young, twenty years old people. Despite guaranteed anonymity, going to a psychologist causes high concern, mainly because of the possibility of dismissal with the annotation of mental incapacity to serve, i.e. Profile 21, which becomes a burden for life, taking away a chance to earn the driver license or get a job in government institutions, as well as discouraging private entrepreneurs to employ similar applicants. All of this definitely hinders the detection


of serious disorders, such as depression or PTSD.\textsuperscript{16}

\textbf{SUMMARY}

PTSD is a disease which can be more dangerous for soldiers than the participation in hostilities. Soldiers who have not coped with the trauma, cannot return to completing tasks and function properly in a group, as they are a real threat to themselves and colleagues. According to prof. Stanislaw Ilnicki, in the Department of Psychiatry and Combat Stress of the Military Medical Institute in Warsaw are being made the attempts to restore to service the soldiers with PTSD, who usually wish to continue military service.\textsuperscript{17} However, according to Lt. Col. Miroslaw Ochyra, spokesman of the Operational Command of Branches of Armed Forces, looking at the experience of the United States, there is a need to strengthen preventive measures.\textsuperscript{18}

An example worthy of emulation is the publication of two guides for people returning from the war by the U.S. Department of Veterans Affairs. The publication \textit{Returning from the War Zone. A Guide for Military Personnel} discusses the following topics: What common reactions should you expect following the trauma of war? What experiences are you likely to encounter on the home front? How can you positively cope with the transition? What are signs that you or your war buddies might need some outside assistance? Where can you go for assistance?\textsuperscript{19} Another publication \textit{Returning from the War Zone. A Guide for Families of Military Members} focuses on answers to the questions: What are common reactions to war? What common issues do families of returning service members experience? How can you prepare for this reunion? How can you positively cope with the transition? What are warning signs that your service member might need some outside help? What are treatment options for PTSD and other mental health problems? Where can you and your service member go for help?\textsuperscript{20}

Another example of the activities undertaken in the U.S. to war veterans is the Trauma Management Therapy Program in University of Central Florida's Anxiety Disorders Clinic, designed to deal effectively with the psychological consequences of the participation of soldiers in military missions in Iraq and Afghanistan. This clinical research program, funded by a grant to UCF from the Department of Defense Military Operations Medical Operations Program, is offering a treatment plan that uses the most effective treatments for combat-related PTSD. Research indicates that one of the most effective methods is cognitive behavioral therapy (CBT). Within the program is used one of the CBT techniques - exposure therapy, which involves the strategy of approaching to the fearful situation, which forces to face the fear and provides a reinforcement for this. As a result, this therapy helps people face and control their fear, through exposing to the experiences trauma, but in a safe way. Usually in this purpose is used mental imagery, writing, or visits to the place where the traumatic

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event happened\textsuperscript{21}. UCF’s Anxiety Disorders Clinic uses olfactory stimulants to replicate traumatic events experienced by PTSD sufferers. Visual, audio and tactile components are also used, but according to patients, smell acts as the most powerful trigger.\textsuperscript{22}

As a strategy to cope with the negative effects of stress, consisting in the change of the environment and thus reducing the number and intensity of environmental stressors, is impossible in the case of participation in the armed combat, hence should be prevented the occurrence of adverse consequences of stress, such as PTSD, through effective stress management. The key is education: the transfer of knowledge on stress (including traumatic), its symptoms and consequences; knowledge of the ways of coping and familiarizing with the simplest relaxation techniques.\textsuperscript{23} Most importantly, it should be remembered that posttraumatic stress disorder is completely treatable, if the therapeutic measures are implemented at an early stage.

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