

# Finding New Ways to Improve the Heal of the Physical and Mental Wounds—An Overview

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**Abstract:** The war imposed on Azerbaijan by the Armenian invaders claimed thousands of lives, but even more young guys were left crippled by the war. Today, Azerbaijan faces 2 major tasks of strategic importance: (1) To preserve the lands reclaimed from the enemy and (2) to ensure the maximum preservation of the viability of the military personnel who suffered in this war, because the prospects of the patriotism of our people, fighting spirit, and their combat effectiveness depend on the timely solution of these tasks. Many problems arise for servicemen undergoing rehabilitation after complex injuries. In general, veterans find it difficult to restore old social ties and physical activity, so they also need a positive attitude from society, because they are already the people with disabilities. At the first stage of medical intervention, the doctor is faced with the main task: saving the life and health of the soldiers, so he has little time to study in detail the psychosocial factors that can affect the final results. At the first stage of treatment, unnecessary questions to the patient may even lead to an ineffective result. However, some observations have revealed significant differences in the response to rehabilitation treatment, even in geographically close countries. Therefore, in the subsequent stages, it is important to take into account spiritual factors that will certainly affect recovery and rehabilitation. Thus, to better support the recovery and rehabilitation of people with injuries, more research is needed to organize *human-centered* care. Some of the organizations in our country, such as «Witness Support» and «LifeSupport», study the interests of servicemen, the needs of the families of those who lost loved ones in the war, and try to solve these problems as soon as possible, helping them not only and not so much materially, but also morally. They arrange meetings of civilians with veterans, help veterans to support their families. If during this period the wounded recover from physical and mental illnesses interacting with the civilian population, they are more successful in overcoming difficult problems. To summarize all of the above, we can conclude that health and well-being depend on more factors than just medical care, and we must continue to look for the best ways to rehabilitate people with disabilities who saved our lives.

**Key words:** Biopsycho-socio-spiritual model, human-centered care, post-trauma syndrome, rehabilitation.

## 1. Introduction

### 1.1 The Beginning of the War and Its Trauma, First Aid after Hostilities

On September 27, 2020, the Armenian Armed Forces attacked the Azerbaijani borders in many directions. Our volunteers, ordinary guys from little-known families rushed to defend our homeland. 13,000 of them returned crippled, 3000 died, many are still undergoing rehabilitation, some have gone through a deep mental stress after the horrors of the

war. As a result of the imposed on us war, the Servicemen of the armed forces of Azerbaijan received multiple serious injuries. This has the most severe impact on the health of the younger generation in our country. History has the experience of rehabilitation the military after battles, a particularly rich experience of rehabilitation was acquired after the Great War. The medical experience of the Great War lasted long afterwards, shaping the future of medicine for the disabled in both countries. For example, a comparative analysis of rehabilitation in German and British military medicine during the Great War showed that sense of security in the population depends on the effective rehabilitation of their

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wounded soldiers, and this reality was confirmed by medical workers along with the military. Social and cultural rethinking of the disabled was accompanied by medical advances designed for them [1]. R. Martin showed that army physiotherapists are well-suited in humanitarian aid during the war because orthopedic injuries account for a large proportion of war casualties, and therefore army physical therapists provide optimal care and this results in the early rehabilitation of these patients. The experience of physiotherapists in the field of musculoskeletal injury makes them the most indispensable rehabilitation doctors after the war [2]. Significant progress is being made in pre hospital care, trauma surgery and rear intensive care of the wounded, which has significantly improved the survival rate of the wounded. However, despite these advances in medicine, some problems are still difficult to solve, that is, military personnel experience the clinical triad of post-traumatic symptoms: chronic pain, post-traumatic stress disorder and traumatic brain injury.

### *1.2 Focus on human-centered treatment*

Emergency intervention and participation in a rehabilitation program can lead to different outcomes. Most surgeons, are aware of the fact that even successfully performed skilled procedures can lead to different outcomes, sometimes extremely successful and sometimes less desirable. It is acknowledged that rehabilitation options depend on the type of injury, its complications, and functional restrictions. Basically, military trauma takes the form of multiple injuries: fractures, amputations, peripheral neuropathies, spinal cord injuries, craniocerebral injuries etc.

For military personnel undergoing rehabilitation from complex injuries after trauma care, many problems can arise from this clinical triad of post-trauma. The results may be unpromising, especially when trauma leads to chronic pain and mental disorders. Associated symptoms can overlap with sleep disorders, depression and anxiety, what

makes difficult to determine the origin and true nature of underlying conditions and the corresponding diagnosis.

The correct intervention strategy can be lost amid costly and unnecessary, sometimes very harmful treatments, along with it inaccurate diagnosis can slow down the choice of an effective treatment based on precise symptoms. We should be borne in mind that many post-trauma injuries can lead to long-term degenerative changes in musculoskeletal system, which may become a source of chronic pain. This can lead to delay in the recovery process, significant restrictions on activity, limited participation, and an overall deterioration life quality. Injured military personnel and their families count on continuous medical care to support recovery. However, evidence-based treatment options are more limited & are followed by chronic conditions, ergo additional treatment options are needed if people with trauma want to benefit from rehabilitation.

Currently, data indicate that majority of military personnel do not fully respond to treatment because we have very diverse groups, which is why for best support for recovery and rehabilitation of individuals with trauma more research is needed to organize human-centered care. In support of this idea, we can also cite the fact that there are differences in reactions to the same rehabilitation measures carried out in different, even geographically close regions. Thus, Anderson and co-authors identified significant differences in response to rehabilitation treatments across geographically close nations: in UK & Germany [1]. This prompted scientists to take into account personal factors in the process of rehabilitation and treatment in general. In order to achieve a highly effective result of rehabilitation measures we should first of all have a program to provide people-centered services in centers close to the family as much as possible. There are such programs in the other countries experience, which consist some military rehabilitation centers combined

with civilian centers. There are such cases when, despite the severity of injuries after long-term rehabilitation, thanks to strong psychological support and a long course of recovery, the result exceeded all expectations.

Currently no one disputes the fact that many factors influence the outcome of treatment for each victim: the severity and complexity of the injury, the time of access to medical intervention, the quality of medical support; and even psychological support of the family are important, spiritual factors, such as faith, sense of purpose, and a person's values also matter. Military personnel who have a negative self-image, alienate themselves from civil society, are recovered slowly and to a less extent; the result of their rehabilitation is usually unfavorable. Those who develop new outlooks on life and come to terms with the new situation can compensate for their losses or changes in functional ability by choosing new, rewarding activities. Such can successfully engage in useful things and easily recover. Of course, at the first stage of medical intervention the first role of the doctors is to save life and health, therefore, they have little time to study in detail the psychosocial factors that can affect the final results; these questions at the first stage of treatment can potentially lead to an ineffective result. Nevertheless, in the future, it is important to consider the spiritual factors that affect recovery and rehabilitation.

### *1.3 The Biopscho-socio-spiritual Model of Rehabilitation*

The World Health Organization declared spirituality as an important aspect of quality of life. Spirituality, being an integral aspect of humanity, is a way to realize the meaning of life, your place in this life, life preferences, way to build better relationships with yourself, family and strangers, society and even nature, so this is sacred and extremely important aspect of life. Spirituality is expressed through faith, beliefs, values of person. Researchs [3] conclusively

show that religion has a positive effect on both physical and mental health, social activity of the person. It is for this reason that the new idea, the so-called biopscho-socio-spiritual model was formed in medicine. This model accepts the integrity of a person as such and helps his adaptation in all aspects of his personality. However, in general, the medical professionals unfortunately follow a model focused primarily on the biological aspects of disease, excluding both psychological and spiritual factors of rehabilitation. We know that rehabilitation should aim to help the person improve the impaired abilities needed in daily life, but these abilities are not only physical, but also mental and cognitive. In the literature, there is an example of a bio-psycho-socio-spiritual model of rehabilitation medicine, which is the Canadian model of professional activity and involvement [4]. The application of this model stimulates a person-centered medical practice and promotes optimal functioning and involvement of military personnel after injury. The ultimate goal of rehabilitation is to optimize functioning and involvement of victim in meaningful activities and relationships. This model abandons the traditional approach to treatment, in which doctors are more trained to restore anatomical and physiological functions of the patients they are treating, and accepts the reality that personal life arises not only from a normally functioning body, but also from reason and faith.

Personal factors, such as physical, mental and spiritual strengths, interests and skills, beliefs and values also play an important role in health of military personnel. Such adverse childhood events as physical abuse & neglect, emotional abuse & neglect, parental divorce, misuse within household have a negative impact on the self-esteem of a serviceman and can manifest themselves in the moment of his rehabilitation [5]. Van der Kolk shows a new thinking about trauma & explains, that those who need psychiatric care have been neglected or have witnessed

violence in family. The scientist noticed that the impact of past or recent trauma affects the brain, the mind, thoughts, feelings, emotions [6]!

Hawkins B. L. in 2015 found that home and community participation, as well as social support, play a crucial role in the restoration of the body at the time of rehabilitation, as well as strengthening of personal factors [7]. During military rehabilitation, it is very important to create a sense of support and integration in the family and community, connections with other servicemembers. But in some circumstances, social supporters are not accessible due to various locations. Veterans may regain a sense of control over their bodies by increasing their participation in outdoor sports, but along with it they also need a positive community attitude as they try to support themselves in disabled sports. Some of our country organizations are learning about the needs of the families of those who have lost loved ones in the war, helping them not only and not so much materially, but also morally, helping them support their families. Such organizations can make a positive difference in the lives of those experiencing the effects of trauma by helping the injured and sick recover from their injuries, foster new perspectives on their post-traumatic life, and strive hard to acquire new skills that will help them reintegrate into civilian life. If refer to Mahatma Gandhi, we disclose reality of life in following consequences: “Your beliefs become your thoughts. Your thoughts become your words. Your words become your actions. Your actions become your habits. Your habits become your values. Your values become your fate” [8]. Community reintegration depends on the sense of one’s own effectiveness. This sense is influenced by the opportunity of a person to express himself, stimulated and encouraged by the civilians, which primarily improve the emotional and physiological state of the traumatized; the effect is especially high when he observes the positive results of this activity. Jackson J. K. et al [9] argues that it is time for rehabilitation

psychologists to start thinking outside the box and move beyond the typical rehabilitation environment to help patients and their families who are often struggling to cope after serious illnesses.

## 2. Conclusions

Summing up all of the above, we can conclude that health and well-being depend on more factors than just medical care, and we are responsible for people with disabilities who have saved our lives.

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