





The joy of movement:

how adaptive sports helps veterans recover









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Introductory Word

The idea of a study on the impact of adaptive sports on the process of physical and mental recovery of veterans originated at the CBA Initiatives Center back in 2018, when the scale of problems and challenges was completely different. At that time, there were barely two or three projects in this area in Ukraine, and now there are dozens of them. The issue of a thorough approach to the recovery of veterans through sports is becoming extremely important, as it is not known exactly how it should work; how it functions now; how not to do any harm; why veterans do not exercise despite the already existing opportunities. And most importantly, what needs to be done to get veterans involved in recovery through sports.

An opportunity arose to launch the first study of this topic in Ukraine in 2023. It was aimed at identifying the main pain points and confirming or denying what works well and what does not. I already had a number of assumptions based on my own experience in this area, but it's one thing to think and another to rely on data.

Even before the official presentation of the study, the team of the CBA Initiatives Center's Department of the Veterans Affairs "pounced" on it with all the enthusiasm, as the lack of the facts in this area was obvious. We strive not only to do what we think is important, but also to build a system with the veterans, their opinions, their well-being being in its center and the system itself with its supportive services comes second. Research is the basic thing needed for the system to be built.

For our team and, I hope, for the teams of readers, this study will serve as a guide for the direction of the projects we implement to create conditions and opportunities for the recovery of veterans. It can give an understanding of where to put our efforts to make this type of recovery in Ukraine accessible to as many veterans as possible.

We, the team of the CBA Initiatives Center, believe in and work every day towards creating a nationwide system of veterans' recovery through adaptive sports that will be functional in a few years. We understand how important it is to provide high-quality and effective recovery to those who have sacrificed part of their bodies or health while defending their homeland. Therefore, adaptive sports should become an important part of the recovery of veterans in Ukraine as one of the most effective ways to regain confidence in their own bodies; improve mental health; return the joy of movement, the joy of life; find their "tribe" and integrate into society together. No sacrifice was in vain!

Taras Kovalyk Veteran, a person with a disability caused by the war Head of the CBA Initiatives Center Department of Veteran Affairs

The Team of Authors

The research was conducted by the team of the Come Back Alive Initiatives Center department of Veteran Affairs.

The information is correct and relevant as of 2024 year. **The CBA Initiatives Center** is not responsible for the consequences of using this information for other purposes or in a different context.

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The research has been conducted with the support of the European Union and the International Renaissance Foundation within the joint initiative "European Renaissance of Ukraine". The material represents the position of the authors and does not necessarily reflect the position of the European Union or the International Renaissance Foundation.

The analytical department of the CBA Initiatives Center was established in May 2018.



The CBA Initiatives Center is a public organization that helps strengthen Ukraine's defense capabilities. We conduct research on the security and defense sectors, develop effective solutions and advocate for their implementation in public policy.

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The International Renaissance Foundation is one of the largest charitable foundations in Ukraine, which since 1990 has been helping to develop an open society based on democratic values in Ukraine. Since then, the Foundation has supported about 20,000 projects worth more than \$350 million.

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The European Union consists of 27 member states and their peoples. It is a unique political and economic partnership based on the values of respect for human dignity, freedom, equality, the rule of law and human rights.

It took more than fifty years to create a zone of peace, democracy, stability and prosperity on our continent. At the same time, we have managed to preserve cultural diversity, tolerance and individual freedom. The EU is committed to sharing its values and achievements with its neighboring countries, their people, and with peoples beyond its borders.

Introduction

Today, the issue of reintegration of veterans of the Russian-Ukrainian war who have returned or will return to civilian life is often raised in the information space. Documentary sources offer different definitions for the process of a veteran's return to civilian life. For example, transition¹, reintegration², readaptation³ etc. However, among these processes, there is a cross-cutting one that can take place long before the stage of return - recovery from injuries, wounds or illnesses. Veterans may continue to serve but still need to recover; or they may need it after returning to civilian life. It is the opportunity for quality rehabilitation for a particular need that is important, not the period itself. One of such request among veterans (including active military personnel) is recovery through physical activity and sports.

When it comes to rehabilitation and recovery, it is mostly perceived as a set of procedures, medications, and other auxiliary means that make a person feel better. If you add sports as a separate variable to this complex, this set is more likely to cause skepticism, because sports itself is not associated with rehabilitation and recovery practices. However, this is a misconception, as physical activity, freedom of movement, endurance, and a strong body are the keys to good health.

When it comes to the process of recovery from traumas, injuries or illnesses, it is important to consider adaptive sports⁴.

Adaptive sport is probably the most popular recovery tool for veterans (including active military personnel). This is due not only to the fact that veterans and active military personnel are at the highest risk of injury, trauma or illness, but also to the specificity of the impact of adaptive sports on physical and psychological health. It can be practiced not only by people with disabilities but also by those who do not officially have this status but who, because of trauma, injury or illness, feel uncomfortable participating in sport on an equal footing with others.

Transition is a period of preparation, reintegration and adaptation that servicemen and women enter when they are approaching the moment of discharge from service and return to civilian life: https://www.researchgate.net/publication/335491828_Military_to_Civilian_Transition_Theories_and_Frameworks

Reintegration is a set of psychological, social, cultural, and health-related (including physical rehabilitation) ways of functioning within the immediate environment and during the interaction with various social groups: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5348503/

Re-adaptation is a period, rather psychologically, when veterans return to civilian life and try to re-adapt to the socio-cultural traits of civilian life. This process may be shorter than more extended reintegration that is not well understood yet: https://publications.gc.ca/collections/collection_2018/acc-vac/V32-279-2017-eng.pdf

Adaptive sport is the activity of entities in the field of physical culture and sports aimed at involving persons with disabilities or persons with limitations in daily functioning in physical culture and sports in order to enhance inclusion and integration into society, physical and psychological rehabilitation, facilitate the possibility of leading an independent lifestyle and involvement in the local community, and to define it as a branch of physical culture: https://www.kmu.gov.ua/news/kabinetom-ministriv-skhvaleno-proekt-zakonu-ukrainy-shchodo-rozvytku-adaptyvnoho-sportu

During the ATO/JFO, the field of recovery through adaptive sports began to develop actively. Ukrainian veterans were extensively engaged in it. There are various international sports competitions for the veterans around the world: Invictus Games, Warrior Games, Air Force Trials, etc. In addition to organizing competitions, it is also common abroad to research how such sporting events affect veterans. For example, the impact of sports competitions on the well-being of participants and their families were studied during the Invictus Games⁵. There are enough examples to suggest that adaptive sports contribute to the recovery and improvement of a person's well-being. However, it is not enough to make a conclusion about adaptive sports' Ukrainian specifics and its impact on Ukrainian veterans. After all, the context of the Russian-Ukrainian war is significantly differs from that of other countries where veterans participate in recovery programs.

Ukrainian adaptive sports programs are focused on the needs of Ukrainian veterans, although they overlap with the experience of military personnel from the United States, the United Kingdom, Canada, and other countries. Ukraine's experience differs significantly from that of other countries. Firstly, Ukrainian military personnel are involved in combat operations on the territory of their own country. Secondly, veterans recover from injuries, traumas or illnesses often while continuing their military service, and there is always a potential possibility of returning to the combat zone, where there is a threat of retraumatization and deterioration of their current physical or psychological condition. Therefore, one of the challenges for implementing adaptive sports recovery programs is to build a knowledge base about why it is worth doing in general, for whom, how it affects veterans, how to implement it, and what obstacles there are.

Studying the experience of veterans' recovery through adaptive sport is an important step towards institutionalizing the field and subjectivizing it alongside other practices that have been shown to be effective. But it is also a tool for implementing the principle of "Nothing for veterans without the veterans themselves".

New research demonstrates the positive impact of participation in the Invictus Games — Forces in Mind Trust: https://www.fim-trust.org/news-policy-item/new-research-demonstrates-the-positive-impact-of-participation-in-the-invictus-games/

Methodology

The study we conducted has no analogs in Ukraine. It is the first attempt to collect information related to the development and scaling of adaptive sports, as well as the involvement of veterans (including active military personnel). It's not aimed at confirming or refuting hypotheses, as there is not enough information to do so, and it is impossible to build descriptive or analytical hypotheses. The main objective of this study is to create a foundation for further development of the knowledge base on adaptive sport and its impact on the life and well-being of the veterans.

Several groups of respondents, that were selected for the study, may have unique experience in the field of adaptive veteran sports.

Study respondents

- Veterans who have started their recovery journey through sports and are actively involved in sports camps, competitions, and various sports and recreational activities:
- Veterans who are not only experienced in adaptive veteran sports but also work on scaling it up and adding quality content. For example, they are coaches, sports ambassadors in communities, develop and implement various sports events and activities, etc;
- coaches, sports managers, organizers, psychologists all those who
 accompany veterans during the process of recovery through adaptive
 sports. It is important to include them in the study to trace the
 implementation of adaptive veterans sports in Ukraine through the eyes of
 those involved professionally, rather than as direct recipients of services.

Key task of the study

Determine the existence and nature of the impact of adaptive veteran sports on the lives and well-being of the veterans (including active military personnel) in order to further build a knowledge base and raise awareness among different stakeholder groups.

The main objectives of the project

- 1. Conduct a brief comparative analysis of the development of adaptive sports for veterans in other countries.
- 2. Illustrate the presence or absence of the impact of adaptive sports on veterans and how they undergo recovery, are involved in the community and return to civilian life after trauma, injury, or illness.
- **3.** Explain the specifics of the impact of adaptive sports on veterans, if there is any.

- 4. Identify the advantages and disadvantages of adaptive sports as a recovery activity, based on in-depth interviews with veterans (including active military personnel) who have been or are involved in the process of recovery through sports.
- 5. Identify ways to engage and motivate veterans to practice adaptive sports.
- 6. Describe the further movement of veterans through sports activities (organization of competitions, promotion, professional growth, etc.).
- 7. Analyze the main obstacles and problems on the way to involving veterans and military personnel in the adaptive sports (infrastructure, lack of information, government policy, etc.).
- 8. Illustrate the importance of adaptive sports in improving the process of returning veterans to civilian life.

Essentially, this study aims to solve a number of problems:

- to build a comprehensive understanding of why a restorative activity such as sport develops and spreads;
- to understand how to scale up existing sports projects;
- to make adaptive sports visible to various stakeholder groups;
- to develop an empirical and theoretical foundation for building knowledge base on adaptive sports among veterans in Ukraine in the future;
- to answer the question of what sports really is for the veterans: high sporting achievements, an opportunity for recovery, or a necessity for maintaining physical health.

Methods of data gathering

Examination of the development of adaptive sports in other countries through a **comparative analysis** of publicly available documentary sources that illustrate the specifics of the development of adaptive sports for veterans abroad. For the comparative analysis, we selected countries that either have remotely similar experiences with war and developed veteran policy or are prominent representatives in the area of adaptive sports for veterans. The main focus of the analysis is to describe and illustrate:

- 1. Development of adaptive sports among veterans in a particular country;
- 2. Challenges, obstacles, and their overcoming in the process of scaling up adaptive sports;
- 3. Sociocultural specifics of the development of adaptive sports in different countries;
- 4. Potentially relevant examples of adaptive sports development that could be useful for implementation with further adaptation in Ukraine.

The method of semi-structured in-depth interviews. This is the main method for collecting information about the forming, development, specifics and impact of adaptive sports on the well-being and lives of veterans. Since there is little information on this topic, the main function of the method is reconnaissance. To conduct the interviews, we used a guide with a set of topics and questions based on previous work and conversations with veterans, conducted by the CBA Initiatives Center. However, during the interviews, it was important not only to get answers to the pre-developed questions, but also to give respondents the opportunity to express their thoughts that were relevant to the topic but were not previously provided for in the questionnaire. The limitation of the method does not allow confirming or refuting certain hypotheses, as there is not enough data to do so. Therefore, all the conclusions in this study are assumptions and require further research using quantitative methods of data collection and analysis.

Study Limitations

The aim of this study was not to build an empirical and theoretical framework for adaptive sports for veterans in Ukraine, as this would require a much larger number of respondents and methods for collecting and analyzing information. Other research limitations include the following points:

- the research is purely exploratory in nature, so all conclusions are assumptions that need to be further developed;
- respondents were selected using the snowball method, when the previous one could advise on who else to talk to, as well as according to key characteristics related to their life experience (participation in combat operations, trauma, injury or illness), involvement in sports and their professional background. Therefore, the respondents do not represent the opinions of the general population;
- the study included respondents who have mostly positive dynamics in doing sports, but this does not mean that negative dynamics are not present. The methods and principles of selecting respondents allowed us to find only those who continue to engage in sports, but not those who have stopped doing so or have had negative experiences. Therefore, this issue needs to be further elaborated;
- the purpose and objectives of the research do not include a study of the legal framework for adaptive sports in Ukraine and its basic principles.
 While describing the results, we will refer to certain provisions, but rather as an illustration.

Ethical aspects of the research

The research involved only those who voluntarily agreed to participate in it. It is important for us to create an environment where respondents do not feel pressure or discomfort, so before the interview, the interviewer notified the responders that they could refuse to answer certain questions that might be sensitive or uncomfortable for them. This is crucial, given that the conversation could have touched rather challenging periods of respondents' lives. The transcripts and quotes used in this report do not contain any personal data (names, settlements, military formations, NGOs, etc.) that could help identify the respondent, their travel routes, places of residence, or information that could harm the respondents.

Glossary of terms

Adaptive sports are recreational or competitive sports for people who have traumas, injuries, or illnesses that affect their physical and psychological condition. The research focuses on adaptive sports, specifically related to veterans (including active military personnel).

Invasport is a system of physical activities and sports for people with disabilities that operates at the state level in Ukraine.

Veterans (including active military personnel) are people who have the status of combatants and/or persons with disabilities as a result of war. In the study, we do not refer to all veterans, but only to those who have experienced a trauma, injury or illness while defending the homeland.

Recovery through adaptive sports is a set of activities that aims to improve physical and psychological health. This process can include many different actions, but the key is always physical activity that gives a sense of joy through movement.

High Performance Sports is the process of engaging athletes in a particular sport to prepare them for competing at the national and international levels.

Physical training and sports recovery are systematic measures developed around the use of physical exercises aimed at restoring or improving human health and at recovering through compensation by physical training.

Sport camps are the sporting events that take place before veteran trials. The meaning of the term is not the exclusive one, but the study considers only sport camps held for veterans.

Veterans' well-being is a state where a veteran has a satisfactory standard of living and has their needs met. The level of well-being consists of various aspects⁶: life skills and spirituality, housing and physical environment, health, relationships and recognition, vocation, and material needs.

A sports ambassador is a promoter of adaptive sports for veterans in a particular community who scales up sports programs, organizes competitions/ sports clubs and engages other veterans in sports activities.

Adaptive sports recovery programs include all possible sports events, competitions, camps, online courses, trainings, etc. This term summarizes all the opportunities available to veterans who have decided to incorporate adaptive sports into their lives.

The concept of veterans' well-being proposed by Veteran Hub. Presentation of Journeys of Veterans: https://drive.google.com/file/d/1DvjOJfw86l9w7f7DUh9l8CpzxAxW5M41/view

List of abbreviations

DFoU Defence Forces of Ukraine

ATO Anti-terrorist operation

JFO Joint forces operation

MMC Military medical commission

MP Military police

MSEC Medical and social expert committee

NGU National Guard of Ukraine

TBI Traumatic brain injury

CYSS Children's and youth sports school

PTSD Post traumatic stress disorder

Key Findings of the study



Adaptive sports that helps veterans recover from injuries, wounds or illnesses, should be considered as a recovery instrument used in conjunction with other factors that contribute to its effectiveness. This method of recovery is one of the many, not the unique one. The person who goes through the recovery can choose what is more comfortable for them.

The results of the study allow suggesting that adaptive sports has an impact on the of veterans, their well-being and life in general. The respondents were mainly positive and stated that doing adaptive sports is not just important, but necessary.

Adaptive sports as a tool for recovery has the following ways of impact:

1. Improves physical health.

Adaptive sports can significantly improve physical health and recovery from trauma, injury or illness. It should be borne in mind that this applies to those who have as visible and invisible traumas (whose physical and psychological health was affected by the experience of participating in hostilities). In this case, being physically active after returning to civilian life becomes a key to good health. It doesn't have to be adaptive sports or a specific sport - basic physical activity is enough to feel better. The wrong approach or lack of qualified support during the training process can lead to injuries and deterioration of health.

2. Helps to improve mental health.

Adaptive sports can reduce symptoms of depression, anxiety, distress and post-traumatic stress disorder (PTSD). Certain types of adaptive sports and sports in general help to rebalance the emotional state. Being in a safe and comfortable community helps veterans feel better. And having more self-sufficiency in movement, doing exercises or even getting to know a "new" body gives them confidence and also has a good effect on their mental state.

3. Helps to create new social connections and be in a community of likeminded people.

Adaptive sports for is a platform for the veterans to socialize with people who share similar experience. This social interaction can potentially reduce the feeling of isolation and loneliness. At certain stages of their transition to civilian life, veterans tend to form or join communities where there are people with similar experiences. Such environment feels more comfortable and safe. A sense of security is the key to a proper recovery process, and is impossible without it. The respondents often mentioned that the possibility to meet their comrades-in-arms and relax for a while was their main motivation to participate in adaptive sports programs.

4. Helps to develop skills and form new capabilities.

Adaptive sports empower veterans by helping them develop new skills and

gain confidence in areas where they had not imagined themselves before. It is about finding new versions of themselves. Some participants of adaptive sports programs continue being their involvement in the adaptive sports, but as assistant coaches, trainers, rehabilitation specialists, or develop adaptive sports in their communities.

5. Helps to regain self-belief and accept the new self.

Military service, combat involvement, injuries/traumas/illnesses - are major challenges for veterans that can significantly affect the way they perceive themselves. Adaptive sports is a good opportunity for them to look at themselves from a different angle and believe in themselves again, to see that, despite all the hardships in life, they can do much more.

As for scaling up recovery programs through adaptive sports, there are quite a few of them now. But if we gradually work in this area and solve its challenges, it can help more and more veterans discover adaptive sports. The number of sports-based recovery programs determines the number of veterans who can join them. In other words, in order to scale up, both the number and capacity of such programs should be increased.

The challenges and obstacles currently include the following:

1. Challenges during treatment and rehabilitation

After being wounded, injured or falling ill while defending their homeland, veterans had to undergo further treatment and then, at best, rehabilitation. At best, as not everyone goes through this stage, not because the nature of the injury or trauma does not require rehabilitation, but because, as the respondents stated, Ukraine lacks qualified specialists, rehabilitation facilities, and information on how to get it.

Treatment and rehabilitation are among the challenges of scaling up adaptive sports, as these are the stages where respondents believe it is possible to form an understanding of adaptive sports as a rehabilitation tool and engage veterans in various programs.

2. Problems of availability and adaptability of infrastructure to the needs of veterans

The most significant and widespread obstacle cited by respondents was related to infrastructure and its accessibility. The number of gyms, sports sections and grounds is unevenly distributed across different regions and types of settlements. Access to sports infrastructure is uneven and depends on the place of residence of a veteran. Of course, it is possible to choose a sport or activity for which there is an appropriate infrastructure, but for many, even the presence of a gym, CYSS, training courses, or sections does not mean that they can interact with them, as they are often inaccessible to people with limited mobility. The problem of infrastructure includes also the transportation

challenges as well as an issue with public areas, which are often uncomfortable physically or psychologically for people with certain complications due to injuries, wounds, or illnesses.

3. Lack of specialists

Recovery through adaptive sports requires the involvement of specialists who can not only explain the biomechanics of the body during certain exercises and activities, but also understand more comprehensively how to work with veterans. Those who can explain how to adapt a sport to an injury, wound or illness in order to avoid harm and provide as much benefit as possible for recovery. The lack of specialists can be partly solved by yesterday's participants in adaptive sports recovery programs are being involved in this sphere more professionally. Or those who have a background in the field are gaining the capacity to use their knowledge and experience in working with veterans. Therefore, there is a greater need for training, courses, and authorized educational programs.

4. Lack of awareness about recovery through adaptive sports

Low awareness means that those outside the "information bubble" are unlikely to find information and try adaptive sports for themselves. It is impossible to scale up sports-based recovery programs without proper informing and communication. Not only information is important, but also communication with all its elements. This determines the level of veterans' involvement in adaptive sports..

5. Lack of physical culture in Ukraine in general

A relatively low percentage of citizens are involved in sports in Ukraine. The very culture of sports is questionable, as many instructors do not have the necessary knowledge or certifications, and people who use their services do not care much about it. It is impossible to develop adaptive sports in isolation and in an environment that lacks the culture of physical activity. However, the development of recovery through adaptive sports among veterans can contribute to the formation of this culture in general and attract more people to training.

6. War

The problem that slows down the scaling of adaptive sports for veterans the most is the war that is taking place on the territory of Ukraine. A significant number of participants in adaptive sports recovery programs are active military personnel, which affects their ability to play sports or participate in sports camps and competitions. It also creates a risk of repeated injury, wounding, or exacerbation of the disease and makes recovery more difficult.

The recovery of veterans after injuries, wounds or illnesses through adaptive sports is a promising field of work for coaches, members of the public, local

and central authorities, etc. It is beneficial not only for the veteran community but also for the country as a whole.

Adaptive sports can become a bridge between civilian and veteran culture, helping people from different social groups to find common ground. It can be used to create an environment that educates society and makes more visible that a rich and fulfilling life does not end after trauma/injury or illness, but can be transformed and new horizons for accomplishments can be found.

Analysis of the foreign experience



1.1 Rationale for country selection

When preparing a comparative review of international experience in the development of adaptive sports for veterans, we looked for the countries that have relevant characteristics for studying and potentially applying their practices in the Ukrainian context.

We have grouped countries into two notional categories. The first includes the United States, the United Kingdom, Canada, and Australia. All are members of Five Eyes, an intelligence alliance (1941) with a similar common law system, and established veterans' support systems. In addition, the United States, the United Kingdom, and Canada have been members of NATO since the organization's early years. Learning from the experience of these countries is particularly valuable because of their active engagement with Ukraine, the exchange of experience, and the activities of numerous international and non-governmental organizations supporting Ukraine and its veterans on their path to recovery at this stage of the war.

In the second category, we included **Israel** and **Croatia** due to some (albeit limited) similarities of contexts. The main selection criteria were that both countries have experience of wars that were fought on their territory and a high percentage of veterans among the population. Israel is included in the review for its unique veteran support system, which operates in conditions of ongoing military conflicts. The state has experience in the struggle for sovereignty that is comparable to Ukraine's in some respect, and is also an example that is often used as a model for security policy in Ukraine. Croatia was chosen, in particular, as a post-socialist state that joined NATO and the EU and actively shares its experience in the veteran policy area with Ukraine.

This approach provides a better understanding of various models of support for veterans and exploring opportunities for their implementation in the Ukrainian setting, as well as avoiding repeating mistakes and developing our own effective solutions in the field of adaptive sports for veterans.

1.2 The context and target group

The disproportionate scale and conditions of the Russian-Ukrainian war create unique challenges that differ from the experience of other countries. Therefore, the local context of Ukraine should be taken into account when studying such experiences. When trying to transfer international practices, one should also take into account the differences in approaches to determining veteran status, which, in turn, affects the size of the target group of veteran policy.

For example, in Canada, which is comparable to Ukraine in terms of population, more than 600,000 Canadians are considered veterans, about 1.6% of the

population. Everyone who served in the Canadian Armed Forces, including reservists, has the status of a veteran, which significantly expands the target group.

In the United Kingdom and the United States, the number of veterans is much larger. These groups were formed by participation in numerous military conflicts that differ in scale and duration. For example, since 1945, the British army has been involved in 83 military conflicts, including the wars in Africa, Yugoslavia, Afghanistan, and Iraq. As of 2021, 1.85 million people in England and Wales reported that they had served in the UK Armed Forces. This is 3.8% of the total population aged 16 and over (or almost every 25th person).

In the United States, there were more than 18 million veterans in 2023, which is about 6% of the country's adult population⁸. Veterans in the United States are considered to be people who have not only participated in combat, but also those who have served at least one contract in the military and completed it under any conditions, except for dishonorable discharge. A reservist called up for active duty at the federal level or a person who was injured during training can also be considered a veteran.

Israeli law does not have a concept of a veteran. Instead, there are the concepts of a "discharged soldier," "active reservist," "discharged soldier with a disability," and "wounded soldier." All citizens are either conscripts or reservists, or are recognized as unfit. A person who participated in the military operations is not singled out in any way, while combatants receive the status of participants in a particular military campaign, which, however, does not provide any status or related benefits or obligations. There is also a separate status for a person with a disability in the Israeli Defense Forces ("nehe zahal")⁹.

The definition of a veteran in Croatia is comprehensive and includes not only members of the armed forces, but also civilians who contributed to the "war effort." The estimated number of the veterans in the country is over 500,000, meaning that every tenth Croatian citizen is a veteran¹⁰.

⁷ Canada's Veterans: By the numbers: https://www.statcan.gc.ca/o1/en/plus/4932-canadas-veterans-numbers

The changing face of America's veteran population: https://www.pewresearch.org//the-changing-face-of-americas-veteran-population/

⁹ How Israel takes care of its veterans: https://mil.in.ua/uk/blogs/yak-izrayil-pikluyetsya-pro-svoyih-veteraniv/

UNDP report "Review of International Practices in the Field of Veterans' Reintegration: Considerations for the War and Postwar Context of Ukraine", 2023: https://www.undp.org/uk/ukraine/publications/ohlyad-mizhnarodnykh-praktyk-u-sferi-reintehratsiyi-veteraniv-mirkuvannya-shchodo-voyennoho-ta-povoyennoho-kontekstu-ukrayiny

1.3 The development of the field of adaptive sports among veterans

The development of adaptive sports for veterans in each country has been shaped by different historical conditions and the needs of the target group. It is reflected in approaches to recovery and social integration through sports.

Adaptive sports for veterans began to develop rapidly in the United States after World War II, when an urgent need to rehabilitate wounded servicemen arose. At that time, the social stigma was so deeply rooted that sports were not available to the so-called crippled bodies. But thanks to medical progress and the dedication of pioneering doctors and rehabilitation coaches, paralyzed veterans formed the first wheelchair basketball teams and got involved in other sports that were adapted to their needs¹¹.

A significant role in this process was played by the British neurologist Ludwig Guttman, who used sports to rehabilitate wounded veterans. He initiated the International Wheelchair and Amputee Sports competition (1948), which later became the Paralympic Games. The first competition recognized by the International Olympic Committee was held in conjunction with the 1960 Summer Olympics and has since become a major international event showcasing the abilities of athletes with disabilities 12. Other national sporting events have also gradually evolved. In particular, the National Veterans Wheelchair Games (1981) and, eventually, the Warrior Games, launched in 2010 by the U.S. Department of Defense (DoD). The latter are now held annually, and every athlete can participate regardless of their disability.

In the UK, adaptive sports for veterans has also developed significantly, although it remains less systematized than in the US. The first **Invictus Games** were held in 2014. They were initiated by Prince Harry after he had attended the Warrior Games a year earlier and was convinced that sport could help both physically and psychologically. The annual competition has spurred the national development of adaptive sports, allowing veterans to participate in international competitions and receive additional support from both the government and numerous charitable organizations. For example, **Help for Heroes**¹³, is an active organization that has implemented comprehensive physical rehabilitation programs for wounded and ill veterans. One of their activities is the organization of inclusive and adaptive sports events for veterans and their families.

Following successful examples from the United States and the United Kingdom, Canada created the Soldier On program. It not only ensures that veterans

Davis, D. (2020). Wheels of courage: How paralyzed veterans from World War II invented wheelchair sports, fought for disability rights, and inspired a nation. Center Street.

Scholz, J., Chen, Y. T., & De Luigi, A. J. (2024). History of Adaptive and Disabled Rights Within Society, Thus Creating the Fertile Soil to Grow Adaptive Sports. In Adaptive Sports Medicine: A Clinical Guide (pp. 3-21). Cham: Springer International Publishing.

Help For Heroes: https://www.helpforheroes.org.uk/

have access to sports, but also encourages them to actively participate in sports competitions and training. The program provides veterans with the opportunity to engage in adaptive sports and gradually expands the circle of support for those who need physical and psychological rehabilitation after service¹⁴.

Australia has been developing adaptive sports for veterans to support military personnel returning home after serving in peacekeeping missions, in response to its own needs and international development. In 2018, the Invictus Games were held in Sydney, which prompted the founding of Invictus Australia¹⁵. Furthermore, the country's Ministry of Veterans Affairs is implementing The Veterans Heart Health Program¹⁶. Its goal is to support the individual physical activity and well-being of veterans.

Adaptive sports for veterans began to develop in Croatia after the 1991-1995 War of Independence, that created the need for rehabilitation programs for a significant number of war veterans with injuries and disabilities. Subsequently, the state and local organizations began to cooperate with international partners to expand opportunities for veterans in sports. However, it should be noted that Croatian veterans are predominantly aging, so scaling up existing programs is mostly out of the question.

Israel has also been actively developing adaptive sports programs given the ongoing conflict in the region. In 1974, the **Zahal Disabled Veterans Organization (ZDVO)** founded the **Beit Halochem (House of the Warriors)** center, which became a place of rehabilitation and sports training for veterans with disabilities. Today, it is a network of sports and rehabilitation centers under the same name, operating in all major cities of the country and including special inclusive swimming pools, gyms, game rooms, and recreational facilities such as reading rooms¹⁷.

The main center of the Beit Halochem in Tel Aviv hosts **The Veteran Games.** The selection process is based on the principle that participants do not have to demonstrate athletic skills to join the competition. The only selection criterion is whether their participation will contribute to their recovery. Another aspect of the program is that participants are encouraged to bring their families with them, as it is believed that the loved ones play a crucial role in a veteran's recovery¹⁸.

Adapt. Overcome. Soldier On: https://www.soldieron.ca/

Team Australia at the Invictus Games: https://www.invictusgamesfoundation.org/invictus-community-nations/australia

Heart Health Program: https://www.veteranshearthealth.com.au/

How Israel takes care of its veterans: https://mil.in.ua/uk/blogs/yak-izrayil-pikluyetsya-pro-svoyih-veteraniy

^{&#}x27;It's Not About Winning': For These Disabled British and Israeli Vets, a New Type of Sporting Event: <a href="https://www.haaretz.com/israel-news/2023-05-31/ty-article-magazine/.premium/not-about-winning-for-disabled-british-and-israeli-vets-a-new-type-of-sporting-event/00000188-716a-d2d1-afbe-7d6ff4580000

1.4 Policy mechanisms and tools

Every country that develops adaptive sports for veterans faces a number of challenges and obstacles related to scaling up these programs. The most common ones are a **lack of necessary infrastructure and competent personnel**, as well as financial challenges. The development of effective mechanisms and policies that support adaptive sports for veterans depends heavily on the institutional structure, availability of resources, and specifics of veterans' policies. All the countries in our sample engage both governmental and non-governmental capacities in the development of adaptive sports, and often rely on existing sports infrastructure for invasport.

In the United States, the Department of Veterans Affairs (VA), along with the Department of Defense, plays a leading role in developing veteran programs that include adaptive sports as an important component of rehabilitation. In particular, the **VA Adaptive Sports and Arts** program brings together national sports and arts activities for veterans to promote veterans' independence, participation in community life, well-being, and quality of life. The programs are based on the clinical experience of Veteran Service Organizations and are implemented with the support of corporate sponsors, individual donors and community partners. Additionally, the program provides grant funding for organizations to increase the quantity and quality of permanent adaptive sports activities for veterans¹⁹.

Non-governmental organizations such as the **Adaptive Sports Center** and **Disabled American Veterans** are also notable, covering support systems for veterans with disabilities across the country. Veterans of the U.S. Armed Forces make up a significant proportion of all those involved in adaptive sports in the country. Most programs are to some extent affiliated with Veterans Affairs Medical Centers (VAMCs)²⁰.

In the United Kingdom, the mechanisms for supporting adaptive sports for veterans are partly backed by government programs and at the same time heavily dependent on non-governmental organizations such as the **Royal British Legion**²¹ and Help for Heroes. Cooperation with the Ministry of Defense allows British organizations to integrate adaptive sports into rehabilitation programs for veterans, but most of their funding comes from charitable contributions. This model has advantages in being flexible, but is limited by the volatility of financial income, making it more difficult to scale programs.

Canada also relies on the support of the non-governmental sector in the field of adaptive sports for veterans and utilizes, in particular, the existing network of

VA Adaptive Sports and Arts: https://department.va.gov/veteran-sports/

Community organization factors affecting veteran participation in adaptive sports: https://pmc.ncbi.nlm.nih.gov/articles/PMC9135442/

The Battle Back Centre: https://www.britishlegion.org.uk/get-support/physical-and-mental-wellbeing/recovery-services/the-battle-back-centre

organizations. Among them, for example, is **Canadian Adaptive Snowsports (CADS)**, a non-governmental organization that develops adaptive snowsports for people with physical and cognitive disabilities, including veterans. **Adapted Sport and Recreation of Canada (ASRC)** recognizes the importance of physical activity for the rehabilitation and social adaptation of veterans and actively engages them in its programs. In order to provide the veterans with opportunities to engage in sports that promote physical health, ASRC works with other veterans' organizations and adaptive programs that promote physical health, improve psycho-emotional well-being and integrate into society.

In Australia, the Adaptive Sports Program is run by the Australian Defense Force in partnership with Invictus Australia. It is designed for both current and former military personnel who have been injured, traumatized or have suffered illness²². The program is supported by the Australian Parliament²³, while government mechanisms for promoting adaptive sports for veterans also rely heavily on partnership between the state and charitable organizations.

In Croatia, where state resources are limited, adaptive sports for veterans is supported by a combination of state measures and the active involvement of international partners. The Croatian Ministry of Veterans is committed to attracting funding from the European Union and other international donors to expand opportunities for the veterans.

The embodiment of such cooperation are the veterans' centers, which are created around the idea that everything veterans need can be found in one place. Basically, these are residence and rehabilitation centers that permanently or temporarily accommodate Croatian veterans, soldiers returning from peacekeeping missions, wounded deminers, civilian victims of war, and other people who need this kind of care, particularly, physical rehabilitation, training and indoor and outdoor sports and recreation²⁴.

The most notable Israeli experience is the evolution of the House of the Warriors network. The centers range in size from 5,500 to 10,000 square meters and provide veterans and their families with physiotherapy, hydrotherapy, and rehabilitation services. The budget of these centers is partly funded by the Ministry of Defense, partly by donations from abroad, and partly by small symbolic contributions from the residents themselves²⁵.

Adaptive Sport program: https://invictusaustralia.org/adaptive-sports-program/

The healing power of sport – what are adaptive sports: https://www.dva.gov.au/newsroom/latest-news-veterans/healing-power-sport-what-are-adaptive-sports

S. Brus, Y. Bukhta, I. Shmatko; Edited by D. Sultangaliev and L. Galan (Kyiv, 2024). Social support systems for veterans: Croatia, Israel, the United Kingdom, Serbia and Denmark. Analytical brief.

²⁵ How Israel takes care of its veterans: https://mil.in.ua/uk/blogs/yak-izrayil-pikluyetsya-pro-svoyih-veteraniv



For this study, it was imperative to understand not only the role of adaptive sports in the lives and recovery of veterans after trauma/injury or illness. Therefore, the presentation of the study results will cover several interrelated topics.

- The way adaptive sports has become a part of veterans' lives. It is important
 to trace how and when veterans integrate adaptive sports into their lives
 for understanding at what stage and under what conditions a person can
 be involved in recovery through sports.
- Specifics of involvement in adaptive sports programs (which sports, which projects, why, etc.) as well as understanding how veterans interpret adaptive sports for themselves.
- Impact of adaptive sports: further involvement and lifestyle changes, which is important to describe all the possible consequences of getting involved in recovery through sport, both positive and negative.
- Scaling up adaptive sports among veterans: opportunities and obstacles. The study involved not only those who participated in adaptive sports programs, but also experts who create and implement them. They can reveal more insights into potential ways for adaptive sports to grow and spread among veterans in Ukraine and uncover the obstacles that prevent the scaling or make it slower than desired.

To develop further recommendations, it is important to describe and elaborate on the previous points. In this study, we will also provide recommendations based on the answers of the respondents. These recommendations require further verification and establishing an understanding of how feasible they are to implement in the current environment.

2.1 The path to sports: "I've already been doing some warm-ups while still being in the hospital bed"

Military personnel is a social group that takes a much higher risk to their own life and health, because they are largely in circumstances where just a few seconds can change their entire life or take it away altogether. A fairly high percentage of servicemen and women get injured, wounded or ill while defending their homeland. These injuries can be of variable severity. But even regardless the factor of possible injuries or wounds, military service and participation in combat leave a significant mark on the health of a soldier. The Veteran Hub's study "Journeys of Veterans" lists many different consequences for mental and physical health of a military person. These include back pain, problems with the urogenital and cardiovascular systems, sleep, blood pressure, etc.²⁶

[&]quot;Journeys of Veterans" research, Veteran Hub: https://veteranhub.com.ua/analytics/doslidzhenya-shlyahu-veteraniv-i-veteranok/

About 50,000 people suffered from injuries and wounds leading to amputations as of August 2023²⁷, and about 200,000 were seriously injured²⁸. By June 2024, this number increased up to 100,000 Ukrainians with amputations (both civilians and military personnel)²⁹.

A significant percentage of military personnel may suffer one or more traumatic brain injuries in a short period of time, which can negatively affect their subsequent health and lead to impaired hearing, vision, musculoskeletal function, affect speech, memory, and the functioning of the entire body. It is now understood that military service and participation in combat operations can lead to a deterioration in physical and psychological health, and thus create a need for recovery. Therefore, sport as a recovery tool is important not only for veterans with visible wounds, injuries and illnesses, but also for those with invisible injuries (TBI, psychological disorders, musculoskeletal damage, etc.).

"No matter how bad you feel, it will make it easier for you, for your body, for your mental health, I'm 100% sure," – stated the veteran.

However, veterans may think that participation in adaptive sports programs is more important for those who have a complex injury, wound or illness.

"Sometimes I feel that it would be better if someone was in my place, someone who was more seriously injured. Someone with amputations, something like that. And I only have a contusion," – the veteran said.

Why precisely can adaptive sports help in the recovery of veterans? Adaptive sports come in all forms: from wheelchair basketball to archery with teeth or skeleton. Almost every kind of sports or activity can be adaptive. It requires either certain modifications to the equipment, additional materials, special flooring or the adjustment of existing equipment to accommodate the specifics of the body's functions and thus ensure an equal participation for everybody.

Besides the benefits, it is also important to discuss how and when veterans start engaging in sports activities, why, and what or who motivated them to do so. This knowledge is potentially important for understanding at what stages and how to communicate with veterans to engage them in adaptive sports programs.

WSJ: 50 thousand Ukrainians lost their arms or legs because of the war: https://www.radiosvoboda.org/a/news-wsj-50-tysyach-ukrajinciv-amputacija/32530520.html

²⁸ Ibio

Almost a hundred thousand people have amputations due to the war. How the Superhumans Prosthetics Center gives them a chance: https://www.radiosvoboda.org/a/olha-rudneva-pro-protezuvannya-v-ukrayini-ta-tsentr-superhumans/32977005.html

2.2 When do veterans begin to incorporate sports into their recovery?

Each respondent to the study has their own path to adaptive sports, which sometimes begins well before the military service and an injury, trauma or illness.

"Sport is the solid foundation of my personality, I have been playing sports since I was 5 years old regularly. It was different kinds of sports, including extreme and technical ones. Sport mobilizes and gives strength to face any challenges in life and work," – the veteran said.

Some veterans mentioned their previous experience of involvement in sports and that after being wounded/injured or becoming ill, it was the first thing they thought of because they were used to movement.

"I started doing sports right after the surgery. On the 10th day after the operation, I asked my wife to buy some elastic bands. I was doing some kind of exercises while still being in the hospital bed: some warm-ups, trying to do something with those elastic bands. Sport is a part of my life, and I can't imagine myself as a complete person without sport. That's why I had already started training and rehabilitating a little bit at that stage. And when I got better, when I could walk on crutches, I went outside, I went to the sports ground at the school at the opposite side of the street. There is a playground there, with some bars, a horizontal bar, all that stuff. I was already walking there with elastic bands and started to exercise a little on this equipment, doing something depending on how I felt the condition I felt," – the veteran said.

However, after an injury/trauma or illness, not only people who have been actively involved in sports before, but also those who may not have had such experience, start doing adaptive sports during rehabilitation or subsequent recovery.

"I didn't do sports at all before I was injured. Before my injury, I thought it was stupid. Only people who have nothing to do, go in for sports, because there are a million different other interesting things to do instead of sweating, suffering, and so on. I thought it was some kind of bullshit," – the veteran said.

Veterans get involved in adaptive sports after an injury, trauma or illness, regardless of whether they have previously played sports or not. It can only be assumed that if sports was present in their lives before military service and injury/trauma, or illness, the "path" to it may be shorter and influenced by fewer factors than if it was not. This can be explained by the fact that those

who had previously been involved in sports were more likely to say that they started to include physical activity during the treatment and rehabilitation phase. And those who had little or no involvement in sports in their lives before their injury or trauma, were more likely to say that they were introduced to adaptive sports in the latter phase or that they were motivated by a fellow soldier, rehabilitation specialist or close person.

"My wife is also a military person, an officer, she came to me and was with me during the most difficult times of my treatment. She was very worried about how I would be able to walk. She said: "You've been lying down for a very long time, you're atrophying, it will be hard for you to walk later. I talked to the doctor - why don't you do some crunches?" Well, I was surprised by this proposal, because I still had a lot of tubes sticking out of me, I had an external fixation device on my leg, so it was difficult for me to get up, to drink water. But nevertheless, the doctors allowed me to do it, my wife said so, so I started doing crunches," - the veteran said.

But this assumption requires further research.

Furthermore, each individual may have their own interpretation of the term "sport". Certainly, there is a general definition set out in the Law of Ukraine "On Physical Culture and Sports". According to it, sport is the subjects' activity in the field of physical culture and sports aimed at identifying and comparing people's achievements in physical, intellectual and other skills through sports competitions and appropriate preparation for them. Sport has the following types: children sport, youth sport, reserve sport, sport of higher achievements, professional sport, sport of veterans of physical culture and sports, sport of war veterans, Olympic sport, non-Olympic sport, service and military applied sport, sport of persons with disabilities, etc.³⁰ However, veterans have their own interpretations of what can be classified as sport and what cannot. It was often suggested that regular physical activity and exercise are not considered to be sport, so the veterans did not consider sport to be present in their lives.

"I can't say that I've ever played sports at all. I prefer the term 'physical training'. I did not say that I never played professional sports, but I had an active life: I used to ride a bicycle, I like running and athletics," – the veteran said.

Veterans begin their journey of recovery through sports at different stages.

Directly during treatment, some veterans try to add physical activity that does not harm them. We should also mention invisible traumas (TBI, mental disorders, etc.), when a veteran has no significant physical impairments. In this case, physical activity can be introduced at the stage of treatment and made

an integral part of it. This approach, in particular, is used at the Lisova Poliana rehabilitation center³¹.

"The place is more of a psychological rehabilitation center. And when you walk in, there are three tennis tables right there. When I saw it, I was just over the moon. 21 days, a real joy. Two pool tables. No, three pool tables. A gym. There was everything there - archery, even. Just go and recover, as they say. At first, I didn't care about those procedures, because I had sport," - the veteran said.

During rehabilitation. Rehabilitation centers are somewhat closed facilities where many veterans stay. That is, it is easier to get in touch with them and involve as many of them as possible in adaptive sports. Or at least introduce them to this alternative method of recovery. Veterans who are currently working on the development of adaptive sports among veterans in their communities said that they themselves tried to visit hospitals and rehabilitation centers to communicate with their brothers and sisters in arms and inform them about adaptive sports and the fact that even after a serious injury they can feel the joy of movement and interact with their new bodies.

"Look, we have the following situation. The guy who have had medical treatment, return to military units. Those who have not been treated return home after the MSEC, after the MMC. How can I, as a person who wants to raise awareness of the development of adaptive sports, inform these guys who are already at home that there is such a possibility? I've asked you a question, and I'm giving you an answer right away. There is almost no way to do it. That's why you need to meet with them when they are still rehabilitating," – a veteran sports and a manager said.

Respondents also indicated that the rehabilitation therapists or trainers at the centers motivated them to take part in the competitions or try a certain sport.

"It was a rehabilitation therapist. He himself actively participates in competitions: in the Ukrainian championship and so on. He has been to Europe and won second place there. So, he motivated me. I honestly did not believe that I would make the national team. He said: go ahead and try. Besides, he saw my physical skills, meaning that my hands work perfectly. And so on. And, of course, he made me go to the pool. He suggested it, that's what I'm saying," – the veteran said.

As for rehabilitation, the process can take a long time. Veterans often pointed out that they had no rehabilitation period at all. They mentioned a lack of rehabilitation centers for veterans. Respondents indicated that they were unable to get through the rehabilitation process for various reasons: lack of

places in rehabilitation centers, lack of support and information from their military unit, difficulties with documentation, etc. Among the respondents were veterans who were traumatized and injured during the ATO/JFO, when the rehabilitation environment was much worse than it is now. The absence of a quality rehabilitation stage could potentially affect further recovery.

"There was no rehabilitation as such, just a physical therapy room, or something like that. We went there a couple of times a week, just to lie on the floor, to lift some kilogram dumbbells not to become stiff, and that was it. So, when I got the prosthesis, I started to walk on it a little bit. In the prosthetic center where it was fitted, they showed me how it works in the format of "look, bro, you stand like this, bend like this, unbend like this, and be sure to pay attention to this, this and that." And that was it. After all this, it was only trial and error. I remember the first day I got it, I came to the hospital, took one crutch and walked around the floor. Everyone was like: "Wow, wow, that's so cool, wow." And the next day I was like Jesus f*cking Christ, because I woke up in the morning and my leg was the color of the eggplant. Because you can't strain it so much on the first day and walk on it with only one crutch," – the veteran said.

After rehabilitation, if there was any, when the veterans return to military service to the reserve companies/battalions or rear units. This period was mostly not talked about, as military service is one of the biggest obstacles to practicing adaptive sports for many reasons (lack of infrastructure and equipment, lack of time and support from the leadership). At the same time, veterans said that they might be lucky enough to have a colleague in the service who has gone through the path of recovery through adaptive sports and will be their main motivator and support along the way.

"If we're talking about sports in life, especially in the army, this should be the number one priority. Physical training in times of war is almost the most important thing. I have already told everyone about this, this is my opinion. When I hear that we have people who hold the positions of chief physical trainers, those who decide what to do: they go to gyms, introduce some concepts, and participate in competitions. I was like, wow, I witnessed as everything turned 180. Tell me, do people really understand why they need sports? Usually, who are the ones who understand? Those who understand what combat is, and those who understand what the training exertion is for. Those are who understand why it is necessary. If they have such an understanding, they will promote this stuff, this topic in general," – the veteran said.

After the return to civilian life. This is the least mentioned period of involvement of adaptive sports in a veteran's life. In most cases, this happened on the recommendation of a colleague or relative. It should be noted that in

the study, we did not interview those who started going to the gym after returning but did not participate in adaptive sports programs for veterans. Of course, there are many such examples. But we are focused on involvement in a more comprehensive recovery process through adaptive sports.

"I demobilized. With my light injuries and contusions, I started my job and worked in an organization. A regular sales assistant, a supplier representative. After the concussion, I started practicing martial arts, MMA. I had been practicing it for 4 years, and then the full-scale invasion started," – the veteran said.

It is worth adding that a veteran can be involved in sports recovery more than once - this is a specific feature of the Russian-Ukrainian war. Veterans who were wounded/injured or got ill during the ATO/JFO and started doing adaptive sports then, after being wounded again during the full-scale war, also tended to return to recovery through sports. This is a specific feature of adaptive sports for veterans that is unique to Ukraine.

"We were at our positions, a mine hit us. I was injured, two legs were amputated, plus the arm was injured: an open fracture. But I am fine. I'm already fighting at the full-scale war. I was no longer worried about losing my legs or arms. I knew that this would not stop me. Now I have prostheses, I can run on prostheses. It's just that now I have a different goal. I ran a marathon on my own legs, now I want to run a marathon on prostheses," – the veteran said.

To summarize, veterans begin to discover adaptive sports at different stages of their journey after trauma, injury or illness: during treatment, rehabilitation, return to the military or civilian life. They can do it several times, but with different "bodies", because those who participated in the ATO/JFO returned to the ranks of the Defense Forces of Ukraine after February 24, 2022. The path of Ukrainian veterans in adaptive sports is unique. After all, they go through it when their country is at war, and recovery from the trauma/injury or illness does not guarantee that they won't go through this experience again in the future. And the recovery path itself can be more rocky, as some veterans may serve in combat units and go on rotations to the combat zone while simultaneously participating in adaptive sports recovery programs. This significantly complicates the whole process and creates a great risk for them.

2.3 Programs of the recovery through sports: «I don't think this is a competitive story. On the contrary, I am glad that there is such an alternative»

There is no single vision of what exactly adaptive sports recovery programs should look like, both in Ukraine and in the rest of the world. And this is reasonable, as the main task of the idea is not to monopolize the field, but to create a greater variety of opportunities for every veteran to choose what is right for them.

Respondents had different views on adaptive sports programs. Some people prefer competitive sports, when they need to achieve results; others, on the contrary, want to be in a community and do not try to win medals. And for some, it is more important not to participate themselves but to help others, so they become coaches, sports managers, or sports ambassadors in their communities. This is especially important because some sports programs (Invictus Games, Warrior Games, Air Force Trials, Games of Heroes, Spartan (para race)) take place once a year or every few years. This may not be enough to fully meet the need of the veterans.

"We are invited to these competitions only. And this also has a very strong impact to a certain extent, because you don't understand why you should continue to train. Why? To just come to these kinds of competitions and just compete, without any qualification process? And that's it? What's the point in terms of the first, second, third category, candidate, master, international master? We don't even have this kind of sport officially. It's not even registered. You can't get anything for it, neither first reserve nor any official sports achievements. You can't get anything at all. None of this is legally regulated. It's not laid down in law. What's the motivation here?" – the veteran said.

Respondents named various sports-based recovery programs in which they have participated or plan to participate. In the following, we will focus only on those available in Ukraine. We will not take into account opportunities abroad (marathons, orienteering competitions, etc.) because this is an unregulated environment and is not related to the scaling of adaptive sports for veterans in Ukraine.

The programs of recovery through adaptive sports include the following:

Comprehensive adaptive sports programs that include both a competitive component and a training aspect, as well as the involvement of rehabilitation specialists, psychologists, masseurs, etc. This format is used to prepare the national team for international competitions (Air Force Trials, Invictus Games). Veterans said that participating in this type of project has become a good experience for them, which has launched many other processes that now affect their lives.

"As for Invictus [Games]. It's a very cool thing if guys, so to speak, immediately after discharge from a rehabilitation center, end up here. It's just probably the best story that can happen in this case. The injury, the hospital, the rehabilitation center and Invictus. It's really great if this happened. Even if a person is withdrawn, has no friends, this still can happen," – the veteran said.

"When I came back from the Invictus Games, I realized that I could combine all of this. So I formed a team of veterans, and we went to the Ukrainian team table tennis championship," – the veteran said.

Competitive programs are the projects that do not involve a training aspect or the training is not organized as a separate process, but rather are part of a competition. There are many such competitions in Ukraine now, and the number is growing every month, both regional or national. This is a good opportunity for the veterans to fulfill the need to achieve results and to communicate with their brothers and sisters-in-arms while being in a community of their own.

"Also a strongman competition or something like that. Or this Warriors' Cup, where guys who know each other meet and compete. It's not a lengthy event, and it's not really as expensive as our state would spend on some other events," – the veteran said.

Creating sports clubs, forming teams, and interacting with veterans within the format. The sports clubs are not always just about veterans. Children and people without combat experience often attend them. These can be sections for a particular sport, or just a space where you can practice adaptive sports.

"He's not a veteran, it was a regular civilian club, but the guy knew what he was doing. He helped me put everything in order, not just for fun, but to improve my results and find this support. Was there any additional support from this club? I wouldn't say so. They just worked with me, like with everyone else. There were no peculiarities or anything else that would create some advantage for me. I was just a regular visitor of this club, like we were practicing, just... They sometimes gave me some tips. There were competitions in [settlement]. They told me about it: if you want to participate - it's fine, if you don't want to - it's also ok. That's why the experience of working with this person was important to me, that they could give me something more than I knew. And, in principle, whether he was a civilian or a veteran, at this stage I can't say that it was important to me" - a veteran said.

It should be understood, however, that not at every stage of the journey after trauma/injury or illness, a veteran will feel comfortable in spaces or

groups where they cannot identify someone as "their own," i.e. a person with experiences that are similar to theirs.

Among the sections mentioned by respondents are TMS HUB (a space where people practice adaptive Brazilian jiu-jitsu), an archery section, an amputee football team in Lviv³², a whole space for adaptive sports at the Dnipro municipal sports club complex in Cherkasy³³ etc. Essentially, veterans mentioned the initiatives they were involved in or organized themselves. However, there is no holistic picture of how this system of the recovery through sports works, so veterans often discussed the need for a guidebook where they could learn more about the places to go that are close to them and meet their preferences.

"The gym opened near me... I asked about it, went there and tested it. I liked it there from the first days, the first day. I just kept going. I completely forgot about aggression. I started to control myself. I realized what it was. I was calming down. I went to work and worked. After work, I knew that I had to go to the gym after 9, so I went to the gym until 12 am. And until 12 am I'm at the gym working my fingers to the bone. We spar for 2–3 hours, fight, and hone our techniques. And it's really cool. I mean, it brings you closer to each other. I met some really cool guys who helped me and are still helping me now, and helped me during the war," – the veteran said.

Programs that promote professional development of veterans. For example, the School of Adaptive Trainers³⁴, where veterans can learn how to train their brothers and sisters in arms if they have certain physical or psychological conditions. This includes the project "Sports Ambassadors"³⁵, implemented by the Come Back Alive Foundation together with its partners. The goal of these adaptive sports programs is to both scale up adaptive sports as a recovery tool and boost professional growth for veterans themselves. They discover new perspectives on adaptive sports, learn how to create their own projects, organize activities in their communities, and help their brothers and sisters in arms recover through sports.

"The main thing I wanted was to teach veterans to become coaches. Because I really like the 'from your kin to your kin' principle, you know. When a civilian trains a veteran, it's one thing, but when a veteran is trained by the veteran who has gone through the same journey, it's totally different story. It's a new level of trust, a new level of cooperation, and it's a much greater quality of cooperation that comes out of it. That's why

Football on crutches - Lviv has a team of veterans with amputations: https://veteran.com.ua/news/view/majzhe-vsi-nashi-gravtsi-veterani-minus-intervyu-z-kerivnikom-pershoi-v-ukraini-futbolnoi-komandi-na-militsyah

Dnipro Municipal Sports Club Center for the Development of Sports for War Veterans and Adaptive Sports: https://mskdnipro.com/veterany/

[&]quot;School of Adaptive Coaches", Games of Heroes: https://www.facebook.com/share/p/j6RTsNf1aKC2cEKU/

Sports Ambassadors project, "Come Back Alive": https://savelife.in.ua/sport-ambassadors/

the main thing I wanted to do was to train veterans who have some basic coaching education, many of them former athletes. Many of them have some kind of physical education, you know, under their belt, or they have been doing sports, not as a super professional, but throughout their lives," – the organizer of the sports program said.

We've described just a few of the recovery through adaptive sports programs that are currently in place or are emerging. They pursue different goals and provide an opportunity to engage in adaptive sports in a way that makes the veteran feel comfortable. Further development in the field of adaptive sports depends entirely on the goals of each individual. For instance, there were respondents who indicated that they wanted to join the Paralympic team, as they had already fulfilled their other needs. There are those who like to participate in competitions and just socialize with their brothers and sisters in arms. And there are those who want to earn a medal for their efforts and aspirations. When creating adaptive sports programs, it should be borne in mind that the environment of veterans is not homogeneous, so the request and specifics of recovery may be different for everyone. This is a significant challenge, but also a potential space for growth when different target audiences are spoken to according to their interests and desires.

"I think it's important to communicate that it's primarily about overcoming yourself. To reject motivation by saying that it's not about medals and that you're all winners is, like, also wrong. Because it turns out that people who made extraordinary efforts, trained, went through a lot of pain, overcame a lot, and their efforts are being undermined by the message that, for example, that guy over there, he drank beer yesterday, and today he's not aiming for the medals, as you are, so, basically, we are the same. Sounds like some kind of Soviet Union to me. Well, yes, if you level everyone and, let's say, level out everyone's personal motivation, then here we are. So, if we need to drag as many people as possible into the competition, into this physical training, because it is not yet a sport, it is actually more physical training, it is very important to maintain this common sense, this balance, when we choose the right words for the right audience" – the veteran said.

2.4 What is the impact of adaptive sports: «my country needs me even after I am out of service»

Today, adaptive sports are probably the most in-demand mean of recovery among veterans (including active military personnel). This is based not only on this category of population being at the highest risk of injury, trauma, or illness, but also on the specifics of the impact of adaptive sports on physical and psychological health. Adaptive sports can be practiced not only by people with war-related disabilities, but also by those who do not officially have this status but need it due to injury, trauma, or illness. Each aspect of how adaptive sport affects the well-being and lives of veterans will be discussed in more detail below, but it is worthwhile to address whether adaptive sport has any impact at all.

As part of our study, we asked respondents about their subjective perception of whether they noticed an improvement or deterioration in their well-being after engaging in adaptive sports. Most of the responses were positive, meaning that, according to the respondents, there was an impact, and it was more positive.

"Now, speaking of myself, I can say that I am an absolutely happy person. And I'm being honest about it. Actually, it is all thanks to veteran sports. Why is that? Let me explain. For example, the endurance, the desire to improve myself, allowed me to get rid of psychological problems that I definitely had," – the veteran said.

"The person functions without any problems in everyday life: he learned to move, learned to control his musculoskeletal system, better manage his prostheses, his functionality has improved significantly in everyday life. What is the impact of this? This has a very positive effect on the moral and psychological state, because you can do a lot on your own, you don't need help, you don't need an extra cane, an extra railing, etc. So, when you are psychologically liberated in this sense, you feel very good, because now you are independent and functional," – the expert says.

It cannot be said that the improvement of health or well-being depends only on adaptive sports, as it can be influenced by many factors. For each veteran, this impact can be different: for some, it improves their physical condition, for others their mental state, and for others it works as a foundation for a career and professional activity in the field of sports and rehabilitation.

More specifically, adaptive sports have the following impact on the well-being of veterans:

Contributes to improved physical health

Adaptive sports can significantly improve physical health and improve

recovery from injury, trauma or illness. Combat experience can lead to the following physical health problems in the future, even without injury or illness: problems with the back because of the need to wear heavy equipment and PPE; problems with the gastrointestinal tract due to irregular and unhealthy diet; problems with the genitourinary system because of the long hours spent outside, in trenches or cold basements; problems with sleep. We can list many effects on physical health, but it is important to note that not every combatant experience all abovementioned problems. Physical activity after returning to civilian life is a key to well-being. It doesn't have to be adaptive sports or any specific sport. Basic physical activity is enough to feel better.

"But in terms of my physical condition, I realized that when I quit sports and don't play sports, my back hurts a lot. Due to the change in these loads, the change in biomechanics, walking, all that shit; I messed up my back as a child doing heavy agricultural work. Then I completely ruined it in the army. And when I didn't exercise, I felt really shitty. But when I would return [to doing sports], the back would get better. And I was like, okay, no chance, bro, for the rest of your life, if you want to feel right in the head and physically, you'll have to keep training anyway. That's how it happened," – the veteran said.

If we consider injuries, traumas or illnesses sustained while defending the homeland, we are dealing with a "new" body and the need not only to get to know it, but also learn to interact with it comfortably. This is where adaptive sports has the biggest impact. Veterans who participated in the study gave examples from their own lives of how a particular type of adaptive sport helped them. For example, swimming helps significantly with spinal injuries³⁶, and archery is good for focusing after traumatic brain injuries. It does not strain the body to the extreme, as can occur with other sports, and does not significantly increase the level of adrenaline.

"I tried it for the first time in my life, for the first time. I said, "No, this can't be". And that's about it, all my free time, from morning to evening, sometimes with my kids at their weekends, we went shooting. A month later, we went to [name of the settlement], -- that's what I remember the best of all [my] medals, because I have quite a few of them. It was the first place in this competition. And that's it, and my engine started up, so that's it, in a nutshell. Very interesting," - the veteran said.

"Nowadays, sport is my main necessity in life. Due to a traumatic brain injury, the left side of my body was paralyzed, but now, thanks to physical exercises, I got out of my wheelchair and even abandoned my walking stick!" - the veteran.

Adaptive sports can also have a negative impact on the health of veterans, injuries can occur and veterans' health can deteriorate if the training process is incorrect or if there is no qualified support during the training. The experts believe that this often happens because Ukraine does not have a developed tradition of not only adaptive sports, but also sports in general.

"I'll say this, given the number of veterans I know who train, play various sports, adaptive athletes, I mean, they have a culture, I don't know how to say it in Ukrainian, but the culture is to go at maximum. Like, I want to run a marathon or something, right away, even if I'm not ready for it, even if I'm out of breath, my heart is racing, I'm going to do it anyway, because this tradition is there, or the so-called "tradition". People do not understand that the intensity should be gradual. Just a simple example: muscles adapt to the stress in two months, and bones in six months. The spine takes six months. Just to illustrate. If you go to a competition a month after the amputation and do a deadlift of 150 kilograms, you may be able to do it, but you will have to treat your back for a year after that. That is, there is no such awareness of the fact that your musculoskeletal system has changed, no understanding of the compensations that have appeared, all of which have a maximum impact on the spine, and you cannot do things the way you used to, even if you were a super athlete before your injury. That's why we need to explain that there should be basic adaptive training, and then, please, go do whatever you want, you will be awesome in any sport," - the adaptive sports expert said.

It is essential to understand that adaptive sports alone will not have a positive impact on physical health. It needs to be practiced with the right approach and with the support of specialists who can advise and help you understand how to recover through sports, rather than get injured and worsen your condition.

"I'm not concerned about mindset and psychological condition, I'm concerned about the fact that I know for sure that there is a very high level of physical injuries and a widespread neglect of physical health," – the expert said.

Helps improve mental health

Adaptive sports can reduce the symptoms of depression, anxiety, distress and post-traumatic stress disorder (PTSD). According to research conducted by CBA Initiatives analysts, participants of sports camps experienced an improvement in their psychological state before the qualifying competitions: the level of distress, anxiety and signs of depression decreased (the indicators were measured at the beginning of the sports camp and before its completion)³⁷.

Research by the CBA Initiatives Center on adaptive sports and its impact on the mental state of veterans: "How adaptive sports training camps affect the lives of veterans and servicemen": https://cbacenter.ngo/en/page/how-adaptive-sports-training-camps-affect-the-lives-of-veterans-and-servicemen

"Sport is rehabilitation, both physical and psychological. Thanks to training, support from coaches and the team, I was able to overcome depression. Sport gave me the opportunity to socialize again. It makes life brighter", — the veteran said.

The respondents described different aspects of the impact on their mental state following their involvement in the adaptive sports recovery program.

After returning to civilian life or while still undergoing treatment and rehabilitation, veterans may experience many different emotions that affect their well-being and life satisfaction levels. Frequently, these emotions are more negative, due to the challenges of integrating into a new environment and accepting a "new" body. Adaptive sports can potentially help to deal with these emotions. For example, competitive sports that involve sparring work very well with regulating and releasing pent-up emotions such as aggression and anger³⁸.

"Sport gives you psychological, physical, and moral rehabilitation. You calm yourself down, get some of your thoughts out of your head and all that stuff. I understand that the war will not end, in terms of the fact that it will be in your head for a very long time. The war is still in my head, I still dream about how I left Debaltseve pocket, constantly have dreams about it. I remember it still, it won't go away. Likewise, even now, the fact that I survived the injury, it's always in my head, that I had it. So, I think it's not going anywhere. And we need to pull people out of this hole, because if a soldier closes himself off, it is very difficult to find the key to him," – the veteran said.

Respondents also often stated that the feeling of being able to do some exercise, feeling that your physical health is improving, or becoming more independent in your movements affects and improves your mental state.

"I felt the result for myself, for me personally. Firstly, it was very telling that it was difficult for me to go up and down the stairs. I lacked balance, I lacked equilibrium. Now it's easy to go to the 10th floor with some bags when there is no electricity, I'm not even going out of breath if I'm, for example, on the phone with someone. I've experienced it, and I'm trying to tell others about the benefits," – the veteran said.

Helps to build new social connections and be part of a community of "your own"

Adaptive sport for veterans is a platform for socializing with people who have similar experiences. Such social interaction potentially reduces feelings of isolation and loneliness.

Outcomes of Adaptive Sports and Recreation Participation among Veterans Returning from Combat with Acquired Disability, Neil Lundberg: https://www.va.gov/adaptivesports/docs/lundberg_final.pdf

"Firstly, when you get into this community, it is really very, therapeutic. I came here, and my eyes just lit up. And I want to come back here again. Because each and every one of these guys, they are all real fighters. I know what they've been through. And this understanding gives me strength. And that's what I mean by being in my own group. It helps a lot psychologically," – the veteran said.

At certain stages of their return to civilian life, veterans tend to join or form networks of people with similar experiences. This environment is more comfortable and safe. A sense of security it gives to veterans guarantees the effectiveness of their recovery process. Without it, the recovery is impossible. Therefore, respondents often mentioned that their biggest motivation to participate in adaptive sports programs was the opportunity to meet their brothers and sisters in arms and relax for a while.

"If I hadn't made the national team, it wouldn't have mattered, because I would have participated [in the trials]. And I will come and participate next year. Not with the intention of getting into the national team, but just to come, to talk to the guys I met, to meet others. In other words, to see the guys I don't talk to on the phone, but just to see them once a year. And socializing. That's what motivates me the most to come and see them. Not so much to get into the national team, but to come and see others," – the veteran said.

The moments spent in a comfortable community do not last long, then the veterans return to their homes, where there is neither such a team nor such an atmosphere. Therefore, this factor at the same time have a positive effect and can reduce motivation to do sports for a while.

"Well, the decrease in motivation was primarily due to the fact that three days passed like one hour. These days were so intense, I wanted to talk to everyone, but I didn't have enough time. It needs to be extended at least for 5–7 days, not so much for the competition, but for people to get to know each other, communicate and have a good time, because this time I was surprised by the number of people. There were a lot of friends and even comrades with whom we had met before the full-scale [invasion]. They were injured during the full-scale, and they can now come to the trials. That's why there was a sense of sadness afterward as it was all over, and we had to return to our everyday routine. So, here you go," – the veteran said.

Helps develop skills and build new competencies

Adaptive sports empower veterans by helping them develop new skills and gain confidence in areas they had never seen themselves in before. It is about finding new selves. Some participants of adaptive sports programs continue

this path as assistant coaches, trainers, rehabilitation specialists, or as developers of adaptive sports in their communities.

This includes not only the transition to civilian life, when veterans begin to look for new identities, but also military service, which allows them to engage in additional activities.

At certain stages of engagement in adaptive sports recovery programs, veterans (including military personnel) begin to discover new areas for their further involvement. For example,

- study and start working as coaches;
- establish non-governmental organizations, unions or associations and engage in various organizational, fitness or informational activities;
- promote adaptive sports in their communities and act as the primary organizers of sport clubs or competitions;
- start their own business and pursue this career path;
- become sports managers for teams and are engaged in organization, fundraising and promotion;
- · study to become rehabilitation therapists and start working with veterans;
- start working in the civil service to improve the sports system, etc.

The list can go on, as after taking part in adaptive sports recovery programs, veterans indicated that it helped them to organize their lives and thoughts and adapt to a new environment.

"I recently changed my job, I work in IT, again thanks to sports. In this particular IT company, I and another veteran who joined the company later, an athlete, by the way, who also uses a wheelchair, [name of the veteran], we worked, we were trained, and everything was fine. Now, when I was looking for another job, I had an interview, and it went like this. I know when they start asking about stress, this and that, and well, I actually had a lot to talk about. How hard you work, how capable you are of working hard, of overcoming difficulties, and you start telling them about running 51 kilometers without fully functioning legs. You know, and you make such ironclad arguments, when you can impress the employer at least with this, that is, with your personal qualities. It's clear that the professional ones may be different, because they may not be present, but as a potential candidate, again, we're not just talking about IT, it's about any other field where if you don't have any problems with alcohol, drugs, some kind of frivolity, some absences, some excessive sick leave, and so on," - the veteran said.

"Now, this year, I have already entered a master's program in business and trade. So this year I also want to start my own business, but I won't give up sports," – the veteran said.

"It's very difficult to talk about any professional aspirations when most of our veterans are active military personnel. I don't see myself working in any fields other than those related to veterans, the war, or veterans until we win. I will either fight, or I will continue to do work related to veterans, to bringing us closer to victory, to rehabilitation, to getting, I don't know, weapons and everything else," – a veteran said.

The respondents stated that after getting injured/wounded or ill, when they could no longer perform combat missions, they started looking for areas and activities in which they could be useful for their brothers and sisters in arms. These activities can range from informational, educational to coaching or management.

· Helps to rebuild self-trust and accept the new version of oneself

Military service, participation in warfare, injuries/traumas/illnesses are significant challenges for the veterans that can significantly affect their perception of themselves. That's why adaptive sports is a good possibility to look at yourself from a different angle and rebuild self-trust; to realize that despite all the challenges, you can do much more.

"After participating in the trials, I realized that my country needs me not only as a soldier for combat missions, but even after I was discharged from the service due to injury. And this gave me a powerful boost of motivation and energy to further improve and maintain my physical fitness, and also sparked a desire to participate in such events as often as possible in the future," – the veteran said.

2.5 Opportunities and obstacles to scaling up adaptive sports: «In no way, the adaptive sports can't exist in the vacuum. It is a part of the common practice of fitness and doing sports»

To illustrate the importance of adaptive sports in the recovery of veterans, it is also important to describe the obstacles that respondents currently believe affect scaling. After all, without scaling up, it is impossible to develop programs of recovery through adaptive sports effectively enough and to engage more veterans.

Adaptive sports is not a panacea, but one of the options that a veteran can choose as a tool for recovery. Not all veterans will choose sports, which is also important to understand when reviewing obstacles, as this is one of them. For

now the main task is to provide the conditions and opportunities to make this option available to the widest possible audience, regardless of territorial or financial status. Whether they choose it is up to each individual.

"I believe that sport is not for everyone. Some people rehabilitate through other things: work, painting, humor, those who were wounded have their own kind of humor, no one is offended, we understand all of this. We are already living with it, and there's not much we can do about it, that's all I'm saying" – the veteran said.

But for veterans to have this choice, adaptive sports should be scaled up and made more accessible to all. Create opportunities, popularize and involve as many people as possible.

Veterans (including active military personnel) and experts who participated in the study named obstacles they encountered at the stage of participating in recovery through sports programs, which they believe affects the scale of adaptive sports among veterans.

The respondents mentioned the following obstacles.

1. Infrastructure challenges

The most significant and widespread issue cited by respondents was infrastructure and its accessibility. The number of sports halls, sections, and playgrounds is unevenly scattered across different regions and types of settlements. The access to sports infrastructure is unequal and varies depending on the veteran's place of residence.

Certainly, you can choose a sport or activity that has the appropriate local infrastructure. But for many people, the mere existence of a gym, CYSS, classes, or sections does not mean the ability to interact with them, as these places are often inaccessible to people with limited mobility. For example, gyms in basements or on the second or third floors where there is no elevator for a veteran in a wheelchair to simply walk in. Even if the premises are located on the first floor, there may be problems with restrooms, showers and other basic need facilities.

Besides the accessibility of the sports facilities, problems with infrastructure arise at the stage of veterans leaving the house and getting to the gym. This becomes a challenge for some veterans, as not every building has freight elevators or ramps. It is difficult to get to the far located gyms and sport clubs without a car or social transportation. Basically, at all stages of engagement in adaptive sports, the infrastructure issues complicate the way of a veteran. Unadapted infrastructure means that veterans cannot be independent in their activities, and this factor can be demotivating.

"There were steps, and I was at the wheelchair, so, honestly, there was no training as it is. Especially in the locker room or in the showers, there were no conditions at all. It was difficult to get up the stairs because of one place. I needed someone to be with me. I wouldn't been able to go up the stairs, to be honestly. You need to be able to get there on your own, even in a wheelchair, whether it's me or someone else, so that you can get there on your own, get up, then get on a wheelchair and move out of the paralympic sports hall, that's how it should be" – the veteran said.

"The administrative centers of the districts. It's a nightmare there. It's not a rocket science to build a municipal gym. People would go there. Let's take, for example, the city of Yavoriv, population 13,000. One municipal gym, if we make it a little bit more appropriate for a veteran, let's say, something like a veteran's café, you'll see a lot of people coming there, plenty of young guys, in particular," – a veteran said.

According to respondents, it is not required to create infrastructure for veterans from scratch, as many district and regional centers already have facilities where training can be conducted. Personal examples of respondents include the following:

- training at the premises of Invasport or Sport for All. Many communities already have facilities, swimming pools, equipment and coaches who can work with veterans as well;
- organizing transportation from rehabilitation facilities to sports facilities, gyms, etc;
- Training at CYSS, as they already have a certain amount of equipment and facilities and can be used for adaptive sports;
- placing equipment for certain sports at the rehabilitation centers, as was done at Lisova Polyana.

The common feature of all these examples is that they are is not a systematic story, but the result of individual agreements - when there is a veteran or a manager who is ready to engage with Invasport coaches, etc. A systematic and centralized approach is absent, such initiatives work on a sporadic basis, so in other communities, veterans often do not even know about these potential opportunities.

According to respondents, efforts in this direction could also partially resolve the lack of infrastructure. The solution for the adaptive sports that require specialized equipment may be buying or setting up production in Ukraine. Not all sports equipment can be adapted for the veteran sport.

"A wheelchair basketball, for example. I couldn't play it just like that. But one wheelchair costs four thousand dollars. Very expensive, unaffordable price. They don't make them in Ukraine, you have to order them [from abroad]," – the veteran said.

2. Challenges of the medical treatment and rehabilitation

After being wounded, injured or becoming ill while defending their homeland, veterans had several stages of evacuation, further treatment, and then, at best, rehabilitation. At best, because not all of them went through this stage. The lack of the rehabilitation was caused not only by the mildness of their injuries or wounds, but by the lack of qualified specialists, rehabilitation facilities, and information on how to get it, as was stated by the respondents. Additional research should be conducted to study in detail the problems that arise at the stage of treatment and rehabilitation. Currently, there is not enough information even to put forward some hypotheses.

Veterans also mentioned that the treatment process itself can negatively affect their health and lead to apathy, new diseases acquired during treatment in a particular institution, etc.

"Probably, the biggest problems are, in my opinion, there. You should be given another medal if you survived a military hospital. Indeed, many guys die there. The problem of military and even civilian medicine is trivial. It is hygiene. Right at that stage, I got acquainted with a bacterium called pseudomonas. It is very resistant and it is a hospital-acquired infection. That is, it develops and is fed only, so to speak, from patients who have been in the hospital for a long time and have open wounds," – the veteran said.

According to the veterans, the negative experience of treatment could delay the recovery from an injury, wound or illness, as there is a need to treat what the patients have acquired additionally in the hospital. Furthermore, the attitude in hospitals poses a significant obstacle, as it negatively affects the mental state and motivation of veteran. It is currently difficult to address this issue in detail. Respondents shared few memories of this stage, as most of them were negative.

The rehabilitation phase, if there is one, begins with getting to know the "new" body and making the first attempts to interact with it in a way that does not injure you, but rather teaches you to make certain moves again and perform exercises that were previously a regular routine. According to the respondents, not all rehabilitation centers sufficiently involve the sports component in the scope of rehabilitation activities.

A physical therapist is the person who introduces veterans to basic adaptive training, when they understand how to do a particular move not to harm themselves; how to walk properly to maintain their lost balance; how to dose the activity and listen to their own body. This very important stage may determine the effectiveness of recovery through sports in the future. Without understanding the limits and capabilities of the "new" body, engaging in adaptive sports can be more traumatic.

"I will say at this point that everyone needs to engage in recovery and adaptive training. And sport is a great tool, if you are a smart person, you will prepare, but you just need to explain to them that everyone should have this stage. And then, whether you go into sports or stay out of top-level sports is up to you. The main thing is that you will be healthy. In other words, we are talking more about adaptive basic training, as a way of life that should be present all the time. There should always be a stage of basic training, and then all these competitions and any heavy workloads on the adapted body," – the expert says.

Besides, high-quality rehabilitation and its presence on the veterans' journey after injury is a good opportunity to communicate and involve people in adaptive sports. Rehabilitation centers are where the veterans are within reach of sports coaches and managers who can come, talk to them and show them that, regardless of their physical condition after an injury, wound or illness, they can feel the joy of movement again.

"We went to rehabilitation centers. We took a bow and a shield there and divided the conversation into two parts. First, I talked to the guys without their wives, without volunteers, without rehabilitation specialists, without doctors. They gave us the room. We just sat there and talked not only about sports, but in general. I told them about the competition, what's going on here, how the training camps are organized, what kinds of sports you can try yourself in. As I said, you can try everything, but, for example, rowing could be unfair to people with spinal cord injuries. It's hard to compete there. People with amputations will win. They will invite you to another category, but they have a working back, and you don't. This category is imperfect. Logically, you can try swimming or go into shot put or discus throwing. It's more or less fair there. And after that, for example, the coach held an archery training session. Everyone enjoyed it. And later they came to the competition, and now half of the guys who were in the rehabilitation center are here. That is, [our involvement] played a big role. Played a lot, really," - the veteran said.

3. Challenges of the lack of the specialists

Recovery through adaptive sports is a process that requires the involvement of specialists who can not only explain the biomechanics of the body during certain exercises and sportive activities, but also understand more comprehensively how to work with veterans. The point is not that veterans are a specific group of people. The experience they have gained can create additional needs or issues in communication, state of health, perception, etc. But first and foremost, it is about specialists who can explain how to adapt a sport to an injury, wound or illness to avoid harm and add as much value for recovery as possible.

"At the very beginning of my work with the military personnel I realized that the psychological component was very important, so I organized courses from military psychologists for all trainers in this network so that they knew in advance who they were going to work with, and avoided these words, triggers, excessive emotions, like pity, you know, and other things. The psychological component is very important, and we devote a lot of time to it at the adaptive coach training school, as well as to the ethics of speech. Many coaches even have a particular request, saying, "I'm afraid to train such a person, because I'm afraid to say something wrong and offend them". These are also important moments," – the expert says.

But in Ukraine, the shortage of specialists is a problem not only in the field of adaptive sports, but in general, including mainstream sports, physical therapists and psychologists. Basically, there is a lack of every type of specialist who should be involved in the adaptive sports recovery program (as service providers). This issue affects the scaling of adaptive sports.

"Just building a center and buying equipment is not enough. You need to build processes, find people, train them, allow these people to make mistakes so that they can gain skills, and only then will they be effective and cool. But you need to keep them there somehow, because it will most likely not be in the center of Kyiv. Because there is no need for such a center in the center of Kyiv. It has to be somewhere in the middle of nowhere. And I don't know how to keep good specialists in the middle of nowhere. I don't understand at all how you can keep a good specialist somewhere in the middle of nowhere. So yes, the issue is very complicated. Besides personal motivation, this is also a question of some kind of nonmaterial motivation, but also financial motivation. We should not dismiss the idea of financial motivation, it is very important. When you're hungry, you can't do your job well, especially emotionally demanding work," – the veteran said.

The lack of specialists is partly solved by the yesterday's participants in adaptive sports recovery programs who get involved in this area professionally. Or, those who have a specialty are beginning to acquire the capacity to use their knowledge and practical experience in working with veterans. For instance, there is the School of Adaptive Coaches, where veterans, coaches, and rehabilitation specialists can learn more about the intricacies of adaptive training. Or the program of assistant coaches during sports camps and training camps that are part of the preparation for international veterans' competitions. However, these initiatives are isolated and do not solve the problem of staff shortages, because even the certificates that are granted there are more symbolic than legitimized and certified. Therefore, without

revising the legal framework and creating training programs at universities, it will be difficult for individual NGOs to develop these initiatives.

But at the same time, scaling up can lead to devaluation and loss of the special connotations of recovery through adaptive sports.

4. The challenges of the low awareness

Adaptive sport for the recovery of veterans is quite young, and the general population and target groups know little about it due to many different factors. In particular:

- Lack of physical culture in general and awareness of not only top-level sports, but also practices aimed at recovery;
- shifting the focus on veterans to reintegration, employment, benefits, and veteran business, as these are important components of well-being that need to be addressed;
- the lack of a unified policy on adaptive sports, as it is not defined at the legislative level, as, for example, Olympic, non-Olympic, mass sports, although drafts and documents on it are currently being prepared;
- rehabilitation and recovery of veterans have less media coverage than the provision of the army and, in general, the war as the main issue on the agenda.

Low awareness leads to the fact that people outside the "information bubble" has little chance of finding information and trying adaptive sports. Without proper information and communication, scaling up programs of recovery through sports is impossible.

"I think one of [tasks] is to increase media coverage. Definitely, to make more people aware of it. Because even now, a lot of people do not understand what adaptive sports, veteran sports, are. There is a circle, some kind of community that knows about it, communicates and tries to tell something to someone, but usually it is perceived as some kind of professional sport," – the veteran said.

Moreover, the respondents discussed a lot about how to build communication, because it determines the number of new veterans who will want to join the adaptive sports community.

"Communication should be thoughtful. Not that it should be mundane, but thoughtful. I don't know how to do it. I'm not a communications expert, but the fact that we are, like, heroes here, we are making a big fuss over Invictus guys, but after Invictus, everyone forgets about them. This is a crappy story. This is a very, very painful story that can break many people. Or maybe it already has, I don't know. So yes, common sense is needed here. As in everything, in principle, common fucking sense is needed. So,

yes, perhaps, we need to reconsider this issue, but this is the easiest way. When we show something unusual, the guys are working their asses off, wow, they're wearing prosthetics, no legs or no arms, a guy shoots a bow with his teeth, holy shit, that's impresses. But when there is too much of it, then at some point you will get bored, and you'll think, oh, this is the tenth or twentieth guy who shoots with his teeth. There is nothing wrong with that. I don't know how to deal with it. I really don't. Perhaps at that moment, when it becomes boring, it will become normal, adequate communication," – the veteran said.

5. Lack of sports practice

The reason why veterans most often choose something other than sports for recovery after being injured or ill, or when returning to civilian life, is the generally low percentage of Ukrainians involved in physical culture. The results of a survey conducted by Interfax-Ukraine showed that about 5% of its participants are constantly engaged in sports, 22.5% do it from time to time, and the majority - about 58% of respondents - do not engage in sports at all is very high, which affects adaptive sports for veterans. It is impossible to build a culture of adaptive sports for veterans in a vacuum, because sooner or later other social groups will be involved in this "bubble".

"Veteran adaptive sports cannot exist in a vacuum. No way. It is a part of the general culture, the culture of physical education and sports. And it is very strange to build an infrastructure for wounded veterans at a time when our basic needs are not met," – the veteran said.

At the same time, the attention towards the development of adaptive sports for veterans can become an impetus and motivation for greater and better development of physical culture in general. After all, there is a demand to improve sports infrastructure, adapt it to the needs of people with reduced mobility, and develop various sports clubs in the communities. This can spur the creation of a new physical culture in the country.

"You can try to use this desire, motivation and veteran adaptive sports as a factor that will change all these cultural narratives about sports. But it is not possible to develop it separately from the rest of the system," – the veteran said.

6. War as a challenge

The most significant problem that slows down the scaling of adaptive sports for veterans is the war that is taking place on the territory of Ukraine.

³⁹ Critically low level - how many Ukrainians have sufficient amount of physical activity: https://health.24tv.ua/kritichno-nizkiy-riven-skilki-ukrayintsiv-mayut-dostatno-fizichnoyi_n2504940

Respondents stated that it is impossible to fully develop this field while important requirements and problems that will affect the situation at the front need to be addressed.

Moreover, most of the participants in adaptive sports recovery programs are active military personnel, which also impacts their ability to play sports or participate in sports camps and competitions, or creates a risk of re-injury, trauma, or exacerbation of the disease. It also complicates recovery.

War means constant risks, worries and losses. Infrastructure is constantly being destroyed, the economic situation is deteriorating, jobs are being destroyed, and the focus is shifting to survival, which does not include recovery and improvement of well-being.

According to the respondents, as long as the active phase of the war continues, it will be impossible to scale up adaptive sports to as it was done, for example, in the United States. This should be taken into account when planning and creating programs of recovery through adaptive sports.

Among the suggestions made to address this obstacle was to develop a culture of sports in the Armed Forces of Ukraine. Many respondents mentioned the inability to exercise during their service, as it is considered to be a way of shirking their work and duties. This issue should be further studied, as the survey did not cover the period of service and doing sports during the military service sufficiently to make any assumptions.

2.6 Why adaptive sports should be cultivated: «Sports is a preventive measure against a lot of bad consequences»

Above, we have identified numerous obstacles in the way of scaling up recovery programs. It is also essential to add why adaptive sports can be valuable for the state, its security and defense capabilities in general. This assumption is based on the respondents' statements and the processes currently taking place in Ukraine.

When it comes to adaptive sports for veterans, it should be understood that it is not a widespread phenomenon at present. But if scaled up and adopted into the structure of state veterans' policy, it can generate positive effects.

1. Joint sports activities are a way to integration

Respondents noted that the gym, sports section, or club often becomes a place where several cultures collide, namely military and civilian. But at this particular place and particular time, the physical culture is the dominant one. This was stated by veterans who went to regular sports clubs where they were not the sole attendees. By this principle, veterans are also involved in the

"Sport for All" and "Invasport" programs. This is what a veteran encounters when they come to the gym, where a broad mix of people have come to exercise.

According to the respondents, sport, activity, and physical culture can be the **first subject to find common ground** when a veteran returns to civilian life and tries to start their integration journey, where everything feels anew.

"That's a given that we all will live together. We all need to continue to live together, to interact and be in it somehow, to understand each other and interact. This is a direct necessity, a joint meaningful activity that has a certain meaning. Sport provides ideal conditions for people to be united and not feel helpless, because everything is clear. Here is a specific task-you can work out, you can work out together, with each other, somehow be at least close to each other, everyone has their own program, but you are close to each other and there is a common topic, for contact, for discussion, such safe topics," – the expert said.

The educational function is also important in such cases. Often, children train alongside the veterans, thus communicating with them and discovering who the Ukrainian veteran really is.

"So, in fact, it's like an element of educating people to accept people with disabilities more casually. Definitely, yes. We were recently approached by our education department. And they said that we know what you do, what you know, that you are basically information media, about how to communicate with people without limbs, and everything else, these things. And they came to us with a request. We have children, or rather their parents, who ask if you can somehow tell us how to communicate, how to speak. They had just this request, which you mentioned. And I think, yes, this is very important. Why? Because maybe I'm wrong, but I see that families who don't really understand this can translate this message that if a person is disabled, then that's it, they can't do anything, they've been abandoned, they can't do anything. Children perceive this, they see it, and when they come and see us at competitions, and I myself, when I came to that community, saw people running on two prostheses faster than I've seen in the records, it was an incredible motivation for me. And here they, the children, come and see the guys rowing, pushing, running fast, this and that, shooting with their teeth, and for them, it's a kind of breakthrough, they are like: I don't understand how, because we were told they couldn't do anything," - the veteran said.

2. It's about care and respect

The introduction and development of recovery through adaptive sports programs at the state level is about respecting the sacrifice made by veterans.

Sometimes, due to the attitude during treatment and rehabilitation mentioned above, or due to certain difficulties in obtaining payments, benefits or social services, the veteran may get the impression that the state and the people do not appreciate what a person has given to save lives and sovereignty of Ukraine. Therefore, it is important to show care and provide for veterans in a way that is important and necessary for them. For those who have chosen to recover through sports, adapting infrastructure, creating new programs, holding competitions and supporting this field in every way possible is an important part. Creating opportunities according to the needs is the key to improving the well-being of veterans.

This matters, because not everyone will want to start their own business; not everyone will need educational programs; not everyone will be immediately ready to find a civilian job; not everyone will need new housing; not everyone will be involved in adaptive sports. But the majority need the right to choose what they want for themselves and to be able to exercise their choice.

Scaling up recovery through adaptive sports programs is another equally important opportunity to demonstrate respect and appreciation.

3. It is about restoring and reducing the pressure on the social sphere

In the section on the impact on physical and mental health, we described how a competent approach to adaptive sports can improve physical health. It is about managing illnesses that may require ongoing treatment in the future; about increasing endurance and strengthening immunity; about avoiding alcohol or other addictive substances; about sublimating negative emotions (the negative trajectory of veterans' paths)⁴⁰.

Effectively, we are saying that practicing sports can reduce the pressure on the social and medical spheres. This is an assumption only, as veterans are not currently involved in adaptive sports so widely that we can draw appropriate conclusions. However, this is something that was mentioned during the interviews when respondents gave examples of how recovery through sports can be useful.

"If you go in for sports, you will fuck around less. We need to create alternatives to bad habits, which some people turn to in order to somehow survive everything that they went through. Their health gets worse, and they can get into trouble, and then others have to clean up their mess. Sport is a preventive measure against many harmful outcomes," – the veteran said.

Research "Journeys of Veterans", Veteran Hub: https://veteranhub.com.ua/wp-content/uploads/2024/10/doslidzhennia-shliakh-veteraniv-ta-veteranok.pdf