

## Physical culture in the aspect of illogical behavior of people who underwent organ transplantation

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**Summary:** Practicing sport by disabled people, whether recreationally or professionally, has a positive effect not only on their physical and mental condition but, without doubt, it also improves the quality of their lives. It enables them to achieve success, measured by their own standards or by professional standards. A specific group among the disabled are people who have undergone organ transplantation. Being in a life-threatening situation, they received an organ, its part, tissues or cells from donors, which saved their health or life. However, the recipients of the "gift" very often behave in an illogical way. Instead of taking up some physical activity after the transplantation, which could help them improve and maintain good health, they tend to take excessive care of themselves, "save their strength", not to force themselves, keep their bodies motionless, which in turn, contributes to the deterioration of their physical and mental condition and, as a consequence, even death. This article is an attempt to draw attention to this problem, to point out that there is a need for people after organ transplantation to do physical activities. In addition, practicing sports and participating in sport competitions not only unites and integrates this group of people with the rest of the society but it also allows to publicize the need to donate organs for transplantation from deceased people and living donors - as a gift of great love of man for man - THE GIFT OF LIFE FROM LIFE.

**Keywords:** physical culture, sport, physical rehabilitation, people who underwent organ transplantation

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### Introduction

#### The phenomenon of physical culture - an attempt to provide a definition

The term <<physical culture>> is extremely complex. It includes a wide range of categories. On the one hand, it appears to be more general and connected to the values that constitute it, the knowledge related to it and to the specificity of human upbringing in this aspect. On the other hand, it is understood as more individualistic and comes down to a specific attitude of a person towards his or her own body, conscious and active care for his or her development, fitness and concern about health, both physical and mental (Grabowski, 1999, Dziubański, 211).

Apart from physical education, commonly identified with the school activity of children and the youth, contemporary forms of broadly understood physical culture include physical recreation, seen as a specific type of rest and entertainment, dedicated to people of all ages, as well as sport and physical rehabilitation. The last two forms of physical culture may seem to lie on opposite ends, since sport is mainly associated with people who are extremely healthy and fit, while physical rehabilitation is rather dedicated to people with disabilities, whose primary goal is to recover or improve life quality. In reality, however, both forms have many common elements.

#### Universal nature of sport

One of these elements is the universal nature of sport, understood both in a general, mass, global sense as well as being accessible to every human being. By its definition, sport is associated with peaceful competition, the essence of which is individual or team competition (according to specific rules) conducted with respect to the principles of *fair play* and striving to achieve the best results. Among numerous sport disciplines, one can mention, for example, the following: football, volleyball, handball, basketball, ski jumping, athletics, martial arts and a number of other activities that give competitors the opportunity to compete.

No one needs to be convinced that sport facilitates the development of the human body and contributes significantly to maintaining health. Physical activity stimulates and supports, among others, somatic development by building muscles, which improves their strength and elasticity, supports building and strengthening bones (which affects their mineralization), strengthens and stabilizes joints as well as improves motor coordination. Physical activity is also responsible for harmonious development (e.g. proportional weight gain), increasing the vital capacity of lungs, improving heart function, lowering blood pressure and getting fitter. Physical activity is also responsible for psycho-emotional development, e.g. by improving memory, learning how to cope with stress and mental fatigue. It also has a positive effect on intellectual development, lowers the level of fear and even reduces depression. It has a positive effect on well-being, helps to accept oneself (Kowalik 2009). Thus, it appears to be an essential element of life - a component of the life of every human being.

Although sport is associated with competition, in fact, it aims at opening borders and bringing nations closer to each other, which undoubtedly, inspired the creator of the modern Olympic idea - Pierre de Coubertin. Hence, sport also plays an important role in building inner harmony in fraternal and social relations. It is a symbol of cooperation between geographically, ethnically, economically, politically and culturally distinct communities in the world (Burkett, 2010).

Therefore, sport can also be discussed as an axiological category. It has universal values, is a boon to humanity, i.e. it benefits communities living at all latitudes, in ethnic and cultural groups and at all levels of civilization (Krawczyk, 1994). In its assumptions, sport must, therefore, be available to all competitors, regardless of their nationality, skin colour, gender, age or beauty. It cannot be limited only to healthy people. The disabled also have the right to practice those forms of physical culture which are attractive, exciting and beneficial for their health and rehabilitation. After all, sport is not only a specific field of physical culture. It is also part of national culture which everyone has the right to take advantage of (Dega, 2001).

### **Physical rehabilitation**

Physical rehabilitation, mentioned above, is a specific form of physical culture. One element that connects it with sport is, for example, a wide range of rehabilitation treatments, received by both professional sportsmen willing to regenerate after tiring competitions and injuries they have suffered and disabled people who want to recover and become fit or at least improve their physical and mental health or the comfort of life after injuries, medical treatment, neurological and other diseases. Various therapeutic methods, possible and personalized therapies (kinesiotherapy, physiotherapy or therapeutic massage) are used and adapted to the needs of individuals. Therefore, physical rehabilitation is a strong element of the rehabilitation treatment system and, like sport, it should be:

- early – i.e. it should start already in the period of basic treatment, simultaneously with medical procedures, which significantly improves the results of treatment and shortens the period of recovery;
- comprehensive – all aspects of human life: medical, professional, social should be taken into account during the entire program of rehabilitation and from the very beginning;
- continuous – since rehabilitation is a continuous process, the initiated rehabilitation process should be continued until the end, i.e. until people taking advantage of it become completely physically and mentally healthy, able to take up or return to work and to do other activities, as well as are able to take the right place in society;
- universal – i.e. available to anyone who needs it, i.e. also to people with disabilities (Kinne, 2004 et al., Skalski et al. 2021).

### **Development and essence of sport for disabled people**

**“Disability does not have to be an obstacle in mastering a given sport discipline, nor does it have to be a circumstance that makes it impossible for a person to attempt to win laurels and trophies in sport, tourism and even in the Paralympics”  
(Waszkowski, 2004, p.58)**

It is commonly known that disabled people have an inalienable right to do physical activity in a form that should be adapted to the type of their disability, general physical condition as well as their passions and interests. This social group of people also has the right to present their achievements on the local, national or international arena, which is another element connecting the idea of sport and physical rehabilitation.

Today, however, the development of sport for disabled people should be associated with the development of the sport movement in Europe and in the world at the end of the 19th and the beginning of the 20th century as well as with the introduction of physical education measures to the rehabilitation process. Information about the participation of disabled people in sport competitions first appeared in the London "Times" in 1880. It said that in Newmarket Heath, two competitors with amputated lower limbs took part in public sport competitions, in a run, moving on wooden prostheses. It was a public confirmation of the fact that the disabled are able to compete with healthy people in many sport disciplines (Spencer, 2003, Guskowski, Pater 2010).

However, these and other similar individual cases of extraordinary achievements of people with certain health limitations did not have much significance for the development of sport for disabled people. This was due to the view that sport is only for healthy people. This view was common until World War I, during which sport was introduced as a way of improving patients' condition. During this period, various types of sport activities were offered to wounded soldiers, hoping that they will be able to return quickly to the front.

Thus, the 1920s and 1930s is a period of development of sport for disabled people in many European countries. In 1922, the first sports club for the disabled was established in England, Disabled Drivers' Motor Club, organizing car competitions every year. In 1932, The Society of One-Armed Golfers was established in

Glasgow and a few years later similar clubs were created in the USA. In 1935, in the USSR, therapeutic gymnastics was commissioned in health resorts. One of its elements were sport activities. The first international sport organization for the disabled was established in 1924 in Paris. It was the International Committee of Sports for the Deaf (Rekowski, Wilk, 1997).

Thus, the interwar period became known for the establishment of the first sports clubs for disabled people, the development of organizational activities and theoretical scientific activity, the purpose of which was to specify precisely the indications and contraindications for practicing various sports by these people.

Also during World War II, doctors recommended practicing various forms of sport by wounded soldiers. It was noticed that recovery through sport gives unexpectedly good results. This contributed to the popularization of sport in medicine. Thanks to its dynamic organizational development, more and more patients began to practice sport.

The rehabilitation center for paraplegics (people with injured lower limbs) run by Ludwik Guttmann in the English village of Stoke Mandeville also played an important role in introducing sport to the rehabilitation of severely physically disabled people. On Guttmann's initiative, the 1st Paraplegics Games were held in Stoke Mandeville in 1948. Their opening was deliberately held on the same day as the XIV Olympic Games in London. The initiative of the International Stoke Mandeville Games intentionally referred to the ideology of the Olympic movement. This gave sport practiced by disabled people a universal character, not used exclusively as means of rehabilitation treatment, but as value carrying the Olympic idea. On the initiative of Stoke Mandeville, the International Organization Committee for the Paraplegic Games was established in 1952, thanks to which Paralympic Games were held in Rome in 1960 and in Tokyo in 1964. They were held immediately after the Olympic Games of the International Olympic Committee (IOC) and in the same facilities. The development of organized sports movement led to the establishment of the International Sports Organization for Disabled in Paris in 1964, associating many countries from around the world (Burkett, 2010, Borowiecki, 2015).

### **Sport development among people who underwent organ transplantation**

A specific group among people with disabilities are those who underwent organ transplantation. For them, sport or physical rehabilitation are not unavailable forms of physical culture. In most countries, sport organizations whose activities are dedicated to people after organ transplants have existed for a long time. The initiator of this movement was the English surgeon Maurice Slapak, who founded the World Transplant Games Federation – WTGF in England in 1978. In 2000, the European Transplant and Dialysis Sport Federation - ETDSF was established. The superior goal of both organizations is not only to bring together people after transplantation who actively practice sport, representing their country at the summer or winter games (organized in a two-year, alternating cycle) but also to promote the idea of transplantation around the world. What is interesting, the only criterion for athletes after transplantation to take part in sports competitions (apart from medical qualification) is not the type of organ transplanted, but the age category of the competitor on the day of the Games, which has a decisive impact on the results achieved. Moreover, world games are also organized for 4- to 17-year old children who underwent organ transplantations - Nicholas Cup. Children, representing countries from all over the world, have skiing lessons, which end with competitions in Alpine and/or cross-country skiing. One edition of this type of games was held in Zakopane in Poland in 2005, the IV Winter Games for Children after Organ Transplantation (Chmura, Murdzek 2013).

### **Characteristic features of sport practiced by people who underwent organ transplantation**

However, despite many obvious similarities, sport practiced by people with disabilities should not be identified with sport practiced by healthy people. Contemporary sport of disabled people/ organ transplant recipients should be considered both from the point of view of the theory of physical culture and the theory of rehabilitation. On the one hand, it is an integral field of physical culture and is simply seen as sport practiced by a given group of people, which is its distinguishing feature, on the other hand, it is part of the process of broadly understood rehabilitation, and this element constitutes its distinguishing feature (Rekowski, Wilk 1997, Kowalik, 2004). Thus, sport practiced by people with disabilities/ people who underwent organ transplantation should have the following characteristic features:

1. It should be adapted to the individual needs of people exercising, that is, it must be consistent with the rehabilitation program but it should remain entertaining and stimulating,
2. It must be safe. The risk of accidents and damages should be minimized. This involves the choice of appropriate sports disciplines, adaptation of sports facilities, rules and regulations, and planning trainings in appropriate frequency and of proper intensity,
3. Practicing sport by people who underwent organ transplantation must be limited, especially in the period just after the surgery. Numerous overall physical conditioning exercises and activities are recommended (preferably combined with marches and runs/walks),

4. This group of people is recommended to start exercising regularly not earlier than 3 months after transplantation. It is necessary during this period to do exercises with an instructor or trainer who can gradually increase the range and intensity of exercises. Low-impact sports are recommended during this period (such as sport walking, cycling, aerobics, darts, Nordic walking, dancing or swimming),
5. People who underwent organ transplantation can usually start practicing sport professionally 6 months after the transplantation, adjusting the disciplines to the competitor's abilities,
6. A competitor can take part in official sports competitions one year after organ transplantation, of course, under the consent of the doctor. What is interesting, the competitor is qualified for the competition by a doctor from the World Transplant Games Federation (Chmura, Murdzek 20113).

Only when the above criteria are met, sport for disabled people /people who underwent organ transplantation will play an activating and rehabilitation role, from integrating, ludic and social to social and national. However, one condition should be met - sport must be available to all willing to practice it and it should be duly appreciated.

### **Mental problems of people who underwent organ transplantation as a paradox in practicing sports**

The etymology of the word transplantation can be found in the Latin word "*transplantare*". The origin of this term can be seen as a combination of two words: "*trans*", meaning "beyond something", and "*plantare*", meaning "to plant", "to vaccinate". In fact, the term transplantation means both the transplantation of the whole organ or its part to the recipient as well as tissues or cells taken from the donor (transplantation can also refer to a procedure performed within one body, where the recipient is at the same time the "donor"). The superior goal of organ transplantation is to restore body functions which were lost due to underdevelopment, disease or damage, by transferring a cell, tissue or organ from the donor's body to the recipient's body. Basically, the aim of organ transplantation is to improve the recipient's quality of life, his or her total recovery, and often to give someone

a new life - which is confirmed by the well-known slogan "*transplant is a new life*" (Chmura, Murdzek, 2013).

That is why recipients who prior the transplantation were often "on the other side of the door" treat organ transplantation as a donation. Synonyms of this word reflect the essence of the term. Among them, one can mention, for example: "offering", "help", "gift", "devotion", "sacrifice" or "kindness", indicating great respect for donors or their families who decided to give part of themselves or someone close to another person. A synonym of the word "donation" is also the word "respect", reflecting the recipients' attitude towards donors or their families, whom they will often never have the opportunity to meet. Synonyms of the words "donation" are also terms, such as: "capacity", which can be interpreted directly as increasing, improving or completely restoring the physical condition of a sick person, as well as "vitality" interpreted as giving someone life, extending it. Therefore, all people who underwent organ transplants, treat their new lives as priceless donations that should be protected, secured and cared for.

There wouldn't be anything surprising in the above-mentioned argumentation if this concern of people who underwent organ transplantation did not take an extreme form. This excessive worry for the "donation" means excessive care for oneself, exaggeration in "saving one's strength", etc. And this situation is a paradox, which can be explained in the following way: a person suffering from the disease feels that his or her life is in danger – they may die. An organ transplantation saves this person's life – he or she receives a priceless "gift" in the form of a transplanted organ. Being grateful for saving life, the person feels a great need to take care for the "gift". As a result, organ recipients feel an excessive need to protect themselves, avoid forcing themselves, move their bodies as little as possible (slowly, "step by step", gently, without effort). Mental changes can also be observed in people who underwent an organ transplantation. They concentrate too much on their illnesses. They constantly ask themselves questions: Will I live? How long will I live? As a result, their activity is limited mainly to taking drugs regularly and having passive lifestyle.

Unfortunately, such an attitude often means complete lack of physical activity by the person who underwent organ transplantation. As a result, his or her health deteriorates and the person's life is at risk again.

These mental problems occurring in the minds of people who underwent organ transplantation become justified when they start suffering from many diseases and ailments, which is, in a way, a result of the transplantation. One of them is, for example, obesity, which is a threat to health and even life, as it may cause problems with regulation of the appropriate amount of sugar by the organism. This may lead to diabetes, which may be additionally affected by drugs that maintain the proper functioning of the transplanted organ. Another ailment that may develop is hypertension, which is also not indifferent to the health of people who underwent organ transplantation. Development of obesity and also hypertension especially concerns people with kidney failure, as recoveries from such failures rarely occur after transplants. It should be also mentioned that

many people with kidney failure have skeletal disorders after dialyses, which is likely to cause, for example, osteoporosis. This condition is also reinforced by the need to take immunosuppressive drugs used against rejection of the transplanted organ (Chmura, Murdzek, 2013). The ailments listed above, typical of people who underwent organ transplantation, are only examples of diseases and ailments that affect organ recipients.

Their health, also in terms of their mental condition, is also affected, for example, by the losing job or the necessity to retire. This makes organ recipients feel that they are not important in the society, which is often reinforced by a significantly lowered material status. As a result, the number of organ recipients' friends may become limited to closest people, often only to closest relatives. As a consequence, what can be observed is not only social exclusion, resulting from reluctance to maintain social relations with people who are not socially attractive, but also (more often) social self-exclusion, which occurs because people who underwent organ transplantation feel inferior, weaker, less valuable. In the case of people affected by the mental paradox described above, we can also observe problems of a noetic (spiritual) nature. They cannot picture their future (they have no plans, perspectives, dreams, goals, aspirations, they live in a "vacuum", "suspension"). They became to be afraid of the future (their own, their children, their families, which causes uncertainty of tomorrow, fear of what else may happen). They begin to feel that they cannot develop (they became aware of values that are unattainable for them, they realize that they cannot develop their potential, they lose motivation to do anything, feel unhappy). This is often connected with loss of the meaning of life, understood as resignation from life, loss of motivation "to..." live, general discouragement to life, and even mental or spiritual "death" (Białas, 2020).

That is why physical activity is so important for people who underwent organ transplantation. Sport not only allows them to maintain their health, which facilitates recovery after organ transplantation and during the process of their treatment but it also improves their mental and noetic (spiritual) condition. Practicing sports gives such an opportunity, especially if this activity enables maintaining relations with a group of people who have the same problems. Practicing sports by people who underwent organ transplantation, their physical activity, undoubtedly helps to improve their physical condition. On the other hand, practicing sport in a group, being part of a group and acting for a group, understood as training together, going to competitions together, experiencing sports victories or losses together, adds further values. Sport heals the body and the spirit of people who underwent organ transplantation. It allows them to maintain good physical and mental health, supports the rehabilitation process. It gives them a sense of being significant and valuable. It also gives the opportunity to meet new people and make friends, connects people with similar problems. It allows them to "open the window wide" to people and to the world - to enjoy life despite traumatic experiences that they frequently have. And what is extremely important, it promotes the idea of transplantation, increasing the number of conscious donors of organs for transplantation.

### **Conclusion**

Conclusions that can be drawn after reading the above text can be reduced to two aspects. The first one results from the topic of the article and problems discussed in this publication. It proves the need to popularize physical activity among people with disabilities / organ recipients, thanks to which they can not only overcome problems of everyday life, overcome their own weaknesses, get a chance for self-realization and the sense of victory that is so important in their lives, but also and above all, they can maintain good physical condition - maintain health - extend life (Jucewicz, 2004).

The second, equally important aspect, concerns the superior idea of promoting sport practiced by disabled people /people who underwent organ transplantation. Sport competitions are not only places where people compete for victory . They are also a way to make people with disabilities / organ recipients come out of hiding, get out of the social margin where they often had to live. Thanks to sport, people with disabilities can convince themselves and others that physical and mental limitations do not diminish their humanity in any way. It is also a good opportunity to change the image of people with disabilities / after transplantation from weak, lonely, uncertain and withdrawn from life to strong, persistent, independent, valuable, taking advantage of life, which can undoubtedly contribute to full social integration (Guszkowski, Pater, 2010).

The third aspect concerns social integration mentioned above. This phenomenon is understood as merging of communities, in this case, of healthy people with those who underwent organ transplantation. Full integration assumes not only being physically together, creating a community, but also sharing the same values. This is why the role of sport practiced by people who underwent organ transplantations, understood as organizing and participating in sport competitions, national, abroad or international games, is so important. Places where these meetings take place become not only arenas of sport competitions, but also places of promoting the idea of transplantation. By tangibly making the wider public aware of the need to donate organs for transplantation from deceased people and living donors - as a gift of great love of man for man - THE GIFT OF LIFE FROM LIFE (Chmura, Murdzek, 2013).

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