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Alternative Opportunities for Conducting Physical, Sports and Recreational Activities in the Conditions of the Covid-19 Pandemic

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Abstract

The situation created as a result of the Covid-19 Pandemic has paralyzed the normal life of human society almost all over the globe. In addition to disruption of health, education, economic systems, etc., this situation has seriously damaged physical sports and recreational activities. The necessity to keep fit makes athletes to constantly try and find ways to organize training, while minimizing the risk of infection. Some of these ways are: a) medical measures or continuous testing of athletes; b) 'team quarantine' for the longest period of time that minimizes contact with other additional people of the club members where he/she trains; c) maximum care for maintaining the minimum allowed distance and contact between athletes. Meanwhile, outdoor recreational activities can be more easily controlled. However, these ways are not sufficient, so the consequences will be irreparable for a long time.

Keywords: Covid-19 Pandemic, physical activity, sports, recreation.

Introduction

The Covid-19 pandemic caused an emergency situation which resulted in the inability to develop normal activities, including

physical activity, almost in all areas of life. This condition has truly disoriented all mankind, it can even freely be said that it looks like a plague, but with the specifics of beginning of this century and hopefully with less consequences in loss of life. The spread of the virus from China to other parts of the world was rapid. In just a few weeks the epidemic spread to all four corners of the globe. At first there was speculation from the leaders of some countries which hinted at a mass spread.

In two months of the spread of the virus identified as SARS-CoV2, the World Health Organization on March 11, 2020, declared COVID-19 a pandemic. Predictions were various, but far more pessimistic than optimistic. Since the beginning of the pandemic, the increase of cases affected by this virus has been rapid. This situation and the panic related therewith forced the governments of different countries to take radical protective measures, for example, the measures imposed by the Government of the United Kingdom on March 23, 2020, which, among other things, ordered that: individuals can leave their homes only for essential needs such as: buying food, for medical needs, travel to work and similar for the most basic needs (Sorbie et al., 2020). With regard to physical activity, in the context of these measures it was ordered that the exercises be limited to groups of family members. These quarantine restrictions created unprecedented disruptions in the social, family, and work lives of individuals (Sorbie et al., 2020). In addition to the mobilization of health institutions to provide medical assistance to the infected persons and give advice to all human strata, educational, sports, social, economic, etc. institutions were also mobilized. While medicine treated cases and increased activities, the others restricted movement and interrupted activities. For example, on March 23, 2020, the Union of European Football Associations (UEFA, 2020) decided to postpone the highest level matches of the Champions League, until further announcement.

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This decision was made after some professional footballers were tested and resulted positive. The International Olympic Committee (IOC, 2020), together with the Japanese Government, decided on March 30, 2020 that the 2020 Olympic Games to be held in Tokyo had to be rescheduled for July 2021, but retain the name Tokyo Olympic Games 2020. The same occurred with other high-level international events. Cancellation actions included the competitive activities in almost all countries of the world, at all levels. Apart from seriousness of the situation, many vital activities for society have from the beginning of the pandemic, adapted ways and forms in order to not paralyze their work. This is necessary for certain branches of economy, transport, security, etc., without which, survival cannot be imagined. Although physical and sports activities are considered as less necessary forms compared to the former ones, experts in this field, coaches, doctors, athletes, etc., have since the beginning been trying to look at finding ways how to continue with their work. To conduct training activities in restricted conditions is not easy; however, holding competitions is even more difficult. But some other physical and recreational activities are possible, of course, with the adaptation to these pandemic conditions. In this context, each specific activity should be respected, such as: elite sports, organized sports, recreational exercises, post-traumatic and rehabilitation exercises, leisure recreational exercises, physical and sports activities at school, physical outdoor activities, etc. The places where these activities can be organized are: indoor environment, outdoor environment and online training. Within this period of time, from the beginning of the pandemic onwards, many studies, source articles, reports, guidelines, etc., have been published and are being published constantly, which addresses various aspects of the following topics (Frahsa et al., 2020; Sorbie et al., 2020): consequences of lockdown for federations and sports clubs, perspectives of coach and athlete and risk of infection,

consequences of lockdown for the fitness and fitness industry, use of internet training during Covid-19, physical activity for different groups of the population during the Covid-19 pandemic, such as: clients of mental health services, children, adolescents, the elderly etc., physical activities based on the school curriculum but implemented at home, the consequences of lockdown of rehabilitation centres that use physical activity and behavioural change strategies such as treatment, socio-economic factors and sport-related activities during lockdown, use of outdoor activities during Covid-19, sports events and mega-events related to Covid-19, economic and commercial aspects of Covid-19 for sports, governance and management of sports related to Covid-19, sports media and Covid-19, the role of the individual versus the team in training and sports advancement during the lockdown by Covid-19 (frontiersin.org/research-topics, 2020). In this situation, the society in all countries has no choice but to do their maximum mobilization to face this evil.

Fortunately, all relevant factors have taken this expanding pandemic situation seriously and are constantly preparing to do whatever is possible in order to mitigate the consequences in every sphere of life. This is also the case with mitigating the consequences in sports by being mobilized with concrete work in the field and in information. Suffice it to mention the systematic media analysis that conveys the message to individuals about how they should behave at this time. For example, analysis of detailed online media reports in the UK on sport and Covid-19 during the main lockdown period during March-May 2020 is one case in point. The research is based on the Sport-Covid reports, which has been presented in the top five online media in the UK. The analysis defines four basic statuses or dimensions of sport: existential, normative, socio-cultural and political (Giulianotti and Collison, 2020).

Physical activities during the Covid-19 pandemic

As the Covid-19 pandemic crisis continues, various problems accumulate in parallel. The problem of health care is more sensitive, therefore, special care should be taken. In this period of time, with the restrictions on movement and physical activity, experts of relevant fields have compiled strategies and alternative forms of exercise. According to the analysis of the Department of Psychiatry at the University of Michigan in the USA (2020) in this pandemic period, of particular importance to human health are these strategies of physical activity and exercise classified into three key points: physical activity and exercise can be effective treatment strategies for the symptoms of depression and anxiety; physical activity and exercise can bring short-term and long-term benefits to mood, sleep and physical health; sustained motivation and determination to exercise can be enhanced by peer support, family support, or electronic platforms that offer exercise programs. Concrete steps can be taken from these three orientations in order to design physical activity with different levels of people. Restriction of movement and in more severe cases complete isolation of the individual often results in the beginning of depressive symptoms (University of Michigan, Department of Psychiatry, 2020). Several studies (Lynette and Perna, 2004; Saravanan, Mahmoud, Elshami and Taha, 2020) suggest that high level of aerobic activity (exercises that significantly increase heart rate) may be associated with greater reductions of depressive symptoms. Also, high-intensity of physical activity can be executed, once or twice a day for short periods (30-90 seconds). This can be achieved through exercises at home including various jumps, exercises with force sequences (i.e. standing up, pushing, etc.). Meanwhile, the use of equipment, such as exercise bicycle, treadmill, etc., provide greater opportunities for home exercises. Physical activities at home for an improvement of general health

and to increase motor skills, are possible in more improvised forms. Strength training has proven to be helpful in reducing anxiety symptoms for individuals with and without an anxiety disorder. Weight training, using exercise equipment or household items (school books, canned products, water-filled cans, paint cans) can help reduce the negative effects of stress and anxiety. The benefits of weight training (low weight with a high number of repetitions) can be even higher with adults to maintaining quality of life and normal functioning (Michigan Psychiatry Resources for COVID-19, 2020; Chen et al., 2020). In these conditions, exercise programs and guides are being designed by many companies.

They offer free use of their on-line platforms that can help you choose from a variety of indoor activities (cycling, running, dancing, yoga, strength training, etc.) to make exercise more enjoyable during this critical period. Experts recommend choosing physical activities that the individual likes, and using the experience of others. At the same time, there is evidence which suggests that exercise may be beneficial for mood even if the act of doing the exercise is not as satisfying (Michigan Psychiatry Resources for COVID-19, 2020). Implementing physical exercises at home can activate other family members, by always maintaining the individual's opportunity to choose his activities, which provides a constant interest in exercising. In this difficult time it can be even considered as a turning point on learning new ways to build emotional stability and physical health. According to many guides which prefer home environment activities, people can take regular breaks after a short time in front of the computer, tablet or smartphone, 20 to 30 minutes altogether. You can take few minutes break, to walk around the house, get some fresh air on the balcony, in the garden or yard, or play in your home with the dog for a few moments. Using stairs is an extremely effective way. Fast stairs

climbing can improve fitness for few weeks. But, if you live in an apartment, avoid unpleasant encounters with other neighbours (The Conversation, Academic rigour, Journalistic flair, 2020). Global recommendations are for all adults to accumulate at least 150 minutes of moderate-intensity or 75 minutes of high-intensity of physical activity per week, as well as muscle-strengthening activities in two or more days a week. If this volume of exercises cannot be achieved, then as much activity as possible should be done, according to the saying 'every activity is better than none'. As the situation changes with the spread of the infection, so should the contents of the exercise program. The situation is unsure, many places can again go to lockdown and it is not known how long we cannot go out for a walk, or to run. So the matter is constantly open on how can people fulfil these guidelines when restricted at home? (Mohammed, 2020; COVID-19 Sports Guidance for Youth and Adults, 2020).

Sports activities during the Covid-19 pandemic

The rapid spread of the COVID-19 pandemic in almost every country in the world has forced the governments of all affected countries to take protective measures such as social and physical distancing, disrupting regular living and communication behaviours including sports and physical activity. This challenge posed by COVID-19 from the beginning has alerted those responsible for sports' activities at the United Nations to compile and provide recommendations to governments to support the safe reopening of sporting events, as well as to support physical activity during and after pandemic. The analysis and recommendations set forth by the Department of Economic and Social Affairs at the United Nations, which deals with the impact of COVID-19 on sports activity, include the following: recommendations to sports federations and organizations as

well as recommendations on the so-called professional sports system (Department of Economic and Social Affairs - UN, 2020). This Department recommends to governments and intergovernmental organizations to provide sports federations, clubs, and sports organizations worldwide with guidance on safety, health, performance, and standards, as well as other international protocols to be implemented in future sporting events. This would enable all parties to work together in order to organize all sports activities more easily and safely. The so-called professional sports system includes actors related to sports, such as: producers, broadcasters, fans, businesses, owners and players, etc. The mentioned institution recommends finding new and innovative solutions to mitigate the negative effects of COVID-19 in the world of sports, and the guide describes strategies to reduce the spread of COVID-19 during sports activities. The complete blocking of the athletes could not have been imagined, so immediately after the alarm of the pandemic, appropriate programs were initiated in order to continue sports activities in the new extraordinary conditions. These guidelines include content for outdoor exercises, recreational activities, while returning to competitive sports is carefully approved depending on the type of sport. Despite the specific conditions of social distancing and personal protective measures, the continuation of the active life of athletes is done in order to maintain physical fitness and at the same time to fight the health consequences (Jiménez-Pavón, Carbonell-Baeza, Lavie, 2020). Moderate exercises are associated with immune system improvement and reduced disease risk. On the other hand, excessive exercise and high-intensity exercise can cause transient immune dysfunction and be associated with an increased risk of disease, including upper respiratory tract infections, but this may not apply to elite athletes (Schwellnus et al., 2016; Alack, Pilat, Krüger, 2019). High intensity sports, such as: football,

athletics running disciplines, etc., in conditions of the COVID-19 pandemic may conduct certain exercises in nature, but due to increased levels of ventilation during training, possible mass gatherings in sports venues, stadiums, jogging trails, parks or any recreation area, are associated with the risk of the infections in question. Currently there are no consistent guidelines regarding the use of face masks for outdoor exercise during the COVID-19 pandemic. Experts advise people to wear face masks during low-to-moderate intensity exercises, such as brisk walking and jogging, while maintaining a safe physical distance (2 m away) and personal hygiene in public. However, the use of face masks can jeopardize high-intensity breathing and oxygen uptake in high-dynamic exercises (Lim, Pranata, 2020). Each sport and activity in the new pandemic conditions is categorized according to its risk, but the general classification is: (1) low risk: exercise at home, alone or together with family members, with equipment and clean facilities; (2) medium risk: exercising in public, alone or together with one's family of not more than 5 persons, with own and cleaned equipment; and (3) group exercises with non-family members in private or public space, physically not far from each other, with shared equipment (Aspen Institute, 2020). Since the time of physical development and sports activities under conditions of multiple restrictions is long, returning to normal exercise and sports activities will be challenging. Many athletes will strive to achieve their previous physical performance. Prolonged rest and reduced exercise lead to decreased functional capabilities of many systems (e.g., musculoskeletal, neuromuscular, respiratory, and cardiovascular systems) as well as reduced physical abilities (e.g., strength, flexibility, speed, and endurance) (Jukic et al., 2020). A study conducted by Kramer et al. (2017) confirmed that a group of healthy adults who don't do any physical activity have significantly lower aerobic and other motor skills compared

to their counterparts who performed three minutes of jumping exercises, six days a week, for 60 days. In addition, the density of bone minerals in the group of those of the sedentary category decreased significantly, while the experimental group that developed jumping exercises maintained these parameters.

Recreational activities during the Covid-19 pandemic

Physical activity is not only necessary for athletes and young people, but it is also of great importance for the strata of people with lower physical disability, for the older people, and for the category of people with disabilities. Therefore, maintaining and improving health with various forms of physical activity is necessary for all people even during this stressful period. Organizing physical activities in the created situation is complicated because it is necessary to be constantly vigilant regarding physical distancing and restrictions on personal contacts, recommended by the Center for Disease Control and Prevention. During the period of self-isolation, most people became accustomed to a lifestyle of sitting for long periods of time with less physical activity, less walking, and less movement. Exceptions are athletes who train individually to keep themselves healthy and maintain shape as much as possible (Pinto et al., 2020). In order to mitigate the spread of COVID-19, staying at home is still encouraged by the Center for Disease Control and Prevention, but in addition daily physical activity is recommended for children (60 min/day), and for adults (30 min/day) (Lim, Pranata, 2020). This helps to manage the stress caused by the COVID-19 pandemic and its potential to threaten the health of ourselves, our families and our communities. For those who have the opportunity, regular outdoor walks are recommended. These can be moderate-intensity physical activities but according to the individual's ability also with

higher intensity and strain (such as brisk walk or jogging). This form of exercise and recreation has proven to be successful and helps in the reduction of bad habits, use of alcohol and other harmful substances. Moreover, regular participation in physical activity is proven to increase their immunity and thus utilize the body's ability to fight infection (Lim, Pranata, 2020). Walking in nature is simple and easy for all other categories with different physical abilities. Older people regulate a lower walking pace and walking time, although it can be combined with jogging. Middle-aged people also have different physical abilities, and depending on this factor they walk or run at a pace that suits their age and ability. Therefore, all categories of people find the optimum of physical engagement in recreational conditions. Outdoor terrains for picnics, parks, recreation centres, etc. are the most suitable places for this purpose. Those forms of exercise can be combined with the use of tools and equipment outdoors or in the gym. Walking or jogging with the dog, yard or park landscaping and many other forms that are not monotonous can be used by all ages. Guidelines for supporting the return to recreation and fitness are numerous. They aim to provide users with basic knowledge about recreational support facilities as well as the safest ways to protect themselves from COVID-19 (Sports, Recreation and Being Active during COVID-19, 2020). Staying seated at work for a long time or staying at home should be avoided when possible, while a healthy diet and active daily lifestyle should be encouraged (Schwellnus et al., 2016). A sedentary lifestyle negatively affects: neuromuscular system (rapid muscle loss, degeneration of nerve fibres etc.), muscle protein metabolism, glucose homeostasis (reduces insulin sensitivity), cardio-respiratory system, as well as balance of energy (excess fat deposition etc.) (Alack, Pilat, Krüger, 2019). In addition, for people of active working age, except performing the necessary duties, their goal should be avoidance of excessive

body mass and follow a healthy lifestyle. Currently, there are numerous virtual fitness and personal training opportunities that are widely available online, as well as opportunities for meetings with medical consultants. With a more flexible schedule, healthy individuals can adjust their modality, frequency, volume, and intensity of exercises that can be performed at home (Jiménez-Pavón, Carbonell-Baeza, Lavie, 2020). But they need to know limits of their abilities and abstain from any form of exhaustion, or high-intensity exercise that could compromise the immune system. Meanwhile, moderate-intensity endurance training and endurance training are recommended in order to boost immunity and fitness.

The COVID-19 pandemic and related restrictions should no longer be an excuse for not maintaining a physically active lifestyle, as there are numerous alternatives to maintaining mental and physical health.

Conclusion

Social distance measures mean that people have far fewer opportunities to be physically active, especially if walking, cycling, or participating in a leisure activity are restricted (e.g. running, dog walking, going to the gym). These drastic measures in a way force people to stay sitting at home for a longer time (Conversation, 2020). The impact of this physical inactivity is likely to have consequences in many areas such as: health and social care, mental well-being of people, education, etc. During the COVID-19 pandemic, being physically active will be a challenge for all of us, but it is important to find and plan ways to reduce our sitting time. During the COVID-19 pandemic, the use of guidelines is a good opportunity to continue with physical activity, although not as in normal conditions. It includes a variety of exercise programs for all categories of people: by age,

gender, physical fitness, ambitions and goals of the individual, etc. Some of these guidelines have the character of a document developed by local government institutions or international institutions. All of that content has been developed to support sports, physical activity and recreational organizations, participants and in parallel by providing advice on reducing the risk of COVID-19 transmission among attendees (Physiopedia, 2020; COVID-19 Guidance for Sports, Physical Activity and Recreation, 2020). This is an unusual situation, but we must face this challenge, since the efforts always lead people to victory. Let's hope this time too.

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