

STAY HOME AND BE ACTIVE: PHYSIOTHERAPIST ADVICE

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Coronavirus disease (COVID-19) is an infectious disease caused by a new virus. The World Health Organisation has declared the coronavirus a pandemic requiring a global coordinated effort.

There are difficult decisions ahead for governments. How individuals respond to advice on how best to prevent transmission will be as important as government actions, if not more important. Government communication strategies to keep the public informed of how best to avoid infection are vital (Anderson, Heesterbeek, Klinkenberg & Hollingsworth, 2020).

The outbreak of COVID-19 may be stressful for people. Fear and anxiety about a disease can be overwhelming and cause strong emotions in adults and children. Response to outbreak depends on background, the things that make you different from other people and the community you live in. The strongest response on crisis is aspected from older people and people with chronic disease who are at higher risk for COVID-19, children and teens, doctors and other health care providers who are helping with the response to epidemy and people with mental health conditions. Recommendations are to take care of you body, take deep breaths, stretch, eat healthy, exercise regulary and avoid alcohol and drugs (Centers for disease control and prevention, 2020).

As new COVID-19 cases continue to emerge world vide, many individuals are being requested to stay at home in quarantine or self-quarantine. Sedentary behavior and low levels of physical activity can have negative effects on the health, well-being and quality of life of individuals. Self-quarantine can also cause additional stress and challenge the mental health of citizens. Physical activity and relaxation techniques can be valuable tools to help you remain calm and continue your health during this time (World health organization, 2020).

Physical activity includes exercise as well as other activities which involve bodily movement and are done as part of playing, working, active transportation, house chores and recreational activities. (WHO, 2020).

Exercise is very powerful tool to treat and prevent chronic disease, mitigate the harmful effects of obesity, reduce mortality rates and improve physical functioning and quality of life. In effect, Exercise is Medicine (American College of Sports Medicine, 2016, p 12).

Public health guidelines have emerged on the recommended intensity and volume of physical activity to promote health.

WHO recommends 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity physical activity per week, or a combination of both (WHO, 2018). These recommendations can still be achieved even at home, in your yard, balcony or indoors, individual or together with your family members keeping the safe distance of 2 m, with no special equipment and with limited space.

Physical activity in short bouts of 10 minutes or more should be counted in minutes. For each activity participants should estimate effort they put into the activity. The effort should be estimated. Moderate activity will raise your heart rate and make you breathe faster and feel warmer. Working at a moderate intensity level is if you can still talk while working. Vigorous intensity activity makes you breathe hard and fast and you are not able to say more than few words without pausing for breath. This guidance should not replace medical guidance in case of any health condition.

One such useful measure to assess activity intensity is the Borg Scale of Perceived Exertion. In its simplest terms, it provides a measure of how it feels that the body is working based on the physical sensations that the subject experience, including increased heart rate, increased respiration or breathing rate, increased sweating and muscle fatigue (Williams, 2017).

What is the role of physiotherapists in quarantine caused by COVID-19? How we can help to overcome this difficult period?

There are many aspects of physiotherapist's role in identifying, containing, mitigating and treating the symptoms of this disease. This includes implementing methods to reduce the transmission of COVID-19, initiating early identification strategies and dealing with identified cases appropriately in the clinic

and home environments. Physiotherapists have a responsibility to share knowledge on preventing transmission of COVID-19.

Physiotherapists are health care professionals who provide services that develop, maintain and restore people's maximum movement and functional ability. They can help people at any stage of life, when movement and function are threatened by ageing, injury, disease, disorders, conditions or environmental factors. Physical therapists help people maximise their quality of life, looking at physical, psychological, emotional and social wellbeing. They work in the health spheres of protection, prevention, treatment/ intervention, habilitation and rehabilitation (World Confederation for Physical Therapy, 2016).

American Physical Therapy Association (APTA) encourages physical therapists to use their professional judgment to determine when, where and how to provide care with the understanding this is not the optimal environment for care, for anyone involved (APTA, 2020).

The most studied area of health promotion in which physical therapists should have knowledge and skills in physical activity promotion. This focus on physical activity stems from the recognition of the expertise of physical therapists in physical activity and exercise prescription. Supported by unequivocal evidence that physical activity positively affects a wide variety of diseases that erode health and that physical activity improves wellness, physical activity appears to be the most important and effective intervention physical therapists can incorporate into every patient or client plan of care to promote health and wellness. Furthermore, physical therapists engage in physical activity at a higher rate than the general public, making them ideal messengers and role models for their patients and clients (Bezner, 2015).

Telerehabilitation is option to provide rehabilitation services to people remotely in their home. Such services include therapeutic intervention, remote monitoring of progress, education, consultation, training and means of networking for people with disabilities.

The Chamber of physiotherapists of Montenegro is professional organization which shares information and technical guidance about COVID-19 infection and control, and recommendations for

regular physical activity via web-site of the Chamber, emails to the members, public networks and social media.

So, physiotherapists recommend to stay and to become active in quarantine.

An efficient way to stay attain a moderate level of physical activity is to walk briskly for 30-45 minutes most days of the week. Your pace should be such that your heart and breathing rates increase slightly but not so much that you could not carry on a conversation while walking. Also, you should experience a light to moderate increase in relative perceived exertion (Edlin & Golanty, 2014, p. 10).

One can stay active in home by walking in small space, walk in spot, walk around the house, walk to indoor stairs, stepping, marching. You can follow an online exercise classes, dance with music and dance with children.

Domestic physical activity particularly among females and older adults (housework) is not seen as the main method by which sedentary individuals are encouraged to meet current physical activity guidelines. Is not sufficient to provide all benefits normally associated with meeting physical activity guidelines (Murphy, Donnelly, Breslin, Shibli & Nevill, 2013).

For sedentary people this recommendation may seem a bit overwhelming and providing a more modest initial regimen is recommended. The exercise should feel „light” and the person should be able to maintain a conversation without experiencing breathlessness.

One can start with short periods of exercise multiple times during the day. Encouraging daily exercise can help maintain consistency in exercise beginners. Once a person is able to exercise continuously for 30 minutes, it is reasonable to adjust the frequency to 5 days weekly. Prescribing exercise and getting sedentary persons moving is necessary, needed and effective (Traynor, 2016). One can practice exercise while sitting and watching TV. To be active while sitting-it can be one option to think about.

For more vigorous activities implement body weight activities, plyometric exercises, calisthenics and high intensity interval training (HIIT).

Body weight training can be the option. It doesn't require use of special equipment and can have the form of endurance or strength training. The advantage of such training is the fact that it includes

functional exercise engaging many muscle groups, which additionally help improve balance, proprioception and flexibility. The exercise can be done with varying level of intensity and different groups of muscles: upper and lower extremity muscles, back and stomach muscles (Lipecki & Rutowicz, 2015).

The term calisthenics originally referred to a set of body weight exercise used in the United States to improve the general fitness level of female school children. Over the years, this term has been generalized to a set of bodyweight skills aiming to improve health and fitness. Calisthenics training is a feasible and effective training solution to improve posture, strength and body composition without the use any major training equipment. Calisthenics based training protocol may include different exercise: squats, lunges, pulls, dips, static and dynamic plank (Thomas et al., 2017).

Plyometric training is a technique used to increase strength and explosiveness. It consists of physical exercises in which muscles exert maximum force at short intervals to increase dynamic performances. In such training, muscles undergo a rapid elongation followed by an immediate shortening (stretch-shortening contraction), utilizing the elastic energy stored during the stretching phase. Only athletes who have already achieved a high level of strength through standard resistance training should engage in plyometric drills (Wang & Zhhang, 2016). There are many plyometric exercises that can be performed indoors: burpees, clapping push-ups in different positions, squat jumps, skipping, stairs hops, lateral bounds. Plyometric exercises tone the entire body, burn calories and improve cardiovascular health.

HIIT involves repeated bouts of high intensity effort followed by varied recovery times. The intense work period may range from 5 seconds to 8 minutes long and the recovery period may last equally as long. The workout continues with the alternating work and relief periods totaling 20 to 60 minutes. Intensity during the high intensity work interval should range $\geq 80\%$ of person's estimated maximal heart rate. As good as subjective indicator, the work interval should feel like you are exercising „hard” or „very hard”. Using the talk test as guide for intensity it should be like difficulty carrying on conversation. There are multiple benefits of HIIT such as: aerobic and anaerobic fitness, blood pressure, cardiovascular health, insulin sensitivity, cholesterol profiles and body composition. What is suitable for quarantine is that HIIT training can easily be modified for people of all fitness levels and special conditions such as overweight and diabetes. Medical clearance from a physician may be an appropriate safety measure for beginners but it is suitable for people who have foundational level of

fitness (ACSM, 2014; Powell, 2019). There are many exercises that can be used for HIIT workout: pop squats, jumps, butt kickers, lunges, skaters and they can be performed in higher and lower intensity.

Physiotherapist and other health care professionals are focused on the general health and wellbeing of the community. Physiotherapists have a responsibility to share knowledge on preventing transmission of COVID-19 and to offer health maintenance strategies including physical activity. Our profession is made up of kind, compassionate and empathic people, and many of us can contribute in this challenging times of requested quarantine or self-quarantine through promotion of physical activities. In time like this it is important to be a positive force in the health of society. We can do it together.

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