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## Physical activity during lockdown

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### Abstract

Due to the corona virus outbreak, several countries in universe are facing the problem of major lockdowns including India. The pandemic has forced many people to stay at home and self-isolate for a period of time. COVID-19 seems to be having a major impact on physical activity behaviors worldwide. The present study is going to highlight physical activity awareness during COVID-19 lockdown period. It is very important for an individual, family and society also. It presents on how to people are facing the challenges like as psychological, physical, economic and social in their routine life in lockdown period. It is very important to maintain the psychological and physical condition in this situation. Physical activity is good for your body, mind and spirit especially during such stressful situations and it will also ensure good overall health. So, engaging in day-to-day physical activity at home is better way to maintain the physical and psychological conditions during lockdown period.

**Keywords:** Physical activity, lockdown, awareness

### Introduction

The Chinese city of Wuhan has reported a novel pneumonia caused by corona virus disease 2019 (COVID-19) since the end of December 2019, which is spreading worldwide domestically [1]. As the COVID-19 pandemic continues to develop in almost all territories and regions, various protective's measures have been introduced by the authorities, including the closing of schools and universities, and bans on travel, cultural and sporting events, and social gatherings [2]. People have ordered to stay at home, several countries have requested for self-isolate to all returning traveler for a fourth-night. These actions are intended as an effective strategy for preventing the virus spreading. Many people's to duly heeling the official advice to self-isolate and stay at home. But these actions will negatively affect on peoples physical activity and psychological behaviors and subsequent impact on physical health, well-being and quality of life.

The steps of lockdown will help control the spread of corona virus. In this situation physical activity will help to stay mentally and physically fit. Physical activity is defined as any bodily movement produced by skeletal muscles that need energy expenditure [3]. Different type exercises reception also will help to take care of better cardiovascular endurance and strength, muscle strength, flexibility also as better psychological state.

According to World Health Organization physical activity is good for your body, mind and spirit especially during such stressful situations. Physical activity has a major impact on health. Some effects are well established; as a serious component of energy expenditure, physical activity features a great influence on energy balance and body composition. Physical activity, especially moderate to vigorous intensity, is highly recommended for preventing cardiovascular diseases, type-2 diabetes, some kinds of cancers, and improving the quality of life [4, 5]. The amount of physical activity has a dose response relationship with all causes of mortality and cardiovascular diseases [6]. Additionally, Physical activity is shown to counter depression, anxiety disorders, and other mood dysfunctions [7, 8, 9]. Therefore, interest in the benefits of physical activity on specific diseases, health, and well-being has increased, and much research is ongoing [10]. More physical activity also will ensure better sleep and good overall health. It is helpful to ensure good health of you and your family doing together.

As per recommends of World Health Organization, healthy adults should do minimum 30 minutes per day of physical activity and children should be physically active for at least 60 minutes per day during lockdown period.

### Home Based Physical Activity

During the lockdown period most people forced to stay at home or adopt isolation protocols to prevent virus transmission. There is no opportunity to physical activity outdoor practice in this period. But peoples should stay active by exercising at home. Exercise at home using various safe,

simple and easily implementable exercises is well suited to avoid the airborne corona virus and maintain fitness levels. Such as multiple home based body weight training exercises mode can be applied, including Walking lunges, Jumping jacks, Jump roping, Box jumps, Planks, Squats, Sit-ups, Push-ups, Mount climbers and Burpee exercises.

**Table 1:** Home based bodyweight training exercises.

Exercise / Activity	Frequency	Benefits
Walking lunges	1-2 sets of 5 reps (beginners)	Hamstring strength and running speed
	2-3 sets of 10 reps (advanced)	
Jumping jacks	1-2 sets of 15 reps (beginners)	Endurance and core strength
	2-4 sets of 20 reps (advanced)	
Jump roping	6-8 sets of 45 sec (beginners)	Cardio endurance, Bone density, ability, coordination
	12-15 sets of 90 sec (advanced)	
Box jumps	1-2 sets of 6 reps (beginners)	strengthens lower-body muscles-glutes, quads, calves & hamstrings
	2-4 sets of 10 reps (advanced)	
Bodyweight Squats	1-2 sets of 10 reps (beginners)	Strength and endurance
	2-3 sets of 20 reps (advanced)	
Burpees	1-2 sets of 10 reps (beginners)	Cardiovascular fitness, strength and mobility
	2-3 sets of 20 reps (advanced)	
Sit-ups	1-2 sets of 15 reps (beginners)	Abdominal and core strength
	2-4 sets of 20 reps (advanced)	
Push-ups	1-2 sets of 10 reps (beginners)	Upper body strength and endurance
	2-3 sets of 20 reps (advanced)	
Planks	1-2 sets of 20 reps (beginners)	Body posture, upper and lower body isometric strength
	2-4 sets of 40 reps (advanced)	
Mountain Climbers	1-2 sets of 20 reps (beginners)	Cardio endurance, core strength and agility
	2-3 sets of 40 reps (advanced)	

Bodyweight training stated is any exercise involves using the body as a means of resistance to perform work against gravity <sup>[11]</sup>. It can enhance a range of biomotor abilities including strength, power, endurance, speed, flexibility, coordination and balance <sup>[12]</sup>. Bodyweight training utilizes simple abilities like pushing; pulling, squatting, bending, twisting and balancing. This type of strength training has grown in popularity for both recreational and professional athletes. Movements such as the push-up, pull-ups and sit-ups are some of the most common bodyweight exercises <sup>[13]</sup>.

There are many benefits of bodyweight training exercise for human being. Bodyweight Squats, Push-ups and jumping jacks increase endurance and core strength, as well as Jumping rope, Mountain climbers, Burpees increase Cardio endurance, Bone density, ability and coordination also. One of the most important benefits of bodyweight exercise is its ability to improve your cardiovascular endurance and muscle strength all at once. Frequently changing your position keeps the guts rate elevated, while weight and gravity work together to strengthen muscles. According to study just one bout of 10 sets of 10 squat-jumps produced beneficial change in muscle fibers <sup>[14]</sup>. Some bodyweight exercises have been shown to benefit not just the young, but the elderly as well <sup>[15]</sup>. Older people undertaking bodyweight exercises benefit through increased muscle mass, increased mobility, increased bone density and decreased depression and improved sleep habits <sup>[16, 17]</sup>.

### Conclusions

On the basis of the forgoing discussion, it may be concluded that, home based activities provide an opportunity for people to stay fit and healthy by practicing simple movements while staying at home. Many countries have now implemented lockdowns, forcing people to stay at home and only go out in the event of an emergency. These decisions will affect people's mental and physical health, especially those who are

used to regular outdoor physical activities. We are all aware of the importance of our mental health and the need to improve our immune system, which is extremely important for fighting sickness. Staying at home can lead to a lot of stress, anxiety and mental distress. The best way to overcome these problems is to replace outdoors activities with home based activities, such as bodyweight training exercise with self paced protocols.

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