



### Aerobic Gymnastics in Warding Corona Covid-19

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#### ABSTRACT

*A strong immune system is one of the strongholds against the Covid-19 Corona virus. Regular exercise is a way to maintain health, fitness and endurance. UGM Sports Medicine Expert Zaenal Muttaqin Sofro said, there are many sports that can be done at home in the midst of the Corona pandemic. Maintaining a healthy physical condition is a very important thing to do during the Covid-19 pandemic. However, in the midst of a Covid-19 pandemic like this, physical activity and space are limited. How to work around this? Sports can be done with a homeworkout. It does not require excessive equipment, and can be accessed easily online such as aerobics. Aerobic exercise can be one of the sports to prevent the transmission of the Covid-19 virus. According to research results, people who regularly exercise are less likely to develop disease than people who rarely exercise. This is because when we exercise, the performance of white blood cells will be stimulated. These white blood cells that function as antibodies to fight various types of germs that enter the body. When exercising, body temperature also increases. This can inhibit bacteria from growing in the body, and the increased body temperature can also help the body fight infection.*

**Keywords:** *Aerobics, Corona, Pandemic*

#### Introduction

The country of Indonesia is currently still struggling against the Coronavirus or Coronavirus Disease 2019 (COVID-19), as is the case with other countries in the world. The number of Corona virus cases is increasing with some reporting recoveries but not a few who have died. Handling and prevention efforts are continuously being made to fight COVID-19, which has symptoms similar to flu. It is known, this outbreak started from a mysterious disease that crippled the Chinese city of Wuhan, China. Where the tragedy that occurred at the end of 2019 has continued until the spread of the Corona virus has spread throughout the world, including Indonesia. Until now, it has been confirmed that there are 65 countries that have contracted this virus (WHO data, March 1, 2020).

At the time of the COVID-19 outbreak, all human activities were limited, including sports activities in gyms or other sports arenas. To deal with the pandemic of this virus spread, the Indonesian government recommends that all people practice social distance and even physical distance. For office workers, work is carried out at home or work from home (WHF), including students and schoolchildren in the learning process online (Arini et al., 2020; Tosepu et al., 2020).

Physical activity can be one way to prevent transmission of the COVID-19 virus. The reason is, according to research results, people who regularly exercise are less likely to get disease than people who rarely exercise. This is because when you exercise, the performance of white blood cells will be stimulated. These white blood cells that function as antibodies to fight various types of germs that enter the body. Exercise is believed to help flush out bacteria from the lungs that can allow the body to catch cold symptoms and other diseases. When exercising, body temperature also increases. This can inhibit bacteria from growing in the body, and the increased body temperature can also help the body fight infection. In addition,



actively exercising can also reduce stress hormones in the body and increase endorphins which are useful as natural painkillers and mood pleasers (happy hormones).

According to WHO (*World Health Organization*) health is a state of body, spirit and social that is perfect and not only free from diseases, disabilities and weaknesses. This definition has changed slightly in the Law of the Republic of Indonesia No. 23 of 1992 on health. In Chapter I, Article 1 states: Health is a state of well-being of body, soul and society which enables everyone to live productively socially and economically. From the two definitions above, it can illustrate that what is considered healthy is free from mental and physical and social diseases. The human body can be attacked by various diseases, both in the form of infectious and non-communicable diseases, minor illnesses and serious diseases. If humans have resistance to disease or their health status is good, it will be difficult for all diseases to enter the human body.

The widespread spread of the COVID-19 virus has affected many fitness centers that are not operating. Lots of people ask, how do you keep exercising at home? Sports can be done with a *homeworkout*. Does not require excessive tools, and can be accessed easily online. Exercise can make your body feel more energetic and healthier. Exercise can also increase self-confidence. Although the benefits are very good, it is not recommended to do excessive exercise.

Gymnastics is an interesting option to do at home, like aerobics. Usually, an aerobic exercise instructor is in front of us during the session. However, because the corona virus emergency made many people choose to stay at home, online instructors were chosen during the pandemic. Reviewed by dr. Karlina Lestari, aerobic exercise can also relieve symptoms of depression and anxiety disorders, which may be caused by the corona virus.

Aerobic exercise is a form of aerobic exercise besides cycling, swimming, jogging, running and games such as badminton, football, tennis and so on. Aerobic exercise is an exercise that moves all muscles, especially large muscles with continuous, rhythmic and continuous movements. Nowadays, many people choose aerobic exercise to improve fitness. In aerobic exercise, movements are selected that are easy, fun and varied so that it allows one to do it regularly over a long period of time. Therefore we need energy and an oxidation process (Soekarno in Purwanto: 2011).

In several studies, aerobics has been successful in reducing symptoms in people with depression and anxiety disorders. Mukholid (2004) argues that Physical Freshness is the ability and ability to carry out activities or work, enhancing work power without experiencing excessive fatigue. Everyone needs good physical fitness in order to carry out work effectively and efficiently without experiencing fatigue. The degree of a person's physical fitness greatly determines his physical ability to carry out his daily tasks. Furthermore, Lutan (2001) added that physical fitness (which is related to health) is a person's ability to perform physical tasks that require strength, endurance and flexibility.

Another opinion also comes from Irianto in Puspodari, et al (2020: 8) which states that physical fitness is physical fitness, which is the ability of a person to do daily work efficiently without excessive fatigue so that he can still enjoy his spare time. The higher the degree of a person's physical fitness, the higher his physical work ability. The main benefit of physical fitness training is to make the body healthier and fitter. The notion of physical fitness itself is actually a movement that requires muscle work so that the body will burn calories. Being active will not only reduce body fat, but also reduce the risk of depression so that the quality of life will also improve.

There are many choices of physical fitness exercises and suitable forms of exercise based on preferences and physical conditions of each. To be able to achieve a condition of prime physical fitness, a person needs to do physical activity that involves physical fitness



components with the correct training method (Depdiknas, 2002). One of the most popular community sports is aerobic exercise. According to Kristono (Jonni, 2003) "Aerobics is an exercise that aims to improve the ability of the lungs, heart and blood circulation, where oxygen is the main factor in generating energy in body cells." Movement by movement in aerobic exercise aims to train the muscles of the body, and is useful in increasing oxygen flow to the muscles and heart. In doing physical exercise, you should still pay attention to the principle of overload.

Aerobic exercise is a sport that has many benefits for the body, especially it is very good for heart health. Aerobic exercise is considered as a sport that is quite relaxed and does not require too much energy, so it is safe to do by various groups, including children, pregnant women and the elderly / elderly.

Aerobic exercise is a type of creative exercise that can be used to prevent Covid-19 in order to improve fitness and endurance. Aerobic exercise is expected to be an alternative way to maintain health, fitness and endurance. Because one of the things that can support the health of the body is to strengthen the immune system because a good immune system will strengthen the body from diseases such as Corona Covid-19.

Through aerobic exercise activities in an effort to prevent Covid-19, the public will be able to be directly involved in participating in gymnastics from home online via YouTube or other supporting media. People only need to choose exercise videos that they like and movements that are easy to follow such as Preventive Version of Gymnastics Against Covid-19, SCC-19, SKJ, Healthy Indonesian Gymnastics and other creative gymnastics with health protocol rules in preventing the Covid-19 virus and also raising public awareness will prevent the Covid-19 virus. In addition, this aerobic exercise accompaniment music also has its own charm that makes the *audience* more excited while participating in gymnastics. When doing physical exercise it is recommended not to do it excessively with high intensity. Because this can interfere with health.

In its implementation, this exercise begins with warm-up movements, core movements, and cooling that can prevent the corona virus. People can choose the form of exercise that will be demonstrated from YouTube and practice the movement directly. It is hoped that aerobic exercise will be able to attract the interest of gymnastics for people from home to increase immunity and body fitness during the Covid-19 pandemic.

### Research Methods

Journal reports are taken from cases in the community and references from various sources such as research journals, articles, newspapers, news on TV / social media, WHO data and others, then summaries are taken from these sources and put together as one reading material.

### Results And Discussions

#### 1. Definition of Aerobic Gymnastics

Gymnastics is indeed very popular among the wider community to fill the morning sports time, and many people around the world appreciate this exercise. According to Listyasari (2019), aerobic exercise is a sport that is in great demand and has benefits. Besides, body weight and body fat percentage also decreases (Brauer, 2004).

Aerobic Gymnastics is a type of exercise in which the heart rate and respiratory rate increase rapidly during a workout session. Aerobics is known as cardio, a sport in which oxygen needs to be delivered to the working muscles. The oxygen in question is obtained from the heart through the blood and supplied. Therefore, both breathing and heart rate usually increase rapidly during aerobic activity.

According to FIG (International Gymnastique Federation), aerobic exercise is the ability to perform complex and continuous movements that follow high-intensity movement patterns. With continuous movement and showing strength, flexibility. And the last one is to use seven basic steps and solve the difficulty of moving elements perfectly done. According to Listyasari (2019), aerobic exercise is a sport that is in great demand and has benefits. Besides, body weight and body fat percentage also decreases (Brauer, 2004).

Aerobic exercise is a series of aerobic exercises that are arranged with connecting movements that are compatible with music that is integrated with the movement, by paying attention to movements of the arms, waist, legs that can be done alone or in groups (Budiyono in Mubarak, S., et al. 2019) . In the implementation of aerobic exercise using musical accompaniment. Music used during aerobics should be fun, full of energy and have a rhythm that moves, this is very useful for increasing training motivation and exercise speed. The intensity of the exercise can be adjusted by adjusting the tempo of the accompanying music.

## 2. Benefits of Aerobic Exercise

Every sport certainly has a general advantage, namely maintaining physical fitness. But every sport has its specific advantages if practiced regularly. Here are 15 benefits of doing aerobic exercise if done regularly:

### a. Lose weight

The first benefit of aerobic exercise is weight loss. This exercise is an effective exercise to reduce weight because it moves the whole body and lasts a relatively long time. Aerobic exercise that is done regularly in combination with proper nutrition can reduce body weight more effectively.

### b. Lowers cholesterol

The second benefit of aerobic exercise is that it can lower cholesterol. Aerobic exercise increases the work of the heart, so that more oxygen flows throughout the body. Of course, this can speed up blood circulation so that bad cholesterol doesn't accumulate in the blood vessels.

### c. Reducing the Risk of High Blood

Good blood flow and oxygen flow in the body can not only lower cholesterol, but also reduce the risk of high blood pressure. Both high cholesterol and high blood pressure are diseases to watch out for because they can trigger other dangerous diseases.

### d. Improve Heart Function

The next benefit of aerobic exercise is to improve heart function. As already mentioned, aerobics is used to increase heart rate. If you exercise your heart regularly with aerobics, your heart rhythm can become more stable.

### e. Reduces Stress

Aerobic exercise can also reduce stress and make you happier. When you do aerobic exercise, your body produces endorphins that can make you happier. Aerobic exercise has also been shown to improve self-confidence and brain function, thereby reducing the likelihood of depression.

### f. Maintain Healthy Muscles

Movement in aerobic exercise is done by training the muscles of the body. So aerobic exercise clearly has benefits for maintaining healthy muscles. A more regular blood flow and a regular supply of oxygen to the muscles also help the muscles to avoid lactic acid.

### g. Exercising Bones and Joints



Not only healthy muscles, but aerobic exercise can also train bones and joints. Bones and joints become more brittle with age. Therefore, we must be diligent in training muscles and joints from a young age to become stronger, including aerobic exercise.

h. Stay young

The next benefit of aerobic exercise is that it can make you look younger. Regular aerobic exercise can help make your skin firmer and more beautiful, so you can look younger.

i. Guarding System Respiration

People who rarely exercise are more likely to be short of breath than people who exercise regularly. Regular aerobic exercise is also great for breathing exercises, so you don't run out of breath every time you do an activity.

j. Preventing Various Chronic Diseases

The next benefit of aerobic exercise is to prevent various chronic diseases. As mentioned earlier, aerobic exercise can lower cholesterol and prevent high blood pressure. This means that you can also avoid various dangerous diseases such as heart failure and stroke.

k. Increase Body Immunity

Aerobic exercise not only avoids chronic diseases, but also increases immunity. When you strengthen your immune system, you are less susceptible to attack by various viruses and bacteria, so you don't get sick easily.

l. Increase Stamina

Even if exercise slows down, regular exercise can definitely increase your endurance, as can aerobic exercise. Aerobic exercise can increase endurance and make you more productive and less tired when traveling.

m. Long life

One study says that people who exercise regularly have a longer life. Considering the benefits of aerobic exercise mentioned in the previous points, you should not be surprised if it is concluded that aerobic exercise has the potential to prolong life. Maintaining health is truly one of the keys to a longer life.

n. Streamlining the Labor Process

For those of you who are pregnant, it seems that routine aerobic exercise can train the strength and elasticity of the abdominal and vaginal muscles so that contractions work more smoothly. To protect your pregnancy, you should consult a doctor before aerobic exercise and take part in special aerobic classes for pregnant women.

o. Controlling Sugar Levels in the Body

Aerobic exercise has energetic movements and can burn calories quickly. Sugar is a source of calories, so aerobic exercise can help balance sugar levels. A study conducted by Louisiana State University showed that participants who did aerobic exercise and had a very high glucose load decreased with HbA1 levels dropping from 7.7% to 7.3%.

### 3. Pandemic

According to WHO (World Health Organization) a pandemic is the spread of new diseases throughout the world (World Health Organization, 2020). However, there is no acceptable definition of the term pandemic in detail and in full, some experts consider the definition based on a disease that is generally said to be a pandemic and try to study diseases by examining their similarities and differences.

Most of the use of the term pandemic refers to diseases that are widespread geographically, for example, the 14th century plague (black death), cholera, influenza, and the human immunodeficiency virus (HIV) / AIDS. In a recent review of the history



of pandemic influenza, it is geographically categorized as transregional (2 bordering regions / countries in the world), interregional (2 regions / countries that are not bordering or neighboring), and global (Taubenberger and Morens DM in Handayani). , Rina Tri., Et al: 2020)

#### 4. Corona Covid-19

Coronavirus disease 2019 or called Covid-19 is an infectious disease caused by SARS-CoV-2, a type of coronavirus. According to Susilo Adityo, et al (2020), COVID-19 is a new disease that has become a pandemic. This disease should be watched out for because transmission is relatively fast, has a mortality rate that cannot be ignored, and there is no definitive therapy. Covid-19 sufferers can experience fever, dry cough and difficulty breathing. In the most susceptible sufferers, this disease can lead to pneumonia and multi-organ failure. Even now there are new symptoms found for people with Covid-19, namely loss of taste and smell, diarrhea and conjunctivitis.

#### Conclusion

Aerobic exercise can be done at home during the corona pandemic to prevent Covid-19 according to health protocols because it is effective in increasing endurance. In addition, it is also expected to increase knowledge and physical fitness and endurance of the community to avoid the Covid-19 virus that has hit this country.

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