Coronavirus (COVID-19) and the benefits of physical activity during quarantine

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\textbf{Abstract:} In this short note, we present an overview of novel coronavirus (Covid–19) outbreaks in most countries of the world. Some procedures taken to combat the coronavirus. We proposed the practice of physical activities during the quarantine period, and we showed their importance and their positive effects.

\textbf{Key words:} Coronavirus, physical activity, quarantine.

The spread of the Coronavirus, which appeared in late 2019 in the seafood market in the Chinese city of Wuhan, provoked a global panic, as the virus had a direct impact on ten (10) million people in Wuhan city and soon spread in other provinces of China and then moved to several other countries (Johns Hopkins University, 2020). On January 20, 2020, the World Health Organization (WHO) announced that the new Corona virus was an emergency health state internationally, creating an unknown health threat on a global scale.

By April 22, 2020, the number of infected individuals reached 2,471,136
cases and 169,006 deaths around the world. Moreover, in Europe, there were 1,219,846 confirmed cases and 109,952 deaths. In Africa, there were 16,115 confirmed cases and 720 deaths (WHO, 2020). The rapid outbreak of the disease forced authorities in various countries to take preventive measures, including the isolation of entire cities, the imposition of travel bans, the extension of holidays, the closing of schools and universities, mosques, assembly centers and curfews in some cities. In addition, the various health authorities in most countries of the world have taken decisions to cancel flights, transfers, and a commitment to stay at home; quarantine for those infected, in order to reduce its spread.

All countries where the virus has spread have also carried out safety precaution campaigns related with the current data. (Khaliq, 2020). Most of the world's media urge adherence to individual hygiene such as washing hands with disinfectants. All these measures aimed at reducing the spread of the virus. (XINHUANET, 2020) Credible sources also pointed to a serious shortage of medical kits and clinics capable of caring infected individuals.

It is well known that physical activity contributes effectively to the strengthening of the immune system. (Martin et al, 2009). But, unfortunately, the commitment to quarantine has a bad effect on the daily routine of individuals, which includes external activities. Based on this instructions and advice that should be given to individuals to maintain their physical activity and daily training during the quarantine period, because staying at home makes a kind of inactivity, therefore some symptoms will occur. Such as: sitting in an askew way due to the use of smartphones to watch videos and play games. So, the physical activity is reduced and calories burning is reduced, what exacerbate the condition of people with chronic diseases such as heart problems diabetes and high pressure (Alves et al, 2016; Zhu, 2019), which negatively affects immune system activity.
As a result, we strongly recommend maintaining the physical activities in areas applying quarantine such as designated rooms or at home to preserve health and stimulate the immune system during the current unstable health situation. Practicing sports with simple, safe and easy exercises, is very important to maintain fitness level, This type of activities and exercises can include muscle strength exercises, symmetry and stretching, for example: More walking at home and carrying different weights to maintain muscular strength, climbing stairs, using chair in various exercises known as push-ups and bodyweight reliance in muscular strength and rope skipping (Guo et al, 2014). As all of the above exercises require no space, no means, they are very practical in quarantine conditions. There are also very modern audio-visual equipment, such as: E-Health, home training applications and physical activity videos focused on encouraging and training people via social media.

Limiting the movements of individuals, declaring a state of emergency in some countries, and applying quarantine does not necessarily mean stopping or limiting physical activities, on the contrary, as many studies have shown that physical activity has clear and certain benefits to the health of individuals and individuals with different diseases (Alves et al, 2016).

Little physical activity is better than nothing, and the increase is always better than the decrease, said Ken Powell. A daily average intensity activity of 30 minutes should be maintained every day. Knowing that children, the elderly and chronic patients must consult a doctor before starting any training program that contains a specific physical activity (US departement of health and human service, 2020).

As researchers, we must propose actions that would contribute to fight this emerging virus. We firmly believe that this measure is one of the measures to be observed and has a positive impact on certain behaviors that lead to inactivity and lack of movement and contribute to increasing anxiety and depression during the period of quarantine that may lead to chronic
diseases. Finally, maintaining a regular training routine within a highly secure environment is a viable strategy for living in health and maintaining fitness during the Coronavirus pandemic.

**Conflict of interest**

This work does not have any conflicts of interest.

**References**


