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# Sleep Medicine

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## Editorial

# Physical activity and mental health in Covid-19 times: an editorial



Since the appearance of the first cases in China of the new Coronavirus disease (COVID-19), changes have occurred worldwide at various levels. For instance, several countries adopted many prevention measures, including restrictions in the free movement and circulation of people, such as quarantine or physical isolation [1]. These measures entailed several physical [2,3] and psychological negative consequences, such as high levels of anxiety, stress, fear, or even the presence of depressive symptoms that can persist beyond that period [4–6]. However, the progressive return to the everyday life that is now taking place (eg, return to work, return to school, return to the gyms and to the practice of sports), and all the preventive and safety measures that we are getting used to, have also contributed to feelings of uncertainty, fears, and concerns [7]. Furthermore, some countries are now experiencing second waves of the disease, which has brought new challenges.

In this context, there is a growing need of studies such as the one published in this issue by Chouchou and colleagues [8]. In fact, the psychological negative consequences and their entailed fears may arise not only from the lockdown itself but also from the need to adapt to a new reality. Around the world, people must comply with a set of new rules and norms that change daily life, both from a personal, social and professional perspective. Therefore, it is important to understand the decisive impact that these consequences (such as, for example, the increase in anxiety levels) may have in many dimensions of individuals' lives, such as changes in the level of sleep patterns, that have already been found in some important studies [9]. In this regard, it is important to better understand the changes in the level of sleep as a consequence of a set of concerns and fears associated with this pandemic. These fears may be due to uncertainty, and the set of news and cases that have been constantly reported by the press [7]. These studies may include self-reports, but also more objective measures based on new technologies [10].

Thus, and considering the aforementioned data, it becomes clear why there is a concern of all entities (such as the WHO) regarding people's mental health, namely with the maintenance of more controlled levels of anxiety [11]. Therefore, it is of utmost importance the identification and operationalization of strategies in order to prevent mental health problems. For instance, the WHO highlighted the importance to seek a healthy lifestyle through regular physical activity, healthy eating and regular sleep routines [11]. Moreover, the practice of physical activity has a fundamental role, especially considering that changes in daily routines may lead to an increase in sedentary behaviours and contribute to increased levels of anxiety [12]. Furthermore, several

studies had already attested the unquestionable benefits of regular physical activity in the reduction in anxiety levels [13–15].

Thus, the article published in this issue [8] is timely and important pointing to the role of physical exercise in well-being and sleep during COVID-19 pandemic and lockdown. The authors conducted an online survey of the general population in Reunion Island between 35th and 54th day of lockdown relative to pre- and post-lockdown periods. The results suggest an impairment of well-being due to lockdown associated with anxiety, lack of activity and sleep disruption. These factors should be considered for improving the well-being of the population during COVID-19 lockdown, future waves and/or other future possible lockdowns.

During COVID-19 lockdown exercise of collective physical activity was prohibited and imposed by governmental measures in several countries. However, it was possible and recommended, in some states, to make short trips with the purpose to practice physical activity. Several platforms and social media reinforced the importance of practising physical activity, even at home. This revealed a great sensitivity of governments regarding the importance of this behaviour for the physical and mental health of its citizens.

It seems clear the importance of promoting the practice of regular physical activity at all times of life, not only due to its impact on the level of physical health [16–18] but also on the mental health of citizens. In moments of great psychological and emotional fragility such as the ones we live in, its practice gains even more importance [19]. Thus, it is essential to create safety conditions, adequate spaces as well as health education/literacy that includes the promotion of physical activity habits as a decisive factor in the physical and mental health of populations. This is even more important considering we are living times requiring special adaptations. The possibility of a second wave and the consequent need to adopt new restriction rules make it urgent that physical exercise is accessible to all. In addition, everyone must have access not only to scientifically valid knowledge but also to structures and conditions to practice physical activity close to their home (ie, have material conditions for walking/running, etc., near their homes and in a safe way).

Despite the clear benefits of physical activities and the beneficial impact it may have in specific situations such as the one we are all living, it is also important to emphasize that the practice of physical activity must be monitored and supervised by a professional qualified for this purpose. Especially in an era when everything seems to arrive in a much easier way through new information technologies, this becomes even more urgent. The health [physical and mental] promotion factor associated with the regular practice of physical activity requires that it must be prescribed and monitored according to

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technical and scientific knowledge. As in other areas, it cannot be replaced by autonomous research or self-creation since, in many cases, it may have harmful consequences for the practitioner.

We hope that researchers will find a way to transform science into practice and that more studies will relate these three variables: physical activity, sleep, and mental health.

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