Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to the Editor

Comment: Impact of the first COVID-19 lockdown on body weight: A combined systematic review and a meta-analysis, Clinical Nutrition 2022

Keywords:
Coronavirus
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Dear Editor,

Bakaloudi et al. (2021) aimed to investigate the global impact of confinement on body weight, body mass index (BMI) in adults and adolescents (>16 years) [1]. In fact, the period of exposure to social isolation was responsible for drastic changes in anthropometric variables including the increase in body weight and BMI around the world. Some factors may justify this scenario: the significant decrease in physical activity levels, outdoor exercises, closing of gyms, sports gym, among others. Such conditions had direct implications at the COVID-19 pandemic, such as overweight and obesity, which were identified as a risk factor for COVID-19 severity and mortality.

Adults and adolescents were included in this review. However, the adolescent population was restricted by age group from 16 years of age onwards. The authors do not make it clear which criterion was used to stratify this population. The WHO classifies the stage of adolescence as the stage of an individual's life between 10 and 19 years old. In addition, it is known that there is variability in the classification of this population, as young adolescents aged between 15 and 19.

Evidence points to a reduction in daily energy expenditure in adolescents with advancing age, especially in girls. This is attributed to behavioral and social changes [2]. Guedes et al. (2013) observed that 97% of girls and 74% of boys do not meet the physical activity recommendations according to the American College of Sports Medicine [2]. Apparently, opting for participants aged 16 and over is to consider a small portion of this population, which generally has a lower average daily energy expenditure. Furthermore, in the present study, a significant increase in body weight in the adult population (>18 years) was observed. Therefore, adding studies that assess adolescents (>16 years old) may not effectively contribute to the results.

Another point to highlight is the fact that the inquiry was obtained by interviews, reducing the reliability of the information. Studies that evaluate body composition in this population and in the long term, in order to elucidate the chronic effects of social isolation are necessary. It is recommended to evaluate the body composition by Bone Densitometry. Moreover, studies that consider the possibility of performing home-based exercise, changes in dietary patterns, sleep quality and psychological conditions, which may interfere in their body composition are suggested. As it was observed by Vitale et al. (2020) in a home-based protocol promoted improvements in muscle strength in older adults during COVID-19 outbreak [3].

In conclusion, it is necessary to emphasize the importance of evaluating anthropometric parameters in the global population since obesity is a risk factor for SARS-CoV-2 infection and disease progression [4].

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