

DOI: 10.5455/msm.2020.32.315-316

Received: DEC 15 2020; Accepted: DEC 25, 2020

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LETTER TO EDITOR

Mater Sociomed. 2020 Dec; 32(4): 315-316

Why Not Encourage Physical Activity Outdoors and Inhaling Through the Uncovered Nose During the Coronavirus Lockdown?

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European Association
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To stop the spread of COVID-19, more and more countries worldwide introduce progressive restrictions and promote the “stay at home” policy, requiring that time spent outside home should be minimized. For families living together, however, this policy is against the official WHO recommendations to avoid the three Cs: spaces that are closed, crowded and/or involve close contact¹. Consequently, lockdown greatly facilitates transmission of the disease among family members, so unintentionally it contributes to the spread of COVID-19. This undesirable side effect is aggravated in autumn and winter because of poor ventilation indoors, so the problem needs to be solved urgently. Moreover, staying at home for a long time increases the risk of depression and many other serious diseases.

Fortunately, there exists a good solution: promotion of physical activity², mostly outdoors³. Firstly, it limits the time spent indoors with people who may have been infected. Secondly, both physical and mental health benefits of regular exercise have been reported, not only for sports but also for less strenuous outdoor activities, like strolling⁴, gardening⁵ and bird-watching⁶. All these activities can be easily practised also in cities, e.g. by planting wilted winter-hardy potted flowers in lawns or on roadsides⁷. Thirdly, our lungs can be ventilated more effectively thanks to body movements and fresh air. As emphasized by WHO infographics, 1 m is a safe distance outdoors^{1,8}, and masks should not be used while exercising, as they reduce the ability to breathe comfortably and promote the growth of microorganisms⁹.

As evidenced by Prof. Lidia Morawska and

her research team, aerosolization of secretions lubricating the vocal chords is a major source of droplets¹⁰ (which play a major role in the spread of COVID-19¹¹), so covering the mouth is crucial during conversations, singing and coughing. In contrast, the benefits of uncovering the nose seem to outweigh its disadvantages. Our nasal cavities produce nitric oxide (NO), which intensifies blood flow through our lungs and boosts oxygen levels in the blood, as explained by Prof. Louis Ignarro (one of Nobel Prize winners in 1998). He emphasizes that “breathing in through the nose delivers NO directly into the lungs, where it helps fight coronavirus infection by blocking the replication of the coronavirus in the lungs”¹².

Admittedly, sneezing with an uncovered nose could pose a risk, but chiefly indoors, and the WHO recommends using one’s elbow or tissue then. The exposed nose would allow us breathing comfortably and benefit from the favourable effects of NO produced in the nasal cavity. The use of face masks seems justified primarily in closed spaces (public buildings, public transport, etc.), crowded places, and during close-range conversations (also in private settings and outdoors).

Thus it can be concluded that the effectiveness of the current coronavirus strategies in many countries could be increased if physical activity outdoors was encouraged and we covered only our mouth in public places outdoors. In my opinion, the new policy (promoted e.g. as #moveoutdoors), could help to reduce the rate of COVID-19 transmission and would be highly beneficial for both our physical and mental health (13).

- **Conflict of interest:** This work was not in any way directly or indirectly supported, funded, or sponsored by any organisation or entity. I declare no competing interests within the submitted work.

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