

LETTER TO EDITOR

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Physical Activity Outdoors as an Alternative to Lockdown: the Three Cs Strategy

Sylwia Ufnalska

ABSTRACT

Basing on scientific evidence and discussions with many people about COVID-19, an outline of the Three Cs Strategy is presented as an alternative to lockdown. The suggested solutions – eg encouraging regular physical activity outdoors (also for symptomless quarantined people), frequent ventilation with fresh air, and more careful use of antipyretics – can markedly help to reduce the rate of transmission of this disease. The new strategy is also likely to lower the risk of mental disorders and various diseases, thanks to promotion of a healthy lifestyle. The outline should be discussed and refined in the future, to improve public health worldwide.

Keywords: Three Cs Strategy, COVID-19, physical activity outdoors, antipyretics, healthy lifestyle

1. INTRODUCTION

The focus of the COVID-19 pandemic is on protection of physical health, but its influence on mental health may in the future prove to be an even greater challenge for public health globally, as rightly emphasized in March of the 2020 by Masic et al. (1). Mental problems are aggravated due to the enormous stress and anxiety caused by the pandemic itself, but also to the progressing restrictions, leading to lockdown in many countries. The Great Barrington Declaration (2), signed by many experts, draws attention to the devastating short- and long-term effects of the lockdown policy, especially in the most disadvantaged groups. Its signatories advocate Focused Protection, where senior citizens and other high-risk groups are strongly protected, but all the others resume life as normal. The Declaration, however, was criticized by some other health professionals (3), who argued that controlling community spread of COVID-19 is necessary. I have attempted to develop an alternative coronavirus strategy that could be a golden mean between the two opposing views.

In my opinion, a major problem now is that lockdown, which forces many people to stay at home with their families most of the time, is – paradoxically – against the official advice for the public issued by the World Health Organization (4). One of the main WHO recommendations is to avoid the 3Cs: spaces that are closed, crowded or involve close contact (Fig. 1). The “stay home” policy seems necessary to decision-makers, but I am afraid that it may bring opposite results now, because lockdown in autumn and winter is likely to facilitate disease transmission among family members more strongly than in spring, due to poor ventilation.

Fortunately, there is another solution, much better in my opinion: promotion of regular physical activity outdoors, such as strolls, gardening or bird-watching (5-6). Firstly, it lowers the risk of inhaling large amounts of SARS-CoV-2 produced by family members. Secondly, it enhances natural immunity, thanks to eg better blood circulation as well as ventilation of lungs, if masks are not used. Thirdly, it helps to prevent serious mental problems, such as depression and anxiety (eg 5). Finally, it is commonly known to improve brain function, and I have also experienced it during my daily strolls combined with Christian meditation. This is crucial now, as permanent stress reduces our ability to think logically and draw conclusions.

A second major problem is the frequent lack of clear distinguishing between two very different groups of symptomless people. The first group, which can be provisionally termed permanently symptomless, shows no symptoms and stays healthy in spite of exposure to coronavirus because their immune sys-

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Figure 1. Illustration of the Three Cs Strategy with two WHO infographics (publicly available by courtesy of the World Health Organization)

tem is very efficient. (Another possible explanation is that they were exposed to an extremely small amount of the new coronavirus, so the organism started to produce antibodies against it before the virus proliferated in huge numbers.) Organisms of this group do not produce large amounts of SARS-CoV-2, so they rarely infect others. The second group is only temporarily symptomless, due to an early stage of the disease or because of either intentional or unintentional use of antipyretics, which mask its early symptoms. Such carriers exhale large amounts of viruses, so they can become super spreaders.

It must be emphasized that fever is our natural defence mechanism, slowing down virus proliferation and accelerating antibody production. Thus inappropriate

use of antipyretics is very dangerous now, leading to very fast progress of the disease and – consequently – more severe symptoms, eg breathing difficulties. Unfortunately, many people are unaware of it, due to widespread misconceptions resulting in fever phobia (7-9). Caregivers are often afraid of febrile seizures, and start to lower body temperature too early. However, a recent meta-analysis provides very limited support for the use of antipyretic drugs to prevent febrile seizure recurrence within the same fever episode and no evidence for their use in distant fever episodes (10). It should be remembered that, normally, fever should not be treated if body temperature is below 39.0°C (7), except for some groups

of patients (eg dehydrated or suffering from coronary disease).

The Three Cs Strategy, outlined below, is based primarily on two WHO infographics (Figure 1): “Avoid the Three Cs” (11) and “Can people wear masks while exercising?” (12). It can be concluded from them that COVID-19 is transmitted primarily by long-term exposure to large amounts of viruses in closed or crowded places or during close contact (also in home-quarantined families), so regular physical activity outdoors without masks should be recommended (Figure 2). The outline presented below is not perfect and may need to be adapted to local conditions.

2. OUTLINE OF THE THREE CS STRATEGY

- Popularization of knowledge about the importance of fresh air and avoidance of long close-range contact (eg by means of the first WHO infographic), so that all people could understand why they should follow the rules of Three Cs.

- Call for following the rules in the name of mutual respect, solidarity and love of our neighbours.

- Beside standard hygiene (washing hands frequently), masks recommended during close-range conversations and in crowded places, public transport, public buildings, etc. Time spent in small, poorly ventilated spaces should be limited. Safe distance outdoors according to the WHO: 1 m.

- As a form of relax and prevention: all people should be encouraged to go for a walk in less crowded places every day if they do not have symptoms of infection and do not take any antipyretic drugs (including some painkillers). Long-term stress and lack of physical activity lower immunity and contribute to many diseases.

- People who are unwell should remain at home, but symptomless home-quarantined persons (who do not take any antipyretics) should also be allowed to go for a walk regularly, but in masks and close to their home (<0.5 km away), maintaining a distance of >1.5 m from others and avoiding long conversations. They should not enter other buildings and crowded spaces.

- Home-quarantined people should receive regular reminders about the need for physical exercise and ventilation with fresh air.

- In preschool and primary education, support for outdoor classes with physical activity: physical education, biology, physics, school gardens (as horticultural therapy), forest kindergartens, local historical excursions, nature walks, etc.

- Whenever possible, all private and business in-person meetings should be organized outdoors (in a garden, sports centre, etc.).



Figure 2. Nature walk for primary school children (by Sylwia Ufnalska, 2020)

- Senior citizens and younger groups at risk (serious chronic diseases) ought to be under special protection, while others return to normal routine, wherever possible.

- Creation of a hotline for all quarantined and ill people who need help. All churches, NGOs, etc. should be invited to aid in providing help to them.

- Promotion of a healthy lifestyle, as a component of the coronavirus strategy, in all public media (request to all channel owners to join this campaign): physical activity, fighting addictions, limited consumption of sugar and generally of unhealthy foods.

- Promotion of gardening, music therapy, art therapy, and other forms of occupational therapy, to minimize the risk of mental problems resulting from the pandemic.

- Reduction of the bureaucratic workload of teachers, scientists, and health professionals.

- In advertisements of all antipyretic drugs (including some painkillers), an obligatory warning: “Do not over-use, as the drug can cause serious diseases and mask early symptoms of COVID-19”.

Three additional suggestions can also be carefully considered, but they are debatable:

- Children should wear masks during school breaks indoors and in crowded conditions, but may not need masks during indoor classes, when sitting in frequently ventilated, spacious classrooms, in safely spaced benches.

- When allowed to stroll, quarantined symptomless people should wear masks for safety reasons, but while moving outdoors in uncrowded spaces they may be permitted to uncover their nose, to enable them breathing properly and minimize moisture deposition on the mask.

- Symptomless people who have been home-quarantined because of long direct contact with a fully symptomatic person may not need to be quarantined again

after repeated exposure, as they are probably immune to the disease.

3. FINAL REMARKS

Basing on scientific evidence, the solutions suggested here – such as encouraging regular physical activity outdoors (also for symptomless quarantined people), frequent ventilation with fresh air, and more careful use of antipyretics – can markedly help to reduce the rate of transmission of COVID-19. I hope that this outline will be discussed and refined in the future, to improve public health worldwide.

I am very grateful to all the researchers who provided the available scientific evidence as well as my family members and friends who have discussed it with me. All this has greatly contributed to development of this strategy. As explained in my earlier article (13), close cooperation is urgently needed now, so we must focus on searching for solutions, rather than for people to be blamed. I wish the present terribly difficult situation would lead not only to human suffering but could also urge us to change our priorities and show more respect for other people, our own organisms, the beauty of nature, and our Creator.

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