

Development of Physical Activity In The Face of Climate Change

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Abstract

The global climate issue necessitates a relationship between physical activity promotion and climate action. This essay aims to inspire future conversation by providing an initial review of the links between physical activity promotion and climate action, as well as potential synergies and discrepancies. The research is based on the World Health Organization's 2018-2030 Global Action Plan on Physical Activity (GAPPA). The GAPPA addresses five areas that are particularly relevant in terms of potential climate policy links: (1) infrastructure supporting active transportation, (2) green spaces and recreational/exercise facilities, (3) exercise programs, (4) mass communication campaigns and mass participation events, and (5) professional training. Our research reveals a significant overlap between physical activity promotion tactics and efforts to reduce greenhouse gas emissions. However, there are still several locations where this alignment may be improved. In the field of physical activity promotion, more climate-conscious policy, research, and surveillance are also needed.

Keywords: Climate change • Food seClimate change • Climate action • Physical activity • Training

Introduction

In recent years, there has been a fresh wave of acknowledgment of the global climate crisis's urgency. The Intergovernmental Panel on Climate Change (IPCC) has said unequivocally that the next ten years are critical in keeping global warming below 1.5 degrees Celsius. According to World Bank studies, global warming will have a devastating influence on the development of poor countries and, as a result, on migration. The IPCC has also published a report on the devastating effects of climate change on land use⁴. Nonetheless, the United Nations has highlighted the global inability to reduce greenhouse gas emissions in dramatic detail. In view of these apocalyptic warnings, a number of American public health organizations have urged governments, industry leaders, and civil society to consider climate change as a "health emergency." Scientists have also called for civil disobedience as a means of putting pressure on international leaders to increase efforts to tackle the climate issue [1]. Similarly, PA promotion has progressed greatly in recent decades and has established itself as a stand-alone public health issue. On the one hand, a solid awareness of the significance of PA in the prevention of no communicable illnesses, and on the other, stubbornly high rates of insufficient physical activity in teenagers (81%) and adults (27%) drove this development. The PA Strategy for the World Health Organization (WHO) European Region 2016-2025 (EuroPAS), the Global Action Plan on PA 2018-2030 (GAPPA), the EU Council Recommendation on Health-Enhancing PA across Sectors, and numerous strategies, action plans, and recommendations at the national level have all resulted from the policy response [2]. But, if so, how are attempts to encourage PA related to the climate catastrophe, and if so, what are those connections? Will the climate crisis hamper efforts to promote PAs, or will there be potential synergies, with PA promotion potentially assisting climate change initiatives? What is the carbon footprint of various PA-promoting initiatives now in use or proposed?

What are some of our field's probable future research goals in relation to the climate crisis? Given the urgency of climate change and the necessity to priorities scarce resources, these questions are extremely pertinent [3]. The GAPPA at the global level recognizes this by including a link to the United Nations' Sustainable Development Goals (SDGs), which include SDG 13 on climate action. The link between PA promotion and climate change, on the other hand, is only mentioned briefly in the GAPPA and, in our opinion, has to be investigated more. This article is an attempt to provide a preliminary review of the available data and to spark additional discussion on these themes. It is mostly concerned with climate change mitigation and the relationship between rising temperatures and the promotion of PA. The most recent WHO policies to assist national-level PA promotion provide a good overview of the most commonly proposed action areas. The PA Strategy for the European Region, for example, has a life-course approach with four key action areas (leadership and coordination; children and adolescents; adults; seniors; monitoring, surveillance, evaluation, and research) and 14 specific targets. The global-level GAPPA13 expands on this earlier plan and adopts a somewhat different framework with four strategic objectives (active societies, active environments, active people, and active systems) and specific policy measures [4].

Discussion

Our first study revealed a significant opportunity for alignment between PA promotion tactics and efforts to reduce greenhouse gas emissions. The GAPPA recognizes the significance of this issue by referencing the SDG on climate action. However, because it is limited to a few phrases, the link between climate action and PA-promoting policies/interventions remains vague. Our research shows that these connections are already widely recognized in some GAPPA action areas, particularly in the areas of active transportation (strategic objective "create active societies") and green spaces and (at least in part) recreational/exercise facilities (strategic objective "create active environments"). However, the alignment of PA promotion with efforts to reduce carbon dioxide emissions may be improved in other areas, including as media campaigns, public events, and professional training [5]. Changes in PA policymaking, research, and surveillance will be required to offer PA promotion a new, more climate-conscious perspective. The GAPPA provides health economic analyses of health, climatic, and environmental benefits in the domains of active transportation and urban design as well as public and green open spaces and natural spaces as policy actions. These measures, however, are only mentioned in the appendix and are insufficient to replace a more systematic examination of climate-conscious policy making, research, and surveillance. Our ideas are based on the GAPPA's strategic objective "Create Active Systems," which focuses on the governance of PA promotion [6].

For instance, raising awareness of the possible benefits and risks of sport and physical activity for the climate among policymakers at all levels of government, the media, the commercial sector, and community leaders will be critical. This applies not only to health and sport, but also to other relevant sectors including transportation, the environment, urban planning, tourism, and social care. The transportation industry, in particular, has enormous potential for developing policies that combine improved health and quality of life with lower CO₂ emissions. Environmental advocacy organizations and climate change projects can also be viewed as potential allies in the promotion of PA. A logical next step, as urged by the GAPPA, is to improve the integration of the two concerns in policy frameworks, leadership structures, and governance systems, such as through multispectral coordination mechanisms [7]. Both the health and environmental sectors have long advocated for mainstreaming their concerns across all levels of government, with one calling for "Health in All Policies" and the other for "Environmental Policy Integration." In practice, however, there appears to be room for improvement: data on the implementation of the EU Council Recommendation for Health-Enhancing PA across Sectors shows that only 17 of the 27 participating EU Member States have integrated the transport and environment sectors into cross-sectorial PA coordination mechanisms. In this sense, another major action area is finance methods. To ensure long-term financial support for programs that enhance both climate and population-level PA, it will be necessary to further integrate health and environment-related financing lines in the future. Again, data from the EU show that governments find it difficult to collect information on expenditures made in areas other than health that may assist promote PA, whether as an intentional or unintended side effect, much alone act to

improve sectorial spending coordination [8].

However, economic, political, and cultural variables all influence the implementation of climate-conscious strategies for PA promotion. Health spending per capita, for example, is lower in low- and middle-income countries. These budgetary constraints may have a significant influence on these countries' ability to adopt policies aimed at mitigating climate change in general and health promotion in particular. The GAPPA discusses research and surveillance as critical cornerstones for future PA strategy. However, there are a number of significant challenges in these regions that should be addressed immediately in relation to climate change, including the following:

- Understanding the environmental impact of different types of sport and exercise so that promotion efforts can be tailored to those with a minimal carbon footprint.
- Identifying solutions to reduce sport tourism's carbon burden.
- Developing curriculum for health and other professionals that incorporate knowledge of the links between PA promotion and climate protection.
- Gaining a better knowledge of how to convert neighbourhoods and communities to high levels of active transportation.

Importantly, present PA surveillance systems should seek to incorporate indicators with strong climate change relevance. This could mean that physical activity questionnaires should contain specific walking and bike metrics, allowing governments to more properly track changes in active transportation behaviour [9]. Currently used questionnaires frequently assess either walking alone (such as the International Physical Activity Questionnaire IPAQ) or walking and cycling as a combined indicator (such as the International Physical Activity Questionnaire IPAQ) (Global Physical Activity Questionnaire GPAQ). The relatively new European Health Interview Survey Physical Activity Questionnaire EHIS, which assesses walking and riding separately, is a favourable exception. The same can be said about PA policy enforcement. As previously mentioned, regular joint EU/WHO surveys on the implementation of the EU Council Recommendation for Health-Enhancing PA across Sectors already provide data on a number of highly useful indicators, such as the level of cycling and walking, and other supplementary WHO tools (such as the HEPA Policy Audit Tool and the HEAT Tool for the health economic assessment of cycling and walking) may assist countries in gathering additional data. Initiatives to increase PA policy monitoring and maybe connect it with comparable efforts in the fields of transportation, environmental, and climate policy should be taken up in the coming years [10].

Conclusion

This article does not include the broader perspective of climate change adaptation and resilience because it focuses primarily on climate change mitigation. Similarly, it ignores other ecological factors of sustainability, such as biodiversity loss. In addition to rising temperatures, greenhouse gas emissions have a number of other effects on the climate, including an

increase in extreme weather events, changes in precipitation patterns, and sea-level rise, all of which are not addressed in our work. These issues could be addressed in future study at the intersection of PA promotion and climate change. The promotion of PA and climate action is linked in numerous ways. While they are most well-known in relation to active transportation, green spaces, and - to a lesser extent - recreational or fitness facilities, these relationships could be improved in other areas as well (media campaigns, mass events, professional training). In the field of PA, climate-conscious policy formation, research, and surveillance are required. The importance of recognizing the intimate link between physical activity and climate action is a key message for public health professionals and policymakers..

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