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ORIGINAL RESEARCH

Navigating Physical Activity Promotion and Policy in the Post-COVID-19-Pandemic Era

Justin Richards,[1] Katja Siefken,[2] Michael Pratt,[3,4] Adrian Bauman,[5] Juliana Mejía-Grueso,[6] Catherine B. Woods,[7] Wanda Wendel-Vos,[8] Erica Hinckson,[9] Deborah Salvo,[10] Pedro C. Hallal,[11] and Andrea Ramírez Varela[12,13,14]

[1]Te Hau Kori, Te Herenga Waka, Victoria University of Wellington, Wellington, New Zealand; [2]Institute of Interdisciplinary Exercise Science and Sports Medicine (IIES), MSH Medical School Hamburg, Hamburg, Germany; [3]Herbert Wertheim School of Public Health and Human Longevity Science, University of California San Diego, San Diego, CA, USA; [4]Institute of Public Health, University of California San Diego, San Diego, CA, USA; [5]Charles Perkins Centre, Sydney School of Public Health, The University of Sydney, Sydney, NSW, Australia; [6]The Global Observatory for Physical Activity—GoPA!, Bogotá, Colombia; [7]Physical Activity for Health Research Centre (PAfH), Health Research Institute, Department of Physical Education and Sport Sciences, Faculty of Education and Health Sciences, University of Limerick, Limerick, Ireland; [8]Centre for Prevention, Lifestyle and Health, National Institute for Public Health and the Environment (RIVM), Bilthoven, The Netherlands; [9]School of Sport and Recreation, Auckland University of Technology, Auckland, New Zealand; [10]Department of Kinesiology and Health Education, The University of Texas at Austin, Austin, TX, USA; [11]Department of Health and Kinesiology, University of Illinois Urbana-Champaign, Champaign. IL, USA; [12]Department of Epidemiology, School of Public Health, The University of Texas Health Science Center at Houston (UTHealth), Houston, TX, USA; [13]Center for Health Equity, The University of Texas Health Science Center at Houston (UTHealth), Houston, TX, USA; [14]Department of Pediatrics, McGovern Medical School, The University of Texas Health Science Center at Houston (UTHealth), Houston, TX, USA

Background: There is limited evidence on the priorities and opportunities associated with promoting population physical activity (PA) participation for the post-COVID-19-pandemic future. ***Purpose:*** This study assessed government-led PA promotion efforts before and during the COVID-19 pandemic, along with post-COVID-19-pandemic priorities and recommendations. ***Methods:*** Two separate cross-sectional surveys conducted in 2023. Survey 1 was targeted at the Global Observatory for Physical Activity (GoPA!) Country Contacts. Survey 2 also included key international informants representing influential stakeholders in PA policy implementation. ***Results:*** There were 68 respondents to Survey 1, collectively representing 61 countries. An additional 37 people, including representatives from 14 key international stakeholders responded to Survey 2. Eighty-two percent of countries had national PA policies. COVID-19 widely disrupted PA policy implementation. Less than 40% of countries integrated PA into their COVID-19 response plan and more than 75% reported policies that restricted PA participation. Although most respondents indicated that government PA priorities did not change due to the COVID-19 pandemic, one in five countries reported that cross-sectoral partnership had become more important during this period. Less than a third of postpandemic governments reported as highly engaged despite the widespread proliferation of PA policies and plans prior to the pandemic. There were variations according to country, region, and income. ***Conclusions:*** Elevating PA promotion on the public health agenda is crucial for the post-COVID-19-pandemic era. At a policy level, it is critical to focus on adequate resourcing, cross-sectoral partnerships, integrated interventions, and inequities in participation. These factors have become increasingly important in the postpandemic PA policy landscape.

Keywords: epidemiology, public health, survey research

Key Points

- Promoting physical activity is vital for public health post-COVID-19.
- Postpandemic policies should focus on resources, partnerships, integrated approaches, and participation equity.
- Countries' actions on physical activity during the pandemic offer future policy lessons.

Prior to the onset of the COVID-19 pandemic, 1 in 3 adults and 3 in 4 adolescents failed to meet global physical activity (PA) guidelines.[1] The onset of the COVID-19 pandemic affected how people were physically active and there has been an overall sustained decrease in participation internationally.[2,3] This can be largely attributed to the lockdowns and restrictions that were necessarily implemented by governments to reduce the spread of COVID-19.[2,3] Specifically, national policy initiatives to promote PA were de-prioritized as public health experts and government officials were involved with the urgent health care concerns of managing the pandemic. Although the benefits of this approach are widely accepted, the long-term implications of limited concurrent PA promotion during this period may have been overlooked.[4–8]

Siefken https://orcid.org/0000-0001-5948-2479
Pratt https://orcid.org/0000-0002-8939-7715
Bauman https://orcid.org/0000-0002-0369-4621
Mejía-Grueso https://orcid.org/0000-0003-0059-2993
Woods https://orcid.org/0000-0002-0892-6591
Wendel-Vos https://orcid.org/0000-0002-0653-3620
Hinckson https://orcid.org/0000-0003-3928-7830
Salvo https://orcid.org/0000-0002-9726-0882
Hallal https://orcid.org/0000-0003-1470-6461
Ramírez Varela https://orcid.org/0000-0003-2685-9617
Richards (justin.richards@vuw.ac.nz) is corresponding author, https://orcid.org/0000-0003-4584-8614

First, the well-established impact of the reductions in PA participation on the physical and mental health of the population may have been further compounded by social isolation during the pandemic and ongoing disruption to community structures postpandemic. For example, there has been a widespread interruption to PA participation and socializing through sports organizations and competitions that were discontinued during the pandemic and have not recovered in the postpandemic period.[9] This appears to have led to "permanent" changes to the landscape of PA sector stakeholders, despite the subsequent removal of all pandemic-related restrictions at a policy level.[9]

Second, during the pandemic, the under-recognized advantages of PA in combating infectious disease were also identified. This included evidence for improved immune function and reduced risk of infection,[7,10] as well as specific advantages for COVID-19 hospitalization rates and death.[5–7] Therefore, it appears that having a population engaged in regular PA not only fosters overall health but also boosts resilience to infection and diminishes the likelihood of severe COVID-19 outcomes.[5,7,10] Thus, PA can contribute to resilience against emerging health threats at both individual and population levels.[11]

Therefore, the pandemic-induced changes in PA behavior and the PA sector, coupled with the potential widespread health and social well-being benefits of effective PA promotion, present an unprecedented need to prioritize PA policy. Further exploration of the implementation of PA policies during the pandemic will improve our understanding of the current policy environment. This will inform global PA policy development in the postpandemic period, with a renewed focus on promoting PA participation for immediate population-level health outcomes and resilience to future pandemics. Consequently, the purpose of this study is to assess government-led PA policy implementation and promotion efforts before/during and after the COVID-19 pandemic. We aim to describe the evolution of the international PA policy landscape during this period and develop policy-level recommendations for PA promotion that are responsive to challenges and opportunities that have persisted postpandemic.

Methods

Study Design

This study comprised 2 cross-sectional surveys conducted between April and November 2023. The target audiences were the Global Observatory for Physical Activity (GoPA!) Country Contacts and other key informants (defined as influential stakeholders/experts in PA policy from around the world). Definitions and descriptions of the following key terms in this study were included in the survey preamble: PA promotion, PA policy, and PA policy implementation (see Supplementary Material S1 [available online] and Table 1).

Questionnaire Development

The Lancet PA series 2012, 2016, and 2021, the World Health Organization's Global Action Plan on PA (WHO GAPPA), and other international PA policy documents, guided the questionnaire development.[15–19] Both surveys included closed- and open-ended questions. The first survey comprised 10 questions about PA promotion prepandemic and during the first 3 years of the COVID-19 pandemic (see Supplementary Material S1 [available online]). The first 5 questions explored overall opportunities, restrictions, and barriers for PA promotion, and relevant policy between 2012 and 2023 and the last 5 questions specifically asked about the impact of the COVID-19 pandemic on PA policies and programs during this period. Respondents replied to a series of yes/no questions and were then asked to provide further details and corroborating information in free text. The second survey comprised 15 questions about PA promotion post-COVID-19-pandemic (see Supplementary Material S2 [available online]). It explored government priorities and recommendations for PA promotion and relevant policy in the post-COVID-19-pandemic period. Respondents were initially asked to rank 10 different PA policy promotion actions on a 5-point Likert scale (response range: "unimportant" to "very important priority for the next 5 years"). They were then asked how the prioritization of these actions had changed due to the pandemic (response options: "no change," "higher priority," or "lower priority"). The next 3 questions solicited free-text responses to emerging issues and recommendations for the future of PA policy in a post-COVID-19 world. The final 2 questions used 5-point Likert scales to ask about government engagement in PA policy (response range: "not at all" to "extremely") and awareness of the benefits of PA for infectious disease outcomes (response range: "completely unaware" to "fully aware"). Respondents were then asked to provide further details and corroborating examples in free text.

The surveys were piloted with the GoPA! Steering Committee and Research Team in February 2023 to test face and content validity as well as ensure their applicability, acceptability, and practicality. The surveys were programmed, tested, and managed using the Research Electronic Data Capture (REDCap) software.[20,21] All data were hosted within a single REDCap password-protected server at the Universidad de los Andes in Bogotá, Colombia.

Table 1 Key Definitions

Physical Activity Policy	Formally written policies, rules, and guidelines, written nonformal direct statements, formal procedures, and informal policies (or lack thereof) that may directly or indirectly affect physical activity through community or population level.[12,13]
Physical Activity Policy Implementation	Translating statements, ideas, goals, and/or objectives mentioned in the policy documents into practice. For example, a policy document may mention building new facilities as one of the strategies to increase participation in physical activity. Implementation of this statement means having the new facilities actually built.[12,13]
Physical Activity Promotion	Policies or programs that could fall under any of the "8 investments that work" for promoting physical activity according to the International Society for Physical Activity and Health (ISPAH), which include:[14] 1. Whole of school programs 2. Active transport 3. Active urban design 4. Health care 5. Public education, including mass media 6. Sport and recreation for all 7. Workplaces 8. Community-wide programs

Sampling/Questionnaire Respondents

For the first survey, a purposive sampling strategy was used to recruit a global representation of experts in PA research, policy, and practice. Specifically, we invited members of the GoPA! Network to complete the survey, which comprised representatives from 168 countries. (Note: some countries had more than one Network member). GoPA! was launched in 2012 as an independent and evidence-based observatory to monitor national PA research, surveillance, and policy globally.[22] It collaborates with country representatives, known as Country Contacts, who are local PA researchers, practitioners, and policymakers from academia and government sectors.[23–25] These individuals are part of the GoPA! Network based on their role, leadership, and expertise in the fields of PA, noncommunicable diseases (NCDs), and/or public health. Further information about GoPA! and current representatives from each country is available elsewhere.[26]

For the second survey, the same GoPA! Country Contacts were re-contacted to participate. We also invited additional key informants in PA policy, which included at least one executive representative from several widely respected international stakeholders at the forefront of PA promotion: (1) American College of Sports Medicine; (2) African Physical Activity Network; (3) American Public Health Association physical activity interest group; (4) Asia-Pacific Society for Physical Activity; (5) European Public Health Association; (6) GoPA! Steering Committee; (7) EU Health-Enhancing Physical Activity Focal Point network; (8) International Society of Behavioral Nutrition and Physical Activity; (9) International Society for Physical Activity and Health; (10) *Journal of Physical Activity and Health*; (11) Policy Evaluation Network members; (12) Physical Activity Network of the Americas; (13) WHO Europe Working Group on Policy Approaches; and (14) 2012, 2016, and 2021 Lancet Physical Activity Series Executive Group (excluding the co-authors in this study). Recruitment of these additional survey respondents was based on identification of the leading relevant international agencies by the co-authors and directly approaching the leaders of these organizations via email, who then self-selected the most appropriate respondent/s from their executive group.

Data collection/Questionnaire Distribution

Data were collected between April and November 2023. REDCap was used to collect data.

Questionnaire Analysis

Quantitative Data

For data analysis, countries were grouped by region according to the WHO regional classification: Africa (AFRO); Eastern Mediterranean (EMRO); Europe (EURO); The Americas (PAHO); South-East Asia (SEARO); and Western Pacific (WPRO).[27] Countries were also grouped according to the World Bank income classification: high-income country (HIC); upper-middle-income country (UMIC); lower-middle-income country (LMIC); and low-income country (LIC).[28] Descriptive analyses were conducted in Stata (version 18.0, StataCorp) for the overall results and stratified by world region and income classification. Graphs were produced in R (version 4.2.3, R Foundation for Statistical Computing).

Qualitative Data

For analysis of open-ended questions, a thematic analysis was conducted using MAXQDA 2022.[29] An inductive approach was employed, aligning with the principles of grounded theory, to systematically identify emerging themes and categorize qualitative data. This process facilitated a nuanced exploration of patterns within the data set, contributing to the depth and richness of the findings. MAXQDA's coding features were utilized to systematically code the open-ended responses. Each response was assigned consistent and relevant codes that represented the main themes, concepts, or ideas present in the data. Regular discussions and peer debriefing were conducted and thoroughly documented by the co-authors to improve analytical credibility, dependability, and confirmability. Representative quotes and excerpts were selected to support the interpretation of each theme and the transferability of our findings across similar contexts.

Ethical Approval

Ethics approval was obtained from the Ethics Committee at Universidad de los Andes, Colombia (2022; Approval No. 2022121301). All participants provided informed consent to enroll in the study.

Results

In total, 68 GoPA! Country Contacts participated in both surveys providing data for 61 countries (response rate = 36.3%). Representation in the surveys varied according to region: EURO (n = 24, 39.4%), PAHO (n = 12, 19.7%), AFRO (n = 10, 16.4%), EMRO (n = 6, 9.8%), WPRO (n = 6, 9.8%), and SEARO (n = 3, 4.9%). There was also variation in the representation in the surveys according to income: HICs (n = 30, 49.2%), UMICs (n = 15, 24.6%), LMICs (n = 11, 18.0%), and LICs (n = 5, 8.2%). An additional 37 key informants responded to the second survey, including representatives from 14 key international stakeholders offering perspectives not limited to specific countries. The quantitative questions in both surveys were completed by 100% of respondents, and 98% of respondents to the first survey and 97% of respondents to the second survey also provided further qualitative information. Overall, the majority of respondents were employed in academic institutions (n = 72, 68.5%) and their most common area of expertise was behavioral interventions, nutrition, and NCDs (n = 49, 46.7%). Table 2 presents a breakdown of survey respondents based on regions, income groups, workplaces, and areas of expertise.

PA Promotion and Policy Between 2012 and 2023 (Survey 1)

A total of 82% (n = 50) of respondents indicated that their country had implemented a PA policy, strategy, or action plan. The majority of countries also had PA promotion networks and initiatives that included government agencies (63.9%, n = 39) and nongovernment stakeholders (68.9%, n = 42). However, only 47.5% (n = 29) countries reported that resources had been prioritized to support PA policy. In free-text responses, the majority of respondents also identified the COVID-19 pandemic as a key barrier to implementing PA policy and this was observed consistently across geographical region and country income groups.

PA Promotion and Policy During the COVID-19 Pandemic (Survey 1)

Overall, respondents indicated that 39.3% (n = 24) of the countries explicitly integrated PA into their COVID-19 pandemic response plans. The free-text responses demonstrated that this primarily focused on being active in the home, safe engagement in independent outdoor activities, and the promotion of active transport (see Table 3). Similarly,

Table 2 Respondent Characteristics

	n	%
Region (n = 61 countries represented[1])		
AFRO	10	16.4
EMRO	6	9.8
EURO	24	39.4
PAHO	12	19.7
SEARO	3	4.9
WPRO	6	9.8
Income group (n = 61 countries represented[1])		
HIC	30	49.2
UMIC	15	24.6
LMIC	11	18.0
LIC	5	5.2
Current workplace (n = 105 respondents[2])		
Academic institution (includes universities)	72	68.5
Government institution (includes public research institutions-non-university)	22	20.9
Private industry (includes private research institutions)	1	1.0
Nongovernmental organization (includes not-for-profit research agencies/foundations/advocacy groups)	7	6.7
Other	3	2.9
Area of expertise/focus (n = 105 respondents[2])		
Public health and epidemiology	13	12.4
Health policy and promotion	11	10.5
Health care and kinesiology	11	10.5
Behavioral interventions, nutrition, and NCDs	49	46.7
Statistics, systems sciences, and other	21	20.0

Abbreviations: AFRO, Africa; EMRO, Eastern Mediterranean; EURO, Europe; GoPA!, Global Observatory for Physical Activity; HIC, high-income country; LIC, low-income country; LMIC, lower-middle-income country; NCDs, noncommunicable diseases; PAHO, The Americas; SEARO, South-East Asia; WPRO, Western Pacific; UMIC, upper-middle-income country.
[1]n = 61 countries represented by 68 GoPA! Country Contacts (ie, 7 countries had 2 respondents). [2]n = 105 respondents comprised 68 GoPA! Country Contacts + 37 key international informants.

39.3% (n = 24) of the countries reported implementing national-level policies during the pandemic that potentially enhanced opportunities for PA. However, most of the examples identified in the free text were PA promotion initiatives (eg, virtual exercise campaigns, public announcements about PA from government leaders), which did not align with the formal PA policies developed during the pandemic that primarily focused on active transport (see Table 3). Conversely, 77.0% (n = 47) of countries had national-level policies that potentially restricted opportunities for PA as part of the COVID-19 pandemic response. The free-text responses emphasized the negative impact of the closure of sporting facilities and public open spaces on PA participation (see Table 3).

PA policy opportunities created during the COVID-19 pandemic differed by region and income (see Table 4). The free-text responses were categorized into 5 "opportunity" groups: (1) digital exercise campaigns, (2) promotion of outdoor exercise, (3) mass-media PA campaigns, (4) prioritization of active transport, and (5) government PA messages. The most comprehensive set of opportunities was in the EURO region, which reported occurrences of all 5 opportunity categories. Respondents from both EMRO and PAHO reported 4 of these opportunity categories. In contrast, WPRO countries reported just 2 of these opportunity categories, AFRO countries reported only one, and SEARO countries reported none. From a country income perspective, HICs reported all 5 opportunity categories and UMICs reported 4. In contrast, LICs reported only one opportunity category and LMICs reported none.

The development of policies during the COVID-19 pandemic that restricted PA participation also varied according to region and income (see Table 4). The free-text responses were categorized into 6 "restrictions" groups: (1) closure of sports facilities, (2) closure of outdoor spaces (eg, parks, playgrounds, beaches), (3) stay at home measures, (4) restrictions on social gatherings, (5) discontinuation of physical education in schools, and (6) closure of clubs. Closure of sport facilities was reported across all regions and income groups. Otherwise, the most comprehensive set of restrictions was in the EURO region, which reported occurrences of the remaining 5 restriction categories. Respondents from PAHO reported 4 of the remaining restriction categories and both EMRO and WPRO reported 3. Only one of the remaining restriction categories was reported in AFRO and SEARO. From a country income perspective, HICs reported all 5 remaining restriction categories. Both UMICs and LMICs reported 4 of the remaining restriction categories, but LICs reported none.

Post-COVID-19 Pandemic PA Policy and Priorities (Survey 2)

Overall, there was significant variation in the importance placed on each of the 10 priorities considered by the respondents (see

Table 3 Supporting Quotes Related to Physical Activity Promotion and Policy During the COVID-19 Pandemic

	Supporting quotations	Country	Region
Physical activity promotion	"In Cyprus the #BeActiveChallenge was promoted to motivate home physical activity and training. Furthermore, the Cyprus Sports Organization has created a series of videos under the slogan 'we exercise while staying home,' reaching out to the whole range of the population, including: (1) preschool children, (2) school children, (3) adults, (4) senior citizens, and (5) special populations."	Cyprus	EURO
	"The Finnish authorities encouraged people to engage in outdoor activities such as walking, hiking, and cycling. Guidelines and recommendations were provided to ensure safe participation in sports and exercise activities [. . .]. Efforts were made to ensure that physical education and opportunities for physical activity continued in schools, even during periods of remote learning [. . .]. Finland continued to conduct research on the effects of the pandemic on physical activity levels and well-being, which helped inform policies and programs."	Finland	EURO
	"Policies to promote active transport were probably accelerated as a result of people experiencing benefits for active transportation during COVID."	Ireland	EURO
Opportunities for physical activity promotion and policy	"There is a local-level policy, specifically in Mexico City: During COVID-19 a lane on one of the main avenues was delimited solely for the use of bicycles and to reduce the number of people on public transport. That lane is still in effect."	Mexico	PAHO
	"There were verbal communications especially in the President's address to the nation [. . .] advising and encouraging people to exercise at home. In fact, one time the President show-cased how to exercise in a limited space of a small room."	Uganda	AFRO
	"In some urban centres, transport environment was modified to encourage and provide more space for active travel such as walking and cycling, which in some cases has led to sustained changes."	Wales	EURO
Restrictions for physical activity promotion and policy	"Complete closure of gyms, parks, and recreation centers. There was a complete ban on the use of parks and green space [. . .]. Initially, the ban was during the whole day; in later months, the restrictions followed a timetable."	Ecuador	PAHO
	"Sports clubs (gyms) and all organized physical activity with direct contact were prohibited [. . .] for the first year; the last services to reopen were in-door gyms. Massive sports events were prohibited. Distancing in urban green spaces had to be maintained, and no group activities were allowed."	Lithuania	EURO

Abbreviations: AFRO, Africa; EMRO, Eastern Mediterranean; EURO, Europe; PAHO, The Americas; SEARO, South-East Asia; WPRO, Western Pacific.

Figure 1). Two items were identified by the majority of respondents as a priority over the next 5 years: partnering with other sectors to review and strengthen the position of PA (50.5%) and providing ongoing reports of progress toward targets set for 2025 and 2030 (50.5%). Only one item scored less than 20% when reporting what was not considered a priority over the next 5 years: monitoring and evaluation of PA-related policy implementation (19%). There was variation according to region with WPRO scoring all items higher priority and AFRO scoring all items lower priority when compared with the overall scores. There was also variation according to country income with HICs scoring consistently higher across all priorities compared with the overall scores (see Supplementary Material S3 [available online]).

Most respondents indicated that there were no changes in government PA promotion priorities due to the COVID-19 pandemic (see Figure 2). However, almost one in 5 countries indicated that 2 items had become more of a government priority in the post-COVID-19-pandemic context: establishing a high-level national multisectoral coordination committee for postpandemic planning of national PA policy actions (19%) and partnering with other sectors to review and strengthen the position of PA within policy frameworks (19%). There was variation according to region and income with down-prioritizing of PA promotion more prevalent in SEARO countries and LMICs (see Supplementary Material S4 [available online]).

There was strong alignment among the free-text responses for emerging issues in PA promotion and recommendations for future PA policy (see Table 5). These highlighted the need for public education campaigns that are integrated with the provision of diverse and inclusive PA initiatives targeted at reducing participation inequities. Respondents indicated that these should specifically emphasize the benefits of PA for key social issues such as climate change and mental health to ensure PA policy is aligned with the priorities of other policy agencies and enable cross-sectoral engagement (eg, health, education, urban planning). The importance of policy to support the provision of active transport, quality physical education, and public green space was also prominent. Finally, respondents emphasized the need for adequate resourcing to improve PA policy implementation and evaluation within enhanced PA surveillance systems.

Only 30.5% of respondents reported that decision makers had a good level of awareness about the benefits of PA in mitigating health challenges experienced during infectious disease pandemics. Similarly, just 31.4% of respondents reported a high level of engagement by governments in PA policy development, implementation, and monitoring in the post-COVID-19-pandemic period. The free-text responses indicated variation among countries in awareness of the benefits of PA and engagement with PA policy by government (see Table 5).

Discussion

We found that despite more than 80% of countries having PA promotion policies and strategies, the COVID-19 pandemic caused disruption to implementation. During the first 3 years of the

Table 4 Opportunities and Restrictions for Physical Activity Promotion and Policy by Region/Income

	Region						Income group			
	AFRO	EMRO	EURO	PAHO	SEARO	WPRO	HICs	UMICs	LMICs	LICs
Opportunities										
Digital exercise campaigns		•	•	•		•	•	•		
Promotion of outdoor exercise and manual provision		•	•	•			•	•		
Mass-media physical activity campaigns			•	•		•	•	•		
Promotion and prioritization of active transport		•	•	•			•	•		
Government physical activity messages	•	•	•				•			•
Restrictions										
Closure of sport facilities	•	•	•	•	•	•	•	•	•	•
Closure of outdoor spaces (eg, parks, playgrounds)	•	•	•	•		•	•	•	•	
Stay at home measures		•	•	•		•	•	•	•	
Restrictions on social gatherings			•	•	•	•	•	•	•	
Discontinuation of physical education in schools			•	•			•	•		
Closure of clubs		•	•				•		•	

Abbreviations: AFRO, Africa; EMRO, Eastern Mediterranean; EURO, Europe; PAHO, The Americas; SEARO, South-East Asia; WPRO, Western Pacific; HIC, high-income country; LIC, low-income country; LMIC, lower-middle-income country; UMIC, upper-middle-income country; •, the opportunity or restriction was mentioned in the region or the income group. Note: Opportunities and restrictions are shown in order of times they were mentioned from the most to the least frequent.

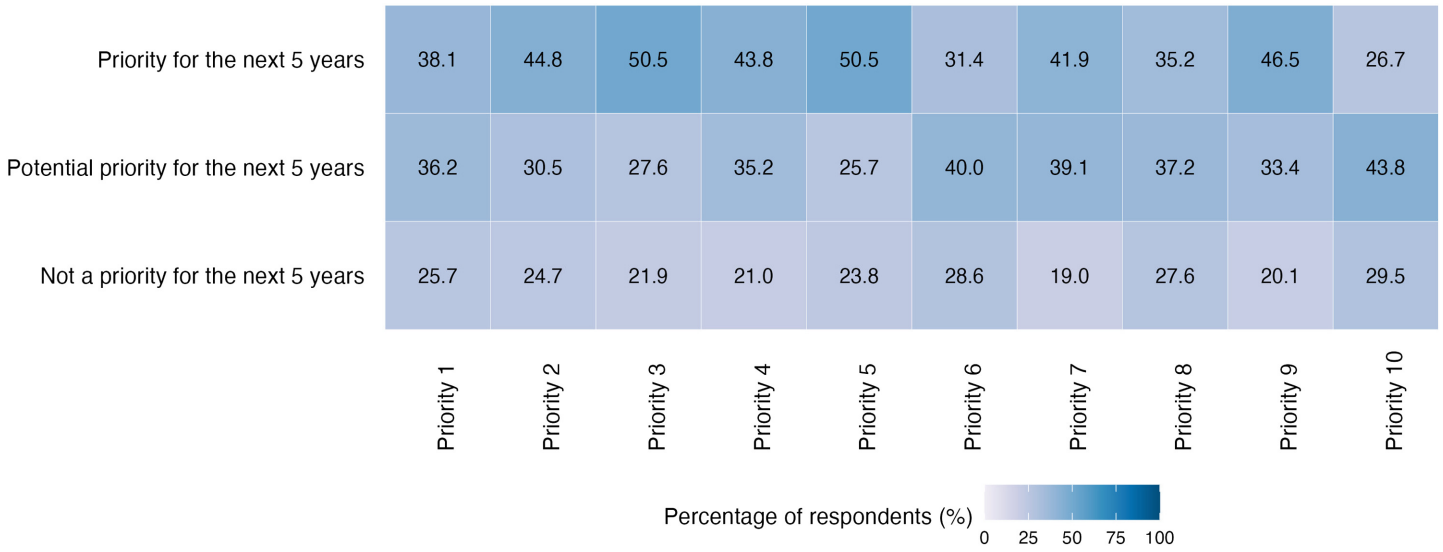

Figure 1 — Post-COVID-19-pandemic physical activity promotion priorities for the next 5 years. Priority 1: Having a high-level national multisectoral coordination committee for postpandemic planning that includes leadership, strategic planning, and oversees implementation and monitoring of national policy actions on physical activity. Priority 2: Developing new, national, and subnational physical activity policies/plans. Priority 3: Partnering with other sectors to review and strengthen the position of physical activity within policy frameworks. Priority 4: Adopting and updating national physical activity guidelines for all ages. Priority 5: Providing ongoing reports of progress toward targets set for 2025 and 2030, using available national and international data sources. Priority 6: Strengthening government and nongovernment funding support for physical activity research. Priority 7: Ensuring appropriate level monitoring/evaluation of national and subnational physical activity-related policy implementation and programs and dissemination of findings to strengthen national, regional, and global knowledge based and inform future planning. Priority 8: Supporting and collaborating with policy makers and others to develop a prioritized national research agenda on physical activity to inform policy development. Priority 9: Creating global, regional, national, and subnational networks and partnerships with civil society, media, and private sector to raise awareness and support all stakeholders' engagement in implementation of policy action to create an active society. Priority 10: Allocate long-term budgets for physical activity policy development, implementation, and monitoring by taking into account national targets and priorities set by the national strategy and action plan.

COVID-19 pandemic, the prioritization of infectious disease control overshadowed the importance of sustaining PA initiatives. Despite this, we identified examples of effective PA promotion during the COVID-19 pandemic that primarily occurred in HICs and UMICs located in the EURO and PAHO regions. There were also common and persistent challenges to PA promotion and policy implementation across regions and country income levels. For example, the importance of adequate resourcing to effectively

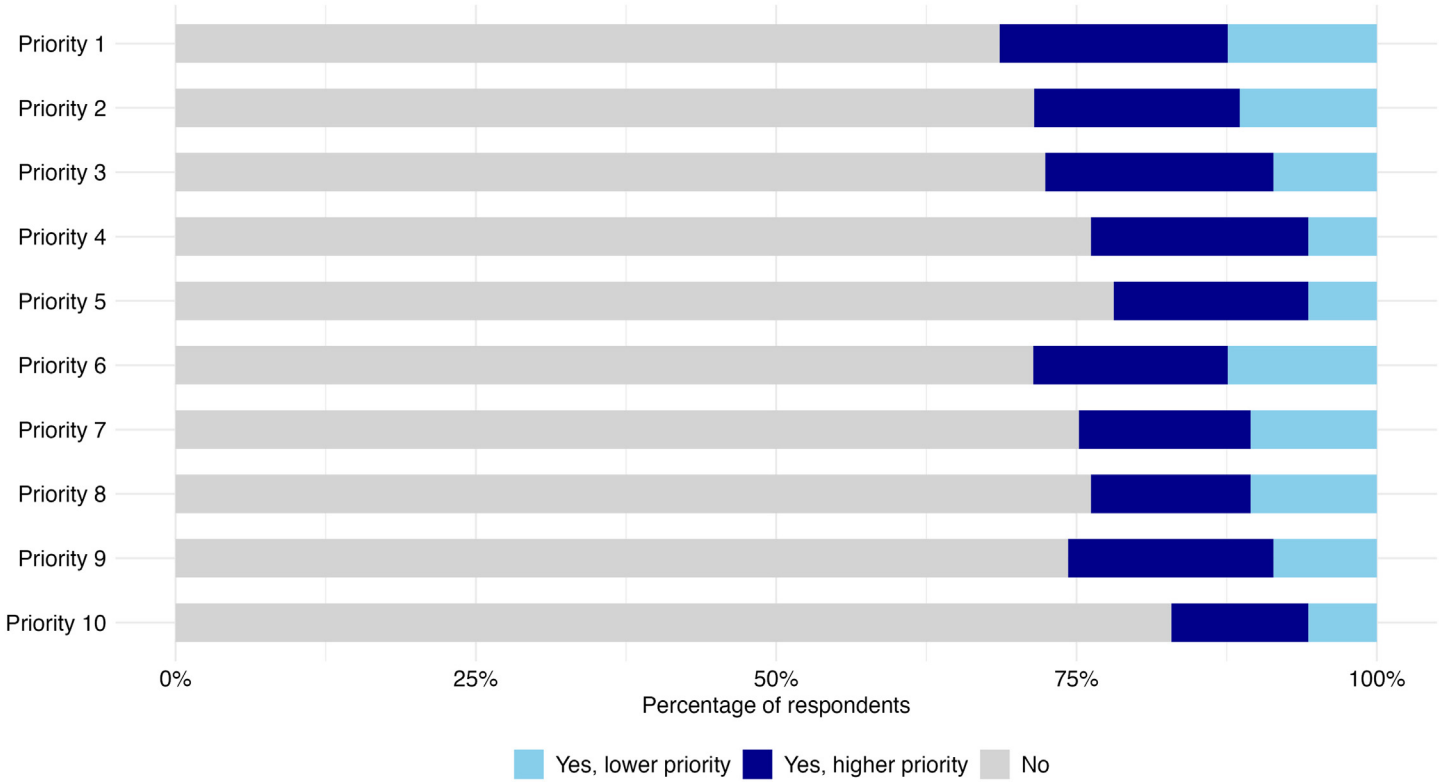

Figure 2 — Change in post-COVID-19-pandemic physical activity promotion priorities. Priority 1: Having a high-level national multisectoral coordination committee for postpandemic planning that includes leadership, strategic planning, and oversees implementation and monitoring of national policy actions on physical activity. Priority 2: Developing new, national, and subnational physical activity policies/plans. Priority 3: Partnering with other sectors to review and strengthen the position of physical activity within policy frameworks. Priority 4: Adopting and updating national physical activity guidelines for all ages. Priority 5: Providing ongoing reports of progress toward targets set for 2025 and 2030, using available national and international data sources. Priority 6: Strengthening government and nongovernment funding support for physical activity research. Priority 7: Ensuring appropriate level monitoring/evaluation of national and subnational physical activity-related policy implementation and programs and dissemination of findings to strengthen national, regional, and global knowledge based and inform future planning. Priority 8: Supporting and collaborating with policy-makers and others to develop a prioritized national research agenda on physical activity to inform policy development. Priority 9: Creating global, regional, national, and subnational networks and partnerships with civil society, media, and private sector to raise awareness and support all stakeholders' engagement in implementation of policy action to create an active society. Priority 10: Allocate long-term budgets for physical activity policy development, implementation, and monitoring by taking into account national targets and priorities set by the national strategy and action plan.

develop, implement, and evaluate PA policy was a consistent theme observed over time. Although most respondents indicated that the PA priorities of governments did not change due to the COVID-19 pandemic, one in 5 countries reported that cross-sectoral partnership had become more important during this period. Consequently, future recommendations include delivering public education campaigns demonstrating the broad cross-sectoral benefits of PA and integrating these with relevant initiatives that are locally nuanced to address ongoing inequities in PA participation. Ensuring PA policy aligns with concurrent PA initiatives is critical to success and will vary according to the existing opportunities and levels of engagement in each country.

Our results are consistent with previous research that showed a slowing of PA policy development and disruption of PA promotion in European Union countries in the first year of the COVID-19 pandemic.[30] However, as part of the response to the pandemic, research was conducted on the benefits of PA participation during the pandemic and how these could be maintained.[4,31–34] In the PAHO region, at least 25 countries used mass media to promote PA through public awareness campaigns.[35] This is consistent with our results, which showed that mass-media campaigns were widespread. However, it is widely accepted that this type of policy intervention alone does not cause significant behavior change. Rather, coupling public education policy with aligned community-level initiatives is essential to genuinely shift PA participation levels.[36] Despite our findings of misalignment between policy and community-level initiatives, there are numerous reports of effective integration of active transport and active urban design policies that were induced by the COVID-19 mitigation strategies.[37–39] This demonstrates that it is possible to promote active lifestyles during public health crises like the COVID-19 pandemic, but it requires effective planning and resourcing, which did not appear to be the case in many countries we examined in our study, particularly LMICs.

Aligned with our findings, other studies have highlighted the persistent lack of financial and human resources for the effective implementation of PA policies.[40–43] Despite the growing number of policies, strategies, and action plans for PA globally, the potential progress remains constrained by inadequate resource allocation and engagement with policymakers.[42,44] Previous research has shown that decision makers have difficulty prioritizing resources for PA when faced with other factors such as organizational complexity, conflicting demands, economic change, and political processes.[45] Our results demonstrated that the COVID-19 pandemic may have

Table 5 Supporting Quotes Related to Physical Activity Promotion and Policy Post-COVID-19-Pandemic

	Supporting quotations	Country	Region
Emerging priorities for physical activity promotion	"[. . .] infrastructure for active travel investment—making this an integral part of new road infrastructure but also as a priority in its own right is key. This should be accompanied by education campaigns to ensure safer riding conditions for cyclists."	Australia	WPRO
	"Social inequality is an issue that remains unsolved; those most in need of support regarding health-enhancing physical activity are still more unlikely to get enough/to be reached."	Germany	EURO
	"[. . .] physical activity must be framed as a catalyst in solving larger issues not merely the correlates of health outcomes. Also, providing everyone equal opportunities to experience and have the benefits of PA participation must be the focus. This thinking, access and opportunities for PA and benefiting from quality PA experiences, aligns with the UN's SDGs as well."	Korea	WPRO
Recommendations for the future of physical activity policy	"Creating regional and national public awareness campaigns/mass media that highlight the benefits of physical activity and mental health, and direct individuals to existing physical activity programs is urgently needed."	Brazil	PAHO
	"Future PA policies should invest in the creation and maintenance of urban green spaces, parks, recreational areas, and safe walking and biking paths, supportive of active transportation, like walking and cycling. [We need to . . .] develop PA policies with a strong focus on equity, diversity, and inclusion to address health disparities. [we must . . .] prioritize access to physical activity opportunities in underserved communities and among vulnerable populations. Physical activity policies should make an effort to frame physical activity as basic human right! Future PA policies should support research on the relationship between PA, larger challenges like climate change, and mental health issues. In relation to this, ensuring that PA policies align with other health, education, urban planning policies and any other sectors related to PA."	Korea	WPRO
	"[We need] school-based policies to reinforce the need to offer daily physical education and active transport to and from school, to ensure children and youth are more likely to achieve the physical activity guidelines of 60 minutes of MVPA."	USA	PAHO
	"What is needed is [. . .] a physical activity policy that is fully resourced and has a monitoring and evaluation plan attached to it with clear indicators and targets."	Vanuatu	WPRO
Awareness and engagement of national decision-makers in physical activity benefits and policy	"They know about the benefits of physical activity, but they have other priorities."	Austria	EURO
	"They know the problem, but policy-making and implementation is a negotiation process in which PA is often not on the stronger side."	Germany	EURO
	"The national decision-makers in the health sector are fully aware of the benefits of physical activity to immunity, inflammation, etc. But decision-makers in other government departments are not necessarily aware of these benefits!"	Morocco	EMRO
	"Physical Activity was never a [point of] discussion. Everyone involved was focused on testing, isolation, reducing the spread of COVID-19."	Papua New Guinea	WPRO
	"I do not know any policy maker with knowledge in the topic. They do not use the academic field to have inputs for their decisions."	Spain	EURO

Abbreviations: AFRO, Africa; EMRO, Eastern Mediterranean; EURO, Europe; MVPA, moderate-to-vigorous physical activity; PA, physical activity; PAHO, The Americas; SDGs, Sustainable Development Goals; SEARO, South-East Asia; UN, United Nations; WPRO, Western Pacific.

further compounded this marginalization of PA policy, with less than a third of postpandemic governments reported as highly engaged despite the widespread proliferation of PA policies and plans prior to the pandemic. This highlights an apparent ongoing gap between the development and implementation of PA policy, which must be critically addressed if we aim to elevate PA to a leading position on public health agendas in the postpandemic era.[46–49]

Existing evidence also aligns with our findings regarding the importance of cross-sectoral partnerships.[50–52] This includes high-level leadership within government that is supported by international, national, and subnational PA advocates to ensure political will and resources are maintained.[53–55] Focusing on local context and culture is also important for shifting the political commitment in the mid- to long-term; and the changing levels of intersectoral coordination and cooperation need to be taken into account.[56,57] Our results suggest that this will vary according to country, which is consistent with a recent study examining advocacy for the implementation of the GAPPA that highlighted the importance of accounting for regional, geographical, and cultural nuances.[15,58,59] Achieving this is best addressed through genuine cross-sectoral partnerships that include key national and supranational stakeholders.[60]

Strengths and Limitations

This is the first study of its kind in which PA policy and promotion were assessed in relation to the COVID-19 pandemic and postpandemic periods. The limitations of our study included the potential of missing information from nonparticipants and from some respondents who may not have been familiar with the data we were seeking because they had alternative areas of expertise in the PA sector. We mitigated this by accessing multiple data sources, including key informants from 14 international societies and the

GoPA! Global Network of PA experts. Additionally, the lack of predefined responses in open-ended questions options may have led to variability in interpretation. However, it is important to note that we used consistent and feasible PA policy measures that underwent face and content validation in accordance with existing PA measurement development recommendations in the absence of a true criterion.[61] Further, there was greater participation of representatives from EURO, PAHO, HICs, and UMICs. Although we advise caution when interpreting results for regions and income groups with lower representation, our sample did include representatives from all geographical regions and country income groups. Finally, we noted some feedback from respondents that what constitutes "PA policy" is not widely understood. Although we are confident in the expertise of our sample in responding to the survey questions, revisiting the definition for "PA Policy" for future work may be warranted.

Conclusion

The diverse range of PA policy action (and inaction) taken by different countries during the COVID-19 pandemic serves as a lesson for the future. The current PA policy landscape remains disparate as governments establish new post-COVID-19-pandemic agendas. Despite these differences, there is a clear call for greater commitment from national decision makers to prioritize PA policies globally. This should include ensuring PA policy development, implementation, and evaluation is adequately resourced and supporting genuine inter-sectoral partnerships with education, urban planning, transport, and other relevant agencies. It should also focus on the holistic integration of policy responses with locally nuanced community-level initiatives to ensure optimal impact for population groups experiencing inequities in PA participation. Finally, there is also an opportunity to increase the number of countries reporting PA policy indicators, which will enable further examination of the differences among countries and among regions to understand how their experiences can be harnessed to prepare the PA community for future challenges and opportunities as they arise. This will contribute to enhancing population-wide health outcomes and resilience to both noncommunicable and communicable disease threats.

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