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Reflection Article

Governance for physical activity: An integral multisectoral governance model for health promotion

Gobernanza para la actividad física: Modelo integral de gestión multisectorial para la promoción de la salud

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Abstract

Physical inactivity has become a major public health challenge, fuelling the rise of noncommunicable diseases in diverse contexts. This reflection article examines recent scientific production on "governance" and "physical activity" in the Scopus, ScienceDirect, Springer, PubMed and Redalyc databases, selecting a set of studies that address the relationship between governance, physical activity and public health over the period 2019–2023. Based on this analysis, three governance pillars for physical activity are identified: information and monitoring of scientific production; intersectoral policies in fields such as transport, environment and education; and systemic and communitybased approaches that articulate health systems, urban environments and social participation. On this basis, the article describes governance strategies aimed at promoting physical activity, including health education, infrastructure improvement, community programmes and regulation of advertising for unhealthy foods and beverages. Drawing on international evidence and dialogue with national experiences in Colombia, an integral multisectoral governance model for physical activity is systematized, connecting governments, nongovernmental organizations, the private sector and communities in the construction of active environments. The model proposes that governance for physical activity should operate as a central component of policies for the prevention of noncommunicable diseases and the promotion of public health, through institutional arrangements that encourage regular movement and wellbeing across different population groups.

Keywords: Governance; Physical Activity; Public Health; Noncommunicable Diseases; Multisectoral Management; Public Policy.

Resumen

La inactividad física se ha consolidado como un problema de salud pública que alimenta el avance de las enfermedades no transmisibles en distintos contextos. Este artículo de revisión analiza la producción científica reciente sobre "governance" y "physical activity" en las bases de datos Scopus, ScienceDirect, Springer, PubMed y Redalyc, seleccionando un conjunto de estudios que abordan la relación entre gobernanza, actividad física y salud pública en el período 20192023. A partir de este análisis se identifican tres pilares

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de gobernanza para la actividad física: la información y monitoreo de la producción científica, las políticas intersectoriales en ámbitos como transporte, ambiente y educación, y los enfoques sistémicos y comunitarios que articulan sistemas de salud, entorno urbano y participación social. Sobre esta base se describen estrategias de gobernanza orientadas a la promoción de la actividad física, tales como la educación en salud, la adecuación de infraestructura, la implementación de programas comunitarios y la regulación de la publicidad de alimentos y bebidas poco saludables. Con base en los hallazgos internacionales y en el diálogo con experiencias nacionales en Colombia, se sistematiza un modelo integral de gestión multisectorial para la actividad física, que articula gobiernos, organizaciones no gubernamentales, sector privado y comunidad en la construcción de entornos activos. El modelo propone que la gobernanza para la actividad física opere como componente central de las políticas de prevención de enfermedades no transmisibles y de la promoción de la salud, mediante arreglos institucionales que favorezcan el movimiento regular y el bienestar en diferentes grupos poblacionales.

Palabras clave: Gobernanza; Actividad Física; Salud Pública; Enfermedades No Transmisibles; Gestión Multisectorial; Políticas Públicas.

Introduction

Physical inactivity has become one of the main public health challenges, consistently associated with a higher burden of obesity, cardiovascular disease, diabetes and other noncommunicable conditions in diverse contexts (Pan American Health Organization [PAHO] & World Health Organization [WHO], 2019). Reports from international organizations indicate that more than one quarter of the adult population does not achieve the minimum recommended levels of physical activity, which places additional pressure on health systems and undermines the quality of life of millions of people (PAHO & WHO, 2019). In this scenario, the debate is not limited to the biomedical benefits of exercise; it also raises questions about the institutional, regulatory and managerial arrangements that enable or hinder people's ability to move regularly.

Within this framework, the notion of governance applied to physical activity has gained ground as a useful category for examining how state actors, civil society organizations, the private sector and communities interact in defining policies, programmes and environments that support active lifestyles. Recent literature documents experiences in areas such as sport policy, urban planning for active mobility, regulation of food and beverage advertising, and the promotion of physical activity in educational settings, where governance emerges as a coordinating axis for decisions, resources and responsibilities. However, many of these developments have taken place in health and public management systems in highincome countries and remain focused on specific sectors, leaving an incomplete understanding of physical activity from a comprehensive governance perspective.

For the authors, this gap represents both an academic and a practical opportunity. On the one hand, there is a need to organize and synthesize the dispersed evidence on governance and physical activity in order to identify patterns, tensions and lessons that can inform the design of more coherent public policies. On the other hand, it is essential to propose reference frameworks that engage with Latin American realities, where physical inactivity coexists with territorial inequalities, heterogeneous institutional capacities and public health agendas shaped by noncommunicable diseases. This article is situated at the intersection of these concerns: it seeks to contribute to the international debate on governance for physical activity while also providing elements that enrich reflection on multisectoral management models in contexts such as Colombia.

To this end, the objective of the study is to analyse recent scientific production on governance for physical activity, published between 2019 and 2023, with an emphasis on studies that explore the relationship between governance arrangements, the promotion of physical activity and public health outcomes. Based on this analysis, the aim is to identify approaches, strategies and results that make it possible to outline an integral multisectoral management model for physical activity, conceived as a component of policies for the prevention of noncommunicable diseases and the promotion of health. The reflection is framed within the field of management and public policy, understanding physical activity not only as an individual practice, but also as the result of collective decisions, territorial planning, market regulation and the development of institutional capacities.

This article forms part of the line of research developed in the doctoral thesis "Governance model for physical activity in the Special District of Santiago de Cali – Colombia", in which an applied management model for physical activity in the local context was proposed (GarcíaBuitrago & TabarquinoMuñoz, 2024a; 2024b; 2025). Previous studies have presented specific findings on this model and on public management of physical activity in Colombia, whereas the present text focuses on organizing and analysing international scientific production published between 2019 and 2023 on governance and physical activity, with the aim of strengthening the conceptual framework and comparing it with global experiences and debates (GarcíaBuitrago & TabarquinoMuñoz, 2024a; 2024b; 2025).

Methodologically, a bibliographic analysis was conducted based on a systematic search in the Scopus, ScienceDirect, Springer, PubMed and Redalyc databases, using the search equation "governance" AND "physical activity" and applying filters for publication period, document type and relevant subject areas. From the initial set of records, a limited number of articles and reviews that explicitly addressed the intersection between governance, physical activity and public health were selected and examined in depth to identify associated categories, strategies and outcomes. The following sections present the results of this analysis for each database and subsequently discuss their implications for the construction of a governance model for physical activity with an integral and multisectoral approach.

In this context, governance for physical activity emerges as a key tool for creating environments and policies that promote regular movement across all ages and population groups. Governance involves coordinating actions among different sectors of society—including governments, nongovernmental organizations, the private sector and communities—to build environments that facilitate the practice of physical activity and improve public health.

The search yielded a total of 1,479 articles and reviews published between 2019 and 2023. The distribution of results by database is shown in **Table 1**.

Table 1. Results of the search in the selected databases

Database	Results	2019-2023	Articles and reviews	Area of business, management and accounting
Scopus	225	120	108	6
ScienceDirect	17	6	5	5
Springer	8591	6109	1303	13
PubMed	189	125	25	25
Redalyc	108	38	38	9

Results

This section presents the main findings of the bibliographic search and, at the same time, builds the theoretical–analytical framework on governance for physical activity that guides the subsequent discussion. Based on the documents retrieved from Scopus, ScienceDirect, Springer, PubMed and Redalyc, patterns and categories are identified regarding how different governance arrangements influence the promotion of physical activity, including sport and public health policies, urban planning for active mobility, regulation of foods and beverages, community programmes and educational strategies, among others. Organizing the results by database makes it possible to show the diversity of approaches and contexts, while the selection of key articles provides conceptual and empirical inputs for the construction of the integral multisectoral management model proposed in this study.

Results of the Scopus search and contributions to the governance framework for physical activity

The search conducted in the Scopus database, using the predefined search equation, yielded 225 documents. After limiting the search to the last five years (2019–2023) and selecting only articles and reviews, 108 documents were obtained for analysis, as shown in **Table 2.**

Table 2. Distribution of documents published in Scopus by type of publication and year

Type of publication	2019	2020	2021	2022	2023	Total
Article	17	20	16	22	23	98
Review	2	2	3	1	2	10
Total	19	22	19	23	25	108

An overall increase in the number of publications is observed over the period, with a slight upturn in 2022 and 2023 (See **Figure 1**). This trend suggests growing interest within the scientific community in the relationships between governance, physical activity and health in different contexts.

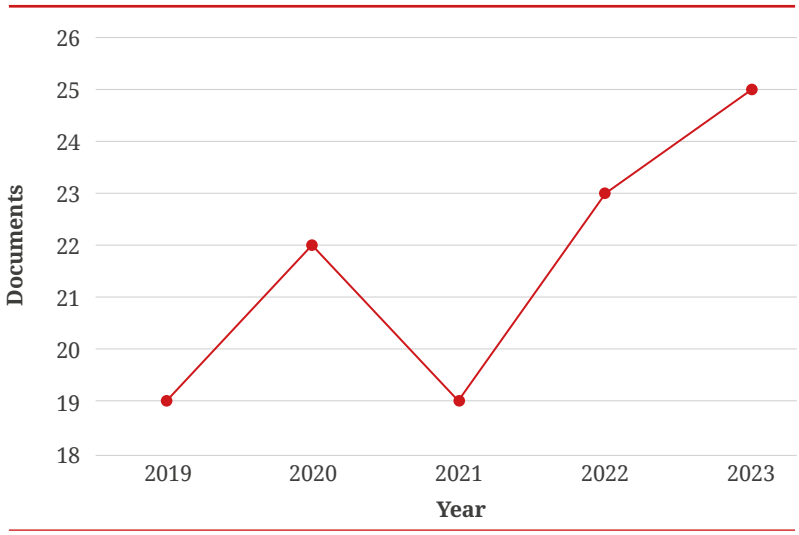


Figure 1. Documents published per year

Source: Scopus (2023).

With regard to subject areas, 59.3% of the documents fall within the health sciences, including medicine (44.6%), health professions (7.3%), nursing (5.1%) and biochemistry, genetics and molecular biology (2.3%). Social sciences account for 13.6% of publications, while the area of business, management and accounting—of particular interest for this research—represents 4.0% of the documents (See **Figure 2**).

Although most of the output is concentrated in the health sciences, the presence of studies in social sciences and in administration and management shows that physical activity is beginning to be addressed from the perspectives of public policy, service organization, resource planning and systems governance. This set of documents provides the basis for selecting and analysing the key articles that feed into the governance framework for physical activity developed in the present study.

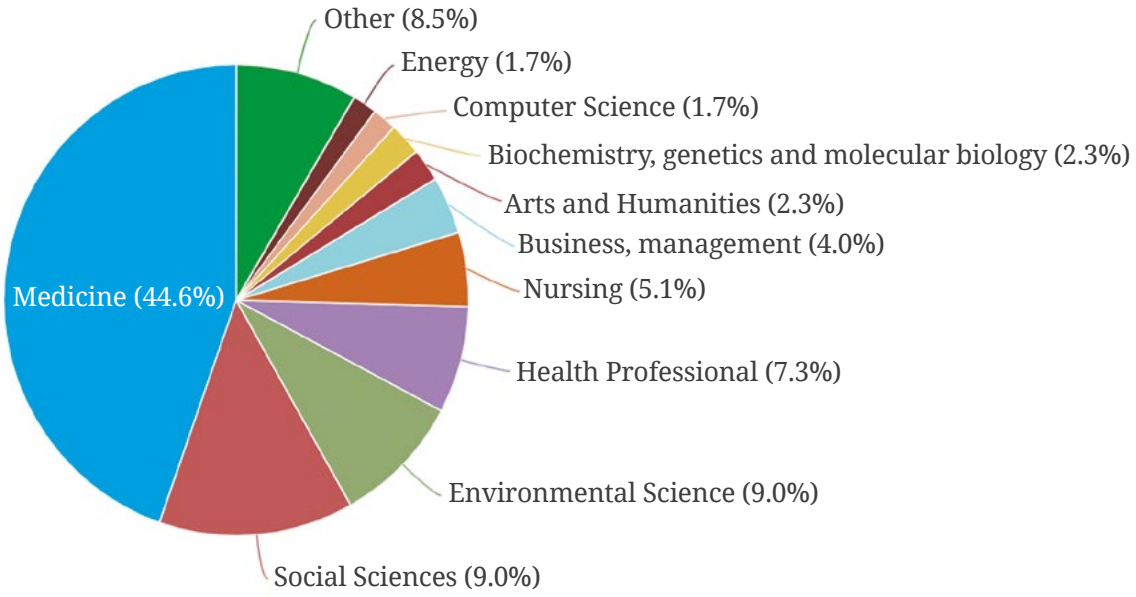


Figure 2. Documents by subject area

Source: Scopus (2023).

Analysis of authors, countries and main findings

Regarding the authors with the highest number of publications, 26 authors have published two documents each, while the remaining authors have published a single document (See **Figure 3**).

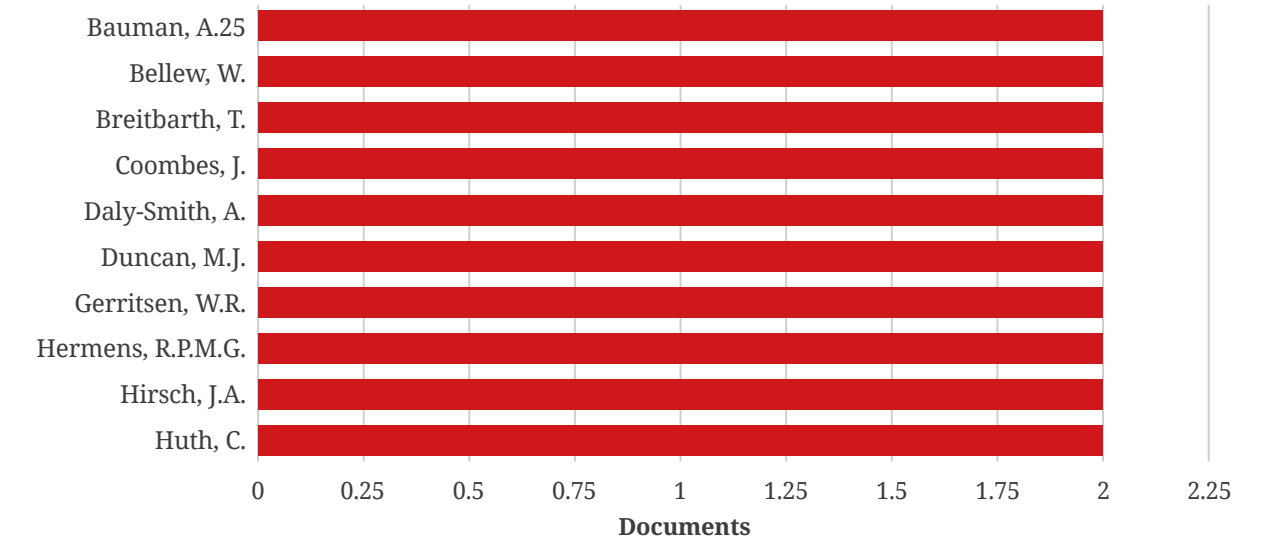


Figure 3. Documents per author

Source: Scopus (2023).

In terms of geographical distribution, the countries with the largest number of publications are Australia (25 documents), the United Kingdom (24 documents) and the United States (23 documents). In Latin America, Brazil has two publications and Colombia has one (See **Figure 4**).

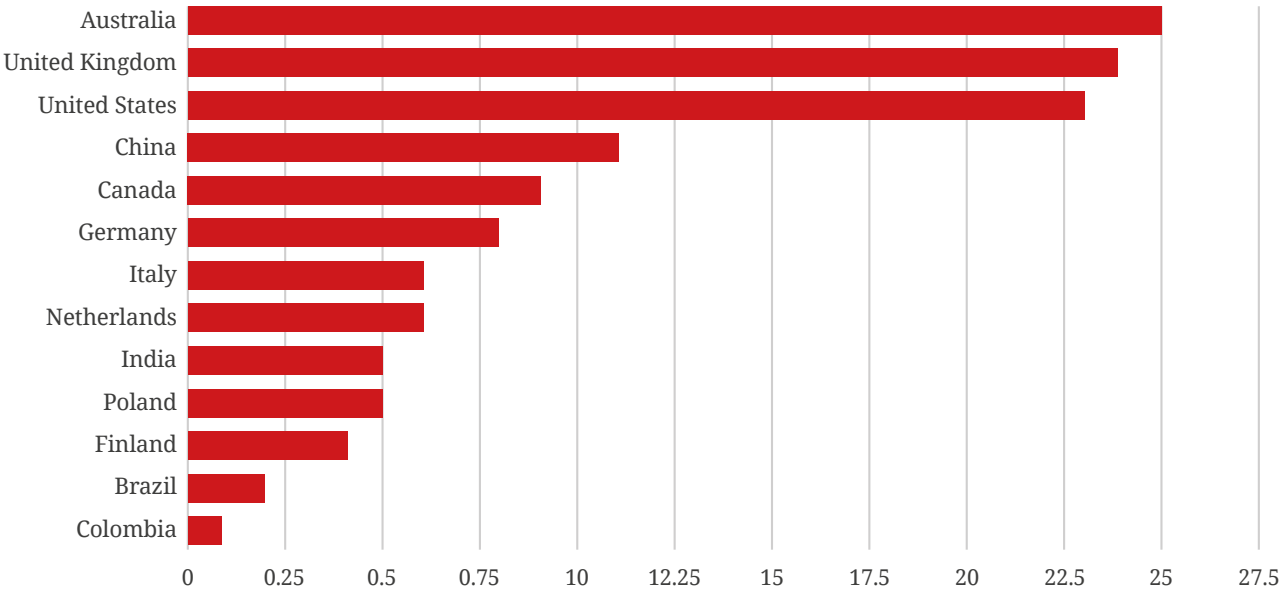


Figure 4. Documents by territory or country

Source: Scopus (2023).

The only article published from Colombia analyses the relationship between economic freedom, climate culpability and grades on physical activity indicators in 57 countries and jurisdictions. The findings suggest that highincome countries tend to be more economically liberal and to have greater climate culpability than low and middleincome countries. In addition, negative correlations were found between temperature and annual precipitation, on the one hand, and individual behaviour indicators, on the other, in low and middleincome countries, but not in highincome countries. In the latter, correlations between climate culpability and behavioural and economic indicators were more pronounced. The study therefore concludes that strategies to promote physical activity worldwide should carefully assess the different areas that require interventions tailored to income groups, taking into account inequalities in the global political economy and climate change (Lee et al., 2022).

Taken together with the strong concentration of publications in highincome countries, these results show that governance for physical activity is being constructed in contexts marked by unequal distributions of power and resources. This raises the challenge of developing management models and policies that recognize and address these asymmetries, especially in regions such as Latin America.

Analysis of key articles in the area of business, management and accounting

Of the 108 articles published in the last five years, six documents in the area of business, management and accounting that are directly oriented towards the research topic were selected.

The most recent article analyses publications on physical activity and tourism management in mountain areas that have appeared in the journal *Folia Turistica* over the last 30 years. This study identifies four main thematic areas: (1) physical or tourism activity, (2) management and governance of resources, (3) nature and protected areas, and (4) tourism and recreational infrastructure (Szczechowicz & Alejziak, 2023).

Second, one study describes sport policy in Finland, highlighting the presence of key actors, the influence of the state and sport organizations, and the role of municipalities in promoting physical activity. The authors underline the central role of the state in steering sport policy and managing resources, while sport organizations are responsible for implementation. They also note concerns about physical inactivity and low performance in elite sport, which have led the government to consider solutions such as centralization and the use of evidence in policymaking (Mikkonen et al., 2022).

Third, one study presents a critical analysis of walking policy in Ireland and its relationship with national and international development goals. Although the positive impact of promoting walking for health and the environment is acknowledged, the study shows that most Irish counties lack uptodate local walking policies. The Get Ireland Walking 2017–2020 Action Plan has the potential to contribute to several goals, but the authors stress the need for multidisciplinary action and for updating local policies in order to maximize its contribution (Power et al., 2023).

Furthermore, one study explores the importance of partnerships in the criminal justice sector, specifically in sports programmes. Although partnerships are fundamental for addressing youth crime, understanding their effectiveness remains challenging. Using McDonald's (2005) theoretical framework, the authors distinguish between strategic partnerships (focused on goals, instruments and authority) and communicative partnerships (centred on cooperation) and examine how these factors influence the development of each type of partnership in the context of the criminal justice system (Morgan & Baker, 2021).

Similarly, another article analyses the strategies and performance of healthy eating and physical activity initiatives sponsored by food and beverage companies. Corporate strategies focused on nutrition and physical activity while neglecting the social and environmental dimensions of health. Investments were managed as part of corporate social responsibility or public affairs, with highly variable scores and shortcomings in monitoring and evaluation; the study highlights the importance of metrics and accountability for improving the impact of these initiatives (Barata Cavalcanti et al., 2020).

Finally, one study examines the relationship between ownership and configuration of sports facilities and participation in the United Kingdom. The authors find that neither ownership nor configuration of facilities significantly influenced the duration of sports activity or policy outcomes. Participation was more strongly affected by using facilities together with other people who frequented the venue, which underscores the importance of focusing on the development of networks rather than on specific forms of ownership and provision in order to achieve sport policy goals (Kumar et al., 2019).

Taken together, these articles address different facets related to physical activity, tourism, sport policy and public health, highlighting the need for integrated strategies, effective policies and collaboration among diverse actors to foster physical activity and improve public health. They also stress the importance of ongoing evaluation of interventions and of clear accountability mechanisms.

The findings show that physical activity is embedded in governance arrangements where public, private and community actors converge, and where resource management, priority setting and interinstitutional coordination condition the effectiveness of policies and programmes. These contributions position physical activity as part of the public management agenda rather than as a purely sectoral sports action, reinforcing the need for an integral governance model that articulates state responsibility, social participation and corporate commitment in the design and implementation of policies to promote physical activity.

Studies in ScienceDirect and governance dimensions related to physical activity

In ScienceDirect, the search equation “governance” AND “physical activity” was entered in the title, abstract and keyword fields, yielding 17 initial results. The search was then restricted to the last five years (2019–2023) and only review articles (1) and research articles (4) were selected, resulting in a final set of five documents analysed in depth.

The first study (Lozzi & Monachino, 2021) analyses the impact of sustainable urban transport policies and active travel on health, highlighting their influence on physical activity, air quality, noise and road safety. The authors emphasize the connection between these policies and improvements in public health, showing how they affect life expectancy, mortality and morbidity due to cardiovascular and respiratory diseases, diabetes and other conditions. They also examine how the guidelines of the European Sustainable Urban Mobility Plan (SUMP) link transport and health, assessing the inclusion of health approaches in mobility planning in four European cities through Health Impact Assessment tools. Although a clear link is established between active mobility and reduced environmental risk, evaluation of the health benefits has only been carried out in some cases, revealing gaps in the governance of these policies.

Second, the study by Jiang et al. (2024) examines the shortterm effects of exposure to atmospheric oxidation and its interaction with fine particles (PM2.5) on the occurrence of firstever stroke. Using data from the National Stroke Screening Survey of China (2013–2015), the authors find a significant association between exposure to NO_2 and an increased risk of a first stroke event. They also identify a notable interaction between NO_2 and PM2.5 that increases stroke risk. These findings have important implications for policies and standards on atmospheric protection and governance, showing how air quality, together with factors such as history of transient ischaemic attack, smoking and physical inactivity, modulates the adverse effects of exposure.

Third, the article by Quadt et al. (2022) highlights the integration of physical and mental activity with the regulation of internal bodily states. It explains how this regulation goes beyond basic homeostatic responses, incorporating complex processes that involve abstract mental representations and conscious emotions. The authors emphasize the connection between physical activity and cognitive processes, showing that physiological changes associated with emotion are fundamental for its expression and maintenance. They also explore brain systems that act as interfaces between cognitive, emotional and autonomic states, demonstrating their overlap with the governance of behaviour and their relationship with survival, as well as the role of prediction and surprise in integrating cognition, emotion and autonomic control.

Moreover, one study analyses freefloating bikesharing systems, a dockless model operated by GPS that has grown rapidly in North America. These predominantly commercial systems pose financial and governance challenges related to operating fees, fleet limits, safety, parking, data sharing and equity. The authors identify gaps in research and practice (use, equity, business model and context) and point to obstacles to sustainability, including infrastructure limitations, vandalism and funding constraints. The study highlights specific challenges such as parking management, bicycle types and data governance, but also the potential of these systems to reduce congestion, promote physical activity and support urban sustainability if these issues are properly addressed (Hirsch et al., 2019).

Finally, the work of DalySmith et al. (2020) focuses on physically active learning (PAL) and emphasizes its implementation from a collaborative, multistakeholder perspective. The study conducted workshops with 35 participants from different fields and identified key components for implementing PAL: opportunities within school hours, teaching environments, pedagogical approaches and the intensity of activities. Practice priorities were oriented towards teacher confidence, support resources and engagement of the school community. At the policy level, the study addressed selfgovernance, educational standards, investments in teacher training and curriculum reforms. Research priorities included strengthening the evidence base, implementation in schools and the adoption of a systemic approach. The authors underline the importance of addressing these factors in a coordinated manner at

classroom, school and policy levels to achieve broad and sustainable implementation of PAL.

Taken together, this set of studies reveals a crucial intersection between physical activity and governance in different contexts. The analysis of sustainable urban transport policies (Lozzi & Monachino, 2021) and research on environmental exposure (Jiang et al., 2024) demonstrate the relevance of governmental decisions in public health, showing how regulation and atmospheric standards directly influence the incidence of stroke. These works underscore the need for robust policies and effective evaluation mechanisms for environmental protection and population health.

In addition, examination of the links between physical activity, cognitive and emotional processes and internal bodily regulation (Quadt et al., 2022) shows that physical activity affects not only physical health but also mental and emotional health. This suggests the need for governance strategies that recognize and promote the intrinsic connection between physical activity and holistic wellbeing.

Furthermore, research on freefloating bikesharing (Hirsch et al., 2019) highlights specific governance challenges in implementing new models of urban mobility, where regulation of tariffs, safety, data sharing and equity is crucial for success. The study stresses the importance of policies that promote sustainability and explicitly address issues such as parking and data management.

Finally, the collaborative and multidisciplinary approach in the PAL study (DalySmith et al., 2020) shows how a diverse range of actors can influence the effective implementation of educational programmes linked to physical activity. It highlights the need for policies that integrate physical activity into school environments, with an emphasis on teacher training, evidencebased practice and systemic approaches in order to achieve broad and lasting impacts.

In summary, the studies analysed in ScienceDirect underscore that decisions on urban mobility, air quality, infrastructure, environmental regulation and the design of educational programmes are also governance decisions for physical activity. Physical activity thus appears as the outcome of intersectoral policies in transport, environment, health and education, supporting the proposal to conceive governance for physical activity from an integral, multisectoral and systemic perspective, in line with the management model developed in this article.

Contributions of Springer, PubMed and Redalyc to the governance model for physical activity

In the Springer, PubMed and Redalyc databases, the same search methodology was applied, using the equation “governance” AND “physical activity” and filters for publication period and relevant subject areas. In total, 13 documents were identified in Springer, 25 in PubMed and 9 in Redalyc, for an overall set of 47 articles related to governance and physical activity. From this set, 12 studies were selected that met

specific inclusion criteria and provided substantive elements for the governance model for physical activity proposed in this article.

The first study (Riley et al., 2021) presents a systems thinking methodology for investigating chronic disease prevention efforts at the community level. Although it does not focus directly on governance for physical activity, the systemic approach has important implications for managing physical activity in community and public health contexts. Governance for physical activity involves planning, coordinating and administering policies, resources and strategies aimed at fostering regular physical activity. The systemic approach is relevant in this field because it incorporates: (1) a holistic vision that recognizes interrelationships among social, environmental and health components; (2) an emphasis on the community as a key arena of intervention; (3) the need for continuous learning and policy adaptability; and (4) the participation and collaboration of multiple actors in processes of joint work and social learning (Riley et al., 2021).

Second, the work of Morgan et al. (2023) explores the feasibility of applying systemic approaches in local governance to address complex health and wellbeing problems, with an emphasis on reducing noncommunicable diseases. Traditionally, programmebased planning has been used for these purposes, but its limitations in dealing with complexity have stimulated growing interest in systems thinking. The study, conducted in a remote municipality in Tasmania (Australia), uses a systems change framework that combines facilitated systems inquiry and "rich picture" processes with various stakeholders. The results show broad support for systemic approaches, which are considered effective in increasing systems thinking capacity, revealing problems collaboratively and identifying opportunities for action. Nevertheless, the authors stress the need for stronger political support at the macro level for these approaches to translate into sustainable changes in health and wellbeing systems, especially in rural and remote municipalities.

Third, the article by Alt et al. (2021) addresses the impact of information technologies and the digital economy on contemporary society and argues for a discipline of "life engineering" to balance technology and human values. The advance of information technologies has transformed everyday life and plays a central role in the digital economy, creating opportunities for wealth, employment and services that empower users in areas such as physical activity and health. However, massive data collection by large technology companies raises concerns about privacy, manipulation and negative social effects, such as depression associated with excessive use of social networks and devices. The text proposes ethical frameworks, governmental regulations and developer communities that foster usercentred solutions, with technologies that integrate ethical and human values in the design of tools related to physical activity and health.

In the same vein, Pagani and Panarello (2022) review projects and programmes aimed at promoting healthy lifestyles through physical activity, using governmental strategies such as improving or creating pedestrian paths, designing environments

conducive to movement across life stages, establishing walking groups and creating spaces for social interaction. Despite the development of these initiatives and the progress of global action against noncommunicable diseases, the authors note that policy adoption and implementation remain insufficient, which calls for a critical revision of the governmental role.

Along these lines, Yang et al. (2020) conduct a critical discourse analysis of governance in global NCD policy. They show that the reasoning employed is grounded in risk governmentalities and that the promotion of physical activity is strongly linked to disciplinary forms of governmentality.

In a different context, Mabry et al. (2020) report that, in Oman, urban planners stress the need to strengthen governance through policies and intersectoral collaboration, improve community design and park accessibility, and address population diversity in order to foster positive attitudes towards physical activity. Policymakers emphasize the urgency of political commitment and capacitybuilding on how the built environment can promote physical activity, through safe infrastructure for active transport and greater access to sports and recreation.

Moreover, Hone et al. (2018) point out that one recurring criticism of governance processes for physical activity is the lack of support from primary health care. They argue that global health and development agendas, guided by the Sustainable Development Goals, have excluded primary care, resulting in limited implementation of the AlmaAta Declaration in promoting healthy lifestyles.

Complementing this, MartínezHerrera et al. (2019) conduct a bibliometric analysis of trends in urban health and highlight the need to frame health promotion, urban resilience and the built environment within clear work pathways for establishing state policies that foster sustainable development practices.

Similarly, Gupta et al. (2021) analyse the work of the National NCDI Poverty Commission and find positive results in understanding NCDs based on national planning needs, implementing health sector interventions and improving governance and coordination for addressing these conditions.

In school and community settings, González et al. (2021) describe participation and empowerment strategies that seek to promote health in school environments, actively involving students, teachers and families in building more active settings. In addition, Vidarte Claros et al. (2020) examine the relationship between bone mineral density, sociodemographic and anthropometric variables, and physical activity practice in Colombian schoolchildren, showing positive effects of physical activity on bone health indicators.

Finally, Bolívar et al. (2020) present a review of 45 articles published between 2013 and 2018 in different databases. Their results describe the benefits and risks associated with insufficient levels of physical activity and report significant improvements in disease reduction, performance in daily activities and muscle strengthening through activities such as walking, which is identified as a key strategy for maintaining or improving functional capacity and quality of life.

Taken together, these studies underscore the direct relationship between physical activity and health benefits, highlighting that it should be a daily and accessible practice for all people. At the same time, they show that health promotion and physical activity strategies require expert knowledge in physical education, physical activity and sport, as well as governance frameworks capable of guiding public management and coordinating actions among different sectors.

The studies reviewed in Springer, PubMed and Redalyc offer a broad view of the relationship between health systems, promotion of active lifestyles and community participation. From systemic approaches to analyses of national policies and local experiences, these works indicate that governance for physical activity must articulate local and national levels, integrate primary health care and take territorial inequalities into account. These elements are incorporated into the integral multisectoral management model discussed in this article, reinforcing the idea that physical activity is the outcome of governance decisions that cut across health systems, urban policies, technological regulation and community participation.

Given the reflective nature of the article, the results section fulfils a dual function: on the one hand, it presents in an orderly manner the corpus of studies identified in the different databases; on the other hand, it constructs the theoretical–analytical reference framework on governance for physical activity based on the findings of these investigations. This articulation between literature review and conceptual elaboration provides the foundation for the discussion, in which the main contributions are synthesized and international evidence is integrated with the Colombian reality.

Discussion

This study provides a broad overview of governance related to the promotion of physical activity, integrating findings from Scopus, ScienceDirect, Springer, PubMed and Redalyc. Taken together, the reviewed studies show that physical inactivity and noncommunicable diseases must be addressed through integral, collaborative and systemsbased approaches, in which physical activity is conceived as the outcome of public policy decisions, institutional arrangements and community dynamics. These findings support the proposal of an integral multisectoral management model for physical activity, consistent with the objective of identifying approaches, strategies and results that connect public health and governance.

Among the studies analysed in ScienceDirect, one salient aspect is the role of sustainable urban transport policies and active mobility in creating environments conducive to everyday movement. Lozzi and Monachino (2021) show that such policies simultaneously affect physical activity, air quality, noise and road safety, with direct effects on life expectancy, mortality and morbidity due to chronic diseases. However, they identify gaps in the evaluation of health benefits, which highlights

the need for governance systems that incorporate rigorous mechanisms for assessing health and environmental impacts. In addition, Jiang et al. (2024) emphasize the relevance of atmospheric governance and airquality standards by demonstrating that exposure to NO_2 and PM2.5, together with physical inactivity, is associated with the risk of firstever stroke. These studies confirm that environmental and mobility policies are structural components of the governance model for physical activity, especially in urban contexts.

Findings derived from systemicapproach studies, mainly in Springer and PubMed, reinforce the need for a holistic view of governance. Riley et al. (2021) and Morgan et al. (2023) show that thinking about NCD prevention and the promotion of active lifestyles through systems frameworks makes it possible to identify interrelationships among actors, levels of government and territorial conditions, as well as to design more adaptable and collaborative interventions. In particular, Morgan et al. (2023) underline that the feasibility of these approaches in local governance depends on robust political support at the macro level, an indispensable condition for governance models for physical activity to move beyond isolated experiences and become sustainable policies.

Another key contribution of these sets of results is the emphasis on multiactor participation and intersectorality. DalySmith et al. (2020) illustrate how physically active learning in school contexts requires the articulation of teachers, school leaders, families and education authorities, combining classroom, school and policy decisions. Pagani and Panarello (2022), Mabry et al. (2020) and Gupta et al. (2021) show that creating walkable environments, accessible parks and routes for active transport demands coordination among health, urban planning, transport and social sectors, alongside sustained political commitment. These findings support the idea that the integral multisectoral management model for physical activity must connect health systems, urban policies, education, sport and community, rather than relying on isolated sectoral interventions.

The reviewed studies also reveal significant challenges in current governance for physical activity. Hone et al. (2018) draw attention to the limited incorporation of primary health care in global health and development agendas, guided by the Sustainable Development Goals, which weakens the capacity of health systems to promote active lifestyles on a sustained basis. MartínezHerrera et al. (2019) highlight the need for clear work pathways that integrate urban health, resilience and the built environment into state policies, and Alt et al. (2021) warn about the risks of uncritical use of digital technologies in physical activity and health, proposing ethical frameworks and “life engineering” to align technological solutions with human values. In the proposed governance model, these challenges translate into the need to strengthen primary care, ensure coherence between development agendas and the promotion of physical activity, and regulate the role of technology in the provision of services and programmes.

In the Colombian context, the review findings resonate with governance processes that have been developed in different settings, such as programmes of the Bogotá District Institute for Recreation and Sport (IDRD), initiatives of the Colombian Association of Faculties of Sport and Physical Education (ARCOFADER), actions of the Colombian Physical Activity Network (REDCOLAF) and guidelines of the Ministry of Sport (IDRD, 2019; ARCOFADER, 2020; REDCOLAF, 2021; Ministerio del Deporte, 2020). These experiences demonstrate efforts to articulate public, academic and community actors in promoting physical activity through local plans, school and community programmes, national campaigns and training strategies, although coordination, evaluation and sustainability challenges persist.

Within this framework, the most relevant findings of the review justify the study's conclusions in relation to its central objective: showing that governance for physical activity requires at least three complementary pillars. First, an information and monitoring pillar, derived from databases such as Scopus, which makes it possible to identify thematic fields, actors and geographies where physical activity is linked to decisions on policy, management and governance. Second, a pillar of intersectoral and environmental policies, evidenced in ScienceDirect, where mobility, air quality and educational programmes are recognized as key components of public health and physical activity. Third, a pillar of systemic approaches, urban health and community participation, consolidated in the studies from Springer, PubMed and Redalyc, which shows the need to articulate levels of government, primary care, the built environment and community.

Drawing on these pillars, the integral multisectoral management model for physical activity proposed in this article conceives governance as a web of decisions, institutional arrangements and participation processes that connect health policies, urban planning, education, sport and technology, both globally and in specific contexts such as Colombia. This model proposes that physical activity be explicitly integrated into public management agendas, with evaluation mechanisms, interinstitutional coordination and ethical regulation that promote equal opportunities to move and live actively.

This model is linked to previous developments on governance of physical activity in the Special District of Santiago de Cali, where an applied management model has been proposed for the local context (GarcíaBuitrago & TabarquinoMuñoz, 2024b).

In sum, the discussion shows that advancing towards effective governance of physical activity entails overcoming fragmented approaches and embracing integral, collaborative and systemsbased frameworks. It requires transport and environmental policies aligned with public health, strengthening of primary care, integration of physical activity into education, responsible regulation of digital technologies and articulation of national experiences such as those developed by IDRD, ARCOFADER, REDCOLAF and the Ministry of Sport. These orientations open future lines of research on impact evaluation, models of collaboration among actors and

concrete ways of implementing the multisectoral management model in specific cities and territories.

Conclusions

The review shows that governance for the promotion of physical activity must be grounded in an integral, collaborative and systemsbased approach, in which physical activity is understood as the result of public policy decisions, institutional arrangements and community dynamics rather than as an exclusively individual responsibility. Drawing on the analysis of literature in Scopus, ScienceDirect, Springer, PubMed and Redalyc, three complementary governance pillars are identified that support the integral multisectoral management model proposed in this article.

The first pillar concerns information and monitoring of scientific production on governance and physical activity. Patterns observed in Scopus—in terms of subject areas, countries and actors—indicate that physical activity is increasingly discussed in health, social sciences and management fields, but with a strong concentration in highincome countries and relatively few contributions from Latin America. This distribution reveals asymmetries in knowledge production and reinforces the need to develop governance models adapted to realities such as that of Colombia, where physical inactivity coexists with territorial inequalities and heterogeneous institutional capacities.

The second pillar focuses on intersectoral and environmental policies that condition the possibility of moving in everyday life. The studies reviewed in ScienceDirect show that decisions on urban mobility, active transport, air quality and the design of educational programmes have direct effects on physical activity and on the burden of noncommunicable diseases, by modifying road safety, exposure to pollutants and opportunities for physically active learning. However, the review identifies gaps in the evaluation of health and environmental impacts, which poses the challenge of incorporating systematic evaluation and accountability mechanisms into policies that affect physical activity.

The third pillar relates to systemic approaches, urban health and community participation, which are predominantly present in the studies analysed in Springer, PubMed and Redalyc. Thinking about physical activity from systems frameworks makes it possible to recognize interrelationships among levels of government, health services, the built environment and community, as well as to design more adaptable and collaborative interventions. Research on governance of NCDs, primary care, urban health and poverty shows that promoting active lifestyles requires articulating national and local policies, strengthening primary care, integrating physical activity into sustainable development agendas and taking territorial inequalities into account.

In the Colombian context, these pillars resonate with governance processes that have been developed in various settings, such as policies and programmes of the Bogotá District Institute for Recreation and Sport (IDRD), initiatives of the Colombian Association of Faculties of Sport and Physical Education (ARCOFADER), actions of the Colombian Physical Activity Network (REDCOLAF) and guidelines of the Ministry of Sport. These experiences demonstrate efforts to articulate public, academic and community actors in promoting physical activity through local plans, school and community programmes, national campaigns and training strategies. Nevertheless, the reviewed evidence suggests that challenges remain in the effective integration of these policies with primary health care, in reducing territorial gaps and in consolidating multisectoral evaluation and coordination mechanisms.

On the basis of these findings, governance for physical activity can be conceptualized as a web of decisions and institutional arrangements that connects health systems, urban policies, education, sport and the use of digital technologies. An integral multisectoral management model should therefore include: the generation and strategic use of information; explicit incorporation of physical activity into transport, environmental and education policies; strengthening of primary care and urban health; ethical regulation of the role of technology; and active participation of communities, social organizations and the private sector in programme design and implementation.

From this framework, several orientations emerge for action and research. In terms of public management, it is necessary to advance towards governance arrangements that integrate physical activity into health, urban planning and education agendas, with clear coordination mechanisms among ministries, territorial entities and communitybased organizations. In the sphere of evaluation, further studies are needed to measure the impact of policies on active mobility, air quality, active school environments and technologies applied to physical activity promotion. In the research domain, there is scope for developing and testing governance models adapted to specific cities and territories, articulating international evidence with the institutional and social particularities of the country.

In summary, the review allows us to conclude that governance for physical activity, conceived from an integral and multisectoral perspective, constitutes an indispensable component of policies for the prevention of noncommunicable diseases and the promotion of public health. Consolidating governance models in this field requires combining robust information, intersectoral policies, systemsbased approaches and community participation, as well as recognizing and leveraging existing national experiences to move towards environments where being physically active is a daily and equitable possibility for all people.

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Ethical Considerations
The study is based on a bibliographic analysis of published scientific literature and policy documents and does not involve human subjects, experiments or the collection of primary data. Therefore, formal approval by a research ethics committee was not required.

Conflict of Interest Statement
The authors declare that they have no conflicts of interest, whether ethical or related to intellectual property.

Author Contributions
Jefferson García Buitrago led the conception of the study, the literature search and analysis, and the drafting of the manuscript. Raúl A. Tabarquino Muñoz contributed to the refinement of the conceptual framework, the interpretation of results and the critical revision of the manuscript for intellectual content. Both authors approved the final version and agree to be accountable for all aspects of the work.

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