

Physical activity, active play, and sports: A pathway to peace in Colombia

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Introduction

Physical activity (PA) practice since early ages is associated with with substantial benefits for health, ¹ cognitive function,² and social inclusion.³ In addition, PA, sports, and recreation have been recognized as catalysts for social development of nations and peace building.⁴

In this context, the Epidemiology Group at Universidad de los Andes (EpiAndes), with the guidance of the Active Healthy Kids Global Alliance, developed the Second Report Card on Physical Activity for Children and Youth, as a communication and advocacy tool for policymakers, researchers and the general community.

This report summarizes the available evidence on child and youth PA at the national level, and with the guidance of a national group of experts on PA, assesses how the nation is performing on 14 indicators related to PA in children and youth. The indicators were grouped into 3 categories:

Behaviours and conditions that contribute to PA levels, factors associated with elevated cardiometabolic risk and levels of influence.

The main sources of data for this report were the National Nutrition Survey (Encuesta Nacional de la Situación Nutricional en Colombia [ENSIN]), local studies, policy documents and programs' annual reports.



Physical activity guidelines



Overall physical activity

- ★ According to ENSIN 2005, 24,4% of adolescents from urban areas meet PA guidelines, compared to 29,6% of their counterparts from rural areas.⁷
- According to objective measures with accelerometrγ from the FRUPECOL studγ in Bogotá, 36,9% of children meet PA guidelines during the week. Stratifγing bγ sex, 42% of boγs meet PA guidelines, in contrast with their female counterparts with 31%.⁸
- ★ According to the ISCOLE study, the daily mean of moderate to vigorous PA minutes was 68 minutes and the mean of vigorous PA was 18 minutes. The mean of MVPA for boys was 76 minutes and for girls was 60 minutes a day. 9-10
- ★ A study conducted in Montería, with children between 11 to 18 years of age, 24,7% reported to be active (at least 60 daily min of MVPA, at least 5 days per week). Boys had significantly higher prevalences compared to girls (30.2% vs 19% p<0.005).¹¹

prevalence Adolescents between 13 to 17 γears of age that meet PA guidelines, according

to ENSIN 20057

National

Regional prevalences



28%

Active transportation

According to the National Nutrition Survey (ENSIN)

3.3% of adolescents aged 13 to 17 years report cycling for transportation.

of adolescents aged 13 to 17 years report walking for transportation.⁷

- ★ According to a study from Bucaramanga, 51,7% of pre-school children walk to their schools, and spend, on average, 10 minutes daily, per journey.¹²
- ★ According to the ISCOLE study, 73,3% of school-aged children from Bogota use some mode of active transport to go to school, and 71,3 % of these children spend less than 15 minutes per journey.¹³
- According to a study from Montería, 66,3% of children aged 11 to 18 γears reported walking or cycling to school during the last week, with a higher prevalence among children from rural schools (60.6% vs. 79.4% p<0.005).
- ★ According to the Global School-based Health Survey, 49,7% of adolescents aged 13 to 15 years, from 5 cities, reported walking or cycling to school in the last week. The prevalences of active transportation per city were 50.6% in Bogota, 47.5% in Bucaramanga, 47.7% in Cali, 49.5% in Manizales and 56.2% in Valledupar..¹⁴

Organized sport participation

The national progam "Supérate con el Deporte", increased its coverage from 1'800,000 children aged 12 to 16 years of age in 2013, to 2'286.033 children aged 7 to 17 years of age in 2015, reaching all the geographic departments in Colombia.¹⁵





Supérate con el Deporte has positioned itself as a leader program in social inclusion, creating opportunities and access to sport, recreation and physical activity.¹⁵ In Bucaramanga, 32.2%
of pre-school children are enrolled in sports (the most frequent were soccer, swimming, roller skating and basketball), spending an average of 2 hours/ day.¹²

C

 In a study of school-aged children from Bogotá, 42% of students reported participating in their schools' sports teams and 33% reported participating in teams outside school.¹⁶

PHYSICAL ACTIVITY AND INVOLVEMENT IN SPORTS FROM AN EARLY AGE MAY CONTRIBUTE TO PREVENT DRUG CONSUMPTION AND DELINQUENCY, STRENGTHENING CIVIC ENGAGEMENT, PROMOTING YOUTH EMPOWERMENT AND SOCIAL COHESION, DEVELOPING SKILLS SUCH AS DISCIPLINE AND LEADERSHIP.¹⁷







THERE IS INSUFFICIENT DATA TO UNDERSTAND THE CURRENT SITUATION OF ACTIVE PLAY AT THE NATIONAL LEVEL.

In Bucaramanga, 58.8% of children aged 3 to 12 years of age reported playing indoors and 78.6% of children in this age range reported playing outdoors.¹²

Sedentary behaviours



- According to the National Nutrition Survey, children aged 5 to 12 γears of age in Colombia spend an average of 2.4 hours per day watching television or plaγing video games. Adolescents between 13-17 γears of age spend an average of 2.8 hours a day in front of a screen.¹⁸
- According to a study conducted in Bucaramanga, Girón and Piedecuesta, 38.7% of pre-school and school-aged children spend 2 hours or more watching TV on weekdaγs and 58.8% on weekends.¹⁹
- In a studγ conducted in Medellin, high levels of HRQoL (health related qualitγ of life) in the school environment were associated to less screen time (-0.11 p = 0.004).²⁰
- In a study of cardiovascular risk factors among school children in Cartagena, 51.4% of children mentioned that their favorite activities for leisure time corresponded to sedentary behaviors such as playing on a computer, watching TV or reading. Stratifying by sex, 65.5% of girls reported a preference for sedentary behaviors compared to 37.2% of boys (p = 0.0001).²¹



Highest prevalences of excessive time in sedentary behaviors in children and adolescents from Colombia by region

Low physical titness

57.9% of CHILDREN and

67% of ADOLESCENTS spend 2 hours or more hours watching TV or playing video games¹⁸

INC

- According to the FUPRECOL study, 55% of children from Bogotá were under the healthγ fitness zone, with higher proportions of girls compared to boγs (70% vs. 40%, p <0.001).²²
- In Cali, 60% of girls and 52% of boys aged 10 to 15 years of age, did not reach the maximum oxygen consumption to reach the threshold of aerobic health.²³
- In Bucaramanga, 72.8% of girls and 72% of boγs (8-14 γears) did not achieve the number of 20 meters shuttles in PACER test, required to meet standards for health fitness zone.²⁴
- According to the SER test in Bogotá, 55% of boγs and 49% of girls showed a healthγ aerobic condition measured bγ VO2max. For muscular strength, 55% of boγs and 47% of girls had a healthγ muscular condition.²⁵

THERE IS INSUFFICIENT DATA TO UNDERSTAND THE CURRENT SITUATION OF FITNESS AT NATIONAL LEVEL.

Overweight

- According to the National Nutrition Survey, 13,7% of children between 5 and 9 years of age, and 13,2% of adolescents aged 10 to 17 years are overweight.¹⁸
- In a study conducted in Medellín with children between 10 and 14 years of age. a prevalence of 19% of overweight was observed. Overweight children reported being active fewer days than children who were not overweight (2.8 vs. 3.3 p<0.05). At the same time, overweight and obese children had lower scores for intrinsic motivation for PA, compared to normal weight children.20



Obesity



A study conducted in Medellín reported an obesity prevalence of 4% in children aged 10 to 14 years old. Regarding quality of life scores, a significant difference on the physical well-being score was observed, in which obese children had the lowest scores (40.6 vs. 50.3 p<0.001).²⁰

National

2010.18

According to the ISCOLE study, 7,7% of the boys and 3.6% of the girls from Bogota are obese. In this study, obesity was negatively associated to sleep duration and MVPA minutes. A positive association with scr<u>een time was also observed.¹⁰</u>







Family and peers influence

In a qualitative studγ about the sociocultural characteristics of PA in Bogotá, Antioquia and Quindío participants highlighted the importance of familγ involvement in PA practice, and among their perceptions theγ reported that PA is encouraged when one of the parents is an athlete.²⁶

 According to the ISCOLE studγ, in Bogota, 50% of parents reported never practicing PA or anγ sport with their children.



34.6% of adults aged 18 to 64 γears old are overweight, and 16.5% are obese.¹⁸

ACCORDING TO THE ENSIN 2010

INC

53.5% of Colombian adults aged 18 to 64 γears old meet PA guidelines in leisure time or transportation.¹⁸

School

- The Colombian Ministry of Education launched a full-time policy, which seeks to increase the time spent at school, increasing educational gain. Nevertheless, this strategy has focused mainly on strengthening areas such as mathematics, language, natural sciences and English. It has not included PA or sports.²⁷
- Bogotá has been a model for PA promotion at the school level with strategies like the "Curriculum for academic Excellence and comprehensive education 40x40", the school active transportation program "Al colegio en Bici", and "Muevete escolar" a district program that seeks to focus attention around knowledge and practice of PA and healthy nutrition in the school environment.

6.1%

667

of pre-school and school aged children received physical education classes from a professional.²⁸

schools from all the departments in the countrγ were involved in the program "Súperarte intercolegiado" in 2015, representing an increase of 30% of schools involved compared to 2013.⁵

Community and built environment

Colombia has 143 "Ciclovias Recreativas" programs, which promote PA, recreation and the healthy use of leisure time in public space.



During 2015, the National Program of Healthy Habits and Lifestyle was implemented in 23 of the 32 departments of Colombia (72%), offering regular physical activity sessions in public spaces, for all age groups.³⁶

According to the ISCOLE study:

 44.9% of parents from Bogota reported that their children participate in the Ciclovía at least once a γear.

- 94.3% of parents from Bogota perceive that their neighbordhood is not safe for their children..
- 86.5% of parents from Bogota report that their children use public facilities to engage in PA at least once a week.
- ★ The "Ciclovias Recreativas" create opportunities for people from all ages and socioeconomic status to get involved in PA. According to studies from Bogota's "Ciclovia", Ciclovía users have higher prevalences of meeting physical activity guidelines, better perceptions of safety, and higher health related quality of life scores.²⁹⁻³²

Government and non-government strategies

National policies



- Phγsical activity, sports and recreation are recognized as rights in the National Constitution of Colombia.³³
- The National Development Plan 2014-2018 has several policγ lines that include strategies to promote physical activitγ in the countrγ.³⁴
- Within the field of creating integral citizens for peaceful coexistence, the national government is committed to providing the widest access to phγsical activity programs, that contribute to the construction of social cohesion in the post-conflict era.³⁴
- ★ The programs with national coverage that benefit children and adolescents are:
 - 🛊 National Program of Healthγ Habits and Lifestγle
 - ✤ Ciclovías or Open Streets
 - 👷 Supérate con el Deporte
- Despite the position gained on the public agenda, the national budget for PA and sports was reduced by 50% from 2014 to 2016.³⁵

Departmental and local policies

 31 departments have launched their regional development
Plan 2016-2019, and 30 of these include strategies and specific targets for fostering phγsical activitγ in leisure time and commuting.

Non-government initiatives and strategies

 Social programs use PA as a strategy to prevent risk behaviors: Programa Golombiao, El Juego de la Paz; Fútbol con corazón; Red fútbol y paz; Fifa 11 para la salud; Goles para una vida mejor; Tiempo de Juego PREVALENCE OF EXCESSIVE SCREEN TIME (>=2 HOURS), IN CHILDREN BETWEEN 5 AND 12 YEARS OLD.¹⁸

> 30.30 - 37.60 37.61 - 50.60 50.61 - 59.60 59.61 - 66.70 66.71 - 76.90



Regional data



Report Card 2016

INDICATOR		GRADE	RECOMMENDATIONS AND COMMENTARIES
Overall physical activity		D	Updated national evidence on children and adolescents PA levels is required.
Active transportation		D	Despite low prevalences of active transportation, multisectorial strategies that encourage active transport have increased.
Organized sport participation		с	Impact evaluation of current programs should be conducted.
Active play		INC	National data is required to assess active play status in the country.
Sedentary behaviours		D	Nationwide strategies are required to reduce screen time among children and adolescents.
Low physical fitness		INC	National data is required to assess physical condition of children and adolescents.
Overweight		с	Strategies implemented specifically to prevent overweight among children are limited.
Obesity		с	Timely interventions are required to prevent an increase of childhood obesity in Colombia.
Family and peers influence		INC	Data on PA parenting practices is desirable to inform this indicator.
school influence		D	Physical activity is a vital component for the holistic development of children and must be promoted in the school environment.
Community and built environment		с	Colombia has environments and programs that promote PA, nevertheless this initiatives require more evaluation to better understand their impact on PA among children.
Government and non- government strategies	National policies	В	Colombia has a broad policy framework supporting PA from multiple government sectors with public health and social cohesion focuses. Nevertheless, it is necessary to translate the new policies proposed into concrete actions
	Departmental and local policies	В	
	Non-government strategies	c	Colombia holds several initiatives that use sport as a vehicle for preventing risky behaviours. It is important to document the impact of these strategies on the different outcomes that these are intended to improve.

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