

From Diagnosis to action

Logic model of the Recreovía: a community program to promote physical activity in Bogota

Modelo lógico da Recreovia: um programa para a promoção da atividade física em Bogotá

Ana P. Rios¹, Diana C. Paez¹, Edwin A. Pinzón², Rogério C. Fermino^{3,4}, Olga L. Sarmiento¹

Abstract

This study aimed to develop the logic model of the Recreovia program in Bogota, Colombia. The logic model was developed based on the manual of the Center of Disease Control and Prevention (CDC), with indicators of resources, activities and short- and long-term results. Mixed methods were used for data collection and analysis. Human, physical and financial resources, as well as collaborators of the program, were identified, besides the activities defined according to the program aims. In conclusion, the program emphasizes the processes and actors for their operation and maintenance, and recognizes future challenges for physical activity promotion in Bogota.

Keywords

Motor activity; Physical fitness; Recreation; Green areas; Parks; Community Development.

Resumo

Este estudo objetivou desenvolver o modelo lógico do programa Recreovia de Bogotá, Colômbia. O modelo lógico foi desenvolvido com base no manual do Centro de Controle e Prevenção de Doença (CDC), com indicadores de recursos, atividades e resultados a curto, médio e longo prazo. Foram utilizados métodos mistos convergentes para a coleta e análise dos dados. Foram identificados os recursos humanos, físicos, financeiros e colaboradores do programa, além das atividades realizadas e resultados definidos de acordo com os objetivos do programa. Em conclusão, o programa ressalta os processos e atores para o seu funcionamento e manutenção, assim como identifica os desafios futuros para a promoção da atividade física em Bogotá.

Palavras-chave

Atividade motora; Aptidão física; Recreação; Áreas verdes; Parques recreativos; Desenvolvimento da comunidade.

Introduction

Physical activity programs in public open spaces have been described as promising interventions^{1,2}. At the global level, programs in Australia, Canada, United States, India, New Zealand and South African have been described³. Community programs in public open spaces, such as parks and plazas, are a reality in Latin American countries for over 20 years, implemented in Argentina, Brazil, Chile, Colombia, Ecuador, Guatemala and Mexico^{3,4}.

The Recreovia Program, created in Bogota (Colombia) in 1995, consists in sessions of physical activity, coordinated and musicalized, in plazas, parks,

commercial centers and jails^{2,5}. This program promotes activities for the community^{3,6} and participation has been associated with higher physical activity levels, especially in women⁵.

The aim of this study was to develop a logic model of the Recreovia Program in Bogota, Colombia.

Construction of the Logic Model

The logic model was constructed based on the manual of the Center for Disease Control and Prevention of the United States⁷ during the months of July 2013 and December 2015. Three steps were taken: 1) identification of the needs or problems of the program; 2) identification of the actors in the program (beneficiaries, allies, counterparts); and 3) identification and analysis of the factors and indicators of the program. The key indicators were resources, activities and short- and long-term results⁷.

Mixed methods were used (qualitative and quan-

1 University of Los Andes. School of Medicine. Group of Epidemiology of the University of Los Andes (EpiAndes). Bogota D. C., Colombia.

2 District Institute for Recreation and Sport (IDRD). Bogota D. C., Colombia.

3 Federal University of Technology - Parana. Post-graduate Program in Physical Education. Research Group on Environment, Physical Activity and Health (GPAAFS). Curitiba-PR, Brazil.

4 Pontifical Catholic University of Parana. Research Group on Physical Activity and Quality of Life (GPAQ). Curitiba-PR, Brazil.

titative)⁸. The qualitative component included semi-structured surveys, conducted with participants experienced in the coordination of the program and documental revision. The participants included a current coordinator (2011-2016) and coordinators from three previous terms (1999-2004, 2005-2006, 2007-2010). The survey included questions on the structure of the program, users, instructors, physical activity sessions and budget and responses were recorded and transcribed⁶. Subsequently, five categories were created for coding: 1) resources, 2) activities, 3) outcomes, 4) short-term results and 5) long-term results⁷. Additionally, historical documents, official reports from governmental agencies and press releases were consulted.

The quantitative component included the construction of a database with historic number of users and instructors, budget and physical activity points in the Recreovia defined as spaces where the activities in the program were performed. The analysis was conducted with statistical software STATA 14.1.

The Project was approved by the ethics committee of the University of Los Andes (acta 161/2012). Verbal or written consent were given by participants.

Logic Model of the Recreovia Program

The Recreovia Program is coordinated by the technical sub management of recreation and sports of the Instituto Distrital de Recreación y Deporte (in English, District Institute for Recreation and Sport) (figure 1). The initial purpose was to complement the Ciclovía Recreativa Program, in which the streets are closed for automotive vehicles and open for recreational activities for the community. Currently, there are 41 points of the program (figure 2).

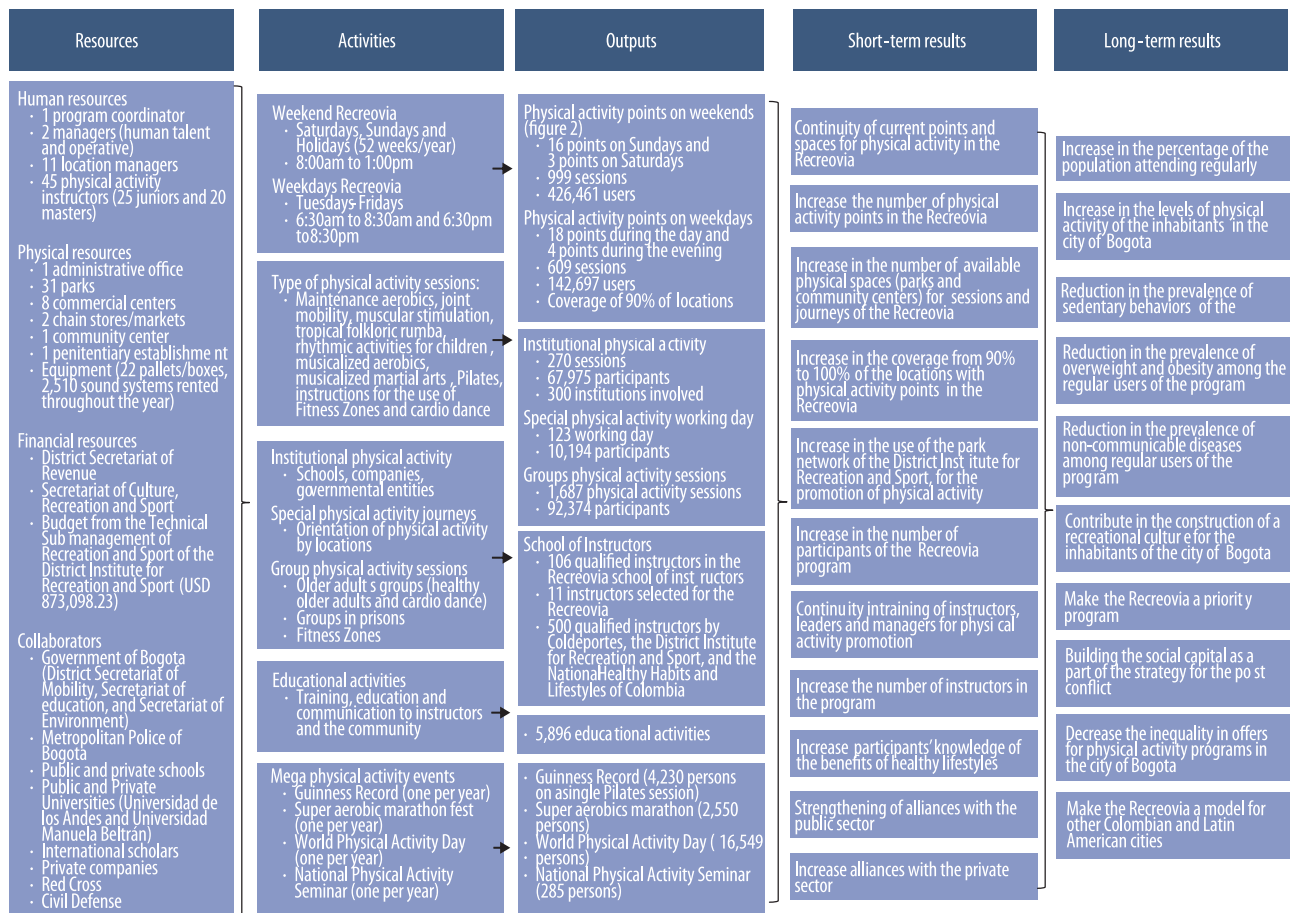


FIGURE 1 – Logic model of the Recreovia Program (initial purpose of the program: to complement the Ciclovía Recreativa program).

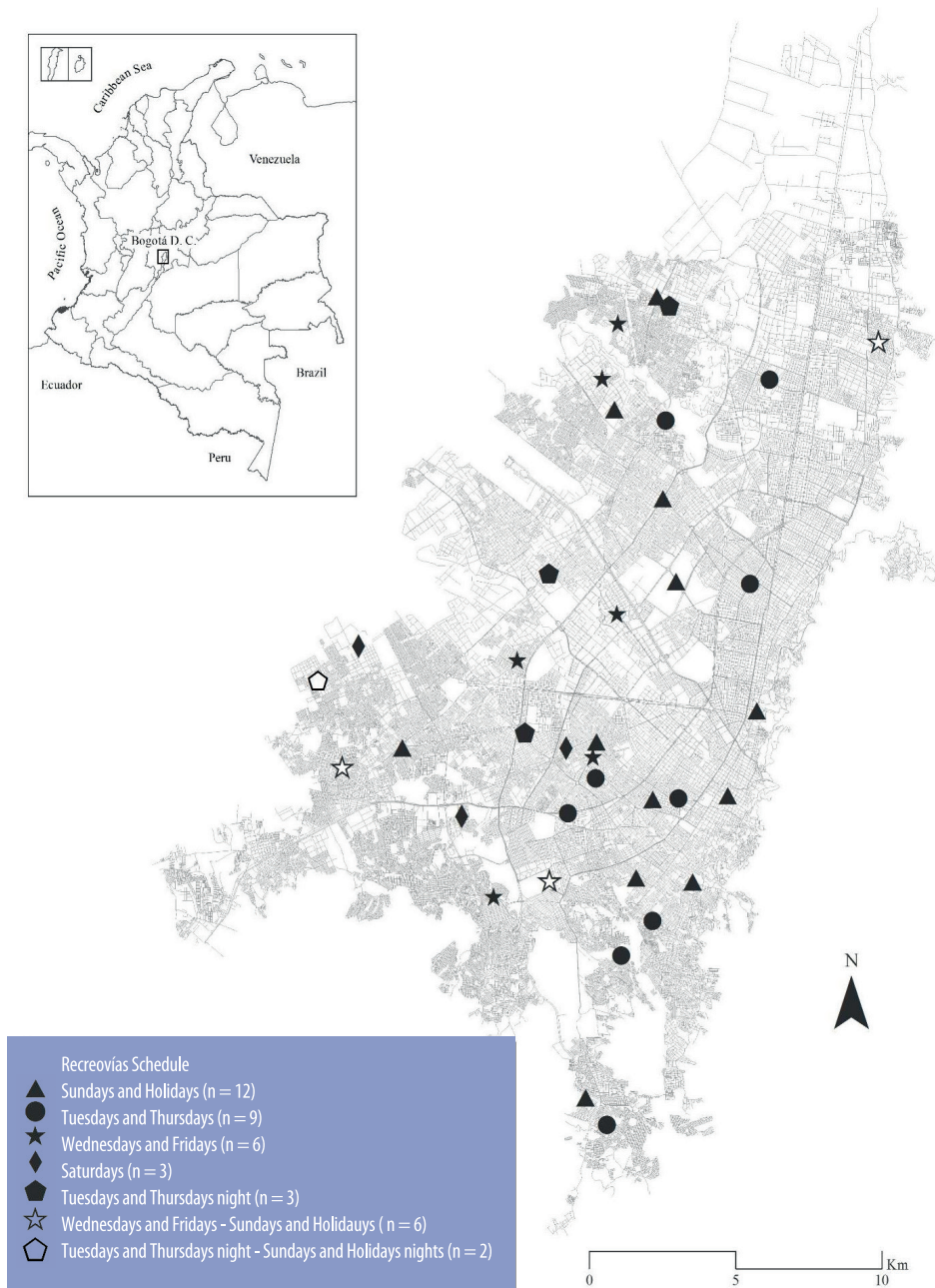


FIGURE 2 – Map of Bogotá with points of the Recreovía Program (n=41).

Resources

Human resources include 59 people (figure 1). The coordinator manages the program, resources and responds to the different needs of the community. The human talent manager is responsible for managers and instructors, furthermore verifying the fulfillment of contract obligations of the physical activity points and managers. The technical operational manager organizes physical resources, service programming and technical support to the physical activity points. Instructors are selected through the Annual School of Physical Activity Instructors.

Physical resources include physical space with offices, places where activities of the Recreovía and the team are conducted. The spaces for physical activity sessions include a park network, commercial centers, chain stores/markets, community centers and a penitentiary building. The equipment for development of the

sessions includes pallets/boxes (owned by the Institute of Recreation and Sport) and a sound system (rented by the hour to each of the events). In community centers, sound systems belong to the community.

Financial resources are provided by the District Secretariat of Revenue, which assigns resources to the Secretariat of Culture, Recreation and Sport, responsible for assigning it to the Technical Sub management of Recreation and Sports of the Institute of Recreation and Sport. The budget is used to account for administrative costs, hire personnel, rent equipment and purchase uniforms and materials. The amount funded by the district varies according to the period of government. In 2015, the total budget was USD 873,098.23.

Collaborators in the program belong to multiple sectors, public and private, in the city of Bogota. These entities include the Alcaldía Mayor of Bogota, District Secretariats, Metropolitan Police, schools, universities, private companies, Red Cross and Civil Defense. Local, national and international alliances have strengthened in the past years. These alliances strengthen the work networks, diffusion of program benefits and continuous capacitation.

Activities

The activities in the Recreovia are offered throughout the week, including Sundays and Holidays. On weekends, 19 physical activity points are available. On Saturdays, sessions are offered in three points from 8:00am to 10:00am. On Sundays, 16 points from 8:00am to 1:00pm (pilot test points from 9:00am to 12:00pm). During weekdays (day and night), there are 22 points where sessions are offered Tuesday through Friday. In the morning, sessions are present in 18 points (6:30am to 8:30am) and in the evening, four points (6:30pm to 8:30pm).

The types of activities include mainly sessions of maintenance aerobics, strength stimulation, joint mobility, rhythmic activities for boys and girls, tropical folkloric rumba, musical aerobics, musical martial arts and Pilates. Besides regular sessions, the Recreovia develops massive annual events by geographic locations. Special events mark the Summer Festival, World Physical Activity Day, Guinness Record and Aerobics Marathon. Also, special events, public or private, and special working day as a response to the community's wish. In parks where Fitness Zones (outdoor gyms) are available, instructors help users with correct use of equipment and complement the activity with an organized physical activity session. Additional groups sessions are offered, to increase opportunities of physical activity for vulnerable groups such as older adults and those inside a prison. During group sessions, the community also receives orientation on the importance of physical activity and healthy habits and lifestyles are stimulated through capacitation, education and communication strategies.

Outcomes

In 2015, there were a total of 1,879 working day of physical activity and participation of 641,956 users. On weekends, 999 sessions were offered, with the participation of 426,461 users. On weekdays, a total of 609 sessions with 142,697 users were observed. Two massive events were conducted.

During the year of 2015, 106 instructors were trained in the School of Physical Activity Instructors and 11 were selected to work in the program. Additionally, along with the National Healthy Habits and Lifestyles Program, led by the Administrative Department of Sport, Recreation, Physical Activity and Leisure (COLDEPORTES), training was offered for over 500 instructors in Colombia.

Short-term results

The short-term aims for the *Recreovía* Program are: at first, to increase the use of the park network, number of hired instructors, number of participants in the program to increase the knowledge of the benefits of healthy lifestyles in participants, as well as the points and physical spaces for physical activity to reach 100% of locations. Secondly, to continue with current points and spaces where activities are offered and training of instructors, leaders and managers for the promotion of physical activity. Finally, the strengthen alliances with the public and private sectors.

Long-term results

In the long-term, aims of the *Recreovía* are: first, to increase the percentage of the population regularly attending the program and increase levels of physical activity of the inhabitants of Bogota. Secondly, to decrease the prevalence of sedentary behavior, overweight/obesity and chronic disease among regular users, and the inequality in the offer of physical activity programs. Finally, to position the *Recreovía* as a priority program in the Government for the construction of social capital as part of the strategies as a model for other cities.

Final considerations

The logic model of the *Recreovía* highlights the processes and actors of the multiple sectors for its functioning and maintenance, focused on specific aims. The main goal of the program is to maximize social benefits in the community, reduce social inequality in health and access to programs, and improve the quality of life through the promotion of physical activity.

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Authors' contributions

Each author contributed individually and significantly to the development of this manuscript. A. P. Rios was responsible for the initial concept of the study, data collection, literature review, writing and revision of the manuscript in all its stages. D. C. Paez took part in data collection and initial writing of the manuscript. E. A. Pinzón participated in the creation and critical review of the logic model. R. C. Fermino participated in the initial concept of the study, literature review, writing and review of the manuscript in all its stages. O. L. Sarmiento was responsible for the concept of the project and participated in the writing and critical review of the manuscript in all its stages. All authors approved the final version of the manuscript.

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Corresponding Author

Ana Paola Ríos
a-rios@uniandes.edu.co

University of Los Andes. Faculty of
Medicine. Group of Epidemiology
EpiAndes.
Calle: Carrera 1 N° 18A- 12 - Bogotá,
D.C., Colombia | Postal code: 111711
Telephone: (57-1) 3 39 49 49 ext 3785

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