

Building Community Capacity in Leadership for Primary Health Care in Colombia

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ABSTRACT

Primary health care looks beyond clinical services to health promotion and primary prevention at the population level. In 2011, Colombia adopted a normative approach to primary health care, to advance efforts to set health priorities and transcend a curative, hospital-based system. An intervention was carried out in eight communities in Bogotá and Cundinamarca, Colombia to build community capacity to influence health. Activities included training community leaders to design and implement health improvement initiatives aimed at the most important health problems identified by their organizations. Twenty-eight leaders completed the training. They designed and implemented eight health improvement plans to address the most important health problems in their respective communities: protecting public spaces for children's physical activities, improving family practices in child nutrition, organizing a health insurance beneficiaries' health promotion network, organizing a

service delivery network for homeless persons, connecting people with cognitive disabilities to treatment services, combatting violence against women, working against child abuse, and integrating health education into school curricula. Lessons were learned about capacity-building in primary care, approaches to strengthening intra- and interinstitutional conditions, and managing processes for community ownership. The intervention enabled development of initiatives for solving various problems by different types of organizations, highlighted participants' understanding of their role as health agents, and promoted community participation and intersectoral action.

KEYWORDS

Primary health care, qualitative research, community health agents, community health planning, health education, community-based participatory research, Colombia

INTRODUCTION

Since 1978, WHO has emphasized the importance of primary health care (PHC) for promoting and protecting population health. [1] PHC is highlighted as the mechanism through which countries can provide better health to persons, families and communities, with greater equity and lower costs,[1,2] because it “brings promotion and prevention, cure and care together in a safe, effective and socially-productive way at the interface between the population and the health system.”[2]

Colombia is a culturally and ethnically diverse country with a highly varied demographic and epidemiologic profile, and an increased burden of chronic non-communicable diseases in the past decade without yet having eradicated infectious diseases. [3–5] Until recently, Colombia's health system favored development of a hospital-based, curative health care model, oriented toward highly specialized care (the system revolving around specialists) under a free-market model (with users seen as consumers and with a variety of public and private insurers and service providers) that generates inequities in financing and limits access to health care, patient-centered care and community-based health improvements.[6]

In 2011, Law 1438 modified Colombia's health system, putting PHC legally at the center of the system to address the country's health priorities, emphasizing:

- public health actions such as health promotion and disease prevention;
- coordination of intersectoral actions;
- a culture of self-care;
- comprehensive health care involving individuals, families and communities; and
- active community participation and local approaches to attaining long-term, continuous and intercultural attributes of care.[7–9]

This article describes an intervention based on PHC and community-oriented primary care (COPC) principles,[10] aimed at building

capacity for community participation to change population health status in Colombian communities.

INTERVENTION

Purpose, rationale and participants The Citizenship for Healthy Environments (CxES), a qualitative participatory action research (PAR) project to build community capacity to influence health, was carried out from January 2012 through June 2014 (30 months) with organizations in Bogotá and Cundinamarca, Colombia. In alliance with several institutions (Corona Foundation, Universidad de La Sabana, Organization for Excellence in Health, Community Development Consortium and Social Foundation) the authors invited several community organizations to become part of a joint project.

The rationale for CxES was that implementation of PHC initiatives aimed at solving priority health needs requires the integration of multiple actors (decision makers, health institutions, academia, human resources in health, and communities),[11,12] with the community playing a major role in successfully leading and managing this type of initiative and adapting it to local conditions.[13,14] COPC is an approach that places the community at the center of PHC; it enables concerted, community-based identification of the population's problems and needs and their solutions, transforming health services and improving local capacity to bring about behavioral changes in the population.[15–17] In Colombia, however, the population and local health department and hospital officials are barely aware of PHC and COPC concepts or the practical application of PHC-based initiatives.[13,18]

PAR was selected because it is a methodology oriented toward generating change in persons using collective experience as a starting point (beginning with an assessment of community needs and problems) through an intersectoral approach and planning and implementation of actions for health improvement. Both quantitative and qualitative methods can be used for PAR, which serves as the foundation of COPC because it contributes to community

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contextualization, health assessment, prioritization, program implementation, and ongoing evaluation and improvement.[16,19]

PAR is carried out in complex sociopolitical contexts where dialogue and negotiation about objectives and means are integral to researchers building relationships with participating communities. In building such relationships, PAR encourages deepening local knowledge and stimulates interest in becoming part of research to better understand the community's health. PAR increases the community's understanding of its health status and empowers local actors to take committed action.[20] Its results are not limited to description but rather focus on action to improve public health practice, complementing common epidemiologic approaches and promoting capacity to conduct research at the local level.[21,22]

Participating organizations Organizations were recruited that were involved in various community actions addressing diverse health problems and vulnerabilities (children, people with disabilities, pregnant women, older adults or victims of armed conflict in Colombia). [5] Organizations were selected based on the following criteria: organizational life (people in the organization work collectively toward a common goal and distribute responsibilities accordingly; development of actions oriented toward a specific goal and in a particular community); prioritization of collective over individual interests; and influence in the surrounding area—the organization's territorial location.[23] The eight participating organizations included public, private, religious or charitable, and community-based groups: two grassroots women's organizations in Soacha (Families for Progress and the We Are Women, We are Families Association), one school in Sopó (Paul VI State School), four institutions providing services to vulnerable communities in Bogotá (Center for Stimulation and Development, Royal Friends Foundation, Child Welfare Association, and Medalla Milagrosa Ambulatory Care Center), and one institution with links to the rest (the Archdiocese Food Bank).

Activities *Training community leaders for health initiative management* Leadership trainers were eight professors from Universidad de La Sabana (three physicians and two nurses, all community health professors with master's degrees and at least eight years' experience in their respective professions) and the Community Development Consortium (a psychologist, a lawyer and a social worker, all with experience in social development in grassroots community organizations). Thirty leaders enrolled in the training, three or four selected by each organization based on the following criteria: current membership, responsibility for developing actions related to health or its determinants, length of time in the organization, interest, and time commitment. Training was based primarily on COPC principles[15] and Universidad de La Sabana's community health experience. A modular, cyclical training process was designed to give leaders an opportunity to reflect on their understanding of PHC and COPC concepts, and to identify problems and needs in their communities.[10,17,24–26] The training lasted a total of 20 weeks over six months in weekly five-hour sessions using a variety of pedagogical techniques including master classes, practical demonstrations, debates, case studies and problem-based learning, supported by an online learning platform for complementary asynchronous reflection and discussion outside meetings.

Development and implementation of organizational improvement plans As part of the training, each organization developed and submitted a proposal for an improvement plan to address one priority problem. Once each proposal was formulated, it was implemented

based on the principles covered in the training (16 months) (Table 1). Four tutors or facilitators supervised and participated (known as accompaniment) in practical implementation of the plans until the end of the project. Tutors were professors of community health at Universidad de La Sabana (three public health physicians and one public health nurse, all with master's degrees), who were selected for having at least five years' experience in community health actions.

Systematization of experiences and extraction of lessons learned Systematization was carried out simultaneously with the other two activities and throughout the process (a progress and adjustment report reflecting achievements and challenges midway through the process, and a final report on achievements, challenges and commitments). Content analysis was carried out on all reports, as well as photographic records, meeting notes, field journals and recordings of each plan's activities. This activity involved analytical reflection and reconstruction, leading to knowledge generation from and for practice, through extraction and comprehension of lessons learned.[27,28]

An external team from the Community Development Consortium (an economist and a psychologist with experience in social development and qualitative research who were not part of the training and planning team) conducted systematization. They held semistructured interviews, triangulated data from all sources, obtained lessons learned from the pedagogical process, and reviewed and performed content analysis on documents generated by the organizations (community description and needs assessment, improvement plan, progress and adjustment reports, partial results, and final reports). The four tutors and one representative of each organization were interviewed based on an open-ended question: What factors enable or limit citizen capacity-building, generating a sense of ownership in the community and the terri-

Table 1: Training modules, content and topics

Preparation (weeks 1–5) Introduction to basic concepts and CxES approach (PHC, COPC, PAR, health promotion, disease prevention, community leadership, health legislation in Colombia)
Building trust and community (weeks 6–7) Building trust to develop community work (trust, knowledge of the community, knowledge of family and community health)
Situational assessment (weeks 8–12) Determining problems, needs and priorities of each community (health situation assessment, health planning, health needs, community health diagnosis, epidemiology, demography and population, priority setting, problem rationales, problem analysis)
Preparing the work (weeks 13–15) Development of proposed solutions or interventions for problems identified (project management, educational and intervention techniques, information gathering, intersectoral action, design of health improvement plans)
Field work (week 16) Strategies to deal with situations arising after implementation (teamwork, negotiation and conflict resolution) and specific themes (disease groups, life cycle)
Evaluation and adjustment (week 17) Assessment of work so far (social and community participation, data collection and analysis)
Work sharing (weeks 18–19) Strategies for dissemination and communication of processes and community intervention results, health communication, research dissemination, report writing)
Sustaining and improving the work (weeks 19–20) Factors that ensure initiatives' continuity and sustainability (proposals for continuity, sharing of improvement plans)

COPC: community-oriented primary care
CxES: Citizenship for Healthy Environments
PAR: participatory action research
PHC: primary health care

tory for building a healthy environment? Three analytical categories were defined: (1) citizen capacity-building for PHC (individual and collective competencies to be developed in grassroots PHC community managers); (2) intra- and interinstitutional conditions—organizational and community factors needed for creation of healthy environments; and (3) sense of ownership—elements that foster behaviors contributing to healthy environments.

Data were organized and validated by two people from the systematization team, two tutors and two members of participating organizations, who identified lessons learned in each category. This activity was ongoing throughout the process but most intensively in the six months following implementation.

Ethics All organizations gave written informed consent to participate, by means of a voluntary agreement setting out their understanding that the project originated in the community, whose participants and organizations were the owners and active subjects of the process.[29]

RESULTS AND LESSONS LEARNED

Training of community leaders Of the 30 leaders who initiated training, 28 completed it (93.3%). Training objectives were met, including comprehension and explanation of their reality based on assessments of their communities' principal needs and problems (Table 2). The training phase included their designing improvement plans and leaders expressly committing to lead their organizations in implementing them.

Organizational improvement plans Once each organization had defined their problems and needs, they designed an improvement

plan related to one problem, defined by type of social response, vulnerability addressed and organizational characteristics. In all eight improvement plans, interventions were based on promoting healthy lifestyles, improving living conditions and finding opportunities for participation. The main results were evaluated per objectives, achievements and indicators set forth in the planning stage, using quantitative and qualitative instruments according to each organization and topic (Table 3).

Systematization In the *citizen capacity-building for PHC* category, organized actions regarding PHC were understood in direct relation to participants' empowerment as central actors in health promotion, disease prevention and a culture of self-care. The aforementioned empowerment results were facilitated by having taken on a community health initiative based on organizations' protagonism in identifying their own PHC needs and strategies for action, by breaking with the dynamic usually found in non-community-oriented interventions. Changes were observed in perception of health as a collective matter, in which the subjects are protagonists in generating healthy community environments, helping overcome a hospital-centric vision. Throughout the training process and during plan implementation, it was observed that, as part of the PAR process, organizations made a clear conceptual and practical differentiation between disease prevention and health promotion, the latter understood as a collective matter and not the exclusive purview of the health system.

In the *intra- and interinstitutional conditions* category, it was emphasized that sustainability of building healthy environments with community participation requires a regional approach and not only training of people and organizations to act as replicators in their surroundings. This was because improvement plans were limited by organizational characteristics and did not involve all sectors in their context, health institutions among them. Given the heterogeneity of organizational contexts, these were expected to have only modest influence in their territory. At the same time, such heterogeneity was useful for comparing different experiences to generate lessons learned for creation of a PHC model with community participation.

Intersectoral work in PHC may be oriented toward influencing policies as well as broadening and improving the quality of interest groups' action strategies. Throughout the training and accompaniment process, participants displayed an interest in connecting with other actors they had not initially considered influential for achieving healthy life styles; this interest enabled leaders to facilitate opening new spaces for participation by other community members. Initiatives for creating alliances and seeking opportunities for greater influence in their surroundings varied by type of organization, organizational structure, flexibility for change and ownership of PHC's conceptual framework (Table 3).

In the *sense of ownership* category, community leaders expressed and reflected in the im-

Table 2: Community leader training results

Aspect	Indicators and results (8 organizations, 30 leaders, 20 sessions)
Face-to-face activities	Satisfactory participation and performance in 95% of sessions (fulfilling theme objectives and following training process thread), 93.3% (28/30)
Online activities	Participation and completion of followup and support activities, 86.7% (26/30)
Main lessons learned (at conclusion of process)	<p>Health: understanding that health is not limited to physical health but involves interaction among >3 components (physical, mental, social, cultural, spiritual), 93.3% (28/30)</p> <p>PHC: understanding overall concept from perspective of Alma-Ata and as fundamental to maintaining population health, 93.3% (28/30)</p> <p>Health promotion: understanding that health promotion is not about disease and highlighting importance of self-care, 100%</p> <p>Community health: need to solve community problems together recognized, 93.3% (28/30)</p> <p>Healthy environments: environment's importance for health emphasized, 93.3% (28/30)</p>
Completion and approval	28 community leaders
Products	<p>Each organization satisfactorily submitted three requested products.</p> <p>Context report: description of context, community characteristics and possibilities for coalitions</p> <p>Situational assessment: community needs assessment based on literature review, local and national regulations, review of documented socioeconomic, epidemiologic and demographic factors, and other sources of information, depending on the organization</p> <p>List of needs and problems obtained, from which one was selected by agreement among organization members</p> <p>Improvement plan: selected problem validated and examined more deeply; intervention objectives and actions defined and scheduled based on a logic model</p>

PHC: primary health care

Lessons from the Field

Table 3: Community improvement plans by issue, reach and main results

Community (description)	Issue or problem	Reach	Results
Royal Friends Foundation (child nutrition, Usaquén, Bogotá)	Difficulty accessing public space (parks) because of lack of safety and maintenance (a limitation for physical activity for different age groups)	Direct: 689 children and families in various Foundation programs Indirect: Usaquén population 475,000 (target population 114,000 reproductive-age women and 58,000 children aged <9 years)	<ul style="list-style-type: none"> Mutual knowledge and support by allied social actors More physical activity in local parks Creation of institutional networks for recovery of public spaces for physical activity Raised community awareness of self-care in adoption of healthy behaviors and environmental transformation Opening of public spaces for citizen participation to combat gang violence Increased children's knowledge of importance of recycling and care of the environment
Child Welfare Association (daycare center for vulnerable children, Suba, Bogotá)	Poor nutritional practices in families of children in daycare center	Direct: 217 children and 355 parents	<ul style="list-style-type: none"> More parental interest in good nutrition for their children More family participation in growth and development of children. Greater family awareness of good nutritional practices Parents provided with tools on healthy eating habits Improved children's quality of life
Archdiocese Food Bank (food bank, Bogotá)	Lack of coordination of service network for specific needs of client population	Direct: 801 organizations Indirect: 113,742 persons (73,657 children, 14,209 families)	<ul style="list-style-type: none"> Strengthened healthy experiences in clients on themes of healthy eating and behaviors, physical activity and self-care Intervention in beneficiary organizations: organizational strengthening, health and nutrition, accompaniment Comprehensive approach to food security
Medalla Milagrosa Ambulatory Care Center (services for homeless persons, Los Mártires, Bogotá)	Need for interinstitutional networks supporting quality of services	Direct: citizens living on the streets (approximately 100, variable), persons with addictions, immediate families, and the Center's interdisciplinary team	<ul style="list-style-type: none"> Updated Center vision, mission and objectives with PHC focus Participation in district-level task forces with Health Department, Social Integration Department, Volunteer Committee Strengthened healthy behaviors in homeless persons Strengthened interinstitutional networks Clients empowered by recognition of their social capacities and capabilities
Stimulation and Development Center (services for persons with cognitive disabilities, Teusaquillo, Bogotá)	Need for favorable settings for families; students and teachers to conduct therapeutic interventions that develop potential of persons with cognitive disabilities	Direct: families, teachers and students linked to the Center in Bogotá and Cundinamarca Indirect: external community (potential clients, persons and institutions interested in cognitive disabilities)	<ul style="list-style-type: none"> Improved quality of organizational services for greater consistency with institutional vision and mission Greater interest and participation by families, caregivers and academics in intervention and management processes with clients Increased requests from academic institutions for training practicums in disabilities at the Center Intervention on social and family aspects of prenatal care and early childhood care for disease prevention, especially cognitive disability Greater interest by Center clients, families and employees in development of behaviors to improve quality of life
Families for Progress (women working with families affected by violence, Soacha, Cundinamarca)	Gender-based violence	Direct: 38 women leaders, Comuna 1, Soacha Indirect: 114 relatives of women (husbands and children)	<ul style="list-style-type: none"> Strengthened self-esteem and awareness of tools for preventing violence (Law 1257) reported by all women Able to respond and reinforce lessons learned reported by 31.6% (12/38) of women Organizational strengthening: revised statutes, structure, internal policies, in keeping with mission 6 community-wide workshops, 2 on self-esteem and 4 on Law 1257
Paul VI State School (school for children aged 4–18 years, Sopó, Cundinamarca)	Difficulty of developing life skill and health prevention habits in family and school settings	Direct: 955 pre-school and primary school children (urban and rural) and 31 teachers. Indirect: 1750 students, 66 teachers and administrators, students' families and municipal administrators	<ul style="list-style-type: none"> Improved basic knowledge of ARD and prevention measures, 75.2% (718/955) of children Teachers' recognition of importance of knowledge of ARD prevention; some know when to seek medical help Improved knowledge of healthy behaviors, healthy eating, physical activity, hygiene and their benefits for children, 80.6% (25/31) of preschool and primary teachers Integration of health themes into curricula (initiated) Connections made with municipal health and education departments for development and replication of initiative throughout municipality
We Are Women, We Are Families Association (women organized for protection of women and families, Soacha, Cundinamarca)	Child abuse and its implications	Direct: 51 participants from Comuna 1 in Soacha. Indirect: neighborhood communities, especially participants' families	<ul style="list-style-type: none"> Increased members' knowledge of child abuse Increased mothers' awareness of protection and care, childrearing guidelines Application of new knowledge within members' families Creation of discussion forum with mothers and families about recognizing types of child abuse and importance of infant attachment Establishment of child abuse documentation center

ARD: acute respiratory disease PHC: primary health care

provement plans that family and nutrition are two central elements in community ownership of healthy lifestyles and environments. Nutrition was not given special emphasis during the training process or in drafting improvement plans, but organizations made it a central focus of their initiatives. This may suggest that nutrition is a fundamental first step in developing community ownership of healthy lifestyles. Organizations certainly considered nutrition a main driver and promoter of healthy behavior within families.

One of the main factors influencing the sense of ownership of healthy lifestyles and environments is related to organizations' communication mechanisms and strategies. The experience demonstrated the effects of organizations' participation in local discussion forums and community radio to present ideas, challenges and strategies promoting the concept of health as a social construct requiring broad participation.


General lessons This project demonstrates the potential importance of community participation in developing health programs and confirms the utility of working with preexisting social capital to foster community empowerment.[30,31] PAR methodology favored development of PHC action in organizations, guaranteeing the initiatives' continuity and adjustment to the COPC conceptual framework,[10,17,19] as well as enabling community members to claim ownership of the research. The intervention showed that developing community-based health initiatives is possible and can generate greater sustainability and sense of ownership.

Experiences in Colombia have traditionally focused primarily on top-down or institutional PHC initiatives rather than on integrating the community at the grassroots level.[13,18] It is therefore important to involve all the actors in order to strengthen PHC initia-

tives and meet the population's health needs.[11,15] A community participation approach to building healthy environments requires overcoming an excessive focus on health care services, which can encourage people to depend on treating specific ailments rather than addressing their fundamental vulnerabilities and improving their health (bearing in mind the importance of including the hospital sector to achieve more comprehensive plans). Linking organizations with PHC training and action processes does not in itself guarantee that the process will include all social actors present in a community, nor that it will bring about tangible changes in health status, but needs to be matched with changes to social determinants and generation of community leadership and empowerment.

CxES contributes important lessons for implementing Colombia's new, legislatively mandated,[7] comprehensive health care model,[32] which includes prevention, promotion, diagnosis, treatment and palliative care, all under a local approach in which the community plays a key role. It facilitated and evaluated development of primary care initiatives in different types of organizations to address a variety of problems. In all cases, participants demonstrated comprehension of their role as health agents, promoting community participation and intersectoral action. Forming alliances among community actors, health services and academic institutions that train human resources is equally important for achieving knowledge transfer to all necessary social actors, thus ensuring sustainability of PHC-based health systems.

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REFERENCES

- World Health Organization. Declaration of Alma-Ata International Conference on Primary Health Care. Alma Ata: World Health Organization; 1978 Sep 12.
- World Health Organization. The World Health Report 2008: Primary Health Care, Now More Than Ever. Geneva: World Health Organization; 2008.
- Bernal O, Forero JC, Villamil M del P, Pino R. Disponibilidad de datos y perfil de morbilidad en Colombia. *Rev Panam Salud Pública*. 2012 Mar;31(3):181–7. Spanish.
- Ramos-Clason EC. Transición epidemiológica en Colombia: De las enfermedades infecciosas a las no transmisibles. *Rev Cienc Biomed*. 2012;3(2):282–90. Spanish.
- Ministry of Health and Social Protection (CO) [Internet]. Bogotá: Ministry of Health and Social Protection (CO); c2017. Plan Decenal de Salud Pública; 2012 [cited 2015 Apr 15]. Available from: <https://www.minsalud.gov.co/plandecenal/Paginas/home2013.aspx>. Spanish.
- Agudelo Calderón C, Cardona Botero J, Ortega Bolaños J, Robledo Martínez R. Sistema de salud en Colombia: 20 años de logros y problemas. *Cien Saúde Colet*. 2011 Jun;16(6):2817–28. Spanish.
- Ministry of Health and Social Protection (CO). Ley 1438 [Internet]. Bogotá: Ministry of Health and Social Protection; 2011 [cited 2015 Jun 1]. Available from: https://www.minsalud.gov.co/Normatividad_Nuevo/LEY%201438%20DE%202011.pdf. Spanish.
- Giraldo AF. La última reforma del sistema general de seguridad social en salud colombiano. *Rev Salud Pública (Bogotá)*. 2012;14(5):865–77. Spanish.
- Giraldo AF. Referentes teóricos para el análisis de la reforma del sistema de salud colombiano. *Rev Gerenc Políticas Salud*. 2012 Jun;11(22):28–42. Spanish.
- Gofin J, Gofin R. Community-oriented primary care: a public health model in primary care. *Rev Panam Salud Pública*. 2007 Feb–Mar ;21(2–3):177–84.
- Bolduc N, Grand Maison P. Towards Unity for Health: Lessons for Health Development in Canada. *Educ Health (Abingdon)*. 2007 Aug;20(2):49.
- World Health Organization. Towards unity for health: challenges and opportunities for partnership in health development. A working paper. Geneva: World Health Organization; 2000.
- Ruiz-Rodríguez M, Acosta-Ramírez N, Rodríguez Villamizar LA, Uribe LM, León-Franco M. Experiencia de implementación de un modelo de atención primaria. *Rev Salud Pública (Bogotá)*. 2011 Dec;13(6):885–96. Spanish.
- Bhuyan K. Health promotion through self-care and community participation: elements of a proposed programme in the developing countries. *BMC Public Health*. 2004 Apr 16;4:11.
- Foz G, Gofin J, Montaner G. Atención Primaria Orientada a la Comunidad. In: Martín Zurro A, Cano Pérez JF, editors. *Atención Primaria. Conceptos, organización y práctica clínica*. 5th ed. Madrid: Elsevier; 2003. p. 345–64. Spanish.
- Gofin J, Montaner I, Foz Gil G. Metodología de la Atención Primaria Orientada a la Comunidad (APOC). Elementos para su práctica. *Rev Clín Electrón Atención Primaria [Internet]*. 2003 [cited 2015 Mar 1];1–7. Available from: [https://ddd](https://ddd.uab.cat/pub/rceap/rceap_a2008m9n16/rceap_a2008m9n16a5.pdf)
- .uab.cat/pub/rceap/rceap_a2008m9n16/rceap_a2008m9n16a5.pdf. Spanish.
- Montero M. Hacer para transformar: El método de la psicología comunitaria. Buenos Aires: Ediciones Paidós; 2006. Spanish.
- Suárez R, Zamora G, Conte G, Olarte M. Resultados, sistematización, análisis y recomendaciones de la evaluación de las experiencias de APS - RISS. Bogotá: Pan American Health Organization; Ministry of Health and Social Protection (CO); 2012. Spanish.
- Gavilán Moral E, Jiménez de García L, Olivero FJ. Docencia e investigación en atención primaria orientada a la comunidad: la experiencia de dos residentes españoles en Argentina. *Atención Primaria*. 2006 May;37(9):514–6. Spanish.
- Cornwall A, Jewkes R. What is participatory research? *Soc Sci Med*. 1995 Dec;41(12):1667–76.
- Bach M, Jordan S, Hartung S, Santos-Hövenner C, Wright MT. Participatory epidemiology: the contribution of participatory research to epidemiology. *Emerg Themes Epidemiol*. 2017 Feb 10;14:2.
- Hills M, Mullet J, Carroll S. Community-based participatory action research: transforming multidisciplinary practice in primary health care. *Rev Panam Salud Pública*. 2007 Feb–Mar;21(2–3):125–35.
- Fawcett SB, Francisco VT, Paine-Andrews A, Schultz JA. Working together for healthier communities: A research-based memorandum of collaboration. *Public Health Rep*. 2000 Mar–Jun;115(2–3):174–9.
- Pickens S, Boumbulian P, Anderson R, Ross S, Phillips S. Community-oriented primary care in action: a Dallas story. *Am J Public Health*. 2002 Nov;92(11):1728–32.

25. Lamus Lemus F, Correal Muñoz C, Hernández Rincón EH. Construcción de entornos saludables en el marco de la atención primaria en salud: El caso de la enseñanza de salud comunitaria en el programa de Medicina de la Universidad de La Sabana. *Salud Uninorte*. 2015 May–Aug;31(2):424–34. Spanish.
26. Fawcett SB, Francisco VT, Schultz JA, Berkowitz B, Wolff TJ, Nagy G. The Community Tool Box: a Web-based resource for building healthier communities. *Public Health Rep*. 2000 Mar–Jun;115(2–3):274–8.
27. Laperrière H. Community health nursing practices in contexts of poverty, uncertainty and unpredictability: a systematization of personal experiences. *Rev Lat Am Enfermagem*. 2007 Sep–Oct;15 Spec No:721–8.
28. Dubón Abrego MA, Menjívar López D, Espinoza Fiallos E, Baatz C. La construcción del sistema comunitario de salud de Guarjila: sistematización de una experiencia de Atención Primaria de Salud Integral en El Salvador durante el periodo 1987–2007. *Saúde em Debate*. 2012 Jul–Sep;36(94):414–20. Spanish.
29. Correal-Muñoz CA, Arango-Restrepo P. Aspectos bioéticos en la salud comunitaria. *Pers Bioét*. 2014;18(2):194–212. Spanish.
30. Romeo D. Capacidad comunitaria en beneficio de promover salud en la colectividad. *Med Gen Integr*. 2007 Jul–Sep;23(3). Spanish.
31. Franco-Giraldo A. Promoción de la salud (PS) en la globalidad. *Rev Fac Nac Salud Pública*. 2012 May–Aug;30(2):193–201. Spanish.
32. Campbell C, Gillies P. Conceptualizing 'social capital' for health promotion in small local communities: a micro-qualitative study. *J Community Appl Soc Psychol*. 2001 Sep–Oct;11(5):329–46.

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