

## Community-based participatory research: foundations, requirements and challenges for researcher

Pesquisa participante baseada na comunidade: fundamentos, requisitos e desafios ao pesquisador

Investigación participante basada en la comunidad: fundamentos, requisitos y desafíos para el investigador

**Cristiane José Borges<sup>I</sup>, Denize Bouttelet Munari<sup>II</sup>, Veridiana Carvalho Bianco<sup>III</sup>, Paula Cândida da Silva Dias<sup>IV</sup>, Marcelo Medeiros<sup>V</sup>, Jeanne-Marie Rodrigues Stacciarini<sup>VI</sup>**

**Abstract: Objective:** To describe theoretic and philosophic foundations and possible applications of Community-Based Participatory Research. **Method:** theoretical reflection focused on this approach's transformative potential in Public Health scope. **Results:** in this research modality, community partners are valued at all stages of the investigative process, helping to design interventions that meet their needs. In addition, spaces and production instruments are created, and ideas, practices and care alternatives are disseminated, in order to facilitate the transposition of language and communication barriers between service professionals, researchers and health system users. In the Community-Based Participatory Research context, daily care management is based on cultural dialogue and sharing of chores, which develops mutual trust and sustainability of the researcher-community interaction process. **Final Considerations:** Community-Based Participatory Research is an important methodological approach to understand the human complexity and advances in community nursing.

**Keywords:** Community-based participatory research; Community health nursing; Nursing research; Health promotion

**Resumo: Objetivo:** descrever fundamentos teórico-filosóficos e possíveis aplicações da Pesquisa Participante Baseada na Comunidade. **Método:** reflexão teórica focada no potencial transformador dessa abordagem no âmbito

<sup>I</sup> Nurse. PhD in Nursing. Universidade Federal de Goiás. Jataí, Goiás, Brazil. Email: cristianejose@yahoo.com.br ORCID: <https://orcid.org/0000-0002-5846-0750>

<sup>II</sup> Nurse. PhD in Nursing. Universidade Federal de Goiás. Goiânia, Goiás, Brazil. Email: boutteletmunari@gmail.com; ORCID: <https://orcid.org/0000-0002-2225-770X>.

<sup>III</sup> Nurse. Graduate from Undergraduate Nursing Course, Universidade Federal de Goiás. Jataí, Goiás, Brazil. Email: veridianacbianco@gmail.com; ORCID: <https://orcid.org/0000-0002-0291-9518>

<sup>IV</sup> Nurse. PhD student FEN/UFG, Master of Health Care. Pontifícia Universidade Católica de Goiás, Goiânia, Goiás, Brazil. Email: paulacandidadias@gmail.com; ORCID: <https://orcid.org/0000-0002-8761-0551>

<sup>V</sup> Nurse. PhD in Nursing. Faculdade de Enfermagem, Universidade Federal de Goiás, Goiânia, Goiás, Brazil. Email: Marcelo@ufg.br ORCID: <https://orcid.org/0000-0001-6979-321>

<sup>VI</sup> Nurse. RN, PhD, FAAN. Associate Professor. Assistant Dean for Diversity, Inclusion and Global Affairs. College of Nursing - University of Florida Gainesville, F. Email: jeannems@ufl.edu ORCID: <https://orcid.org/0000-0003-0261-8413>

da Saúde Pública. **Resultados:** nessa modalidade de pesquisa, parceiros da comunidade são valorizados em todas as fases do processo investigativo, auxiliando no delineamento de intervenções que atendam suas necessidades. Além disso, são criados espaços, instrumentos de produção e divulgação de ideias, práticas e alternativas de cuidado, a fim de facilitar a transposição de barreiras de linguagem e comunicação entre profissionais dos serviços, pesquisadores e usuários do sistema de saúde. No contexto da Pesquisa Participante Baseada na Comunidade o gerenciamento diário do cuidado fundamenta-se no diálogo cultural e do fazer compartilhado, o que desenvolve confiança mútua e sustentabilidade do processo de interação pesquisador - comunidade. **Considerações finais:** a Pesquisa Participante Baseada na Comunidade é importante abordagem metodológica para compreender a complexidade humana e avanços da enfermagem comunitária.

**Descritores:** Pesquisa participativa baseada na comunidade; Enfermagem em saúde comunitária; Pesquisa em enfermagem; Promoção da saúde

**Resumen: Objetivo:** Describir fundamentos teóricos-filosóficos y posibles aplicaciones de la investigación participante basada en la comunidad. **Método:** reflexión teórica con foco en el potencial transformador del abordaje en el ámbito de la salud pública. **Resultados:** En esa modalidad de investigación, compañeros de la comunidad son valorizados en todas las fases de investigación, auxiliando en el delineamiento de intervenciones que atiendan sus necesidades. Son creados espacios, instrumentos de producción y divulgación de ideas, prácticas y alternativas de cuidado, así facilitar y transponer barreras de lenguaje y comunicación entre profesionales, investigadores y usuarios del sistema de salud. La investigación participante basada en la comunidad, el gerenciamiento del cuidado se fundamenta en el dialogo cultural y realizar en conjunto, lo que desenvuelve confianza mutua y sustentabilidad de interacción investigador-comunidad. **Consideraciones finales:** La pesquisa participante basada en la comunidad es importante el abordaje metodológico para comprender la complejidad humana y avances de la enfermería comunitaria.

**Descriptores:** Investigación participativa basada en la comunidad; Enfermería en salud comunitaria; Investigación en enfermería; Promoción de la salud

## Introduction

Brazilian nursing has grown as a science and profession in that it has developed significant scientific knowledge, as well as the growth of its critical mass, especially made possible by the expansion of graduate programs. These movements have strengthened the production of new research and given visibility to the profession as a science.<sup>1</sup>

However, a national study<sup>2</sup> mentions challenges for nursing researchers to use more robust methodologies, capable of producing greater impact and knowledge that can be immediately incorporated into practice, and/or bring innovations in favor of the care services. In the health area, in general, the incorporation of innovations that produce transformations of

practices and that are based on the foundations of the Brazilian health system are a great challenge, which encourages the scientific community to seek more effective results.<sup>2</sup>

Such a scenario explains, among other aspects, the need to create spaces for the development of social technologies, which allow health service users to play a more protagonist role. It also favors the definition of research priorities, helping to identify successful experiences of innovation in health care and enhancing existing initiatives.<sup>2-3</sup> These trends are an indication for researchers that investigations need, in addition to filling knowledge gaps, to be pertinent to the real needs of health service users. This process can generate a greater impact on improving their quality of life and making them more active. Thus, it will be possible to build a more democratic society and develop appropriate practices according to sociocultural considerations that facilitate the transfer of scientific knowledge to clinical and care practice.<sup>2-3</sup>

From this perspective, a study<sup>3</sup> reports that, when planning a study in the community, the nurse needs to be clear about what he or she hopes to achieve as a product, especially its impact on the research partner community. Furthermore, it should also be ensured that the research results will be able to contribute to the improvement of health actions and services from the public and private sectors; influence public health policies; improve human health, well-being and quality of life; and minimize disparities in access to health care.<sup>3</sup> These recommendations are in line with the principles of the Brazilian health system and the defense of democratic rights to health.

In this sense, the foundations of the Research-Community Partnerships (RCP)<sup>3</sup> present elements that value and recognize the importance of all involved in the production of scientific knowledge, that is, community, researchers and institutions, which demonstrates that it is an approach that strengthens democratic actions and social engagement in the investigative process.

Although there is a great diversity of typologies for the design of a RCP,<sup>3</sup> the Community-Based Participatory Research (CBPR) is highlighted in this article. Considered a transformative approach in the field of public health, it should be applied by researchers who are concerned with the problems and social inequalities of a particular community, especially minority or excluded groups. In addition, it aims to reduce the gaps between knowledge produced through conventional research and the community needs.<sup>4</sup>

Literature searches to identify studies conducted using the CBPR approach have shown widespread usage in the international context, particularly in Canada and the United States of America.<sup>3,5-6</sup> These studies indicate that the most effective way to improve the health of community is to involve them in the research process so that their needs can be addressed in a more resolute and effective manner.<sup>5-6</sup> They also indicate that such research should be culturally sensitive to the population,<sup>3</sup> with a view to reducing sociocultural and political inequalities.

The purpose of this study is based on the principles of CBPR, especially regarding the production of knowledge in partnership with the community and the need to involve health service users more actively in the processes of change in health practices.<sup>2</sup>

From this perspective, the present article is a theoretical reflection focused on the transformative potential of this research modality in the Public Health area, based on the following guiding question: what is the potential of using Community-Based Participatory Research in the development of research into collective health?

Thus, considering that CBPR is incipient in Brazilian nursing, the objective of this article is to describe the theoretical and philosophical foundations and possible applications of Community-Based Participatory Research.

## **Concepts and theoretical-philosophical bases of Community-Based Participatory Research**

CBPR has been consolidated over the last 20 years<sup>5-6</sup> as a proposal that integrates two theoretical references. The first is based on the dialogue of the foundations of Kurt Lewin's Action Research (AR),<sup>4</sup> sustained by the proposition of an action or the resolution of a collective problem, in which researchers and participants are both involved in a cooperative and participative manner in order to improve health care practice.<sup>4,6</sup> The second is based on the assumptions of Paulo Freire's liberating education<sup>7-8</sup> as a way to minimize social inequalities in the community.<sup>3,9</sup>

The Freirean influence on CBPR projects the ideas of this great Brazilian thinker that the individual needs to have a critical, global and significant understanding of the context in which he or she lives. Both in AR and in liberating education, the active participation of all subjects involved is a condition for the construction of changes and effective social transformations.<sup>7-8</sup>

The earliest records of the creation and elaboration of the original CBPR concepts emerged in Canada in 1995 and in the United States in 1998. By definition, it is considered a research approach aiming to investigate and simultaneously promote change for the community through the active collaboration of people, especially minority groups and those directly affected by the problem itself.<sup>10-11</sup>

In 2004, after analyzing the various concepts of CBPR developed in Canada and the United States, the American Agency for Healthcare Research and Quality, established it as a form of collaborative approach capable of aggregating, in its formal structure, strategies for the active participation of the community that is being researched. This joint participation should take place at all stages of the study, from delineating the problem being investigated to analyzing and disseminating the results.<sup>12</sup>

Moreover, such an approach fosters integration between community members, researchers and institutions involved in the research process. Its main purpose is to improve the

health and well-being of individuals by constructing shared decisions that envisage significant transformations in the social context in which the study participants live.<sup>4</sup>

This approach also contemplates a plurality of knowledge, which makes co-learning possible, based on responsibility and mutual respect between all partners involved in this method of scientific research.<sup>13</sup>

The community's object of interest is a key element for bringing together and involving other actors, such as professionals from health, education, public safety, undergraduate and graduate students, and religious leaders, among others. Depending on this involvement and the community-defined transformation proposal, it is possible to establish partnerships that integrate academic interests with community services.

In CBPR, an understanding of a particular phenomenon only occurs if there is an effective contribution from a community to which it makes sense and reflects a real need for change. Thus, the acquired knowledge is integrated through the implementation of immediate and effective interventions, supported by the health policies and quality of life of the community members.<sup>3,5,13</sup> From this perspective, the methodological approach of CBPR enables a combination of research methods and strategies that include the community in the investigative process. Finally, it aims to minimize the gap between the knowledge produced through traditional research and the application of its results to support its installation and/or implementation of interventions and policies.<sup>8,13</sup>

By enabling the integration of various methods to achieve the pre-established objectives in conducting research, depending on the interests of the community, CBPR is recognized as a broad research approach and not simply as a hermetic method *per se*.<sup>3-5,11</sup> Thus, it has been widely used in the field of health research aimed at the development of health promotion interventions, the environment and the development of public policies.<sup>8,10,13-15</sup>

It can also be applied in different scenarios, including by researchers from more than one area of knowledge.<sup>3-4,6,8-9,12</sup> In practice, this methodological approach has been instrumental in the process of identifying and minimizing social determinants of health. It is recognized by researchers, practitioners, students and community members as an effective strategy for solving the problems surrounding this sector, which are complex and require multifaceted solutions in the various spheres: political, social and biomedical.<sup>4</sup>

Research based on this approach has proven its potential for community development and empowerment of people who have had the opportunity to take a position of social leadership and have been able to generate numerous collective benefits.<sup>3,5,8,10,13-15</sup>

In addition to the conceptual foundations that underlie the principles of studies conducted using CBPR, it is essential for researchers who propose to conduct studies with this approach to meet the requirements to undertake investigations of this nature. Knowing the complexity of community life, respecting each participant's differences and points of view are just some of the facets that need to be considered in research planning. The following section details some of the main the requirements to ensure accuracy in conducting CBPR.

### **Essential Requirements for the Development of Community-Based Participatory Research**

CBPR is not conceived as a hermetic method *per se*, but as a research approach/guide that directly influences the way researchers and participants relate, regardless of their origins.<sup>4,8-9,11</sup> The relationship between researchers and those being studied is a close and horizontal partnership, based on respect and appreciation of cultural diversity.<sup>4,8-9</sup> This is a research process performed in the same context in which the needs and demands of the community are identified.<sup>4,9,11</sup>

In conducting CBPR, it is essential to maintain an active and respectful dialogue between partners representing the university and the community, in order to foster empowerment of all

individuals. Identifying the knowledge, skills and abilities of each research partner is critical to unlocking the full potential of the community, including its knowledge and practices.<sup>4,9</sup>

In this context, reliable communication and shared power are basic principles for egalitarian decision-making in all phases of CBPR, from building research questions to collecting, analyzing, interpreting data, and disseminating results.<sup>4-5,16</sup> This process requires a high level of trust among all partners involved during the investigation.<sup>4-5,12,16</sup> In addition, the researcher should be aware that this type of approach differs from traditional research, in terms of the role of the community, especially due to the communicational process of respecting differences and encouraging active participation by partners.<sup>16</sup> In this case, one works in and together with the community, with the Community-Based Participation (CBP) triad as the main focus.<sup>4,13</sup> The community is understood as a psychosociocultural entity, and the active participation of its members<sup>3-4,8-9</sup> occurs through the creation of a Community Advisory Committee (CAC).<sup>3-5</sup>

In CBPR, the CAC is the main driving element for active participation and empowering community partners throughout the scientific research process.<sup>4</sup> The composition and number of participants in this type of committee vary according to the context in which the study is being performed and without having pre-established rules.<sup>6,11</sup> It is usually made up of individuals with involvement and interest in problem solving (e.g. community members, health professionals, members of religious or social support groups, among others), which have heterogeneous characteristics, varying interests regarding the problem being studied and different educational, social background, beliefs, values and knowledge levels.<sup>11</sup>

This diversity of views from the CAC enables CBPR to exert a direct impact on the scenario studied; this results in improvements for the community, such as strengthening partnerships and leveraging existing community resources. Thus, the proposals to solve or



minimize the detected problems are more efficient and the research development and transformation of the affected community occur simultaneously.<sup>4</sup>

CBPR is based on nine principles, as shown in Table 1:

1. Recognize community as a unit of identity;
2. Research is designed according to the capacity and resources of the community itself;
3. Research is carried out through collaborative and equitable partnership between researchers and the community at all stages of research, through empowerment of all partners in order to reduce social inequalities;
4. Research should promote co-learning and capacity building of all partners;
5. Integrate knowledge and actions for mutual benefit to all partners;
6. Focus on the local relevance of public health problems through ecological perspectives that encompass the multiple determinants of health;
7. Research develops through an interactive and cyclical process;
8. Results obtained should be disseminated to all partners, who should assist in the dissemination of data;
9. Requires long-term involvement and commitment to sustainability.

**Table 1** – Essential principles for the development of CBPR <sup>4:6-9</sup>

In practice, it is the researcher's responsibility to ensure, through the formation of the CAC and the actions developed by its members, that these principles are contemplated. However, the strategies to ensure compliance with these principles will be built during the investigative process, through analysis and collective reflection about the reality of the community being researched.

It is relevant to highlight fundamental principles that guide CBPR: to associate valorization of the shared knowledge between researcher and community, maximization of the relevance of results and guarantee of methodological rigor, as required in any form of scientific study.<sup>4-6</sup> The rigor of CBPR with the production of knowledge coupled with community interventions, would probably not be possible with the application of other methods. Moreover,

in the collective definition of the research problem(s), as well as in the delineation of objectives and methodological path, it is possible to obtain qualitative and quantitative data.<sup>4-6,9,11,16</sup>

The complexity of an investigation conducted in line with the assumptions of CBPR is imposed on researchers, this must be carefully considered at the planning stage of the investigation, although many of these aspects arise only in the course of the investigative process. The following topic highlights some of the challenges described in the literature and also those frequently encountered while using this approach.

### **Challenges for researcher and community involved in community-based participatory research**

Although CBPR has been consolidated in the international scientific environment for some decades, researchers still face difficulties in its use.<sup>12,17</sup> Evidence indicates that one of the limitations in conducting CBPR involves the need to ensure equitable involvement of partners and balance between research method and relevant community interventions.<sup>3,6,16</sup> In order to ensure this balance and the principles of the approach, it is essential that the researchers have a broader view of the investigative process, so that they and their team can identify more readily any eventual attempts to resort to the origins of positivist thinking in solving the research demands common to most researchers.

Thus, those using the CBPR approach need to be aware of investigating a problem from the perspective of a new paradigm. This requires a significant insertion of the researcher into the community, as well as sensitivity and resilience to accept different views from those already established within the culture of traditional research.

Another important aspect to consider is the researcher's understanding of the fact that, in this research approach, the emerging demands are not predictable, since all stages of the study are constantly negotiated between academic and community partners.<sup>3-4</sup> In other words,

the researcher does not have an absolute control of the process and, therefore, must have great ability to respect the community movement and consider the needs of the CAC, without losing sight of the assumptions of the rigor of qualitative research.<sup>6,8,17-18</sup> Since participation in CAC is usually voluntary, the researcher has to be flexible regarding whether or not members are willing to participate in certain actions.

In this sense, knowledge about group coordination is an important intellectual capital for the researcher, since it helps to preserve team spirit, as well as develops and cultivates their best potential.<sup>19</sup> Other qualities are also important and should be valued in the relationship between the researcher and the CAC: conflict management, distrust in the process, valuing cultural and social diversity, maintaining mutual respect and ensuring the effective participation of all partners.<sup>3-4,6,8-9</sup>

A better understanding of the research objectives and partnership over time are factors that will contribute to the relationship of extreme trust between those involved in the process, as well as to the sustainability of this partnership for an indefinite period. However, the researcher must understand that the interests of community members may change over time, which could make it necessary to engage others in the CAC.<sup>3-4</sup>

Other difficulties reported in the literature on the use of CBPR were related to the deadline set for completion of research by funding agencies and the time constraints of community partners.<sup>3,5</sup> In this approach, research is built over the long term, and it is fundamental to negotiate the priority problems to be studied/resolved in the short, medium and long term, as well as to guarantee the continuity of investigative actions of interest to the community. Additionally, planning is necessary regarding how to meet the deadlines set for submitting reports to funding agencies, given that the research is rarely finished in the first data collection. With the cyclical characteristic of AR, one action leads to another and these are not always foreseen in the initial planning.<sup>4</sup>

For the proper management of CBPR, a study<sup>5</sup> suggests some initial questions (see Table 2):

INITIAL QUESTIONS	DETAILS TO OBSERVE
What to research?	What will be the research questions and design?
How to research?	How will we involve the partnership?
Who to research?	How do the identities of the partners interrelate?

**Table 2** - Essential questions and details for planning Community-Based Participatory Research

The approach of the authors of this text to CBPR began after conducting studies based on AR, developed with the Latin community,<sup>3</sup> in the context of health care for elderly caregivers<sup>20</sup> and, more recently, during a survey conducted with urban communities to investigate the risks of alcohol and other drug abuse, which has not yet been finalized. However, despite this prior experience of involving research members in defining the common research object in AR, CBPR has brought an important innovation by including study with and within the community. In this case, the decision-making power of research directions is not centered on the researcher who is open to the community's new perspectives on the problem and respects what it considers to be a priority and emergency, even though this could challenge the researchers in their intentions or perceptions of the best path to follow.

Finally, given the complexity and diversity that surrounds the development of CBPR oriented studies, an international study was initiated to validate a gold standard protocol to define research planning and conduct using CBPR.<sup>21-24</sup> Certainly, this protocol will be extremely useful in guiding future investigations and those researchers who are now beginning to adopt this approach.

## Final considerations

CBPR is an innovative method for conducting research involving communities, as it values community participation at all stages of the investigative process and enables interventions consistent with the real needs of the population under study. The contribution of this article was to bring to the fore discussion about the main concepts that underlie this methodological approach and the challenges posed to those researchers interested in adopting it, besides contributing to fill a knowledge gap identified in the national literature.

Even if a community has local empowerment and can manage the problems pertinent to its reality, the knowledge produced through CBPR is extremely relevant as it can favor other communities with similar characteristics and offer these effective and necessary changes. However, when adopting CBPR as a methodological approach, the researcher needs to develop certain essential skills, such as: understanding the mission and values of this research approach, knowing the theoretical and philosophical constructs and, above all, being able to simultaneously implement the process of research and intervention through a continuous process of shared learning.

Participatory methodological approaches create spaces and instruments for the production and dissemination of ideas, practices and care alternatives that meet the principle of universality. This allows us to go beyond the distribution and delivery of care and to overcome language and communication barriers between professionals of the service, researchers and healthcare system users. In this sense, CBPR assists in the daily management of care by sustaining cultural dialogue and shared action, developing mutual trust and sustainability throughout the researcher-community interaction process.

Finally, the principles of CBPR encourage academic and community partners to produce knowledge coupled with care, this being highly appropriate in the context of public health, as it stimulates the participatory management process and promotes the development and improvement of light technologies and, consequently, psychosociocultural transformations. In

addition, it can represent an effective approach to meet the requirements of community-based research funding agencies to maximize the relevance of results without detriment to methodological rigor, and an important tool for translating knowledge produced within the academic arena into results that meet community interests.

With regard to Nursing in particular, considering that nurses play an active role in health promotion and protection, it is suggested that CBPR be adopted as a viable scientific approach to broaden understanding of human complexity and to advance community nursing.

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### **Corresponding Author**

Cristiane José Borges

E-mail: [cristianejose@yahoo.com.br](mailto:cristianejose@yahoo.com.br)

Address: Curso de Enfermagem – Universidade Federal de Goiás – Regional Jataí. BR 364, KM 195, nº3800 – Câmpus Cidade Universitária – Jataí-Goiás, Brazil

CEP: 75801-615

### **Contributions of Authors**

#### **1 – Cristiane José Borges**

Research project design and planning, data collection, analysis and interpretation, and redaction.

#### **2 – Denize Bouttelet Munari**

Research project design and planning, redaction and critical review.

#### **3 – Veridiana Carvalho Bianco**

Data collection and analysis.

#### **4 – Paula Cândida da Silva Dias**

Contributions: Data collection and analysis.

#### **5 – Marcelo Medeiros**

Critical review.

#### **6 – Jeanne-Marie Rodrigues Stacciarini**

Planning research Project and critical review.

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