Research

Reflection on an interprofessional community-based participatory research project

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Background. A collaborative interprofessional research project that involved community members was beneficial to community development.

Objective. To draw upon the experiences of academics relating to their involvement in an interprofessional community-based participatory research (CBPR) project.

Methods. A Delphi study was applied as a self-reflective evaluation process to reach consensus on the lessons learnt from participation in a CBPR project. Round one of the Delphi employed closed-ended questions and the responses were analysed descriptively using Microsoft Excel (USA). The second round consisted mainly of open-ended questions and responses, and was analysed qualitatively. Ethical clearance was obtained from the University of the Western Cape research committee.

Results. Based on round one of the Delphi study, it became evident that recognition of the community as a unit of identity, addressing health from physical, emotional and social perspectives and formation of long-term commitments were the CBPR principles most applied. Disseminating information to all partners and facilitation of the collaborative equitable involvement of all partners in all phases of the research were the principles least applied. Themes that emerged from the second round of the Delphi included the identification of clear objectives based on the needs of the community, a shift from identification of the needs of the community to the implementation of strategies, and the creation of capacity-building opportunities for all stakeholders.

Conclusion. In a reflection on the research process, the interprofessional team of academics found that the basics of CBPR should be attended to first. A focus on clear objectives, implementation strategies and capacity building is important in CBPR.

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Community engagement has become a key aspect of higher education initiatives. To drive this agenda, higher education institutions, specifically health and social faculties, need to find opportunities in communities for health professional student engagement. To accomplish this goal, a potential strategy is to link community engagement activities with community-based participatory research. Universities have a unique role in this partnership as creators and sharers of knowledge. Communities provide the reality of social and health challenges and therefore provide the platform for learning and exploring their authentic challenges.[1] Community-university partnerships are thus intended to bring together academic researchers and communities, share power, establish trust, foster co-learning, enhance strengths and resources, build community capacity, and address community-identified needs and health problems.[2] Community-based participatory research (CBPR) is a model used to strengthen communities and universities through the application of research. CBPR principles[3] include trust based on communication, collaboration involving shared responsibility, excellence in science through training, monitoring and strict adherence to protocol, and ethics or strict guidelines and agreement on the handling of confidential information.

Interprofessional collaboration initiatives place greater emphasis on interprofessional education and practice and less emphasis on inter-professional research. The latter involves the collaboration of two or more health professionals in the research process. For practitioners or professionals to connect more effectively with the general public to better ascertain a given society's actual needs and concerns, there is also a need to learn CBPR approaches. It is agreed that future healthcare providers require excellent clinical knowledge, a solid grounding in health promotion and disease prevention, the ability to use evidence-based guidelines, and the competencies for practice in interprofessional teams.[4]

Higher education institutions (HEI) therefore play a vital role in formulating the pedagogical transition from a single-disciplined to a more integrated approach in research. However, this transition is challenging and complex, and an understanding of the benefits and possible challenges is required. To link CBPR and interprofessional education and practice (IPEP), we need to understand how we create authentic university-community partnerships that are beneficial to all stakeholders. Although CBPR may employ a wide range of methodologies, the key principles remain the same.[5] Academic researchers may experience challenges[6] in the implementation of CBPR, but these can be minimised if an awareness of potential barriers and upfront communication is shared. This article draws upon the experiences of academics, relating to their involvement in an interprofessional CBPR project.

Method

Research setting and context

The Faculty of Community and Health Sciences, University of the Western Cape (UWC), Cape Town, South Africa (SA) participates in various service-learning activities at designated rural sites to promote interprofessional education, practice and research based on Boyer's model of scholarship. This model includes the scholarship of discovery, teaching and learning application, and integration. The scholarship of discovery includes interprofessional and collaborative research projects.

Research design

A Delphi study was used as part of a self-reflective evaluation process to identify barriers, as well as facilitating factors, in CBPR from a researcher's perspective. Delphi studies are used most often to gather data from domain experts, with the intention of coming to consensus, often around poorly defined topics such as the development of programme alternatives.[7]

Participants

In the current study, the purposively selected Delphi participants were the researchers who engaged in various aspects of the community engagement project. Participants represented disciplines such as psychology, physiotherapy, social work, occupational therapy, nursing, education and sports science, thus highlighting an interdisciplinary approach to research.

Data collection methods

Prior to commencement of the study, ethics clearance was obtained from the UWC Research Ethics Committee (project no. 13/2/3).

During the first round of the Delphi study, the participants were provided with the principles of CBPR and asked to rate the application of the principles during CBPR. The first round would thus identify the aspects that researchers were able to apply in their project and determine the overall extent to which a university-community partnership can implement CBPR principles. The data were then ranked according to the most commonly used principles and distributed for round two.

During round two of the Delphi, the participants were informed of the commonly used principles identified by all the participants in the previous round and were then asked to explain, in ≤250 words, the benefits, barriers and facilitators of the identified principles according to their experience with CBPR projects. The data were then analysed, and categorised into common themes.

Data analysis

Round one consisted of closed-ended question responses that were analysed descriptively using Microsoft Excel (USA). The second round consisted mainly of open-ended question responses and was, therefore, analysed qualitatively. Participant responses were analysed thematically until saturation was reached.[8] The analysis, emergent themes and subsequent surveys were cross-checked by two other researchers, who provided critical input to the results and analysis.

Results

Sociodemographic data

Nine participants, 1 male and 8 females, responded to round one of the Delphi. Experience in academia ranged from 7 to 35 years, with a median of 17 years. Experience with engagement in community-engaged research ranged from 3 to 25 years, with a median of 5 years.

During round one of the Delphi, the participants ranked the application of the principles of CBPR as these applied to their project (summarised in Table 1).

When looking at the application of key CBPR principles in an interdisciplinary project, the main themes that emerged were the importance of identifying clear objectives for the collaborative project based on the needs of the community, a shift from identifying the needs of the community to implementing strategies, and finally the creation of capacity-building opportunities for all stakeholders.

Theme 1: Identifying clear aims and objectives

Setting of clear objectives was identified as a key consideration in driving CBPR. This is reflected in the following quotes:

'The objectives of the study were based on the needs of the community so the community was involved in needs analysis.' (P3)

'If all parties are clear of the concept then collaboration will flow easily.' (P4)

'Clear role clarity and an orientation session in the beginning of the project as departure could be useful.' (P1)

Table 1. Application of principles of CBPR

Item	Never applied: 0	Sometimes applied: 1	Often applied: 2	Always applied: 3	Mode
Recognising the community as a unit of identity	0	1	1	7	3
Building on strengths and resources in the community	0	1	3	5	3
Facilitating collaborative equitable involvement of all partners in all phases of research	1	3	3	2	1, 2
Integrating knowledge and interventions for mutual benefits of all partners	2	1	3	3	2, 3
Promoting a co-learning and empowering process	1	2	3	3	2, 3
Addressing health from physical, emotional and social perspectives	0	0	3	6	3
Finding a balance between research and interventions	2	2	2	3	3
Disseminating information to all partners	0	1	6	2	2
Forming long-term commitments	1	1	1	6	3

However, it was highlighted that we need to be conscious of the challenges, which could include the lack of involvement of a dedicated community member and limited time among stakeholders dedicated to the project, as illustrated in the following quotations:

> 'We could have invited a community member to be part of the research team.' (P3)
>
> 'One of the challenges with doing this is time. Time is needed to identify champions in the community who can be trained and then train them.' (P3)
>
> 'Much more time should have been spent befriending them and gaining their trust.' (P2)

Theme 2: Shifting from identifying the needs of the community to implementing the strategies

Involving the community members as part of the team when shifting from needs to implementation creates a sense of pride and trust, as solutions are collectively found:

> 'As the project was interdisciplinary the different domains of the person's health were investigated, also looking beyond the individual to the family and environment.' (P1)
>
> 'A sense of community and pride was established by revisiting their stories; it assisted them to think afresh about the community and its worth.' (P1)
>
> 'The research process on its own created a space for the community members to reflect on their own context and issues (awareness).' (P2)

A barrier highlighted with shifting from needs to intervention included the additional workload for all stakeholders:

> '[Stakeholders] have indicated that they have an overload of current work already and it would be additional work if they have to implement additional programmes.' (P2)
>
> 'One would have to integrate outcomes of the research programme within current community programmes.' (P3)

Theme 3: Creating capacity-building opportunities

As empowerment is a key feature of CBPR, three clear themes emerged: commitment from partners, creation of learning opportunities and sharing of ideas to build capacity. If an interdisciplinary project is to be successful, all stakeholders should declare their commitment to the project from the onset:

> 'A commitment to be part of a team should be given in the beginning and clear expectations and an agreement set with all stakeholders.' (P1)
>
> 'I think in principle much more time should have been spent collaborating with the community and the co-researchers.' (P2)

Participants were very clear that CBPR must provide opportunities for capacity development:

> '… important part of CE research is capacity development …' (P3)
>
> 'I think what worked well was the effort made to create opportunities for people to meet and discuss about the project.' (P4)
>
> 'Open discussion between stakeholders creates an awareness of challenges to be addressed and things to be avoided.' (P1)

Discussion

The four pillars of learning that have been articulated in the literature are 'learning to know', 'learning to do', 'learning to live together' and 'learning to be'.[9] Universities are increasingly viewed as agents of change and no longer as ivory towers. CBPR, in addition to traditional research, is seen as one way of facilitating change, closing disparities in communities and achieving 'learning to know, learning to do, learning to live together and learning to be'.[9] In particular, we cannot underscore the value of CBPR as a way of researching and learning together with community members and community stakeholders within the SA context.

The objective of the study was to reflect on the CBPR process to identify the lessons learnt and make recommendations for the way forward. CBPR practitioners may experience many challenges with implementing it; these could be minimised if an awareness of potential barriers is shared and communication is upfront. There are numerous challenges and barriers to conducting CBPR, as well as facilitating factors, as highlighted in literature.[10] We list four recommendations, based on the reflections of the participants of an interdisciplinary CBPR project.

Recommendation 1: CBPR requires a people-centred and critical approach that focuses on empowerment

Within CBPR, community members are viewed as participants in the research and as knowledgeable partners in the research process. CBPR is not seen as a once-off event but rather a process of conducting research, resulting from the ongoing action-reflection process between the university, community and stakeholders.[10] Differing from traditional research, where the researchers move in and out of the community, CBPR is a facilitated collaborative process benefitting both researchers and community.[10] Therefore, before embarking on the CBPR process, teams should clarify their knowledge and perceptions of CBPR as different from traditional research. The application of CBPR requires a fundamental shift in academics' views of people in communities from one of subjects who are beneficiaries to a perception of them as invaluable partners and experts who can galvanise their communities in the development of effective, novel and sustainable interventions.

Recommendation 2: Time spent in the community and within the team

The Community Development Resource Association[11] regards time spent with the people in the community and the team as 'getting the basics right'. 'If you want to enter into a venture with people, you have to know them – you have to know what is in their souls.' This is important if we aim to create authentic partnerships where community capacity-building occurs and learning opportunities for students are created. The literature highlights that if insufficient time is spent in the community, community capacity-building may be limited to individuals only and not occur in communities and organisations.[12] Similarly, a need was expressed by the research team for more time to interact with each other and thus be able to attend meetings, share thoughts, build capacity, share experiences and build support structures. To spend time with the community and the team brings a debate to the table relating to the workload of the academics and researchers who will take part in CBPR processes. These are conversations that should be facilitated with the university management structures.[13]

Recommendation 3: Build relationships

Relationship-building with and within the community and within the team is a key aspect of CBPR. CBPR is dependent on good and growing relationships with the community and between team members.[10] It is only when a good relationship exists that CBPR can be sustainable. Implied in the building of relationships in CBPR work are the values of mutual integrity, humility and respect.[6]

Recommendation 4: Building capacity in the community and the team

Participants in the research referred to the need and importance of building capacity of the people in the community, but in particular for the members of the interprofessional team. Sustainability of the CBPR process can only be ensured when research teams and community members are capacitated and mentored to take the process forward.[10] Implicitly, CBPR is about human development and, thus, building capacity within individuals to manage their own lives, and within the team, is important to ensure sustainability. Capacity-building elements should include the cultivation of self-knowledge and self-reflection, as well as the ability to observe, interview and learn to listen, and the facilitation of respect and flexibility.[14] We need to continually maintain opportunities for self-reflection with ourselves, in the team and with the community and research partners, about ourselves, our institutions, power relations and cultures.[14]

Conclusion

CBPR aims to facilitate sustainable change through research and create long-term relationships with community members and stakeholders as research partners. From this reflection on the research process, we concluded that the basics of CBPR should be attended to first. A changed research paradigm, spending time building relationships and capacitating staff and community members, should be facilitated. Getting this right will then assist the universities and communities to learn to know, learn to do, live together and learn to be. All of the above should be applied in an interprofessional and collaborative manner, as the researchers embark on the scholarship of discovery suggested by Boyer's model.

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