A snapshot of community-based research in Canada: Who? What? Why? How?

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Abstract

Community-Based Research (CBR) is rapidly gaining recognitions as an important tool in addressing complex environmental, health and social problems. However, little is known about the Canadian CBR context. A web-based survey including 25 questions was circulated on list-servs and via targeted e-mails to investigate the status of CBR in Canada. Univariate and bivariate statistical analyses were performed to examine variables and relationships of interest. Our sample included a cross-section of CBR community and academic practitioners ($n = 308$). Respondents reported a wide range of project foci, experience, operating budgets and reasons for engaging in their last CBR endeavor. Academic partners were perceived to be most involved at all stages of the research process except dissemination. Service providers were also perceived as being very involved in most stages of research. Community members were substantially less engaged. High levels of satisfaction were reported for both CBR processes and outcomes. Respondents reported a number of positive outcomes as a result of their research endeavors, including changes in both agency and government policies and programs. Our study shows that CBR practitioners are engaged in research on a wide array of Canadian health and social issues that is making a difference. Finding appropriate levels of participation for community members in CBR remains an ongoing challenge.

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Introduction

Despite commitments to social justice, universal health care and principles of equity enshrined in Canadian national policy, the gap between rich and poor continues to grow. These inequalities are embodied and manifest in significant health disparities [1]. In Canada, health and social disparities exist not only across income lines but also across racial and ethic groups [2], immigrant status [3], gender [4], ability [5] and indigenous status [6]. The complexities of these intractable inequalities make them ill-suited to traditional research approaches [7].

Community-Based Research (CBR) is rapidly gaining recognitions as an important tool in addressing complex environmental, health and social problems [8–12]. 'Outside expert'-driven research approaches have proven ineffective and communities across North America are demanding that they be given greater decision-making power over studies that take place in their midst [13–19]. As a result, national and international funders have also begun to recognize the importance of collaboration and are now mandating partnership approaches in some of their granting streams. Some academics are welcoming this change [10, 20–25].

There are many terms in the literature which have been used to describe collaborative research processes (e.g. Community-Based Participatory Research, Participatory Action Research). Several of

these terms and the work on which they are based are described and catalogued in the literature [26, 27]. For our study, we used the term 'community-based research', and the brief definition developed by the Loka Institute as research that is '… conducted by, for or with the participation of community members … Community based research aims not merely to advance understanding, but also to ensure that knowledge contributes to making a concrete and constructive difference in the world' [28].

Therefore CBR is not a method, but an approach to research [27, 29], that emphasizes the importance of collaboration, participation and social justice agendas over positivist notions of objectivity and the idea that science is apolitical [30]. CBR advocates argue that community involvement renders research more understandable, responsive and pertinent to people's lives [11]. Finally, the empowering process may help individuals make lasting personal and social change [27].

To the best of our knowledge, no one has yet done a national cross-sectional analysis of CBR community and academic practitioners. In addition to reviewing the published literature, this project sought to ask community and academic practitioners about their experiences conducting CBR in Canada. The goal of the overall project was to understand the nature of CBR practice in Canada and use the data to advocate for more CBR-friendly policies in the community, academy and funding worlds. The analysis to follow is descriptive and lays out the broad range of experience of those engaged in collaborative research in the Canadian context.

Methods

An advisory committee comprised of 10 leading North American CBR practitioners and funders was established in the fall of 2003. Advisory committee members were recruited based on their leadership, knowledge and expertise in the areas of CBR. Two were researchers situated in community not-for-profit agencies, three were academics located in units with strong community links, two were CBR funders, two were policy experts and one was a grassroots activist with a great deal of experience engaging in partnered research. (Over the life of the project, however, many switched positions and so were able to offer multiple viewpoints and perspectives.) Nine out of the 10 were Canadian.

Based on their collective experiences, key informant interviews with others they identified as leaders in the field and a thorough literature review, a tool was developed by the investigators. The tool was made available online using Survey Monkey, an online survey administration service. It was piloted with the Advisory Committee and adapted based on feedback. Subsequently, the survey was made public. The protocol underwent an ethical review through the University of Toronto.

An e-mail outlining the goals of the project, with an invitation to participate and a link to the survey, was sent out on several listservs with CBR foci; targeted e-mails were also sent to successful applicants for specific CBR grant calls. The total database of potential respondents included ~2 000 e-mail addresses. Two reminder e-mails followed the original. E-mail recipients were encouraged to pass on information about the study to colleagues, creating a larger effective sample. As a result, it is difficult to estimate a denominator for the total potential sample. The survey sought to reach community members, academics, policy makers and funders engaged in CBR.

Informed consent was sought online. The survey included 25 questions, including five questions with multiple sub-questions and three open-ended questions. It took ~15 to 30 min to complete.

Three hundred and eight participants answered at least one survey question. A database was automatically generated by Survey Monkey. Data were exported to Microsoft Excel and SPSS for subsequent analysis.

Those who had 'never practiced CBR' ($n = 38$, 12%) or chose not to answer the question of length of experience ($n = 5$, 1.75%) were excluded from this analysis. Some response variables were collapsed into larger groupings with other variables if the particular grouping was small (in most instances, where $n < 25$). Additionally, in instances where

respondents were able to give a response of 'other' and give a qualitative (text) response, every effort was made to recode responses into existing and, in some cases, new variables.

Univariate and bivariate statistical analyses were performed to examine variables and relationships of interest. Where appropriate, variables were collapsed into artificial scales and were tested for reliability via Cronbach alpha coefficients. Participants were permitted to leave questions unanswered. As a result, the number of responses considered in each analysis varied ($155 \leqslant n \leqslant 308$).

Results

Who is doing CBR in Canada?

Our sample included a wide cross-section of CBR practitioners (see Table I). Nearly half (48%) were new to CBR (<3 years of experience), while approximately a quarter (22%) had been engaged in this work for >10 years. Just over half the sample was academically situated (54%), and nearly a third identified as being not-for-profit professionals or community members (30%). The sample was also diverse in terms of role that the respondents filled within the CBR projects: 35% principal investigators, 22% co-principal investigators, 18% staff, 8% advisory members and 7% community partners. Two-thirds of respondents were from Ontario, with the rest distributed throughout other parts of Canada.

Respondents self-identified by organization and project: most were based at an Academic Institution/Hospital, but respondents were widely distributed across role and organization (see Table II).

What are they studying?

Respondents reported a wide range of project foci. Project topics spanned the life course (20% children, 33% youth, 14% university students, 28% adults and 21% seniors). Some projects focused on individual ethno racial communities (e.g. 23% aboriginal/first nation), others on communities of identity (e.g. 15% lesbian or gay community) and others on communities sharing a common disease experience (e.g. 15% human immunodeficiency

Table I. *Sample characteristics*

	n	%
Experience (in CBR) (*n* = 265)		
<3 years	127	48
3–10 years	80	30
>10 years	58	22
Organization (*n* = 265)		
Academic/hospital	143	54
Government	27	10
For-profit/funder	16	6
Non-profit/citizen	79	30
Role on the project (*n* = 253)		
Principal investigator	89	35
Co-investigator	56	22
Advisory committee member	20	8
Paid staff	45	18
Community partner	17	7
Other	26	10
Province (*n* = 264)		
Ontario	199	74
Quebec	19	7
Maritimes	10	5
British Columbia	54	9
Prairies	12	5

virus). Poverty (29%), education (29%), health/welfare (29%), community sustainability (24%) and housing (22%) were the most popular issues studied. (Note: these categories were not mutually exclusive.)

Why?

Respondents reported a variety of reasons for engaging in their last CBR project (see Table III): 36% identified that the primary goal of their last project was a community assessment, for 23% it was an evaluation and for 19% community awareness was the primary goal. Other reasons cited included proposing policy alternatives and gathering baseline data.

Half of the respondents reported that their last CBR project lasted between 1 and 3 years, while 29% said their last project lasted less than a year and 22% had projects that lasted ⩾3 years. Most projects (62%) were funded by a single source, while 5% had no funding and a third had two or more funders. Budgets for projects ranged from nil to >\$500 000.

Table II. *Role by organization*

		Organization				
		Academic/ hospital	Government	For-profit/ funder	Non-profit/ citizen	Total
How would you best characterize your role on the project?	Principal investigator	62	3	7	17	89
	Co-investigator	34	3	2	17	56
	Advisory committee member	6	6	1	7	20
	Paid staff	20	7	0	18	45
	Other	10	4	5	7	26
	Community partner	3	3	0	11	17
	Total	135	26	15	77	253

How?

Participants were asked to rate the level of involvement in each stage of the project of (i) Community members (people who self-identify as part of the community being studied), (ii) service providers (people who work in not-for-profit organizations), (iii) academics or hospital-based researchers and (iv) funders/government.

Academic partners were perceived to be most involved at all stages of the research process until dissemination (see Table IV). While service providers were also cited as being rather involved in defining the questions, and disseminating the results, they appeared to take the lead in using the findings for advocacy and changing policy and practice. Community members were perceived to be most involved in defining research questions, dissemination and advocacy but were substantially less involved in all other areas of the research. Not surprisingly, funders/governments were understood to be most active around supporting projects financially and using the results to inform policy and practice.

Increased funding was found to be correlated with higher reported community members' participation in data collection and the development of methodology. No other evidence was found of any factors having influenced levels of involvement in the various stages of the research process on the part of any of the four groups.

Satisfaction

Respondents were found to have been overwhelmingly satisfied with both the process and results of

Table III. *CBR project characteristics*

	n	%
Primary goal of the project (n = 240)		
Assessment	87	36
Evaluation	56	23
Proposing policy alternatives	15	6
Community awareness	45	19
Baseline data	15	6
Other	22	9
Duration of the project (n = 243)		
<1 year	70	29
1–3 years	119	49
>3 years	54	22
Funders (n = 265)		
University	44	17
Federal government	104	39
Provincial government	42	16
Local government	25	9
Foundation	84	32
In-kind funding	71	27
Other	26	10
Number of types of funders (n = 265)		
0	13	5
1	164	62
2	48	18
3	27	10
4+	13	5
Total project budget (n = 215)		
<$20 000	66	31
$20 001–100 000	68	32
$100 001–500 000	50	23
>$500 000	31	14

their work. On a scale of 1–4 (where 1 represented a response of 'very unsatisfied' and 4 represented a response of 'very satisfied'), respondents averaged high satisfaction levels of 3.2 with both project

Table IV. *Participation in the research process*[a]

	Academic researchers	Community members	Service providers/ non-governmental organization	Government/ funders
Supporting the project financially	2.1	1.3	2.1	2.5
Defining the research question	2.6	2.1	2.5	1.6
Developing the methodology to answer the question	2.7	1.8	2.3	1.5
Planning the research	2.7	1.9	2.4	1.5
Data collection (e.g. interviewing, surveying, etc.)	2.5	2.0	2.2	1.3
Analysis and interpretation of the data	2.7	1.8	2.0	1.3
Disseminating the results	2.6	2.1	2.6	1.7
Offering skill-building opportunities	2.3	2.0	2.3	1.5
Using the findings for advocacy purposes	2.2	2.2	2.5	1.7
Using the findings to change policy or practice	2.3	2.1	2.5	2.6

$n = 133–177$.
[a]Mean 'level of involvement' score by respondent role (1 = 'not involved', 3 = 'very involved').

process and outcomes. Principal investigators indicated the most satisfaction with process and outcomes (3.4 and 3.4, respectively) and advisory committee members also reported high satisfaction (3.4, 3.3). Others were only slightly less satisfied: community partner (3.2, 3.0), co-investigator (3.1, 3.0), paid staff (3.0, 3.1) and 'other' (3.0, 3.1).

Only 11% were dissatisfied with either one. Those dissatisfied were not characterized by any particular qualities, but were evenly distributed across the full range of CBR experience. (For instance, unhappy respondents had approximately the same amount and duration of funding as the population of respondents overall.)

Respondents reported a variety of both positive outputs (concrete products of the research) and outcomes (less tangible benefits flowing from the project) (see Fig. 1). Presentations (73%), published papers (52%) and/or policy documents and recommendations (47%) were produced by most. Most importantly, CBR was found to foster societal outcomes which are not often perceived as being associated with traditional research methods. In particular, increased community capacity (62%), plans for future projects (60%), cordial working relationships (51%), new coalitions (47%), changes in agency programming (38%) and changes in government policy (15%) were cited as concrete outcomes from the projects undertaken by our respondents. The frequency of reported negative outcomes (e.g. increased polarization, increased mistrust and alienation from funders, etc.) was low (under 2%).

Positive outcomes and outputs were almost all found to have been positively correlated with a number of factors, including the project duration and budget, a result which was also emphasized by respondents in their written comments. A higher number of funders were also associated with positive outcomes and outputs.

Limitations

Our sample was self-selected. Since it is difficult to estimate the potential denominator (or the size of the community of CBR practitioners in Canada), it is impossible to generate an accurate response rate. It is also possible that this sample may have overrepresented individuals who had a relatively successful experience. As such, we cannot make definitive generalizations about the larger community of CBR practitioners, and care should be taken in interpreting the results.

A second limitation of our research is that Ontario residents were overrepresented in our sample and we did not have the power to conduct comparative regional analyses. A third limitation is
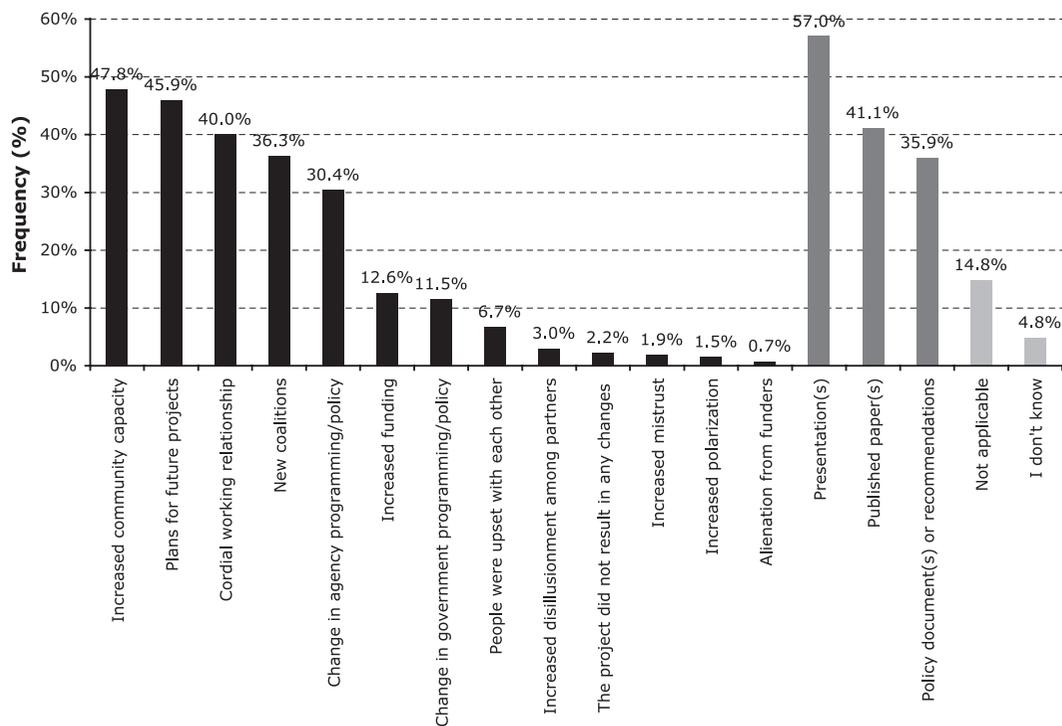
Fig. 1. Outcome/output frequency.

that we have no way of knowing if there were 'linked' responses. For instance, it is conceivable that more than one respondent from the same project team filled out a survey. Therefore, some areas of inquiry or projects may be 'overrepresented'. A fourth limitation is that this survey was circulated online and may therefore have been inaccessible to grassroots groups who do not have access to computers.

Nevertheless, to the best of our knowledge, this is the first survey of CBR practitioners in North America. With just >300 diverse respondents, we begin to get a snapshot of the Canadian CBR community; this exploratory study was a first step. Future researchers may want to develop more targeted sampling frames (e.g. those who apply and/or are successful in accessing CBR pots of funding at provincial or national levels). Our attempt to welcome a broad spectrum of funded and unfunded projects (without a list from which to pull a solid

sampling frame) compromised our ability to draw a representative random sample.

Discussion

Our study shows that CBR practitioners are engaged in research on a wide array of Canadian health and social issues. Despite a plethora of barriers cited in the literature (including CBR being more resource intensive and perceived as less credible than other forms of traditional research [10, 31]), respondents reported being overwhelmingly satisfied with both the process and results of their initiatives. This general finding is in keeping with others that have found CBR to be a successful model of research to address a number of social and health disparities [10, 11, 32, 33].

Our research suggests that academics dominate most areas of the research process, although service

providers seem to take the lead on dissemination and advocacy. Community members were reported as the 'least involved' partners. This raises powerful question about who represents community and what it means to represent community-based concerns [34–37].

There is a wide range of levels of participation possible in CBR projects [12, 38, 39]. Community participation ranges from having a community advisory group that meets quarterly to guide overall research direction to having community representatives partner in all aspects of the research. Using the same language (CBR) to describe each of these instances may in fact obscure when participation is actually token involvement [40].

Our research shows that community members were most often involved in defining research questions, collecting data and using the findings for advocacy purposes. They were least likely to be involved in data analysis and interpretation. (However, this relationship was less strong in projects with higher budgets.) It should be noted that the choice of method and approach to data analysis and interpretation can direct, and even pre-determine, results [41]. Therefore, lack of community involvement in these processes may be a significant limitation.

Many models of CBR romanticize the notion that moving toward maximum community participation in all aspects of the research is optimal. However, community members are often overworked and have little time for, or interest in, involvement with all the minutia of research [42]. When asked, community members disagree on the appropriate level of participation [37]. Often, well-organized and empowered communities could do their own research, but have more important things to do. Having an outside academic facilitate and carry out research does not necessarily hinder a community from learning new skills nor perpetuate knowledge inequality if the knowledge is appropriately shared [20]. Finding an appropriate balance remains a constant tension in many CBR endeavors. Wang *et al.* [43] recommend that an ideal approach may be to offer all participants 'a choice' of whether to have a role in any given stage.

The challenge becomes knowing when a participatory or community-based approach would add value and then negotiating its proper application given the particular fiscal, resource and time constraints of each context. Striving for maximum community ownership and control may not be a realistic or (necessarily) desirable circumstance for every project [20]. Despite reporting lower levels of involvement, community members also reported being satisfied with both project processes and results. Nevertheless, funders and others should take note that projects with higher budgets were more likely to report higher levels of community member participation. This general finding is in keeping with other research that has demonstrated the importance of removing barriers to community participation through assistance with childcare, transportation and other financial remuneration [44–46].

CBR practitioners reported impressive rates of research uptake. Many credited their research with changes to agency and/or government policy or programs. While it is often difficult to directly link the impact of research on policy change, the fact that so many respondents felt that their work was impacting on the public arena is encouraging. Additional research is warranted to further identify these links in a Canadian context [47]. In an era where we are increasingly concerned with knowledge translation, transfer and exchange, this finding may have powerful implications for those seeking to increase the impact of their work locally and globally.

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Conflict of interest statement

None declared.

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