Participatory Research: Assessing Needs and Building Capacity at McGill University

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Participatory Research at McGill (PRAM) – McGill University

We assess the needs of faculty and researchers for conducting participatory research at a major institution and translate the results into development workshops. This mixed model study used an initial qualitative design to inform survey development, and quantitative results to inform workshop development.

Introduction: Participatory Research at McGill

The Royal Society of Canada has defined participatory research as "systematic investigation, with the collaboration of those affected by the issue being studied, for purposes of education and taking action or effecting social change" (Green, et al., 1995). It has been increasingly recognized as a highly effective method of adding relevance and value to primary health care research (Macaulay, et al., 1999; Minkler, 2000). The equally important goals of participatory research are to undertake high-quality research, benefit the community or group where the research is occurring, and develop knowledge applicable to other settings (Minkler and Wallerstein, 2003; Wallerstein and Duran, 2006). Taking a participatory approach integrates knowledge translation throughout the course of the research by ensuring that the end users of the results, such as patients, practitioners, community members and organizations, and policy makers are involved in the undertaking from the development of the research question, through data collection and analysis, to interpretation and dissemination (Macaulay, et al., 1999).

In recent years, more researchers have begun to adopt a participatory approach to research. At the same time, an ever increasing number of funding opportunities are calling for a participatory or partnership component to proposed research designs. It has become clear to many researchers that an additional set of skills are required successfully compete for these funds and successfully build and maintain successful research partnerships.

To this end, Participatory Research at McGill (PRAM) began in September 2006 with a mandate to further critical scholarship in participatory research, while building capacity among McGill faculty and researchers to competently undertake participatory research.

Our Program

To further scholarship, we have undertaken two key review projects. The first is a comprehensive review of the literature in order to determine the benefits of participatory research. This is an 18 month project lead by our PRAM post-doctoral fellow and will result in a paper and a synthesis grant application to continue the work in further depth. The second study reviews on-the-ground community-academic research partnerships in order to explore the variation in how project partnerships manage themselves. This ongoing study will create a best-practice guide for communities and researchers in the process of seeking partnerships.

In order to increase capacity in the McGill community for undertaking participatory research, PRAM is offering consultation; compiling resources; presenting on and off campus; partnering with new and existing research projects; holding a regular lunchtime seminar series; and designing faculty development workshops.

Through our participation in the Ottawa-based *Anisnwabe Kenendazone Network Environment for Aboriginal Health Research (AK-NEAHR)*, PRAM is also offering seed grants and graduate and post-doctoral funding to those working in the area of Aboriginal health.

Designing Learning Tools from Scratch

One of PRAM's principal undertakings since its inception has been the design and delivery of a faculty development workshop on participatory research. This has been a two-year process from conception through workshop evaluation. From the beginning, we conceived of this project as potentially contributing to the understanding of assessing needs and the design and delivery of faculty development tools. We therefore applied for IRB ethical approval and required active consent from all participating in the initial qualitative study.

Qualitative Study

Workshops should be organised around an overall goal and specific learning objectives (Steinert, 1992). We were determined that these objectives would be grounded in concrete needs. We first conducted prospective semi-structured interviews with 7 academic team members, and one focus group with 9 participants from 8 departments across 3 faculties (Medicine, Arts, Education). Participants were selected for their range of pre-existing knowledge and experiences with participatory research, with the goal of eliciting a broad set of thematic categories. Interviews and focus group were conducted in the winter and spring of 2007 and analysed in August 2007.

Results. Qualitative analysis identified emergent themes which would inform survey tool development during the needs assessment phase. Preliminary analysis revealed several emergent themes which could shape the categories and questions in the needs assessment tool. Major themes were:

Table 1

Major Theme	Sub-Categories
Conceptual Framework	*Action vs. Research; Key aspects of PR; General need for PR*
Institutional issues	*Institutional needs for PR; Institutional support for PR; Barriers to PR*
Partnerships	*Ethics; Agreements PR process*
Academic Development	*Need for academic PR expertise; Personal PR goals*
New developments	*PR developments; PR Impact on policy; Interest in PR from other areas*

Needs Assessment

These emergent themes from the qualitative analysis were then used to form categories for the needs assessment survey. Categories were:

PR Background; Partnerships; Funding; Research & Project Evaluation (Scholarship); Disseminating Results & Influencing Policy; Professional & Academic Skills/Leadership; and Ethics.

Tool development took place in September and October 2007. In all, sixteen principal questions were included in the final tool covering each of these themes. Input from those regularly involved in needs assessment within the Faculty of Medicine advised us to keep the total number down under 20 questions if we wished to maximize our return. Further questions were also included to determine respondents' level of experience with PR and with research in general, their potential collaborators, academic department and preferred learning format.

The questionnaire was piloted at the end of October 2007 and administered in two waves, preceding and following the winter break between academic terms.

Results. By the end of the second call for participation, we had received 126 responses from members of 14 of the 21 departments in the Faculty of Medicine, as well as from 2 Schools (Nursing and Physical & Occupational Therapy), 4 Centres, 3 clinical units, 7 divisions, and 1 department outside the Faculty of Medicine.

Respondents were asked to rate 16 issues on a scale of 1 to 5, where 1 was "most important" and 5 was "least important" (see Table 2). They also ranked various learning formats. The preferred format was half-day workshop (see Table 3).

Respondents were also asked to rate their level of PR experience (none, some, significant, see Table 4); their total years involved in research (see Table 5); and their likely research partners (see Table 6).

Table 2: Responses to "It is important to me to improve my knowledge of… 1 (most) - 5 (least)"

Question	N	Mean	SD
grantsmanship skills specific to PR	124	**1.88**	0.976
evaluation methods and models used in PR	125	**2.03**	1.047
research partnership agreements, encompassing partner responsibilities, data ownership, protection, etc.	124	**2.03**	1.012
Identifying and overcoming challenges	125	**2.07**	1.108
integrated Knowledge Translation throughout the PR process	125	**2.10**	1.098
major challenges to conducting PR and how these challenges may be overcome	124	**2.12**	1.130
PR issues with IRBs	119	**2.13**	1.008
using evaluation results to manage, plan, strategize and improve partnership	123	**2.14**	1.058
how to influence policy	124	**2.16**	1.136
how to develop and maintaining partnerships	124	**2.20**	1.189
process evaluation for a PR partnership using a model-based approach	125	**2.20**	1.054
scholarly and community dissemination of PR studies	125	**2.30**	1.158
how to identify PR partners	125	**2.33**	1.243
how to balance personal, community, academic values in PR	121	**2.45**	1.118
key terms and principles used in PR	125	**2.51**	1.175
tenure and promotion in relation to PR	120	**2.93**	1.385

Table 3: Preferred Learning Format (lower mean=higher rank; multiple responses allowed)

Learning Format	N	Mean	SD
Half-day workshop	119	**1.80**	1.078
E-learning tools	111	**2.73**	1.279
Individual/group consultations	112	**2.88**	1.224
One-day workshop	113	**2.94**	1.159
Other	28	**4.50**	1.139

Table 4: Participatory Research Experience

Exp	N	%
none	23	19.3
some	78	65.5
	18	15.1

Table 5: Years involved in research

Years	N	%
0	2	1.6
1-5	30	24.0
6-10	25	20.0
11-15	16	12.8
16>	52	41.6

Table 6: Partners

Partner	N
Professionals	103
Patients	81
Organisations	78
Community members	57
Policy makers	44
Others	10

Workshop Development

Needs assessment survey results informed workshop content by prioritising learning objectives to be covered within the half-day session. Since we felt it was feasible at least to touch upon every learning objective to some degree, the needs assessment results determined how much time was allotted to each relative to how much information there actually was to impart on each topic. Thus, although "grantsmanship" ranked highest, there was relatively less information to impart than under the combined category of "ethics" which conflated several of the categories, such as research agreements, IRBs and data ownership issues. So those were actually given more time in the final program.

Analysis of response variance (*one-way ANOVA*) for "Rate your Level of PR Experience" revealed a significant difference between groups for about 1 in 3 questions. This led us to conclude that a second, more advanced workshop should be planned as a later follow-up. By comparing means among those with "significant" PR experience, the highest responses were for: *how to influence policy*; *PR issues with IRBs*; *integrated knowledge translation throughout the PR process*; *grantsmanship skills specific to PR*; and *research partnership agreement*. The later workshop will therefore spend more time on these issues. In addition we will ask participants to plan or brainstorm further developments in their own PR projects.

Final Workshop Program

Based upon final analysis of the needs assessment data, our final workshop program is as follows:

Learning Goal:
To build participants' capacity to conduct participatory health research.

Objective-based topics:

Introduction: understand key principles in PR
      i.   history
      ii.   enumerate concepts
      iii.   research design
      iv.   professional/career issues
Identify Research Partners
      i.   contacting organisations
      ii.   mobilising groups
      iii.   maintaining relationships
Ethics & Research Agreements
      i.   identify governance issues
      ii.   identify partners' roles
      iii.   identify partners' rights and responsibilities
      iv.   determine means of conflict resolution
      v.   understand protection of individuals and collectivities
      vi.   determining Ownership, Control, Access and Possession (OCAP) of data
      vii.   meeting IRB and Community needs
Integrating KT in research process
      i.   how to include parties in formulating research model
      ii.   ensure two-way communication between stakeholder representatives and their organisations throughout process
      iii.   incorporate non-academic voices in design and dissemination
Post-research dissemination
      i.   incorporating non-academic voices in scholarly articles
      ii.   incorporating multiple voices
      iii.   presenting to community or other interest groups

Conclusion

This workshop, our introductory level program, will be piloted in April 2008 within the Department of Family Medicine – PRAM's academic home – for continuing medical education (CME) credits from the College of Family Physicians of Canada. It will be evaluated through participant feedback, adjusted appropriately and the final product will become a Faculty-level workshop open to all departments in the Faculty of Medicine and allied schools. The follow-up "advanced PR" workshop will be developed over the next year and piloted in the spring of 2009.

References

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