Some Thoughts about Research Methodology and Design

Community Empowered Research Training

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Impetus for change

◆ Gains from 'traditional' research and funding

  ❖ Extensive knowledge base; breakthroughs in diagnostics; health indices; effective therapies etc.

  ❖ Significant impact on increased life expectancies

◆ No appreciable effect on health <u>practice</u>

◆ Health disparities remain even when access issues are taken into account

◆ Spending disparity: Poorer countries that spend less on health care are in better health than US

Banks J, Marmot M, Oldfield Z, Smith J. Disease and disadvantage in the United States and England. JAMA. 2006;295:2037-2045.3.
Siddiqui A, Herman C. Towards an epidemiological understanding of the effects of long-term institutional changes on population health: a case study of Canada vs..USA.Soc.Sci.Med.2007;64:589 -603.

To know how to get to where you are going…

◆ Kurt Lewin: 1940's
   ❖ 'action research': research not just to understand phenomena, but also to be able to shape it
   ❖ Address and redress social inequalities
   ❖ Challenged traditional concept of 'scientific objectivity'
   ❖ Rejected idea that researchers had to remove themselves from the community in order to study it

◆ Paolo Friere: 1960's
   ❖ Education is a dialogue a co-operative activity that involves respect and exchange.
   ❖ Praxis: action and making a change in the world. Not one person acting on another, but with another
   ❖ Conscientization - developing consciousness, that has the power to transform reality.
   ❖ Situating action in the lived experience of the individual

How is this related to methodology?

◆ Fundamental assumptions about the correlation and causal relationships that under gird the issue under investigation IS what guides methodology.

◆ Fundamental shift in assumptions: centrality of role of community and communal factors

◆ Shift in context of understanding: social determinants of process

◆ Research shift: from "knowing" to combining knowledge with <u>action</u> to achieve social change

Research paradigm: WITH vs. IN

◆ Recognizes community as a unit of identity

◆ Builds on strengths and resources within the community

◆ Facilitates collaborative partnerships in all phases of the research

◆ Integrates knowledge and action for mutual benefit of all partners

◆ Promotes a co-learning and empowering process that attends to social inequalities

◆ Involves a cyclical and iterative process

◆ Addresses health from both positive and ecological perspectives

◆ Disseminates findings and knowledge gained to all partners

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Community Engagement and Research Methodology

Community can be involved at every level: "it's never too early, never too late"

◆ Select research question

◆ Develop proposal

◆ Financial responsibility

◆ Study design

◆ Recruiting and retaining subjects

◆ Participate in design of instruments and data collection

◆ Develop intervention

◆ Interpret and disseminate findings

◆ Apply findings: translate research ⟶ practice

Effects on study design

◆ Knock quantitative methodology off its pedestal! We are studying people not particles

◆ The only choice is NOT a focus group!

◆ Triangulation of methodologies: each method reveals different aspects of the empirical world

◆ High priority on translation of basic, intervention, and applied research into changes in policy and practice.

◆ Change assessments need to be built into design of study

The Five Commandments of Research Design

◆ WHAT do I want to know?

◆ WHY do I want to know this?

◆ WHO do I want to get this information from?

◆ HOW am I going to use this data?

◆ WHAT are my limitations?

Research Designs: The usual suspects

◆RCT

◆Pre-post testing

◆Single sample: baseline-change comparisons (longitudinal studies)

◆Cross-sectional/cohort comparisons

Research Designs: Focus Group Interviewing

◆ Clearly defined research objective and/or research problem

◆ The nature of the group

◆ Atmosphere/environment and rapport

◆ Role of Facilitator: key person!

  ❖ Aware and listening facilitator

  ❖ Well-organized and prepared facilitator

  ❖ Structure, direction, and contribution to discussion

◆ Research assistance:

  ❖ Who else should be there?

◆ Systematic analysis (recording and data crunching: we'll get to this later)

Research Designs: Interviews

◆ Interviews: "a conversation with a purpose"
  ❖ Dramaturgical perspective on interviews: 'setting the stage'
  ❖ Structured, unstructured, and partially structured
  ❖ Interview schedule

◆ Questionnaires and surveys: not the same as interviews
  ❖ Poor cousin of the interview…but more cost effective
  ❖ "Quick read" of community issues

Research Designs: Sociometric methods

◆ Sociometry: a means of measuring social distance and group structure

◆ Technique may inform researchers of *key individuals: those people* who may serve as guides or informants

◆ This may be of particular importance when there is an action agenda

Research Designs: Human Traces

◆ Archival studies

❖ Public records: hospital admittances, motor vehicle registries

❖ Commercial media accounts

◆ Actuarial records

❖ Birth and death records

◆ Official documentary records: hospitals, social agencies, schools

Research Designs: Historiography and oral Histories

◆ Basic assumption: you can learn about the present from the past

◆ Culture and cultural assumptions: imposition of personal cultural judgments on other cultures' meanings

◆ Window to understand symbols and symbolism in a current context

◆ Oral histories

◆ Case studies

Now what? Data analysis techniques

◆ Content analysis

  ❖ Interviews, field notes, focus group transcriptions: all require further work

  ❖ Data needs to be condensed and made systematically comparable

  ❖ Nature and levels of analysis

  ❖ Coding frames

  ❖ Word crunching