

Sampling, Recruitment and Retention in CBPR

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The Traditional Divide: Probability and Non-Probability Sampling

Probability

- Simple random
- Stratified random
- Cluster; multi-level

Non-Probability

- Convenience/
availability
- Snowball
- Quota
- Purposive*
- Nominations*

*Qualitative studies

Sampling in CBPR: Inclusion and Exclusion Decisions

- CBPR literature relatively silent on sampling (not listed as Index term in Minkler et al or Israel et al. texts)
- Like other aspects of scientific research, ‘sampling’ traditionally implies *top-down* decisions made in advance
- In CBPR, representation of ‘regular folks’, the under-represented and hidden populations is critical
- Understanding of the ‘community’ and appropriate modes of outreach also critical
- Units and levels of analysis vary (individual, provider, community, neighborhood, organization/agency /clinic/school)

Characteristics of Sampling in CBPR

- Requires definition of 'community' and parameters
- Decisions and implementation are collaborative (e.g., statistical power analysis vs. community-driven)
- Assumptions of probability sampling & external validity countered by local relevance and ecological validity
- Multiple sampling strategies are common across levels
- Different stages of CBPR=different strategies (formative vs. intervention phase)
- In addition to community partners' knowledge, ethnographic mapping and available documents/data can assist in setting parameters for sampling of groups

Issues in Recruitment in CBPR

- Roles blur or overlap, e.g., recruiter, interviewee, health worker, service recipient—potential for conflicts of interest?
- Research partners need to be trained in human subjects protections, IRB jurisdiction and ethics (e.g., avoid any appearance of coercion)
- Employment of community partners for outreach, recruitment and/or data collection can be effective but also problematic re: COIs and privacy concerns
- Employment of non-community members has its own tradeoffs re: local knowledge (lack thereof)

Verticality in Sampling in CBPR: Multi-Level

- Micro/individual—>community members; members of targeted ‘risk group’; providers; key informants
- Meso/social and community—> community organizations, clubs, churches, schools, etc.
- Macro/socio-cultural, economic and political→ government leaders, experts, health ministers, etc.

Temporality or Staging in Sampling in CBPR

- Formative –key informants, focus groups, ethnographic observation/mapping
- Mid-Phase—random sample surveys, targeted interviews; measurement and pilot testing
- Late-Phase—intervention and selection of experimental and control groups
- Post-hoc evaluation/reflection—focus groups, observation, interviews

Dimensions of Sampling: Time and Space

- Vary observation times to capture different rhythms and timing of risk exposure, etc. (afternoon vs. evening hours, daily, weekly, seasonally)
- Vary recruitment spatially and temporally to reach hidden populations (e.g., evening hours for working mothers)

Mixed methods in CBPR: Sampling goes hand-in-hand with data collection methods

Quantitative → surveys, structured interviews, existing data, e.g., medical records, cancer registries, etc.

May be probability or non-probability

Units of analysis may be individuals, households, neighborhoods, etc.

Qualitative → focus groups, ethnographic observation/mapping, in-depth interviews,

Only non-probability; most often purposive

Matching the strategy with the target sample group

- Key informants (purposive; snowball?)
- 'Expert' and 'Leader' interviewees (purposive)
- Focus groups (purposive; convenience?)
- Community households (random; quota)
- Hidden populations (snowball)

Recruitment and Retention: Commitments of Time

- Engaging over time; mutually responsive and trusting
- Paying incentives (individual, organizational, community-level); child care, transportation, etc.
- Building in regular contacts and communication between all participants (e.g., newsletter, website, on-line and in-person community forums)

Case Example: Defining 'community' in a multi-ethnic CBPR environmental justice project

- Location: Greenpoint /Williamsburg in Brooklyn
- Problems: Disproportionate hazards (sewage, solid waste, garbage transfer depots); air and soil pollutants
- Community composition: Latino (42%), Hasidic Jew (24%), African-Am (13%), Polish/Slavic (10%)
- CB organizations “El Puente” and non-profit Community Information and Epidemiological Technologies (CIET)-- community health surveys and focus group forums, mapping of toxic site locations (waste facilities, high truck traffic, high concentrations of nail salons, dry cleaners, etc.)
- Multi-lingual communication barriers reduced by visual maps
- G/W partners ‘reap’ EPA involvement and NIEHS funding

Case Example: Sampling and Recruitment in CBPR on Asthma in Boston Public Housing*

- Eligible--all asthmatic children (ages 4 to 17 years) in 3 mid-rise walk-up public housing projects (and their caregivers)
- Recruitment by trained CHA (Community Health Advocates)
- Used flyers, open house, mailbox drops, door knocks
- CHAs trained in recruitment and data collection
- Yield = 50 children from 41 households

*Levy et al. (2006). A community-based participatory research study of multi-faceted in-home environmental interventions for pediatric asthmatics in public housing. *Social Science & Medicine*, 63, 2191-2203.

Case Example of a 'Mature' CBPR: Community-Based Evaluation of the Sonagachi CBPR Project (HIV Prevention) in an Indian Red Light District*

Phase 1=Ethnographic observation of the district

Phase 2=

a. Interviews with:

- 19 sex workers (employed by the Project)
- 7 non-sex worker professional staff
- 13 other local people (madams, clients, landladies, a political party workers)

b. Ethnographic “shadowing” of Project activities for 6 months (including interviews with powerful men’s clubs, madams, police, political party reps)

*Cornish, F & Ghosh, R. (2007). The necessary contradictions of ‘community-led’ health promotion: A case study....*Social Science & Medicine*, 64, 496-507.

Sampling in CPBR: In Conclusion....

- Defining the 'community' may be challenging
- Recruitment must be socially and culturally sensitive as well as collaborative
- Tradeoffs of relying on community partners vs. others in recruitment, sampling and data collection
- Scarcity of pre-defined sampling frames (yet not necessary in many instances)
- Sample size and statistical power assumptions
- Generalizability and representativeness vs. ecological validity