Community Based Participatory Research; Dissemination and Implementation Science

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Community Based Participatory Research (CBPR)

CBPR

• Introduction to and Defining CBPR
• Principles of CBPR
• Considerations for a CBPR Partnership
Hallmarks of CBPR

- Collaborative
- Increases evidence-based knowledge
- Benefits the community
CBPR is ...

“a collaborative research approach that is designed to ensure and establish structures for participation by communities affected by the issue being studied, representatives of organizations, and researchers in all aspects of the research process to improve health and well-being through taking action, including social change”

AHRQ Report Definition, 2004
Principles of CBPR

1. Community as a unit of identity
2. Builds on community’s strengths and resources
3. Collaborative partnerships in all research phases using an empowering and power sharing process
4. Promotes capacity building and co-learning
5. Integrates knowledge & action for mutual benefit
6. Attends to local relevance and ecologic perspectives
7. Cyclical and iterative process
8. Disseminates findings and knowledge
9. Commitment to sustainability

Israel et al., 2003
Major Considerations for CBPR

- Community identification and selection
- Role of partners in community
  - Overall
  - Specific stages of research (study design, conduct, analysis, and dissemination of findings)
- Group processes around decision making
- Compensation for community
- Direct financial resources
  - Training and assistance
  - Hiring local staff
- Sustainability

Israel et al., 2005
Dissemination and Implementation (D & I) Science
D & I

• Introduction to and Defining D & I Research
• Theories and Frameworks
• Considerations for D & I Research
Translational Research (Type I)

- Basic research
- Efficacy research

Translation Research (Type II)

- Effectiveness research
- Dissemination research
- Implementation research

Rabin BA, et al., 2008.
“Dissemination research is the systematic study of processes and factors that lead to widespread use of an evidence-based intervention by the target population.”

“Implementation research seeks to understand the processes and factors that are associated with successful integration of evidence-based interventions within a particular setting.”

Meisner HI, et al., 2013; Rabin BA, et al., 2008.
Consolidated Framework for Implementation Research (CFIR)

Major Domains are:

- Intervention Content
- Inner Setting
- Outer Setting
- Individuals Involved
- Implementation Process

Damschroder LJ et al., 2009
Major Considerations for D & I Research

- Influential factors
  - Fidelity
  - Adaptation
  - Influences of speed and extent of D & I

- Measurement of D & I
  - Mediators, moderators, outcomes

Rabin BA, et al., 2008.
Case Studies
CBPR: Marshall Islands Case Study

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Marshall Island Facts

Population: 62,000
Births: 1000 annually
Fertility: 3.9
Profile: 40% under age
Per capita income: $2000
Political: Independent state in free association with US
Geography: 29 atolls and 5 islands spread over 75000 sq miles of central Pacific
Nutrition: 1/3 under mainly Fe
80% have not had 5 portions of fruit or vegetables over the last 7 days
US Nuclear Testing: Lies and Failed Promises
Decision Making in RMI

• No interventional research allowed
• Decisions are by consensus, if anyone disagrees nothing happens
• Decision making at both Ministry of Health and local community level (mayors and traditional leaders)
• No established IRB process
• Need local advocate
Proposed Work

Randomized controlled trial of a xylitol syrup to prevent S-ECC in children less than 24 months. 50% have S-ECC by 24 months untreated.

Issues:
- Low level of health literacy
- Safety of xylitol
- Placebo/low dose
- Sharing of results
- Follow-up
Building Trust
Steps

• Initial buy-in by dental department of MOH
• Review by MOH
• HRSA funding
• Consultation with local mayors and traditional leaders
• Appointment of IRB equivalent
• Polling of medical staff
• Interference by outside anthropologist
• Intervention by Minister of Health
• UW IRB of waived consent, low literacy materials
• Decisions on gifts to families
• Hiring, training of local PD and field staff
• Baseline, run in report v/v side effects
• Regular meetings (parties)
• Sign off on results and publication
Implementing Clinical Guidelines for Caries Risk Assessment and Caries Risk Reduction in the Dental School

Example of Dissemination and Implementation Research
Figure 1: Application of the Precede/Procee Model to Dental Caries Management Guideline at the Student Level

Clinical Guideline

- Predisposing Factors
- Reinforcing Factors
- Enabling Factors

Guideline implementation as measured by Student Performance using EHR

- Dissemination to other schools
- Implementation in other schools

Proposed R21 Research

Future Research
Proceed/Proceed Model

Predisposing Factors
• Strength of educational aims & environment
  – Attitudes of students & faculty regarding the goal direction

• Reinforcing Factors
  – Order, organization, rule clarity, teacher control, role of the EHR

• Enabling Factors
  – Supportiveness of peers, staff, role of patients
References

- Meissner HI, et al. Implementation Science 2013, 8:12
Thank You