A global resource for building research integrity and capacity

Building Research Integrity & Capacity
Bridging Research to Practice

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#WCRI2017
@cnebeker | @UCSD_BRIC
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Disclosure

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Describe three phases of designing research ethics education for lay research staff:

- **Formative Research – Participatory Approach**
- **Design, Test, Iterate**
- **Transition from Research to Practice**
What do researchers look like?
Like this?

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Research Promotores/CHWs

Who are they?

- lay members of communities who work either for pay or as volunteers in association with the local health care system in both urban and rural environments
- share ethnicity, language, socioeconomic status and life experiences with the community members they serve.

Montañez & Cordero-Báarzaga, 2011; APHA, Ingram et al., 2012; Spencer et al., 2011
BRIC Research Aims

Building Research Integrity and Capacity

Education to increase research competencies

What skills/knowledge do Research CHWs/Promotores need to carry out their work?

How should these competencies be assessed?

Does BRIC training improve learning about research when compared to a control condition?

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<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
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<tr>
<td>Module 1</td>
<td>Introduction: What is Research?</td>
</tr>
<tr>
<td>Module 2</td>
<td>Research Design</td>
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<td>Module 3</td>
<td>Elements of Research</td>
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<td>Module 4</td>
<td>Methods of Information Collection</td>
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<td>Handling Information</td>
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<td>Module 6</td>
<td>Introduction to Human Research Ethics</td>
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<td>Module 7</td>
<td>Research Risks and Benefits</td>
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<td>Module 8</td>
<td>Informed Consent in Research</td>
</tr>
<tr>
<td>LO</td>
<td>Description</td>
</tr>
<tr>
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</tr>
<tr>
<td>LO-1A</td>
<td>Explain how research is designed to gain new knowledge.</td>
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<tr>
<td>LO-1D</td>
<td>Explain the role of researchers in enhancing research integrity.</td>
</tr>
<tr>
<td>LO-2A</td>
<td>Explain how associations between variables are used to answer research questions.</td>
</tr>
<tr>
<td>LO-2B</td>
<td>Explain why random assignment and random selection are used in research.</td>
</tr>
<tr>
<td>LO-2F</td>
<td>Explain why some information about a research study cannot be told to a research participant.</td>
</tr>
<tr>
<td>LO-3A</td>
<td>Explain how data management can influence interpretation of research results.</td>
</tr>
<tr>
<td>LO-3C</td>
<td>Explain how reliability and validity can influence interpretation of research.</td>
</tr>
<tr>
<td>LO-4A</td>
<td>Explain the importance of good data management in ensuring research integrity.</td>
</tr>
<tr>
<td>LO-4B</td>
<td>Describe why changing or manipulating data can compromise interpretation of the results.</td>
</tr>
<tr>
<td>LO-5A</td>
<td>Define research and explain why it is important.</td>
</tr>
<tr>
<td>LO-5B</td>
<td>Explain key differences between research studies and service projects.</td>
</tr>
<tr>
<td>LO-5C</td>
<td>Explain why government protections for research participants were established.</td>
</tr>
<tr>
<td>LO-5A</td>
<td>Explain how research may benefit the participant and community represented.</td>
</tr>
<tr>
<td>LO-6B</td>
<td>List the four elements of risk associated with a research study.</td>
</tr>
<tr>
<td>LO-6E</td>
<td>Define confidentiality.</td>
</tr>
<tr>
<td>LO-6F</td>
<td>Explain why protecting confidentiality is important to the ethical conduct of research.</td>
</tr>
<tr>
<td>LO-7A</td>
<td>Define the purpose of the informed consent process.</td>
</tr>
<tr>
<td>LO-7B</td>
<td>Name (identify, describe) the three components of the informed consent process.</td>
</tr>
<tr>
<td>LO-7C</td>
<td>Describe what information is presented to the potential participant during the consent discussion.</td>
</tr>
<tr>
<td>LO-7D</td>
<td>Define voluntary participation.</td>
</tr>
<tr>
<td>LO-7E</td>
<td>Describe what factors may influence the decision to participate.</td>
</tr>
<tr>
<td>LO-8A</td>
<td>List (define, identify) the three principles described in the Belmont Report.</td>
</tr>
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</table>
Selección y Asignación Aleatoria

El proceso de selección de un grupo de individuos a partir de un grupo mayor de participantes en un estudio.

Cada persona tiene la misma oportunidad de ser seleccionado, lo que permite que cada uno tenga la misma oportunidad de participar.

Un procedimiento utilizado en experimentos para crear grupos de estudio con características similares de manera que los grupos sean equivalentes al inicio de la investigación.
Selection Criteria
CHW/Promotor
Interested in Research Ethics
Spanish Fluent

Random Assignment
BRIC (n=24)
Control (n=20)

Pre/Post-Assessment (73 items)
Research Knowledge (12 T/F; 47 M/C)
Community Examples (n=14)

Results
Mean improvement: 3.60 points greater in the intervention arm \((p = 0.015)\) unadjusted – adjusted for age, gender, and education mean improvement was 3.65 \((p = 0.018))\).

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Dissemination & Implementation

1. Identify Appropriate D&I Model for BRIC
2. Identify potential BRIC dissemination targets via NIH RePORTER
3. Evaluate implementation process via Stirman Model
### Dissemination & Implementation

#### Knowledge Transfer Framework for BRIC

<table>
<thead>
<tr>
<th>Process</th>
<th>Diffusion and Dissemination</th>
<th>Adoption, Implementation, and Institutionalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified need for training CITWs (promotores de salud) in research ethics and integrity.</td>
<td>Reach out to Project Managers, build support, and establish trustworthy relationships.</td>
<td>Refer to BRIC website where they can learn more about research ethics training and why not having such training can compromise the fidelity of a study.</td>
</tr>
<tr>
<td>Created a training manual with several different modules. From TRES→BRIC.</td>
<td>Inform them of risks to research integrity if promotions (CITWs) are not trained correctly.</td>
<td>Present BRIC training manual as the solution to the problem.</td>
</tr>
</tbody>
</table>

**Actors**

- Principal Investigator
- Project Manager
- Community Health Workers
  - Promotores de salud

- Community Health Organizations
  - Research Institutions
  - Principal Investigators
  - Health Researchers

- Principal Investigators
- Project Managers
- Promotores de salud

**Activities**

- Promotores de salud are recruited for a pre-post test on research ethics and integrity.
  - Pre-test with no training
  - Post-test after they have completed the BRIC training modules on research ethics.
- Conduct literature review on the work of Promotores, their training, and possible threats to community-based studies.

- Conferences
- Webinars
- Websites
- Workshops
- Informational Brochures
  - Summarizing results of BRIC
  - Referencing key studies regarding importance of training CITWs
  - Personal narratives of promotores that completed training

- Training
  - Online manual
  - Certification
  - Cost Benefit Analysis
  - Monitor and evaluate training
  - Who is using and for what?
  - What are the benefits and how is that evaluated?
Early Adopters

DOR: CaPROMISE/Interwork Institute, SDSU, RCT focusing on special needs youth

U54: MCC/Institute of Behavioral and Community Health, SDSU. Cancer research foci on Latino community health

NCI and CTRI: PIC-Health, Pacific Islander Community Health, CSU San Marcos and Rawmana Fitness

NCI: Hawaash pilot study, City Heights/Somali Refugee CBPR study on nutrition

NIH: ESPINA – UC San Diego and Cimas del Equador study of pesticide exposure on child/adolescent development

NIH: OBY25 – UC San Diego and 4 global sites to gather data on kidney disease and intervention feasibility
BRIC Team

Formative Research

- Michael Kalichman, PhD
- Elizabeth Booen, MS
- Blanca Azucena Pacheco, PhDc
- Rebeca Espinoza Giacinto, PhDc
- Mayra Cano, BSPH 4th yr
- Sheila Castaneda, PhD
- Lucy Barton, H-Star Intern
- Karina Prado, H-Star Intern

Evaluation, Dissemination and Implementation

- Araceli López-Arenas, PhD, MPH
- Tiffany Lagare, MPH
- Carolina Lopez, MPH
- Daniela Vital, BSPH 4th yr
- Jasmine Martinez, BSPH 1st yr
- Rebeca Giacinto, PhD, MPH
- Osvaldo Arambulo, BSPH 3rd yr
- Mayra Gutierrez, Bio 3rd yr
- Rasheed Al Kotob, NanoE, 4th yr
- Karina Madrigal, BSPH 4th yr

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