Assessing Change in Health Program Participants: Useful Tools & Lessons Learned

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Why is this Important?

• Health assessment skills, practices and outcomes should benefit your community’s health
• The results of a project’s assessment (and evaluation) are what the grant provider is “buying” – so it has to be influential, feasible and clear.

“Pick Battles big enough to matter, small enough to win” - Jonathon Kozol

(“42.7 percent of all statistics are made up on the spot!”)
Session Objectives

You will be able to...

• Describe 3 key background issues in assessment, including the importance of partnership principles.

• From presenter experiences, discuss at least 4 techniques likely to strengthen your health assessments.

• List at least 5 assessment lessons based on presenter or audience experiences.

Background / Starting Points

• Clarify terms, e.g., how “assessment” compares with “evaluation”

• Align “assessment” with Partnership Principles

• 3 important considerations
  – Assess what your study promised
  – Reduce or control errors and variation
  – Build on a standard, pretest, or prior work
Clarifying Terms

• Measure: To apply a standard scale or device (e.g., ruler) to an object or condition, according to practices accepted by those skilled in the use of the device.

• Assess: A process by which information is obtained relative to some known objective or goal. A test is a special form of assessment. Self-reported hours of sleep or a log of foods consumed could be assessments.

• Evaluate: A process that determines value, often to help make a judgment about a program, its process or impact.

Example: Terms in Use...

• Taking a blood pressure measurement could help in the assessment of a patient.

• A summary of the assessments of several hypertensive patients could be part of a community health program evaluation.

How precise do you need to be about these terms? Best suggestion: be accurate (but these terms are often used interchangeable).
**Assessment & Partnerships**

1. Partners have *agreed upon* mission, values, *goals*, *measurable outcomes* & accountability.
3. The partnership *builds upon identified strengths* and assets; works to address needs and increase capacity of all partners.
4. The partnership *balances power* among partners; enables resources among partners to be shared.


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**Obligations for Partners Doing Assessment**

<table>
<thead>
<tr>
<th>Principles</th>
<th>Obligations</th>
</tr>
</thead>
<tbody>
<tr>
<td>*agreed upon goals,</td>
<td><em>Prepare, communicate clearly and often</em></td>
</tr>
<tr>
<td>measurable outcomes*</td>
<td></td>
</tr>
<tr>
<td><em>mutual trust, respect</em></td>
<td><em>Literacy level, skilled rsh assistants, protections</em></td>
</tr>
<tr>
<td><em>builds upon identified strengths</em></td>
<td><em>Affirm strengths while examining gaps</em></td>
</tr>
<tr>
<td><em>balances power</em></td>
<td><em>Fairness (e.g., $), share credit, sustain relations</em></td>
</tr>
</tbody>
</table>

Assessment Tools & Lessons

- GYM Project, Judy Springer
- POWER Program, Tina Johnson
- ECHU Project, Jeff Morzinski

A Faith Community GYM: Guiding Youth Movement for Sustained, Healthy Futures

- Partners
  - Greater New Birth Church, Milwaukee Area Technical College, Medical College of Wisconsin, Badgerland Striders
- Project Objectives
  1. Train health advocates within the GNBC faith community to initiate, facilitate, and sustain youth health.
  2. **Refine, implement, and evaluate a successful physical activity and nutrition youth “GYM Program.”**
  3. Build church capacity to sustain health and health careers among youth and other community members, advance health awareness, and health career opportunities of youth.
Measurement Methods

• Cardiovascular / health improvement
  – Traditional or laboratory measures
  – Strengths and limitations
  – Other success indicators

• Rating of Perceived Exertion
  – Heart rate and oxygen consumption increase in linear path during activity
  – Perception of effort follows similar path

Revised Rating of Perceived Exertion

OMNI Scale of Perceived Exertion: Child, Walking to Running Format

How tired are you?

Robertson RJ. Perceived exertion for practitioners. Champaign, IL: Human Kinetics, 2004
GYM Procedures

• Discuss assessment methods with key project individuals
• Facilitate physical activity (e.g., games, stretching, run/walk)
• Assess Rating of Perceived Exertion at regular intervals
• Problem Solve

Results and Interpretation

Figure. Rating of Perceived Exertion (RPE) for youth (n=14, females=5, males=9; mean age=13.6 years) results indicate that (1) Over time youth experienced a training effect with each conditioning session and (2) RPE values from pre- to post-program seem to indicate an increase in fitness
Lessons learned: GYM

1. Include all partners in assessment planning for ease of facilitation.
2. Explore practical adaptations from laboratory assessments and dialogue with other clinicians.
3. Pilot the measurement tool when possible.
4. Measure the small stuff.

POWER Program

Working with Veterans Organizations to Improve Blood Pressure

A Community-based Research Project led by Jeff Whittle, MD, MPH

Funded by a grant from the Department of Veterans Affairs Health Services Research and Development Department
Need for POWER (Posts Working with Veterans)

• Hypertension is a leading cause of morbidity and mortality
• Many veterans have suboptimal blood pressure control
• Evidence suggests that community and peer support can improve chronic disease self management
• Veterans’ service organizations (VSO) may be good partners for a health-focused intervention

Pretest & Study Design

• Early POWER (2005-08): Surveys, weight scale + PB cuff methods are pre-tested
• POWER II (2008-11): Cluster randomized controlled trial comparing the impact of monthly peer-led health presentations (intervention) to a series of educational seminars (control)
What We Promised Our Funders

• POWER II Promised to:
  – Establish strong relationships with key Veteran’s organizations in Wisconsin and recruit local posts / participants for our project
  – Accurately measure their blood pressure, weight, behavior, knowledge, and attitudes
  – Evaluate our process: How we did what we did, what worked and what didn’t
  – Disseminate results of our study and our process evaluation

Study Methods

• Recruitment
  – PI / study staff present at posts, provide free BP checks and collect contact information
  – Then, re-contact commanders & potential participants

• Once in study, all receive
  – BP checks by trained personnel using aneroid sphygmomanometers & proper technique
  – Weight readings using digital scale
  – Survey comprised of published, validated instruments
Results: BP in Subjects with / without Hypertension & Obesity

- **Change** in Systolic Blood Pressure (mmHg), baseline to 12 months (n=404)

<table>
<thead>
<tr>
<th></th>
<th>Peer Led</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL PARTICIPANTS</td>
<td>-3.5, 1.1</td>
<td>-5.4, 1.2</td>
</tr>
<tr>
<td>Uncontrolled HTN at baseline</td>
<td>-8.0, 1.6</td>
<td>-12.0, 1.6</td>
</tr>
<tr>
<td>Controlled HTN at baseline</td>
<td>-0.5, 1.3</td>
<td>1.6, 1.6</td>
</tr>
<tr>
<td>Body Mass Index &lt; 30 kg/m²</td>
<td>-2.7, 1.5</td>
<td>-6.1, 1.8</td>
</tr>
<tr>
<td>Body Mass Index ≥ 30 kg/m²</td>
<td>-4.3, 1.6</td>
<td>-5.2, 1.6</td>
</tr>
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**Elder Community Health Upholders (ECHU)**

- **Purpose:** Improve the health of Milwaukee’s urban church communities through the training and influence of health workers, and the advocacy behaviors of pastoral leaders

- **Partners:** Arthritis Foundation, American Heart Association, American Cancer Society, Medical College of Wisconsin, Columbia College of Nursing, NINE churches: Pilgrim Rest Baptist, Tabernacle Community Baptist, St Martin de Porres Catholic, Christ Presbyterian, Mount Carmel Baptist, Incarnation Lutheran, Victory Missionary Baptist, Monumental Missionary Baptist, Mount Zion Missionary Baptist

- In existence since **2004**.
ECHU Goals

Health Volunteers

1. Knowledge and self-confidence in health project planning & coordination
2. Coordinate health initiatives aligned with church needs
3. Mentor and partner with neighboring health ministries
4. With pastoral leaders, help to maintain a sustainable health ministry that is culturally appropriate and meaningful

Pastoral Leaders

1. Support volunteers’ elder health initiatives
2. Work toward personal health goals
3. Mentor and partner with neighboring health ministries
4. Acquire health advocacy knowledge & skills to improve elder health in your church
5. Apply advocacy skills to foster community health

Our assessment used 2 types of surveys and 2 types of focus groups

ECHU Assessment of Community Health Workers

** Note that the method and questions of this written survey were pre-tested and piloted in an earlier study. A reference to the method is below.*

Instructions: Using the scale above, enter TWO numbers that show your ability / experience with each item below. The “Before” column refers to before this module began. The “Now” column refers to now, the conclusion of the module.

<table>
<thead>
<tr>
<th>BEFORE</th>
<th>NOW</th>
<th>I am able to:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Describe 2 spiritual reasons why disease prevention should be part of a community church’s health ministry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feel comfortable discussing my own knowledge and attitudes toward arthritis to a group of up to ten elder members of my church</td>
</tr>
<tr>
<td></td>
<td></td>
<td>List 3 common safeguards that protect human subjects in a community-based health education project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Describe evidence-based facts about arthritis in Wisconsin’s African American elders</td>
</tr>
</tbody>
</table>

Illustration: Display of Results
(1=No experience/ability, 6=exceptional experience/ability. Avg score, n=16)

<table>
<thead>
<tr>
<th>Category</th>
<th>Pre-Score</th>
<th>Post-Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Reasons</td>
<td>2.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Comfort Discussing</td>
<td>2.8</td>
<td>4.6</td>
</tr>
<tr>
<td>List Safeguards</td>
<td>1.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Describe Evidence</td>
<td>1.8</td>
<td>4.3</td>
</tr>
</tbody>
</table>

*For illustration purposes only. Not full scale / not full data set.

Lessons learned: ECHU

1. Include all partners (including subjects) in assessment planning. Start early.
2. Find / use / adapt existing measure
3. If using your own: pre-test & pilot
4. Know when to get expert assistance
Your Questions / Comments

•
•
•
•

Conclusion

• On limitations of “statistics” which could also be said of “assessments”, Andrew Lang said...

He uses statistics as a drunken man uses lamp-posts-- for support rather than illumination.

• In your assessments, seek illumination!
• Thank you.