Bridging the Gaps: Eliminating Disparities in Teen Pregnancy and Sexual Health

June 4-6, 2014
“We are more than just a number”: Using Mixed Methods to Engage Diverse Communities and Strengthen Research Designs

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Pregnancy Prevention Among Native Youth of the Northern Plains (Kaufman, C), was funded by HHS grant #TP2AH000003 from the Office of Adolescent Health.
Objectives

1. Compare Western and Indigenous worldviews and describe how they lead to different research approaches.

2. Identify strengths and weaknesses of qualitative (QUAL) and quantitative (QUAN) methods.

3. Define mixed methods research and its applicability for cross cultural research, and evaluating community based projects and interventions.

4. Discuss basic principles of QUAL methods and ways to integrate QUAL methods in research designs.
Worldview: What is it?

- The way we see and make sense of the world.
- A perspective that we are socialized into.
- Values that we often take for granted.
What do you see?
Comparing Native American and Western Worldviews

Small Group Activity

Questions:
1. What does the quote reveal about Native American (NA) culture?
2. How does this perspective differ from a Western worldview?
3. How might this perspective conflict with a Western approach to conducting research?
4. What accommodations could be made to respect NA culture?
Once I was in Victoria, and I saw a very large house. They told me it was a bank and that the white men place their money there to be taken care of, and that by and by they got it back with interest. We are Indians and we have no such bank; but when we have plenty of money or blankets, we give them away to other chiefs and people, and by and by they return them with interest, and our hearts feel good. Our way of giving is our bank." - Chief Maquinna, Nootka
"Conversation was never begun at once, nor in a hurried manner. No one was quick with a question, no matter how important, and no one was pressed for an answer. A pause giving time for thought was the truly courteous way of beginning and conducting a conversation. Silence was meaningful with the Lakota, and his granting a space of silence to the speech-maker and his own moment of silence before talking was done in the practice of true politeness and regard for the rule that, "thought comes before speech." - Luther Standing Bear, Oglala Sioux
"In the beginning of all things, wisdom and knowledge were with the animals, for Tirawa, the One Above, did not speak directly to man. He sent certain animals to tell men that he showed himself through the beast, and that from them, and from the stars and the sun and moon should man learn.. all things tell of Tirawa. "

Eagle Chief (Letakos-Lesa) Pawnee
“You have noticed that everything as Indian does is in a circle, and that is because the Power of the World always works in circles, and everything tries to be round..... The Sky is round, and I have heard that the earth is round like a ball, and so are all the stars. The wind, in its greatest power, whirls. Birds make their nest in circles, for theirs is the same religion as ours.... Even the seasons form a great circle in their changing, and always come back again to where they were. The life of a man is a circle from childhood to childhood, and so it is in everything where power moves.” - Black Elk, Oglala Sioux
No Connection...

Community Based Participatory Research

A partnership approach to research that equitably involves community members, organization representatives, and researchers in all aspects of the research process.
Why CBPR?

Researchers need to establish trust with Native American communities after historically negative experiences:

- Stigmatizing findings
- Unethical use of biological specimens
- Lack of respect for NA culture
- No benefit to communities
- Findings misinterpreted
Involving Communities in Research

STEP 1: Build Collaborative Relationships
* Develop rapport and trust
* Hire local staff
* Form a well-rounded advisory board

STEP 2: Intervention Development
* Adapt theory
* Obtain local input and support

STEP 3: Implementation
* Provide training
* Monitor progress

STEP 4: Evaluation
* Conduct process & outcome evaluation
* Assess capacity enhancement

Baldwin J. (1998)
Using Qualitative Methods within a CBPR Framework

**Purpose:** exploratory, understand, contextualize

**Methods:** interviews, focus groups, observation, document review, pile sorting, diagrams

**Data:** (textual) field notes, transcriptions, checklists, source documents, drawings

**Strengths:** explains context, detailed, open-ended, grounded

**Weaknesses:** time intensive, subjective, not causal
Standards for QUAL Research

1. Study design appropriate to research question
   a. Observation
   b. Interviewing
   c. Document Review

2. Sampling/data collection
   a. Role/relationship
   b. Saturation
   c. Level of structure for data collection

3. Analysis
   a. Organizing
   b. Connecting
   c. Corroborating/legitimating
Quantitative Research

Purposes: Test hypotheses, describe characteristics

Methods: Experimental: controlled conditions, random assignment, blinding, comparison
          Descriptive: data sets

Data: (numeric) surveys, health outcomes

Strengths: Objective, narrow focus on a specific question, high level of assurance, generalizability

Weaknesses: Rigid, may ignore context, large sample size, measures may not be culturally appropriate
Combining Methods

Mixed Methods:

“...research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study.”

Types of Mixed Methods Designs

1. Qual $\rightarrow$ QUAN
   Qualitative methods are used to develop quantitative measures and instruments.

2. QUAN $\rightarrow$ Qual
   Qualitative methods are used to help understand findings

3. QUAL + QUAN
   Qualitative and quantitative methods are used simultaneously

4. QUAL + Quan
   Quantitative methods are used to understand a qualitative study.
Benefits of Using Mixed Methods

1. Complementary strengths and weaknesses
   - Rigid/Flexible
   - Confirmatory/Exploratory

2. Can address a broader range of questions

3. Data Triangulation

4. Results from one method can inform the other

5. Explain/understand phenomenon
Integrating QUAL Methods

STEP 1: 1,2,3,4,7
Build Collaborative Relationships
✴ Develop rapport and trust
✴ Hire local staff
✴ Form a well-rounded advisory board

QUAL Data Used
1. Field notes
2. Administrative records
3. Meeting minutes (Advisory Group, Directors, Team)
4. Notes from calls
5. Interviews
6. Focus Groups
7. Updates/emails
8. FML, observation reports

STEP 4: (1-5,7,8 data; 3,5,6 interpretation)
Evaluation
✴ Conduct process & outcome evaluation
✴ Assess capacity enhancement

STEP 2: 1,3,4,5,7
Intervention Development
✴ Adapt theory
✴ Obtain local input and support

STEP 3: 1,4,7,8
Implementation
✴ Provide training
✴ Monitor progress

Baldwin J. (1998)
Discussion

• Have you used mixed methods in your study? If so, how and for what purposes?

• If you did not use mixed methods, are there questions that you would have liked to address that you could have used mixed methods for?
References


Thank you
Wopila Tanka!

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