A Field Experience Report

CONTRASTING RURAL AND URBAN KANSAS CHRONIC DISEASE RISK REDUCTION PHYSICAL ACTIVITY AND NUTRITION GRANTEE BARRIERS

Elizabeth Grilliot

Justin Hall 167
Kansas State University
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Presentation Overview

- Introduction/Background
- Field Experience Overview
- Kansas Department of Health & Environment
- Field Experience Project: Rural and Urban Chronic Disease Risk Reduction (CDRR) Qualitative Assessment
- Acknowledgments
- Questions
BS in Health Services Management & Community Development

MPH Physical Activity Candidate
Field Experience

• 240 Field Experience hours completed May 2014 – August 2014

• Kansas Department of Health and Environment (KDHE) – Topeka, Kansas
  – Division of Public Health
    – Bureau of Health Promotion (BHP)
      • Physical Activity and Nutrition Program (PAN)

• Preceptor: Anthony Randles PhD, MPH
  – PAN Program Manager
Products Developed

• Chronic Disease Risk Reduction (CDRR) Physical Activity & Nutrition (PAN) Grantee Report

• Micro-Markets & Healthy Vending Strategies Literature Review
Hands-On Experience

• Technical Assistance in Wyandotte County
• Weekly Farmer’s Market Assistance
• BHP meetings and conference calls
Kansas Department of Health and Environment (KDHE)

- Mission to protect and improve the health and environment for all of Kansas (Kansas Department of Health and Environment, 2014)

- Four sections:
  1. Administration– Office of the Secretary
  2. Division of Public Health
  3. Division of Health Care Finance
  4. Division of Environment
1. Community Health Systems
2. Disease Control and Prevention
3. Environmental Health
4. Epidemiology and Public Health Informatics
5. Health Promotion
6. Family Health
7. Oral Health
8. Center for Performance Management
“Through partnerships with the people of Kansas, promote healthy behaviors, policies and environmental changes that improve the quality of life and prevent chronic disease, injury and premature death.” (Kansas DHSS, 2014)

BHP Sectors:
1. Arthritis
2. Cancer
3. Diabetes
4. Heart Disease & Stroke
5. Health Risk Study
6. Injury Prevention & Disability Programs
7. Physical Activity & Nutrition (PAN)
8. Safe Kids Kansas
9. Tobacco Use Prevention
Physical Activity & Nutrition (PAN) Program

- Direct focus on PAN initiatives within the state

- Chronic Disease Risk Reduction (CDRR) grant process

Mission

1. To promote increased consumption of fruits and vegetables for optimal health.
2. To promote active living among adults in the workplace by providing walkable access to fresh produce.
3. To promote direct marketing of Kansas foods.

- Currently, only 1 in 5 Kansas adults consume 5 or more servings of fruits and vegetables per day (KS BRFSS, 2004).
- 51.3% of Kansas Adults do not take part in the recommended levels of physical activity (30 minutes or more per day, 5 days per week, KS BRFSS 2005).
- The benefits of consuming more fruits and vegetables include: reduced risk for chronic disease and many cancers (Division of Nutrition and Physical Activity, Centers for Disease Control, 2006).

More information about the benefits of fruits and vegetables can be found at: http://www.cdc.gov/nccdphp/dnpa/
Rural and Urban Chronic Disease Risk Reduction (CDRR) Qualitative Assessment
Rural and Urban CDRR

Qualitative Assessment

Primary Aim: Contrast the needs between rural and urban county health departments and to develop guidelines to improve state technical assistance efforts to CDRR grantees

1) Review of Literature
2) Qualitative Interviews
Background

- Low population density → poor health

- Existing research on community public health interventions is based largely over urban and higher-income populations
  

**Figure 1.** Life expectancy at birth (years) by levels of urbanization, U.S., 2005–2009

(Singh, 2014)
Sedgwick County
County Population: 503,889
Health Department Staff: 150-170

Osage County
County Population: 16,142
Health Department Staff: 3

(Kansas Department of Health and Environment Bureau of Community Health Systems, 2014)
Background

• 89 of 105 Kansas counties have fewer than 40 persons per square mile

  (Kansas Department of Health and Environment: Bureau of Epidemiology and Public Health Informatics, 2012)

• Overweight or obese Kansans in 2011:
  – Rural: 67.4%  (95% CI: 64.8% to 70.0%)
  – Urban: 62.2%  (95% CI: 60.9% to 63.5%)

  (Kansas Department of Health and Environment, 2013)

Overweight: BMI 25.0-29.9
Obese: BMI 30+

BMI = weight (kg)/height (m)^2
Review of Literature
Rural Barriers to Community Health

• Human Capital
  – Lack of funders (Barnidge, et al. 2013)
  – Limited staff
    • Less training (Crawford, et al. 2008)

• Culture (Barnidge, et al. 2013)

Rural Barriers to Community Health Continued

Urban Barriers to Community Health

- **Safety**  (Frost, et al., 2010)
- **Environmental Factors**  (Moore, et al., 2010)
Chronic Disease Risk Reduction (CDRR) Grant Program

- Provides funding & technical assistance (TA) to assist in decreasing the risk of chronic disease
  - Decreasing the use of tobacco
  - Improving nutrition access & behaviors
  - Improving physical activity behaviors

(Kansas Department of Health & Environment, 2014)
2015 CDRR PAN TA Report Logic Model

**Inputs**
- KDHE PANO Program
  - Manager
  - Intern
- KDHE Outreach Coordinators - 5
- SFY 2015 CDRR PANO Grantees - 20

**Activities**
- Review of Peer-Reviewed Literature
- Qualitative Interviews with PAN Grantees
- Assessment of Qualitative Data
  - CDRR PANO Technical Assistance Report
  - Development of PANO-TA strategies

**Outputs**
- Implemented TA PANO Webinar
- Implemented PANO TA regional training
- PANOR Resource guide delivered to grantees

**Outcomes**

**Short term outcomes**
- Improved community nutrition knowledge, skills & competencies among CDRR PAN Grantees
- Increase awareness of strategies to increase PA at local level — educating local leader

**Intermediate term outcomes**

**Long term outcomes**
Qualitative Interviews
Methods

• Meetings with each KDHE CDRR Community Health Specialist (n=5)

• Development of semi-structured interview guide
  – Topics: community background, opportunities, resources, and barriers for PAN in the community, community norms and traditions, training and current TA
Methods

• Meetings with each KDHE CDRR Community Health Specialist (n=5)
• Development of semi-structured interview guide
• Selection of participants/grantees (n=10)
  – Rural counties n=5
  – Urban counties n=5
FY 2015 CDRR PAN Grantees – Participants

- Kansas Counties (n=105)
  - Applied for Grant (n=41)
    - Awarded Grant (n=40)
      - Tobacco and PAN (n=22)
      - Tobacco Only (n=18)
        - Drop-out (n=1)
          - Included in Qualitative Interviews (n=10)
Kansas Department of Health and Environment Bureau of Community Health Systems, 2014

Frontier
Fewer than 6.0 persons/sq.mi.

Rural
6.0 - 19.9 persons/sq.mi.

Densely-Settled Rural
20.0 - 39.9 persons/sq.mi.

Semi-Urban
40.0 - 149.9 persons/sq.mi.

Urban
150.0 persons or more/sq.mi.

(Kansas Department of Health and Environment Bureau of Community Health Systems, 2014)
What information, training, and skills do you need to effectively achieve your PAN goals?

What barriers do you have to achieving those goals?

Are there any specific strategies (technical assistance) that you would like to see?

Is there any assistance we are providing that is working well?

Is there any assistance that we currently provide that is not beneficial?
• Semi-structured interviews conducted by telephone throughout a 3-week time period
• Crude method of theming results to find common themes from qualitative data
Results
• Inadequate sidewalks & crossings
  “major issue”        “huge barrier”
• Lack of funding for PAN
• Community and/or leaders don’t understand the importance of supporting PAN initiatives

“They (community) don’t see it as a priority and don’t grasp the strong link between physical activity and obesity rates.”
Results: Common Urban Barriers to PAN

• Prioritizing efforts
  “ongoing challenge trying to prioritize where to start”

• Food deserts in parts of the city

• Lack of existing trail interconnectivity
Results: Rural Training/TA Barriers

• Lack of staff/time
• Funding
  
  “(we) don’t have a lot of resources, period.”

• Distance from trainings
Discussion

Rural
• Consistent with previous research:
  – Sidewalks/Crossings
  – Human Capital
  – Funding
  – Training
  – Lack of community/leader support

Urban
• Large Population– hard to prioritize
• Food deserts
• Trail Connectivity

Rural & Urban
– Need for “best practices”/ resource guide
Recommendations

- Community health assessments
- Partnerships & Collaboration
- Utilizing and expanding upon existing social environmental facilitators
  - Shared-use agreements, walking school bus
- Conduct proper evaluation
- Separate PAN funding from tobacco funding
– “All PAN Grantees were given a list of other grantee projects and contacts. Since last week, several (12 in total out of 21) grantees have begun initiating conversations between themselves to overcome barriers in their own communities.” – PAN Program Manager
Acknowledgements

• Dr. David Dzewaltowski
• Dr. Ric Rosenkranz
• Dr. Katie Heinrich

• Anthony Randles
• KDHE Bureau of Health Promotion Staff

• Dr. Michael Cates
• Barta Stevenson


Questions?

National Rural Health Day
Celebrating the Power of Rural!

NOVEMBER 20, 2014
Supplemental Slides
Learning Objectives

1. Understand the technical assistance needs of local public health offices
2. Gather, utilize and disseminate qualitative data for the purpose to improve community health interventions
3. Identify public health policies, systems and environmental solutions related to specific issues
4. Apply knowledge to develop webinars for local grantees
5. Communicate effectively both in writing and orally
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What is “Rural”?

- **U.S. Census Bureau** ([http://www.census.gov/geo/reference/urban-rural.html](http://www.census.gov/geo/reference/urban-rural.html))
  - Urbanized Areas: 50,000 or more people
  - Urbanized Clusters: 2,500–50,000 people
  - Rural: everything else

  - Metro Statistical Areas: at least one are of 50,000 or more people
  - Micro Statistical Areas: at least one cluster of 10,000–50,000 people

  - Nonmetro Counties
    - Open countryside
    - Rural Towns: fewer than 2,500 people
    - Urban Areas: 2,500–49,999 people

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<th>Competency</th>
<th>Field Experience Project/Exposure</th>
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<td>Biostatistics</td>
<td>- CDRR: Qualitative Assessment &amp; interview guide design</td>
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<td>Environmental Health</td>
<td>- Establish links between behaviors and health</td>
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<td>- Develop methods to measure the behavior</td>
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<td>- Identify influences on the behavior</td>
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<td>- Evaluate interventions to change behavior</td>
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<td>- Translate research into practice</td>
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<td>Epidemiology</td>
<td>- Prevalence of overweight &amp; obesity</td>
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<td>- Behavioral Epidemiology Framework (Sallis, Owen, &amp; Fotheringham, 2000)</td>
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<td>- Chronic Disease Risk Reduction Program</td>
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<td>Health Services Administration</td>
<td>- State-level health department &amp; interactions with various levels (local, national)</td>
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<td>- KSFMNP data management</td>
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<td>- CDRR: Rural vs urban (Demographic trends)</td>
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<td>- Grant applications</td>
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<td>Social &amp; Behavioral Sciences</td>
<td>- CDRR: Qualitative Interviews</td>
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<td>- Technical Assistance in WY County (SCT → improving self-efficacy)</td>
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<td>- Underserved populations, social characteristics: rural counties, KSFMNP</td>
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