Healthiness of Churches

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Outline

• Overview
• Problem
• Significance
• Context
• Method
• Population Sample
• Data Collection
• Analysis
• Results
The Problem

- Black communities are disproportionately less likely to have access to healthy foods. Consequently, African-Americans and more likely to die sooner than their white counterparts due to higher rates of diet related diseases.
**Study Significance**

- Informs us on how to make more meaningful and relevant health interventions.
- Provide feedback on knowledge about chronic kidney disease and how the church can help influence this knowledge.
- Allowed meaningful comparisons of chronic disease burden in the population at large and members of Baltimore Black Churches.
Why The Church?

• Provides a natural gathering space of people with shared goals and values

• These organizations are suited to meet the needs of local communities

• Studies indicate faith-based interventions have been successful in improving health outcomes

Sources: Schwingail and Galvez, 2016; DeHavin et al, 2004
Context-Black Church Food Security Network

- Network of over 25 churches
- Individual membership over 5000
- **Mission**: Establish economic ventures that supply and support every part of the food system through working with Black churches.
Research Questions

What is the baseline measure of the health of church members?

What percentage of Participants have risk factors for CKD?

How does the qualitative research findings of the study help to explain survey results?

What factors might be important to consider in establishing a CKD awareness prevention program?
Method: Explanatory Sequential Mixed Method

PHASE 1
Quantitative Data Collection & Analysis
Survey Instrument

Quantitative Results
Descriptive:
1. Demographics
2. Chronic Conditions
3. Trends and Patterns
4. CKD Scores

Selecting sample for Follow-Up
1. CKD SCORES
2. Risk Factors
3. Church Affiliation

PHASE 2
Connected through Follow-Up

Qualitative Data Collection & Analysis
1. 6 Focus Groups (of 7-10 participants)
2. 6 Individual Interviews

Joint Quantitative and Qualitative Interpretation and Results
Research Sample

Quantitative:
- Convenience Sample
- Clustered by Congregation
- Members 18 years and older N=143

Qualitative:
- Purposeful sampling (3-6 participants, four churches)
- Inclusion: Diagnosis of diabetes, or hypertension, or CKD
  - African-American
  - 30-70 year old
  - Able to give consent to participate
  - Must be church member for at least 6 months
Data Analysis and Synthesis

Quantitative Analysis
- STATA
- Descriptive Analysis
- Health Profile
- CKD Awareness/Knowledge
- ID of those who have risk factors
  - ie. DM, HTN, family history

Qualitative Analysis
- Coding
- Themes

Integration and Interpretation
Enhance interpretation of CKD quantitative outcome
Results - Phase I
Quantitative
6 Churches - averaged 24 participants per church

94% were African American

39% held a bachelors degree or higher

40% were Married

40% had a household income below $59,000
Chronic Disease Prevalence

- 54% - Current diagnosis of hypertension
- 26% - Current diagnosis of high cholesterol
- 19% - Current diagnosis of diabetes
- 20% - Family member with Chronic Kidney Disease
- 7% - Current diagnosis of Chronic Kidney Disease
- 60% - Had risk factors for CKD
In the past 7 days, participants self reported the following eating habits:

- 72% - Ate 3 or fewer meals prepared away from home
- 86% - Ate 7 pieces of whole fruit or less
- 61% - Ate 7 meals or less that contained leafy green vegetables
- 87% - Ate 3 meals or less that contained beans or lentils
• 72% - Attend church at least once a week
• 94% - Try hard to carry religious beliefs into other aspects of life
• 97% - Wanted to learn health information from their church
• 98% - Would be willing to purchase fruits and vegetables from their church
• 70% - Disagree or strongly disagree with the statement “God will solve my health problems without any effort from me”
• 78% - Report reading their Bible at least a few times a week
17% answered 6 out of 8 kidney related questions correctly.
<table>
<thead>
<tr>
<th>Categories</th>
<th>Pearson Chi-squared (p-value)</th>
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<tbody>
<tr>
<td>Church and CKD Risk</td>
<td>7.0 (p = .220)</td>
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<tr>
<td>Church and CKD Knowledge</td>
<td>8.55 (p = .128)</td>
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<tr>
<td>Gender and CKD Knowledge</td>
<td>.6568 (p = .418)</td>
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<tr>
<td>Gender and CKD Risk</td>
<td>5.52 (p = .019)</td>
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<tr>
<td>Gender and Hypertension</td>
<td>4.962 (p = .026)</td>
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<tr>
<td>Gender and High Cholesterol</td>
<td>5.37 (p = .020)</td>
</tr>
<tr>
<td>Gender and Diabetes</td>
<td>.6988 (p = .403)</td>
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<tr>
<td>Gender and Family with CKD</td>
<td>5.118 (p = .024)</td>
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</tbody>
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Statistical Correlations within Data
Results Phase II - Qualitative
Focus Groups: Number Of Participants for Each Site

Phase II

<table>
<thead>
<tr>
<th>BCFSN Site Location</th>
<th>Number of Participants</th>
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<tbody>
<tr>
<td>Northside Baptist</td>
<td>4</td>
</tr>
<tr>
<td>Pleasant Hope Baptist</td>
<td>3</td>
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<tr>
<td>Calvary Baptist</td>
<td>3</td>
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<tr>
<td>Timothy Baptist</td>
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## Participant Description - Phase II

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<tr>
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<th>Male N=5</th>
<th>Female N=11</th>
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<tr>
<td><strong>Average Age</strong></td>
<td>58 years (range 46-66 years)</td>
<td>60 years (range 50-70 years)</td>
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<td><strong>Household Income</strong></td>
<td>4 had household income below $59,000</td>
<td>9 had household income below $59,000</td>
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<tr>
<td><strong>Education</strong></td>
<td>2- college educated</td>
<td>1- college educated</td>
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<tr>
<td><strong>Years Hypertension</strong></td>
<td>15.5 years (range 1-40 years) N=4</td>
<td>14 years (range 1-34 years) N=8</td>
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<tr>
<td><strong>Years Diabetes</strong></td>
<td>Only 1 had diabetes for two years N=1</td>
<td>12.25 years (range 3-22 years) N=4</td>
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### Result Phase II - Summary Themes

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<tr>
<th>Theme</th>
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<tbody>
<tr>
<td>Lack of information about diet/nutrition</td>
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<tr>
<td>Frustration with not knowing much about their health and how to take care of self.</td>
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<td>Drinking water as a way to protect the kidneys.</td>
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<td>Culture as a influence on health</td>
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<td>Physicians never spoke to them about CKD</td>
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</table>
“I just don’t know anything about kidney disease”

“I think we need more education on what to do-keep your blood pressure down and stay off as much medication”

“This is very good information and a necessary conversation”

“We could share the information with our community-not just us”
Phase II - Summary
Program Design

• Pattern: Most participants indicated
  • Selecting a time during service to promote kidney health
  • Getting information via the bulletin
  • Getting someone to oversee the project
  • Their church would be a safe place to get information
  • They needed something tangible not just information up front
Interpretation

• The qualitative result confirmed the results of the quantitative findings—the population lacks knowledge about CKD and its risk factors.

• Population needs education on kidney health and to have misconceptions corrected.

• The study illuminated how important it is to meet people where they are to provide guidance and education about health.
The church needs guidance in creating programs that would facilitate behavior change.

Due to the high religious nature of the Churches, health interventions should be tied to biblical principles.

Knowledge is important to facilitate behavior change.
• In Biblical terms: “Without knowledge the people perish”

• Without knowledge about health and the prevention of disease such as kidney disease we may continue to see the high prevalence among African Americans
Acknowledgement

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**Assistants:**
- Toluwalope Ologun- Undergraduate Student
- Raneitra Gover- Graduate Student

**Community Organization:**
Black Church Food Security Network
Questions
References


• Black Church Food Security Network (nd). www.blackchurchfoodsecurity.net


References Cont.
