DECLARATION OF CONFLICT OF INTEREST
Socio-cultural influences of heart failure self-care among an ethnic minority population

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Presenter Disclosure Information

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Socio-cultural influences of heart failure self-care among an ethnic minority population

DISCLOSURE INFORMATION:
The following relationships exist related to this presentation:

NONE
The Heart Failure Epidemic

- United States: 5.7 million patients; estimated 10 million in 2037
- Europe: 6.5 million patients
- South America: 6.3% of deaths
- 6.6% – 9.8% aged > 65 years have heart failure
- Asia: incidence 3.8%
- Africa: 3-7% of hospital admissions due to HF
Ethnic Minority Populations with Heart Failure

- Poorer outcomes
  - ↑ Morbidity
  - ↑ Mortality

- Lower adherence rates

Prevalence of Heart Failure among Ethnic Populations
Heart Failure Self-Care

• A naturalistic decision-making process involving…
  – the choice of behaviors that maintain physiologic stability (self-care maintenance) and
  – the response to symptoms when they occur (self-care management)

Riegel, Carlson, Moser, et al 2004
Decision Making Model of Heart Failure Self-Care

- Individual
- Culture
- Meaning
- Cause
- Treatment
- Severity
- Problems
- Fear

Decision Making Characteristics
- Knowledge
- Experience
- Skill
- Compatibility with values

- Self-Care Maintenance
- Self-Care Management
Specific Aims

• To describe cultural beliefs about self-care

• To identify social factors that facilitate or impede HF self-care

• To explore how these socio-cultural factors influence self-care
Concurrent Nested Mixed Method [QUAL + quan]

Instruments
Self-Care
• Self-Care Heart Failure Index (SCHFI)
Social Support
• Multidimensional Scale Perceived Social Support (MSPSS)

Data analysis
Non-parametric statistics

Data analysis: Thematic content analysis

Semi-structured interview guide
Cultural beliefs
Social factors
Self-care

n=30
## Quantitative Instruments

### Key Instruments

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s alpha</th>
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<tbody>
<tr>
<td><strong>Self-Care Heart Failure Index (SCHFI):</strong></td>
<td></td>
</tr>
<tr>
<td>Self-Care Maintenance</td>
<td>.67</td>
</tr>
<tr>
<td>Self-Care Management</td>
<td>.56</td>
</tr>
<tr>
<td>Self-Care Confidence</td>
<td>.83</td>
</tr>
<tr>
<td><strong>Multidimensional Scale Perceived Social Support (MSPSS):</strong></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>.94</td>
</tr>
<tr>
<td>Friends</td>
<td>.86</td>
</tr>
<tr>
<td>Significant Others</td>
<td>.92</td>
</tr>
<tr>
<td><strong>Duke Activity Status Index (DASI)</strong></td>
<td></td>
</tr>
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<td>.77</td>
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Sample

- Purposive homogenous sampling technique
- Inclusion criteria
  - Self-identified as Black
  - Confirmed HF diagnosis
  - Read/understand English
- Exclusion criteria
  - Prior neurological event
  - Inability to perform tests
Sample Characteristics \( (n=30) \)

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
<th>Mean ± Standard deviation</th>
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<tbody>
<tr>
<td>Age in years</td>
<td>59.63 ± 15.19</td>
</tr>
<tr>
<td>Years with HF</td>
<td>5.33 ± 7.03</td>
</tr>
<tr>
<td>Physical Functioning (DASI)</td>
<td>16.80 ± 14.32</td>
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</table>

<table>
<thead>
<tr>
<th>Frequency (%)</th>
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<tbody>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Married/ Co-habitate</td>
</tr>
<tr>
<td>Single, Divorced, or</td>
</tr>
<tr>
<td>Widowed</td>
</tr>
<tr>
<td>Has someone to confide in</td>
</tr>
<tr>
<td>Born outside of the US</td>
</tr>
<tr>
<td>Employed</td>
</tr>
<tr>
<td>Unemployed</td>
</tr>
<tr>
<td>NYHA</td>
</tr>
<tr>
<td>class II</td>
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<tr>
<td>class III</td>
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Highest Education

- College, 33%
- High school, 20%
- Less than high school, 47%
Results: Qualitative Data

- “…all my people have bad hearts…”
- “…just relax…that’s all I can do…”
- “God provides all that I need…”
- “…the doctor may order it…but I pray on it…”
- Selectivity “…I don’t tell them everything…”
- “…carry the burden…”

Meaning of HF

Influences

Self-Care

Spirituality

Shapes

Self-Care

Social Norms

Drive

Social Support
Results: Quantitative Data

- Few had adequate self-care (≥70 on SCHFI subscales)

- Social support associated with self-care maintenance (r=0.535, p=0.002) and self-care confidence (r=0.391, p=0.036)
Integrated Data

- 94-97% concordance of the qualitative and quantitative data

- Self-care supported by cultural beliefs and facilitated by social norms
  - Medication “essential to a long life”

- Challenges integrating self-care due to cultural preferences and meaning of HF
  - “Island food…bad for the heart good for the soul”
  - Symptom monitoring “I listen to my body…”
Poor Self-Care Management

• Few managed self-care symptoms adequately
  – Belief: HF symptoms caused by “stress”
  – Action: “relax...let it pass”
  – Result:
Social Norms & Social Support

- Impaired physical capacity limited social engagement and led to social isolation

- Social norms interfered with willingness to access social supports
  “we don’t ask for help”
Discussion

• Challenges integrating and adapting self-care behaviors with culture

• Cultural meaning of HF influences symptom recognition and management

• Influence of social support on self-care may be behavior specific
Limitations

• Qualitative results not generalizable

• Sample size and demographics limit quantitative analysis

• Very poor self-care
Conclusions & Implications

• Develop and test culturally acceptable interventions

• Assess cultural beliefs and social norms
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