Racial Differences in Assessing Quality of Care: The Role of Caregiving Skills

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Introduction

Background:
The quality of care (QOC) received by patients with Alzheimer’s Disease and related disorders (ADRD) has become an area of focus for researchers and service providers attempting to provide better services to older adults and their families (Mitchell & Lang, 2004). This is true in both nursing homes and other residential settings (Mor et al., 2003). However, assessing quality of care within the home poses obvious challenges and little is known about the impact of cultural differences on the utility of using a single measure across racial/ethnic groups.

With the majority of individuals living with ADRD being cared for by family members in the community (e.g., Schumacher, Stewart, Archbold, Dobb, & Dibello, 2000), understanding the construct of quality of care and related variables is increasingly important.

One psychosocial factor that may impact the measurement of quality of care is the caregivers’ perceived skill in the caregiving role. In other words, does the caregiver’s perception of their ability to provide care influence reported and observable indicators of the quality of care they provide?

Aims:
Aim 1: To explore racial/ethnic differences across psychosocial and environmental aspects of quality of care in a multiethnic sample of Alzheimer’s caregivers.
Aim 2: To determine whether caregiver report of ability managing the care recipient’s behavior (i.e., “caregiving skills”) would mediate the relation between race/ethnicity and quality of care.

Measures

- Caregiver Race/Ethnicity
- Education Level: (1-item ranging from: no formal education to Doctoral degree)
- Revised Memory and Behavior Problem Checklist (RMBPC: Teri, et al., 1992)
- Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL)
- Mini-mental State Exam (MMSE: Folstein, Folstein, & McHugh, 1975)
- Perceived income adequacy in paying for basics (1-item ranging from: not difficult at all to very difficult)

Quality of Care: The REACH II investigators developed a multidimensional quality of care measure tailored for Alzheimer's patients and their caregivers living in the community. Care recipient personal appearance, and safety and adaptations of the physical environment were each rated by the assessor, and the third subscale of the caregivers was reported by the caregiver. The frustrations of caregiving scale was modified from the Potentially Harmful Behavior measure developed by Williamson & Shaffer (2001).

Caregiver Skills: is a subscale of the Risk Appraisal measure developed by the REACH II Investigators based on existing measures. Eight items are rated on a 3-point scale assessing the caregiver’s ability to provide care for the care recipient. For example, “Is it hard or stressful for you to prepare (CR) meals or help (CR) eat?” Scores are from 0 to 16 with higher scores suggesting increased caregiving skills (or decreased difficulty providing care).

Participants:
Baseline data for 642 caregiver/care recipient dyads were obtained from the Resources for Enhancing Alzheimer’s Caregiver Health Research (REACH II), randomized clinical trial. Participants included African American (n = 212), White/Caucasian (n = 310), and Latino American (n = 311) Alzheimer’s caregivers recruited from five sites (e.g., Bronx, NY; Miami, FL; Memphis, TN; Palo Alto, CA; Philadelphia, PA). Participants had M = 12.53 yrs of education and were caring for an AD patient with a MMSE score of M = 12.47.

Graph 1. Caregiver Race/Ethnicity

33.02%
34.12%
32.86%

Data Analyses:
Aim 1: A one-way between subjects ANOVA explored racial/ethnic differences in quality of care and self-reported caregiving skills.
Aim 2: Hierarchical regression models then tested whether caregiving skills could account for significant differences in race/ethnicity by including race in block one and control variables (e.g., MMSE, ADL, IADL, depression, etc.) and the mediator (caregiving skills) in the second block.

Results

Table 1. ANOVA depicting racial differences in primary variables of interest.

<table>
<thead>
<tr>
<th>Variables of Interest</th>
<th>Race/Ethnicity M (SD)</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediator</td>
<td></td>
<td></td>
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<tr>
<td>Caregiving Skills</td>
<td>10.93(2.8)</td>
<td>17.8***</td>
</tr>
<tr>
<td>(difficulty)</td>
<td>9.30(2.9)</td>
<td>10.16(2.6)</td>
</tr>
<tr>
<td>Quality of Care</td>
<td>3.16(2.8)</td>
<td>11.14***</td>
</tr>
<tr>
<td>Frustration of Caregiving</td>
<td>4.43(2.8)</td>
<td>2.635</td>
</tr>
<tr>
<td>Safety/Adaptations in Environment</td>
<td>3.14(1.8)</td>
<td>2.604</td>
</tr>
<tr>
<td>Hazards in Environment</td>
<td>1.22(1.5)</td>
<td>1.46(1.6)</td>
</tr>
</tbody>
</table>

Table 2. Predicting Frustrations of Caregiving and Positive Modifications of Environment

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized B</th>
<th>Std. Error</th>
<th>Unstandardized B</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AA vs. Whites</td>
<td>-.47</td>
<td>.28</td>
<td>-.13</td>
<td>.15</td>
</tr>
<tr>
<td>Latinos vs. Whites</td>
<td><strong>1.35</strong></td>
<td>.29</td>
<td><strong>-3.34</strong></td>
<td>.15</td>
</tr>
<tr>
<td>Model 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AA vs. Whites</td>
<td>.09</td>
<td>.272</td>
<td>-.01</td>
<td>.15</td>
</tr>
<tr>
<td>Latinos vs. Whites</td>
<td>-.59</td>
<td>.31</td>
<td>-.19</td>
<td>.17</td>
</tr>
</tbody>
</table>

Conclusions

- Failure to identify racial differences in interviewer reported indicators of physical environment suggests that racial differences based upon caregiver perceptions need to be approached with caution.
- More research attention is needed to focus on establishing objective indicators of quality of care. Professional assessment on the care recipients’ conditions should be examined simultaneously with caregiver self-reported data.
- Caregiver skills have been a target domain on which interventions for AD caregivers are built. More efforts are needed to understand Hispanic/Latino caregivers’ report of greater caregiving skills and its impact on QOC.

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