TROUBLING TRENDS IN ANTIPSYCHOTIC DRUG USAGE AND SCHIZOPHRENIA DIAGNOSES AMONG NURSING HOME RESIDENTS

Consumer Voice Annual Conference
November 4, 2021
Phony Diagnoses Hide High Rates of Drugging at Nursing Homes
At least 21 percent of nursing home residents are on antipsychotic drugs, a Times investigation found.

Sept. 11, 2021

A Racial Disparity in Schizophrenia Diagnoses in Nursing Homes
Oct. 15, 2021
MDS Data - Percentage of Residents with Schizophrenia Diagnosis
2012(Q4) – 2021(Q2)
“Nearly one-third of residents who were reported in the MDS as having schizophrenia – a diagnosis that excludes them from CMS’s measure of antipsychotic drug use – did not have any Medicare service claims for that diagnosis.”

Office of Inspector General, May 2021, OEI—7-19-00490
MDS Data - Antipsychotic Drug Usage in Nursing Home Residents 2018 – 2021 (Q2)

Antipsychotic N0410A
“As staffing levels decrease AP drug use increases.”

Disproportionate increases in schizophrenia diagnoses among Black nursing home residents with ADRD.

Shekinah A. Fashaw-Walters, PhD
Twitter: @SFWaltersPhD
Background

• Nursing home racial & ethnic disparities have been well documented
• Structural racism likely contributes to these health disparities
• “Colorblind” policies are forms of structural racism and may have unintended consequences for communities of color
Policies that do not account for the potential unintended consequences that may disproportionately impact people of color due to historic structures of disadvantage
Nursing home racial & ethnic disparities have been well documented

Structural racism likely contributes to these health disparities

“Colorblind” policies are forms of structural racism and may have unintended consequences for communities of color

The 2012 CMS National Partnership to Improve Dementia Care in Nursing Homes is an example of a “colorblind” policy

The Partnership may have unintentionally encouraged the labeling of Black residents with ADRD as schizophrenic

Limited prior work reveals that schizophrenia nearly doubled between 2011 and 2013 for long-stay NH residents enrolled in Virginia Medicaid
Objective & Hypothesis

- The purpose of this work was to examine the effects of the Partnership on the rate of schizophrenia MDS-based diagnoses among long-stay NH residents considering the intersection between ADRD status and race.

- Following the Partnership, there would be a racial difference where Blacks would experience greater increases in schizophrenia diagnoses than their non-Black counterparts.
Methods

• 2011-2015 Minimum Data Set 3.0 long-stay US NH resident quarterly assessments

• Presence of a schizophrenia diagnoses

• ADRD and Black race

• Controlling for differences in:
  - Age, sex, measures of function and frailty (ADL and CHESS scores), and behavioral expressions of dementia
## Demographic Changes Over Time for Nursing Home Residents

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessments, n</strong></td>
<td>3,960,600</td>
<td>3,950,871</td>
<td>3,890,268</td>
<td>3,910,761</td>
<td>3,846,368</td>
</tr>
<tr>
<td><strong>Residents, n</strong></td>
<td>1,272,958</td>
<td>1,260,554</td>
<td>1,239,831</td>
<td>1,237,807</td>
<td>1,223,290</td>
</tr>
<tr>
<td><strong>Schizophrenia, %</strong></td>
<td>4.9%</td>
<td>5.1%</td>
<td>5.4%</td>
<td>5.6%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

### Demographic characteristics

| Age, years, mean (SD) | 83.8 (8.5) | 83.7 (8.6) | 83.6 (8.7) | 83.5 (8.8) | 83.3 (8.9) |
| Sex, %                |            |            |            |            |            |
| Female                | 73.0       | 72.5       | 72.0       | 71.4       | 70.9       |
| Race, %               |            |            |            |            |            |
| Black                 | 12.1       | 12.2       | 12.5       | 12.5       | 12.8       |

### Health-related characteristics

| ADL Scale Score, mean (SD) | 16.9 (7.5) | 17.1 (7.2) | 17.1 (7.0) | 17.1 (6.8) | 17.1 (6.6) |
| CHESS Scale Score, mean (SD) | 0.8 (1.0)  | 0.8 (0.9)  | 0.8 (0.9)  | 0.8 (0.9)  | 0.7 (0.9)  |
| ADRD, %                  | 63.3       | 63.8       | 63.6       | 63.4       | 62.6       |
| Agitated and Reactive Behavior Scale Score, mean (SD) | 0.5 (1.3)  | 0.5 (1.3)  | 0.5 (1.2)  | 0.4 (1.2)  | 0.4 (1.1)  |
Schizophrenia Reporting among Nursing Home Residents with and without ADRD documentation, by Race.

<table>
<thead>
<tr>
<th></th>
<th>Pre-Initiative</th>
<th>Post-Initiative</th>
<th>Relative Change</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Without Dementia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Black Residents</td>
<td>5.3%</td>
<td>5.2%</td>
<td>-1.9%</td>
<td></td>
</tr>
<tr>
<td>Black Residents</td>
<td>5.0%</td>
<td>4.9%</td>
<td>-2.0%</td>
<td></td>
</tr>
<tr>
<td><strong>With Dementia</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.007</td>
</tr>
<tr>
<td>Non-Black Residents</td>
<td>5.8%</td>
<td>5.7%</td>
<td>-1.7%</td>
<td></td>
</tr>
<tr>
<td>Black Residents</td>
<td>5.8%</td>
<td>5.9%</td>
<td>1.7%</td>
<td></td>
</tr>
</tbody>
</table>
Schizophrenia Reporting among Nursing Home Residents with and without ADRD documentation, by Race.

- **Pre**
  - Non-Black w/out ADRD: 5.8
  - Black w/out ADRD: 5.3
  - Non-Black w/ADRD: 5
  - Black w/ ADRD: 4.9

- **Post**
  - Non-Black w/out ADRD: 5.7
  - Black w/out ADRD: 5.2
  - Non-Black w/ADRD: 5.9
  - Black w/ ADRD: 4.9

3.4pp relative change difference

0.1pp relative change difference
Following the partnership, schizophrenia reporting rates increased for Black NH residents but decreased for their non-Black peers.

The greatest difference in change was seen among residents with ADRD.
Implications

• Findings could reflect:
  - racial disparities in schizophrenia diagnoses
  - quality differences in NHs for Blacks versus non-Blacks
  - staff perceptions of how to manage problematic behaviors
  - structural racism manifesting through the unintended consequences of a colorblind policy

• There may be important implications for how we measure the trend in inappropriate antipsychotic use

• Work is needed to determine if schizophrenia labels are appropriately applied in NH practice, particularly for Black Americans and those with ADRD
Disproportionate increases in schizophrenia diagnoses among Black nursing home residents with ADRD

Shekinah A. Fashaw-Walters PhD,1,3,4 Ellen McCready PhD,1,3 Julie F. W. Bynum MD, MPH1,5 Kali S. Thomas PhD, MA1,2,6 Theresa L. Shireman PhD,1,3

1Division of Health Policy & Management, School of Public Health, University of Minnesota, Minneapolis, Minnesota, USA; 2Center for Gerontology and Healthcare Research, School of Public Health, Brown University, Providence, Rhode Island, USA; 3Department of Health Services, Policy, and Practice, School of Public Health, Brown University, Providence, Rhode Island, USA; 4Institute for Healthcare Policy and Innovation, University of Michigan, Ann Arbor, Michigan, USA; 5Department of Internal Medicine, University of Michigan, Ann Arbor, Michigan, USA; 6Center for Innovation in Long-Term Services and Supports, U.S. Department of Veteran Affairs Medical Center, Providence, Rhode Island, USA.

Correspondence Shekinah A. Fashaw-Walters, PhD, Division of Health Policy and Management, School of Public Health, University of Minnesota, 420 Delaware St SE, MMC 220, Minneapolis, MN 55455, USA. Email: sfash@umn.edu

Funding information Agency for Healthcare Research and Quality, Grant/Award Number: 4T32 HS000101-16. National Institute on Aging, Grant/Award Number: 2PO3OA007386-11.

Abstract Background: Previous research demonstrated an increase in the reporting of schizophrenia diagnoses among nursing home (NH) residents after the Centers for Medicare & Medicaid Services National Partnership to Improve Dementia Care. Given known health and healthcare disparities among Black NH residents, we examined how race and Alzheimer’s and related dementias (ADRD) status influenced the rate of schizophrenia diagnoses among NH residents following the partnership. Methods: We used a quasi-experimental difference-in-differences design to study the quarterly prevalence of schizophrenia among US long-stay NH residents aged 65 years and older, by Black race and ADRD status. Using 2011-2015 Minimum Data Set 3.0 assessments, our analysis controlled for age, sex, measures of function and frailty (activities of daily living [ADL]) and Changes in Health, End-stage disease and Symptoms and Signs scores) and behavioral expressions. Results: There were over 1.2 million older long-stay NH residents, annually. Schizophrenia diagnoses were highest among residents with ADRD. Among residents without ADRD, Black residents had higher rates of schizophrenia diagnoses compared to their non-black counterparts prior to the partnership. Following the partnership, Black residents with ADRD had a significant increase of 1.7% in schizophrenia as compared to non-black residents with ADRD who had a decrease of 1.7% (p = 0.007). Conclusions: Following the partnership, Black NH residents with ADRD were more likely to have a schizophrenia diagnosis documented on their MDS assessments, and schizophrenia rates increased for Black NH residents with ADRD only. Further work is needed to examine the impact of “colorblind” policies such as the partnership and to determine if schizophrenia diagnoses are appropriately applied in NH practice, particularly for black Americans with ADRD.
Contact Information

Shekinah A. Fashaw-Walters, PhD
safw@umn.edu