Educating Nursing Home Staff in Dementia Sensitive Communication: Impact on Antipsychotic Medication Use

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Antipsychotic medications (APMs) are often used to treat behavioral and psychological symptoms of dementia despite increased adverse events and only modest efficacy. Reducing APM use in nursing homes (NHs) is a national priority with recommendations that nonpharmacologic interventions be the first-line treatment for challenging behaviors in dementia care. In 2011, 83% of NH residents received an off-label APM, and these residents were primarily those with dementia for whom a black box warning for APM use exists. This led the Centers for Medicare and Medicaid Services (CMS) to create the National Partnership to Improve Dementia Care with a goal of reducing antipsychotic medications in nursing homes by 15% during the study period.

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There are a variety of barriers to reducing APMs in dementia care. APMs are most commonly given to manage behavioral symptoms in NH residents with dementia. However, managing the behavioral and psychological symptoms of dementia requires individualized approaches that consider the resident with dementia, the care staff, and the environment. Individualized and contextually based non-pharmacologic approaches can be difficult for staff who need to overcome resident and system barriers. Administering an APM is often viewed as an easier solution to control behaviors when staff are faced with time restraints, minimal knowledge on behavioral approaches, and the perception that APMs are efficacious and low-risk.

Staff communication during dementia care directly affects challenging behaviors of residents. Specifically, elderspeak communication doubles the probability of behavioral symptoms in persons with dementia, measured as resistiveness to care (RTC). Elderspeak is a form of infantilizing speech (i.e., baby talk) that is based on stereotypes of incompetence and dependency. This communication style is a well-intentioned attempt to convey caring when staff are unsure of how to communicate with older adults, particularly residents with dementia. Elderspeak features communicative adjustments including a high-pitch, overly-nurturing tone, inappropriate terms of endearment (e.g., honey), and collective pronoun substitutions (e.g., we instead of you). Resistiveness to care is a set of challenging behaviors exhibited during care encounters that co-occur with aggression and agitation. Resistiveness to care leads to neglect of persons with dementia if care is unable to be completed and increases care provider stress and strain.

The CHanging Talk (CHAT) staff education program includes three 1-hour in-person training sessions with videos, vignettes, and role playing focused on resident communication needs, identifying and reducing elderspeak, and practicing effective dementia communication practices. The CHAT program was provided to 11 Kansas NHs between 2011 and 2013 and evaluated for both change in staff use of elderspeak and change in resident RTC. The CHAT program successfully reduced both staff elderspeak and subsequent resident RTC. During the study period, the National Partnership with CMS initiated a goal to reduce APM use from 23.9% in 2011 to 20.3% by the end of 2013, a 15% reduction. Because the CHAT program successfully reduced RTC by residents and challenging behavior is a known antecedent to APM administration, this reduction may have additional effects on APM use. The purpose of this post hoc analysis was to evaluate the effect of the CHAT program and subsequent reduction in RTC on APM usage in participating NHs using publicly reported and freely available data.

Methods

Design

A secondary analysis of observational data from NHs participating in the institutional review board approved cluster randomized control crossover trial evaluating the CHAT program was undertaken to compare the change in APM rates in CHAT NHs to statewide APM rates. The CMS data sets related to quality measures were accessed through the NHC website. This data is derived from the CMS health inspection database, the Minimum Data Set, and Medicare claims.

Measures

APM usage was measured using the percentage of long-stay residents who received an APM (quality measure 419). This quality measure is obtained from the Minimum Data Set where it is reported if the resident is receiving an APM in the target period, excluding residents diagnosed with schizophrenia, Tourette’s syndrome, or Huntington’s disease.

Procedures

The CHAT program was provided to staff in 11 NHs in Kansas between 2011 and 2013. The percentage of long-stay residents who received an APM was abstracted for the 2 quarters both before and after each NH participated in the CHAT program. The quarter the NH participated in CHAT was not included. One NH was excluded from the APM analysis because the preintervention APM data were not available. The average APM rate for Kansas was abstracted for each corresponding quarter to control for potential reductions in rates resulting from the National Partnership campaign.

Analysis

For each of the 10 NHs with available data, APM usage percentages were calculated by averaging 2 quarters before and 2 quarters after the CHAT program. The state’s before and after APM usage percentages were determined by pooling all of the before-quarters and after-quarters. The differences from before to after the program were calculated for all 10 NHs and compared to no change and to the state mean change using a 2-sided, 1-sample Student’s t test.

Results

Nursing Home Characteristics

An average of 21 (standard deviation = 10.3, range = 9.7–39.7) staff attended each session across the 10 NHs, primarily nursing assistants. The NHs ranged in size from 43 to 163 beds (mean = 85.2, standard deviation = 41.7) with an average 78.2% occupancy. Eight of the 10 NHs were nonprofit facilities and the other 2 were for-profit facilities. Six NHs were located in metropolitan areas. Five NHs had at least 1 special care unit. The Medicaid case mix ranged from 0.92 to 1.21 (mean = 1.03; standard deviation = 0.08). Quality ratings ranged from 1 to 5 stars (NHC star rating) with an average of 3.85 stars.

Nursing Home Characteristics in CHAT Facilities, Statewide, and Nationally

<table>
<thead>
<tr>
<th>Measure</th>
<th>CHAT Nursing Homes (N = 10)</th>
<th>State Averages</th>
<th>National Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average facility size (beds)</td>
<td>85.2</td>
<td>74.2</td>
<td>108.4</td>
</tr>
<tr>
<td>Average percent occupancy</td>
<td>78.2</td>
<td>80.9</td>
<td>82.3</td>
</tr>
<tr>
<td>For-profit ownership (%)</td>
<td>20.0</td>
<td>52.5</td>
<td>68.7</td>
</tr>
<tr>
<td>Total nursing staff hours per day per patient</td>
<td>3.8</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Received dignity citation (%)</td>
<td>30.0</td>
<td>19.7</td>
<td>18.0</td>
</tr>
<tr>
<td>4- or 5-star nursing home (%)</td>
<td>60.0</td>
<td>53.8</td>
<td>50.6</td>
</tr>
</tbody>
</table>

CHAT Nursing Home characteristics were obtained from Nursing Home Compare for the quarter or year the intervention was conducted. State and national averages were obtained for the year 2012–2013 when parent study was conducted.
APM Use

The 10 NHs that participated in the CHAT and had complete data available decreased APM use on average by 4.88 percentage points, from 20.71% to 15.83% (P = .03). During the same time, the state average APM use decreased by 0.68 percentage points, from 25.39% to 24.71%. This equates to an average 23.6% decrease in APM use in CHAT NHs compared to a 2.7% decrease in APM use across the state (P = .06) (Figure 1).

Discussion

Nursing homes participating in CHAT reduced APM usage by 4.88% (−22.9% change) compared to the state average decrease of 0.68% (−2.7% change) during the same period. Although these differences did not reach statistical significance, a clinically meaningful reduction in APM usage was observed, and a significant decline (P = .03) in APM rates occurred in the participating NHs before and after CHAT. During 2011 to 2013 when the study took place, CMS set a goal to reduce APM rates nationally from 23.8% to 20.3%, or a 15% reduction.3 All of the NHs engaged in CHAT were identified as participating NHs. Elderspeak communication is a known trigger of RTC,15,23 and inappropriate APM use in dementia care.

Conclusions

The CHAT communication intervention reduced staff elderspeak communication and resident behavioral symptoms.24 In addition, a clinically meaningful reduction in APM usage occurred in participating NHs. Elderspeak communication is a known trigger of RTC,23 and the findings of this secondary analysis using publicly available data indicate that person-centered communication may reduce APM usage related to reductions in behavioral symptoms. If results are replicated in ongoing research, staff education to improve communication may become an effective pharmacologic intervention to reduce inappropriate APM use in dementia care.

References

7. Macaulay MS. Efforts to reduce antipsychotic use in dementia care are starting to bear fruit, but a lot of work remains to be done. J Am Med Dir Assoc 2017;18:204–206.