Administration Practices of Antipsychotic Medications Among Hospitalized Adults with Dementia

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Objective

Explore the use of antipsychotic medications (APM) among hospitalized patients with dementia and compare current practice to national practice guidelines.
Background

- More than 6.2 million Americans
- Greater re-admission rate, prolonged stay and 14% higher cost
- Behavioral and psychological symptoms of dementia (BPSD)
  - 75% hospitalized patients
- APM off-label in elderly
  - Black-box warning 2005 & 2012 Centers for Medicare and Medicaid Services (CMS) mandate
  - 85% increased risk of adverse events (AE)
- Non-pharmacologic first-line treatment
**PICO**

- In hospitalized patients diagnosed with dementia (P), what are the characteristics (I) of patients administered APM (C), compared to patients not administered APM (O)?
- Primary searches on PubMed & CINAHL

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**PRISMA for Literature Review of APM use Among Hospitalized Patients with Dementia**


- Records screened (n = 280) → Records excluded (n = 2183)
- Reports assessed for eligibility (n = 22) → Reports excluded (n= 258)
- Studies included in review (n =9)
Literature Review

- White et al., (2016)
  - BPSD incidence 75% hospitalized dementia patient
  - Higher risk of mortality, over 1/3 died during admit
  - APM administered rate of 12%
- APM associated with 85% increased risk of AE (Banerjee 2009, Ralph & Espinet, 2018)
- Improper training can increase BPSD
- Prevention programs focus non-pharmacologic approach to adapt environment and lower stimuli (Wharton et al., 2018)
The purpose of this DNP project is to characterize hospitalized patients with dementia who are administered APM or not and compare them to practice guidelines.
Aims

- Characterize hospitalized patients diagnosed with dementia that are administered APM and those not administered an APM

- Compare the proportion of hospitalized patients who receive at least one APM during hospitalization to those who did not, each year between January 1, 2016, and December 31, 2021

- Identify disposition status with rates of APM use
Methods/Approach

- Design: evidence-based practice (EBP) project utilizing retrospective observational descriptive design using a quantitative approach. A de-identified convenience sample utilized.

- Sample: Hospitalized adult patients administered FDA approved medications for dementia, aged 65 and older, and hospital stay 24 hours or more

Methods/Approach

Data extracted from de-identified data reports supplied by hospital data scientist:

- Gender
- Age
- Admit source
- Primary admission diagnosis
- APM during admission
- Discharged with APM
- Disposition
- Length of stay
Methods/Approach

- Data were analyzed quantitatively
  - frequency and descriptive statistic
  - categorical and continuous variables

- Chi-square and t-test conducted
  - compare hypothesized group differences APM vs no APM
  - characterize who discharged home vs another facility
Results: Preliminary

<table>
<thead>
<tr>
<th></th>
<th>APM n=(X)</th>
<th>No APM n=(X)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Mean</td>
<td>79.51</td>
<td>81.47</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>n=329 (12%)</td>
<td>n=1139 (42%)</td>
<td>0.76</td>
</tr>
<tr>
<td>Male</td>
<td>n=289 (11%)</td>
<td>n=973 (36%)</td>
<td></td>
</tr>
<tr>
<td>Admit Source</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>n=509 (19%)</td>
<td>n=1716 (63%)</td>
<td>0.53</td>
</tr>
<tr>
<td>Other</td>
<td>n=109 (4%)</td>
<td>n=396 (15%)</td>
<td></td>
</tr>
<tr>
<td>Admit Diagnosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infection</td>
<td>n=179 (7%)</td>
<td>n=623 (23%)</td>
<td></td>
</tr>
<tr>
<td>Fracture/trauma</td>
<td>n=88 (3%)</td>
<td>n=318 (12%)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>n=348 (13%)</td>
<td>n=1174 (43%)</td>
<td>0.87</td>
</tr>
</tbody>
</table>

- Sample size n=2730
- Administered APM n=618 (22.6%)
Results: Preliminary

Length of Stay

- APM: 16.2 days
- No APM: 6 days

APM ADMINISTRATION PRACTICES IN DEMENTIA
Results: Preliminary

- Proportionally more patients who discharged to a facility were administered an APM $p<0.001$
Results: Preliminary

Proportion of APM by Year

PATIENTS WITH DEMENTIA

YEAR

Results: Preliminary

Disposition with APM

- 3% with APM
- 97% without APM
Conclusion

- APM administered 22.6% of patients in the sample
- LOS increased (APM 16.2/No APM 6) (p<0.001)
- Proportionally overall decline in patients who received APM
- No best practice guidelines for hospitalized patients with dementia
- In-patient dementia care training available but not widely used and not mandated
- Future work education providers, nurse and interdisciplinary staff
Implication for Practice

- Potential of contributing valuable information healthcare and its stakeholders
- Inpatient setting stressful, may trigger BPSD
- Non-pharmacologic interventions categorized:
  - Equipment, family assistance, psycho-social, personally tailored interventions

As expressions of God’s healing love, witnessed through the ministry of Jesus, we are steadfast in serving all, especially those who are poor and vulnerable.
References


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Questions?

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