Aggressive Behaviors Between Residents with Memory-Loss in an Assisted Living Residence

Eilon Caspi Ph.D.

February 22 2012
General Background

• An estimated 5.4 million persons in the U.S. have Alzheimer’s disease (AD) while 13.2 million are projected to have AD in 2050 (Hebert et al. 2003).

• Massachusetts: from 120,000 in 2010 to 140,000 in 2025 (Alzheimer’s Association, 2009).

• Assisted Living Residences (ALRs) are the fastest growing residential care option for older adults (Kopetz et al. 2000).

• Massachusetts: from 44 certified ALRs in 1995 (MassALFA, 2005) to 200 in 2008 (EOEA, 2009).
General Background (cont.)

Growth in specialized dementia programs in MA:

- 18% of residential care facilities offered specialized dementia programs in 1996 (Stocker & Silverstein, 1996).

- 40% offered such programs in 2005 (Policy Studies Inc. 2005).
• 42% – 50% of residents in ALRs have dementia (n=2,078 residents in 193 residences in four states; Gruber-Baldini et al. 2004).

• One-third of these residents were found to have one or more behavioral problems at least once per week.

• Substantial portion of behavior problems arise when care does not identify and address the root causes (Cohen-Mansfield & Mintzer, 2005).

• Behavioral problems of older adults with dementia were mostly studied in nursing homes.

• Understudied in ALRs.
“Behavioral symptoms of dementia are often more distressing than cognitive and functional impairment for both individuals with dementia and their caregivers” (Volier et al. 2006)
Initial Guiding Research Questions

In what ways direct care staff strategies...

1. prevent and defuse negative emotions and agitated behaviors?

2. bring about and maintain positive emotions?
Methods

- **Setting**: Two SCUs of an ALR for older adults with memory-loss.
  
  High functioning unit (HFU) and Low functioning unit (LFU)
  
  Public areas only.

- **Data collection strategies**:
  - Primary: Participant observations
  
  Secondary:
  - Informal conversations
  - Semi-structured interviews
  - Residents’ records
  - Communication log

- **Time period**: 206 days; arrival 7:47am, departure 5:58pm (average)
Analysis


“Emergent design.”

Iterative process (data analysis drives subsequent data collection).

Line-by-line coding (1,625 pages of data).

“Constant comparative method.”

“Stream Analysis” (of sequence of events leading to distressing behaviors).

* Data management and analysis software: N-Vivo 2.0.
Sample

- 12 residents with dementia with high levels of negative emotional states and/or behaviors on a continual basis.

- All were ambulatory (two used a walker).

HFU (n=7)
  2 Early-stage
  5 Mid-stage

LFU (n=5)
  2 Mid-stage
  3 Late-stage

Based primarily on MMSE scores.
## Sample

<table>
<thead>
<tr>
<th>Sample</th>
</tr>
</thead>
</table>
| Age | 81 years old (mean)  
| Gender | Female (11); Male (1)  
| Marital status | Widows (4) and Widower (1); Married (3); Divorced (3); Single (1)  
| Educational level | Higher than B.A. level (mean)  
| Race | White (n=12)  
| Religion | Non-Catholic (5); Catholic (4); Jewish (3)  
| Payment arrangement | Private pay (10); P.A.C.E. – Low income (2)  
| Length of stay (at study onset) | 13 months (mean) |
“Going forth to see what the jungle consists of... rather than making ones way through a jungle to find a particular village”  (Soskin & John, 1963)
Selected Quotations  
Aggressive Behaviors Between Residents (ABBR)

Resident:
“This is a matter of serious concern. *It happens very often* and will be fatal.”

“The residents were trying to avert a huge disaster.”

CNA:
“He is going to kill someone one day.”
Limited Research on ABBR

• **Limited number of studies** examined ABBR among older adults with memory-loss in long-term care residences.

• **Mostly secondary analysis. All in nursing homes:**
  - Shinoda-Tagawa et al. (2004) – Complaints, incident reports & MDS.
  - Rosen et al. (2008) – Focus groups (care staff; cognitively-intact residents).
  - Pillemer et al. (2011) – Interviews (residents; CNAs) & observations.

• ABBR can cause **severe negative psychological and physical harm** (Shinoda-Tagawa et al. 2004; Rosen, Pillemer & Lachs, 2007).

• “**Limited guidelines & training materials** exist for staff” (Rosen et al. 2008).

• To my knowledge, the first study to examine ABBR in SCUs of an ALR.
**ABBR-Specific Research Questions**

1. What is the **spectrum** of behaviors associated with ABBR?

2. Which observable **triggers** contribute to development of incidents of ABBR?

3. To what **extent** do observable **early-signs** and **triggers** manifest prior to ABBR?

4. Which **staff strategies** are **effective** in prevention & defusion of incidents of ABBR?

* Unit of analysis = A single incident of ABBR
Findings
Selected Examples of Verbal ABBR

- Ordering a resident to leave the dining room table
- Making insulting comments
- Telling a resident to shut up
- Yelling and shouting at a resident
- Accusing a resident
- Cursing at a resident
- Threatening to throw a plate in the face of another resident
- Threatening to kick, hit, break the neck, or kill another resident
Selected Examples of Physical ABBR

• Pulling a bib from another resident’s neck during meal time

• Taking food from another resident’s plate

• Tossing a bowl of jello at another resident

• Hitting another resident on the hand and in the face

• Pushing and kicking another resident

• Grabbing another resident’s arm and squeezing it hard with fingers and nails

• Following residents and threatening to stab them with a knife and a fork
Selected Triggers – *Unmet Needs*?

- **HFU**
  - Becoming irritated by *coughing, sneezing, or burping* by a resident
  - Becoming aggressive when a resident *sat in one’s seat* in the dining room
  - Calling a staff member a few times without receiving an answer
  - Blocking the television screen from another resident’s view

- **LFU**
  - Refusing to sit next to another resident in the dining room
  - Intrusion into *personal space*
  - Walking towards another resident’s apartment
  - Grabbing food from another resident’s plate
<table>
<thead>
<tr>
<th>Summary of ABBR ($n=43$ incidents) – HFU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of ABBR</strong></td>
</tr>
<tr>
<td>Degree of disruption</td>
</tr>
<tr>
<td>Early sign</td>
</tr>
<tr>
<td>Observable trigger</td>
</tr>
<tr>
<td>Staff presence</td>
</tr>
<tr>
<td>Prevented or defused</td>
</tr>
<tr>
<td>Location</td>
</tr>
<tr>
<td>During mealtime or activity</td>
</tr>
<tr>
<td>Type of ABBR</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Degree of disruption</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Early sign</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Observable trigger</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Staff presence</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Prevented or defused</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Location</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>During mealtime or activity</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

LFU
## Level and Nature of Involvement in Incidents – HFU

<table>
<thead>
<tr>
<th>Name</th>
<th>Number of Incidents</th>
<th>Target</th>
<th>Exhibitor</th>
<th>Neither target nor exhibitor</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Baker</td>
<td>11</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Mrs. Allen</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mrs. Clark</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Mrs. Edwards</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mrs. Davis</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Mr. Green</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mrs. Foley</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Pseudonyms
# Level and Nature of Involvement in Incidents – LFU

<table>
<thead>
<tr>
<th></th>
<th>Number of Incidents</th>
<th>Target</th>
<th>Exhibitor</th>
<th>Neither Target nor Exhibitor</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Lewis</td>
<td>18</td>
<td>3</td>
<td>12</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Mrs. Kendall</td>
<td>18</td>
<td>2</td>
<td>12</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Ms. Harris</td>
<td>12</td>
<td>10</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mrs. Jones</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mrs. Irving</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Pseudonyms
Effective Prevention Strategies

1. Simply being **alert**
2. Being **proactive** (vs. reactive)
3. Being **informed about previous incidents** in which a certain resident was involved in an aggressive behavior or about a history of confrontations between two residents.
4. **Redirecting** a resident from the area where the incident took place.
5. **Offering** the person to take a walk together.
6. **Separating**.
7. Positioning, repositioning, or changing **seating arrangement**.
8. **Refocusing** or changing the topic or subject.
9. **Distracting to a more pleasurable activity**, changing or diverting to a different activity.
10. Staying **calm**.
11. **Never arguing** with a resident engaged in an aggressive behavior.
12. **Seeking help** from other care staff members.

- Based on direct observations and confirmation during 13 interviews with care staff.
Other *Suggested* Prevention Strategies

- Effective **documentation** of the **circumstances that lead to** incidents of ABBR
- Effective **communication among staff** members
- Effective **staff-resident communication**
- **Knowing the residents** (e.g. life-background, personality, coping style, etc.)
- Engaging the resident in a **meaningful activity**
- Acknowledging preserved **face-recognition ability**
- Emotional **reassurance** of residents **during and after** incidents
- Addressing **physical needs** (e.g. the need to use the bathroom)
Ineffective Care Staff Practices

• **Inattentiveness** to development of altercations/ABBR.

• **Not being informed about previous incidents.**

• **Underreporting** – Only 20% of 85 incidents were reported.

• **Poor quality of staff documentation** of incidents (i.e. insufficient detail of the circumstances that lead to ABBR).

• **Labeling** a resident (e.g. “violent;” “abusive;” “out of control”).
Challenges Faced by Care Staff

- Supervision challenge
- Being at risk of being assaulted when intervening
- Fear of being injured
- Being short-staffed
- Residents’ free choice (e.g. sitting next to an aggressive resident)
- Language barrier
- Lack of ABBR-specific training
- Lack of “experiential learning” (especially in the evening hours)
- Personal health problems
- Racist comments or slurs by residents towards staff
- Not being sufficiently acknowledged by managers & family members
- Low pay ($10 an hour)
Practical Implications

• Develop and provide training to improve level and quality of care staff and managers’ daily documentation of incidents of ABBR.

• Classify incidents of ABBR based on the sequence of events that lead to aggressive behaviors rather than in terms of the nature of the aggressive act (Ware et al. 1990).

• Identify unmet needs that contribute to the aggressive behavior (Whall & Kolanowski, 2004) and address them before they escalate into ABBR.

• Develop ABBR-specific training programs (e.g. effective strategies; early signs and triggers).

• Develop ABBR-specific assessment instruments (Rosen et al. 2008) for practice and research purposes.
Recommendations for Change in Regulations
SCUs of ALRs in MA

• Explicitly acknowledge the phenomena of verbal and physical ABBR

• Require that ALRs will address ABBR in their policies and procedures

• Define/clarify what “reasonably foreseeable unschedule needs” means

• Require delivery of ABBR-specific training to all “direct contact” staff

• Enlarge the number of structured activities required per day (currently the requirement in MA is only one activity per day).

• Determine who should be legally responsible for the safety of residents with memory-loss (ALRs in MA are governed by landlord-tenant law).

• Require ALRs to hire a social worker and regularly hold a Resident Council.
To strengthen the validity of the findings and their interpretations I used the following techniques:

- Prolonged engagement
- Persistent observation
- Triangulation
- Leaving an audit trail
- Member checking/informant feedback
- Weighting the evidence
- Checking for representativeness of sources of data
- Making contrasts/comparisons
- Theoretical sampling
- Replicating a finding
- Rich and ‘thick’ description
- Thorough documentation of methods used
- Confirmatory data analysis

These techniques were recommended by Onwuegbuzie, (2000)
Limitations

- Single ALR.
- Small sample.
- Effects of medical conditions and medications were not examined.
- Effects of the physical environment were not examined.
- “Reactivity” – influence of my presence on staff care.
- Unstructured observational method.
Future Research

- Examine policies, actual documentation practices and quality of staff reports (e.g. situational circumstances/sequence of events leading to incidents of ABBR).
- Determine extent to which observable early signs and situational triggers precede incidents of verbal and/or physical ABBR.
- Determine extent to which unmet needs contribute to development of ABBR.
- Compare non-activity time vs. structured activity time to determine extent of protective effects of structured activities on scope and severity of ABBR.
- Identify and evaluate the effectiveness of ABBR-specific prevention and de-escalation strategies.
- Develop and test ABBR-specific assessment instruments.
- Develop and test effectiveness of ABBR-specific training programs.
Thank You!

Assisted Living Residence
Residents, family members, care staff members, and managers.

Committee Members
Frank Caro, (Chair); Donna Haig Friedman; Ann Hurley; & Jeff Burr.
References


• Hebert, LE; Scherr, PA; Bienias, JL; Bennett, DA; Evans, DA. “Alzheimer’s disease in the U.S. population: Prevalence estimates using the 2000 Census.” *Archives of Neurology* 2003;60(8):1119–1122.


