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

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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).

General Background (cont.)

- 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" (Volicer 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

Grounded Theory (Charmaz, 1995) informed by Miles & Huberman (1994) approach.

“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

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:
  - Malone et al. (1993) – Incident reports.
  - Shinoda-Tagawa et al. (2004) – Complaints, incident reports & MDS.
  - Lachs et al. (2007) – Police records.
  - 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
- Threatning to throw a plate in the face of another resident
- Threatning 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 threatning 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

Summary of ABBR (*n*=43 incidents) – HFU

Type of ABBR	Verbal n=20 (46%)	Physical n=13 (30%)	Verbal & physical n=10 (23%)	-	Missing n=0 (0%)
Degree of disruption	Disturbing n=25 (58%)	Endangering n=17 (40%)	-	-	n=1 (2%)
Early sign	Yes n=21 (49%)	No n=1 (2%)	-	-	n=21 (49%)
Observable trigger	Yes n=34 (79%)	No n=1 (2%)	-	-	n=8 (19%)
Staff presence	Yes n=35 (81%)	No n=6 (14%)	-	-	n=2 (5%)
Prevented or defused	Not prevented n=21 (49%)	Not prevented but defused n=12 (28%)	Prevented n=3 (7%)	-	n=7 (16%)
Location	Dining room n=21 (49%)	Activity room n=14 (33%)	Exit door n=1 (2%)	-	n=7 (16%)
During mealtime or activity	During mealtime n=16 (37%)	Not during group activity n=12 (28%)	During group activity n=5 (12%)	Watching TV (activity room) n=3 (7%)	n=7 (16%)

Summary of ABBR (*n*=42 incidents) – LFU

Type of ABBR	Verbal n=18 (43%)	Physical n=21 (50%)	Verbal & physical n=3 (7%)	-	Missing n=0 (0%)
Degree of disruption	Disturbing n=26 (62%)	Endangering n=16 (38%)	-	-	n=0 (0%)
Early sign	Yes n=18 (43%)	No n=10 (24%)	-	-	n=14 (33%)
Observable trigger	Yes n=24 (57%)	No n=10 (24%)	-	-	n=8 (19%)
Staff presence	Yes n=31 (74%)	No n=7 (17%)	Partial N=1 (2%)	-	n=3 (7%)
Prevented or defused	Not prevented n=23 (55%)	Not prevented but defused n=13 (31%)	Prevented n=4 (9%)	-	n=2 (5%)
Location	Dining room n=20 (48%)	Activity room n=13 (31%)	Hallway n=3 (7%)	Elevator n=1 (2%)	n=5 (12%)
During mealtime or activity	During mealtime n=10 (24%)	Not during group activity n=13 (31%)	During group activity n=12 (28%)	-	n=7 (17%)

Level and Nature of Involvement in Incidents – HFU

	Number of incidents	Target	Exhibitor	Neither target nor exhibitor	Missing
Ms. Baker	11	9	0	2	-
Mrs. Allen	7	5	2	-	-
Mrs. Clark	6	4	0	-	2
Mrs. Edwards	5	3	2	-	-
Mrs. Davis	4	0	3	1	-
Mr. Green	3	3	0	-	-
Mrs. Foley	2	2	0	-	-
* Pseudonyms					

Level and Nature of Involvement in Incidents – LFU

	Number of incidents	Target	Exhibitor	Neither target nor exhibitor	Missing
Mrs. Lewis	18	3	12	-	3
Mrs. Kendall	18	2	12	1	3
Ms. Harris	12	10	2	-	-
Mrs. Jones	6	6	0	-	-
Mrs. Irving	5	0	5	-	-

* 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;

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