



JAMDA

journal homepage: www.jamda.com

Editorial

Deaths as a Result of Resident-to-Resident Altercations in Dementia in Long-Term Care Homes: A Need for Research, Policy, and Prevention



Eilon Caspi BSW, MA, PhD*

Dementia Behavior Consulting LLC, Minneapolis, MN

"This is a matter of serious concern. It happens very often and will be fatal."— Resident in early-stage Alzheimer disease

"He is going to kill someone one day."— Certified Nursing Assistant

"I am just afraid that he will hurt someone when we don't see it...especially someone frail whom he can take down with one blow."— Certified Nursing Assistant

"I want to know that someone will be there for me if something happens to me."— Resident in mid-stage Alzheimer disease

The preceding quotations are from a study by the author of this editorial.¹

A growing number of studies in the past decade examined the public health problem of resident-to-resident altercations (RRA) in long-term care (LTC) homes.^{1–14} These studies identified key characteristics/typologies and causes and triggers of this form of behavioral expression as well as staff-reported strategies to address it. One groundbreaking study examined physical injuries due to episodes of RRA.⁴ The vast majority of these studies have been conducted in nursing homes, whereas 2 studies were conducted in assisted living residences, 1 among cognitively intact residents¹⁵ and 1 among older residents with dementia.¹

The prevalence of episodes of RRA has recently been identified in a rigorous study among 2011 residents (average age 84 years) in 10 nursing homes.¹⁶ Two other encouraging developments pertaining to this underrecognized behavioral phenomenon include the development and evaluation of the first instrument for measuring episodes of RRA¹⁷ and the first staff training program in recognition and prevention of these behaviors (this training program demonstrated fivefold increase in staff recognition of these episodes after the training).¹⁸

In addition, at least 3 reviews of the literature have been recently published on RRA in LTC homes.^{19–21} Furthermore, the first Blog dedicated to prevention of episodes of RRA in dementia was launched in April 2012 and consists of hundreds of free resources on this form of behavior.²²

One of the major gaps in research on episodes of RRA in dementia in LTC homes is the fact that virtually no studies examined deaths as

the primary outcome of these episodes as well as the circumstances surrounding these fatal episodes. One study examined 1296 deaths due to external causes in nursing homes in Victoria, Australia (deaths reported to the Coroners Court). The study found that 7 (0.5%) of these deaths were due to episodes of RRA.²³ The actual proportion of deaths due to episodes of RRA is likely higher given the fact that a substantial number of these fatal episodes are not reported to coroners.²⁴

Judy Berry, founder and former CEO of Lakeview Ranch Minnesota, currently president of Dementia Specialist Consulting, asserts,

"I know from being a provider for 16 years that many providers would never admit to a death that might be eventually attributed to severe understaffing. Most of these kinds of deaths are truly preventable with appropriate staff-resident ratios and ongoing staff training and support. Higher ratios of appropriately trained staff are critical to proactive care management and prevention of these types of incidents! I just wish more places would be willing to make the commitment to change from barely getting by to the staff ratios necessary for prevention! Although it raises upfront cost initially, it lowers long-term costs, significantly, in the long haul, by specifically cutting the huge costs of staff burnout, which leads to excessive turnover and in addition contributes to an overwhelming reduction in liability. This is truly what is needed to prevent resident-to-resident aggression!" (J. Berry, personal communication, August 30, 2015).

The possibility that deaths due to episodes of RRA in dementia are underreported is consistent with the underreporting of verbal, physical, and sexual RRA episodes. As stated by Professor Jeanne Teresi et al,¹⁸ "It is most likely that at the present time the majority of resident-to-resident mistreatment incidents are not reported in most nursing homes."

The cumulative effects of a series of persisting barriers contribute to the lack of research on deaths due to RRA in dementia. Selected examples of these barriers are described in [Table 1](#).

In light of the paucity of research studies on deaths due to episodes of RRA in dementia, I conducted a review of 40 deaths reported in the general media that occurred as a result of such episodes (ie, episodes in which at least one of the residents involved, the exhibitor or the target, had been reported to have dementia or cognitive impairment). This comprehensive Internet search was conducted during September 2015, building on 3.5 years of ongoing collection of these episodes on

* Address correspondence to Eilon Caspi, BSW, MA, PhD, 3910 E. 28th Street, Minneapolis, MN 55406.

E-mail address: eiloncaspi@gmail.com.

Table 1
Barriers for Research on Deaths due to RRAs in Dementia

The strong disincentive of LTC homes to report on episodes of RRAs (ie, care providers' concerns for liability and damage for reputation).

Staff reluctance/fear of reporting, which could negatively reflect on their job performance (ie, their duty to protect residents from injury/harm) or end up in disciplinary action against them.

Staff are often understaffed and completing behavioral expressions logs or incident reports can be difficult given their heavy workloads and lack of adequate training in filling out these reports.

The normalization of behavioral expressions in older residents with dementia as reflected in and shaped by commonly used labels such as "aggressive" "violent" and "abusive (e.g., the perceptions by which these behaviors are inevitable part of dementia, represent an expected and natural part of the job of caring for people with dementia, that not much can be done to prevent them, and that older adults with dementia are physically incapable of injuring each other).

Lack of clinically useful instruments for measuring RRA (except for the recently published Resident-to-Resident Elder Mistreatment Instrument¹⁷).

Memory loss of residents with dementia may limit their ability to report reliably on episodes they were involved in or witnessed. Certain target residents who are cognitively capable of reporting may avoid doing so due to fear of reprisals, and certain exhibiting residents may be unreliable reporters due to guilt, embarrassment, or fear of punishment.

Substantial portion of episodes of RRA are not witnessed by staff.^{25,26}

Only a small proportion of these deaths are being examined by coroners/medical examiners.

Significant number of death certificates do not explicitly acknowledge episodes of RRA as contributing factors or direct causes of deaths.

A relatively small number of fatal RRA episodes end up in lawsuits, convictions, inquests, or make their way to the general media.

Lack of effective collaboration and timely information transfer between external agencies (eg, law enforcement, medical emergency personnel, Ombudsman, state regulatory agencies, adult protective services, coroners/medical examiners, hospitals) related to serious episodes of RRA.

The MDS 3.0 (Behavior E Section) does not differentiate the targets of aggressive behaviors (ie, whether the behaviors are directed toward staff or other residents).²⁷

A significant number of falls in LTC homes take place during altercations between residents²⁸ ("push-fall" episodes) but it is not uncommon for these episodes to be reported merely as falls without explicitly attributing these to the altercations.

The tragic episode that led to severe injuries and subsequent death of 76 year old Dwayne E. Walls, a Korean War Veteran with Alzheimer's disease, is an example of this problem.²⁹

my archival blog²² (since April 2012). All the information identified and reported in Table 2 is based on publicly available sources (primarily newspaper articles). For a large number of episodes, a few articles had to be consulted and cross-checked to gather as much detail as possible detail about them.

The 40 episodes took place between 1994 and 2015 in these locations: Canada (20), United States (18) (Tennessee [3], New York [2], Massachusetts [2], New Jersey [2], Connecticut [1], Minnesota [1], South Carolina [1], Illinois [1], Indiana [1], California [1]; Pennsylvania [1]; Wisconsin [1], Colorado [1]), Ireland (1), and New Zealand (1).

The report is intended to raise awareness to injurious and fatal episodes of RRA in dementia in LTC homes among the following stakeholders: cognitively able residents, family members, care staff members, interdisciplinary teams, physicians, administrators, care advocates, Ombudsman, care providers' associations, the Alzheimer's Association, Adult Protective Services, law enforcement agencies, medical emergency personnel, coroners/medical examiners, regulatory agencies, policy makers, and legislators.

Discussion

This editorial represents a small first step toward bridging the major gap in understanding the circumstances surrounding fatal RRA in dementia in LTC homes. It reveals serious problems related to staff ability to supervise residents effectively and keep them safe. For

example, most of the reviewed episodes were not witnessed by staff (70%; 19 of 27) and took place inside bedrooms (68%). The findings add to a previous pilot study using video cameras 24/7 in the public spaces of a dementia care home showing that nearly 40% of episodes of physical RRA were not witnessed by staff.^{25,26}

In addition, more than one-third of the episodes (37%) were between roommates, which may indicate serious problems in roommates' assignment and/or ongoing monitoring. This finding supports recent culture change practices and enlightened models of care (eg, Green Houses of the Eden Alternative; English Rose Suites) committed to provision of private bedrooms as the standard of care. In the words of Professor Mark Lachs, "If every resident had their own room, you'd probably see 50% reduction in resident-to-resident elder mistreatment."³⁰

Furthermore, most episodes (for which there was a report on the time of the episode) took place during the evening/late evening hours (81%; 13 of 16 episodes; 2 other episodes took place during the night), whereas close to two-thirds of the episodes (62%; 18 of 29) took place on weekends. These 2 latter findings may suggest vulnerability periods requiring enhanced clinical attention and allocation of care resources (such as staffing and activity programming). The finding in which 7 of the residents engaged in the altercations (17%) were newly admitted residents may suggest a need for improved preadmission behavioral assessment procedures and enhanced supervision of residents exhibiting aggressive behaviors in the weeks and months after admission. Support for this possibility was received in a study in 3 LTC homes among 339 residents showing that during the 3 months after admission, 79 (23%) of the residents were documented to be involved in an aggressive incident toward another resident (incidents causing physical injury or psychological or emotional harm in which a resident was made fearful). Residents involved in an aggressive incident were more likely to have a diagnosis of dementia than residents not involved in incidents.¹¹

The findings reported in this editorial must be interpreted with caution given the inherent limitations posed by varying quality and level of detail about the episodes as reported in the newspaper articles used for the review. In addition, the small number of episodes reported in this editorial should not be considered representative of the full spectrum of fatal RRA episodes in dementia. The preliminary findings cannot be generalized to all long-term care homes. There is a need for research in view of the lack of datasets and research studies on fatal episodes of RRA in LTC homes.

Directions for Future Research

1. Conduct *analyses and integration of existing datasets* on injurious and fatal episodes of RRA in LTC homes (eg, nursing homes and assisted living residences) to identify prevalence, characteristics, causes, risk factors, and protective factors. Data sources may include Centers for Medicare and Medicaid Services data, Nursing Home Compare and Nursing Home Inspect (ProPublica), state inspection reports, Ombudsman data, APS (Adult Protective Services) (in states in which APS has authority to investigate these episodes), Medicaid Fraud Control Units, death certificates, coroners/medical examiners, hospitals, and police reports.
2. Encourage the *US Inspector General* and states' Inspector Generals to conduct examination of serious episodes of RRA in LTC homes (at the very least, episodes leading to falls, injuries, and deaths).
3. Develop, test, and add questions to the *Minimum Data Set 3.0* that will enable the distinction to be made between aggressive behaviors directed toward staff versus other residents.²⁷
4. Examine the scope of *fatal episodes caused by falls* during altercations between residents (eg, "push-fall episodes"). One

Table 2
Summary of 40 Deaths as a Result of RRAs in Dementia

| | |
|--|--|
| Age, y, target; average | 82; range: 65–100 |
| Age, y, exhibitor; average (a report on age was available for only 23 residents) | 77.5; range: 35–98 (including a 35-year-old resident who was the only one reported to be younger than 65 years) |
| Gender, target | Male: 25 Female: 15 |
| Gender, exhibitor (for 26 residents there was a report on gender) | Male: 19 Female: 7 |
| Nature of physical contact (selected examples) | 13 (32%) of the 40 altercations were “push/beat-fall” episodes (ie, the push or beating caused the target residents to fall and hit their head or hip on the floor). Other types of physical contacts include being punched in the face and head; beaten on the head to death; attacked in her wheelchair; assaulted while in bed; attacked with a cane (eg, beaten over the head and face with a cane); being hit violently and repeatedly over the face and head with a wooden activity board; struck with a waste basket on the head (causing a cut); being attacked with a 2-foot-high metal ashtray; slamming a heavy wooden door multiple times on another resident’s head; blocking a resident’s way and grabbing, choking, and then knocking her to the ground; tipping a resident out of his wheelchair causing him to fall and hit his head on the floor, then picking up a “grabber” and beating him on his face with it; being lifted off the floor and thrown down to the floor; being kicked in the stomach; bludgeoned in the head and other parts of the body with a footboard of a bed; being hit on the head with the metal footrest of a wheelchair; beating 2 residents in the head to death with a metal base from a bedside table; piling clothes on top of a woman’s head, suffocating her; and strangling a resident (the target resident was found in her bed with a plastic bag tied around her neck). |
| Injuries, selected examples | “Injuries to the face and head”; “Crack to the skull”; “Died after blood pooled on the surface of her brain”; “Fractures to nasal area, eye, and face and bleeding on left side of the brain”; “Fractured pelvis”; “Broken hip”; “Broken hip, died after surgery”; “Complications from the injuries (hip, pelvis, and nose fractured)”; “Severe bruising on body and arms, broken ribs and punctured lungs”; “Bruises all over the body”; “Fell into a coma and died a few days after she was hit.” |
| Cause of death, determined by coroner/autopsy (total number of episodes for which the cause of death was reported was 21; the number of episodes for each cause is noted in parentheses) | “Head injuries/trauma” (4); “Brain injuries/hemorrhage” (4); “Cranocerebral blunt force injuries” (2); “Subdural and subarachnoid hematoma” (1); “Complications from blunt force trauma” (1); “Complications from a fractured hip. Head injury. Stopped eating and drinking” (1); Pneumonia (after head trauma or becoming immobile) (3); “Died of complications related to the fall during the altercation” (1); “Stress of a surgery needed as a result brought on an ulcer that perforated” (1); “A fat embolus as a result of a fracture to leg” (1); “Strangulation/Suffocation” (2). |
| Time between episode and death (a report was available only for 31 episodes) | Average: 8.3 days (in 10 [32%] of the 31 episodes, the resident died on the same day in which the episode occurred). |
| Location of episode (total number of episodes for which a report on the location was available is 28) | Total number of episodes inside bedrooms: 19 (68%) of 28 Inside a shared bedroom: 11 (39%) (including 2 inside a shared bathroom) Inside bedroom of target resident: 5 (18%) Inside bedroom of another resident: 2 (7%) (1 inside a bed of another resident) In an area between 2 bedrooms: 1 (3%) Total number of episodes in public space: 9 (32%) of 28 Common area (2), public lobby (1), main dining room (2), main floor recreation area (1), end of the hallway (1), near nurse’s station (1), smoking room (1). |
| Roommates | 15 (37%) of the 40 episodes were between roommates |
| Time of episode (total number of episodes for which a time was reported is 16) | Evening/late evening hours: 13 (81%) of 16 Times included the following: 4:10 PM, 4:15 PM, 5:30 PM, “evening,” 7:30 PM, after 8:00 PM, 8:40 PM, after 9:00 PM, 9:30 PM, “late evening,” 10:00 PM, 11:00 PM, 11:15 PM. During the night: 2 of 16 Early morning hours: 1 of 16 |
| Weekends (total number of episodes for which a date was reported is 29) | Weekend: 18 (62%) of the 29 episodes took place during weekends (9 on Saturday and 9 on Sunday) |
| Witnessed by staff (total number of episodes for which a report was available on whether it was witnessed by staff is 27) | Not witnessed: 19 (70%) of 27 Witnessed: 5 (19%) of 27 Partially witnessed: 3 (11%) of 27 |
| Trigger reported (total number of episodes for which there was a report about whether there was a trigger is 15) | Yes: 13 (86%) of 15 No: 1 of 15 Note: It is important to interpret this finding with caution due to the small number of episodes for which there was information available about whether there was a trigger. |
| History of “aggressive” behaviors (there are only 39 exhibiting residents because in 1 episode 1 resident killed 2 others) | 17 (43%) of 39 exhibiting residents had been reported to engage in “aggressive” behaviors toward others at some point before the fatal episode. 4 pairs of residents who were engaged in fatal episodes had been reported to have at least 1 previous altercation (eg, “history of not getting along,” “the 2 have been arguing for weeks,” “the 2 had quarreled the night before,” and an episode between the 2 in which the exhibitor put a chokehold on the target). |
| Newly admitted residents | In 7 (17%) of 40 episodes it was reported that at least 1 of the residents in the altercation was admitted recently to the care home (5 exhibitors; 2 targets). Note: The number is probably higher because in a significant number of the other episodes there was no report available to determine it. |

The full report with detail on each of the 40 episodes is available from the author on request. This report does not aim to identify the actual number of deaths that occurred as a result of episodes of RRA in dementia between 1994 and 2015. This would be unfeasible given the inherent limitations of using the general media as the primary source of information and in light of substantial underreporting of episodes of RRA in general and fatal RRA episodes in particular (ie, only a small portion of episodes of RRA in dementia that end up in death are published in the general media).



Fig. 1. Negative interaction between older residents with dementia escalating into physical behavioral expression. Note: The tablemates depicted in the image are actors. Permission to use the image was received from JDC-ESHEL and photographer Moti Fishbain.

- study using video recordings of 227 falls among 130 older residents in common spaces of 2 LTC homes has found that 20 (9%) of these falls occurred during episodes of RRA.²⁸
5. Determine levels and quality of residents' *engagement in meaningful activities* as a protective factor for episodes of RRA in dementia (many episodes of RRA occur when residents are bored and are not provided with opportunities for purposeful and meaningful engagement).¹
 6. Identify characteristics of *physical environments* that strengthen staff ability to supervise residents (eg, existence versus absence of hallways as well as length of hallways, areas in the care home located outside of staff members' direct sight, private versus shared bedrooms).
 7. Determine *minimum staffing levels* necessary for effective supervision of residents with dementia (based on functional and cognitive levels, care needs, and behavioral expressions, among other factors).
 8. Identify what proportion of the psychotropic medications administered to residents with dementia is due to episodes of RRA (versus those administered for rejection of care during personal care) and examine the effectiveness and adverse side effects of this treatment.
 9. Examine financial costs of episodes of RRA in dementia (e.g., costs due to physical injuries such as hip fractures and brain injuries; medical treatments and surgeries; psychotropic medications; hospitalizations; property damage; staff time spent on addressing these episodes; reduction in staff productivity; staff injury, absenteeism, sick leave, turnover, replacement, and retraining; employee medical compensation; increase in insurance premiums; liability costs; and damage to the reputation of the LTC home).
 10. Conduct research studies on Veteran-to-Veteran altercations in dementia in Community Living Centers (formerly called VA nursing homes) and State Veterans Homes. While VA LTC homes and Veterans have unique characteristics that may put them at enhanced risk of engagement in episodes of RRA (e.g., vast majority male resident population; relatively younger; having combat experience; frontal lobe injuries; traumatic brain injuries, and PTSD), the vast majority of research studies

on this form of behavioral expression have been conducted in non VA LTC homes.

11. Develop and evaluate *assistive technologies* to strengthen supervision abilities of understaffed and overworked staff. The Vigil Dementia System (Vigil Health Solutions Inc., Victoria, BC, Canada) is one good example (designed to generate signals in real time (Figure 1) when residents' enter other residents' bedrooms) but it requires further evaluation and empirical support to show that is an effective preventative measure. Other types of assisted technologies with additional features and capabilities such as for these and other areas in the LTC home (eg, public spaces) are sorely needed.
12. General suggestion for research (pertaining to episodes of RRA in dementia in general as well as episodes of RRA leading to physical injuries and deaths): Examine the perceptions of cognitively intact residents and those in the early stages of dementia about these episodes. This, however, must be done only after a resident's informed consent (when cognitively able to provide it), family consent (when appropriate), and after the interdisciplinary team determines in close consultation with the resident's close family members that the interviews with the resident will not cause him/her significant distress as he/she reflect on these often emotionally charged and/or scary episodes. Contact information of qualified professionals (such as social workers and/or psychologists) should always be made available for residents who wish to receive psychological support after experiencing emotional distress due to these interviews.

Conclusion

The preliminary findings of this review encourage the research community and policy makers to examine and address the phenomenon of fatal episodes of RRA in dementia in LTC homes. The review reinforces the need for state and national strategies for addressing this unrecognized form of behavioral expression to ensure that older and vulnerable residents with dementia will remain safe.³¹ Well-coordinated state and federal implementation of a system-wide prevention strategy could not only increase the

likelihood that older residents with dementia will realize their human right for living in a safe care environment in their later years but also assist in protecting direct care staff and interdisciplinary teams who often courageously put themselves at risk of injury when attempting to prevent and deescalate physical altercations between residents.

Finally, the findings of this review are *not* meant to suggest that people with dementia are inherently dangerous. Adopting this perception would run the risk of reinforcing the already harmful stigma about this vulnerable population. Rather, the findings suggest that negative and distressing factors in the physical and social environment contribute to the engagement of residents with dementia in altercations with other residents. Most people with dementia do not engage in physically aggressive behaviors toward others, and those who do usually do so because their human needs and frustrations are not met in a timely manner by well-trained and adequately staffed care partners and interdisciplinary teams.

“We talk about violence-free schools. Why we don’t talk about violence-free nursing homes? What about ending violence in nursing homes as a policy goal?”— Professor Karl Pillemer³²

“For the cause of assuring safety in long-term care, it means the coming together of expertise including the appropriate government officials, community agency workers, long-term care administration, frontline staff, family caregivers, researchers...and the media.”— Social workers Eleanor Silverberg, Angela Gentile, and Victoria Brewster³³

Acknowledgments

Thanks to CTV News W5 for compiling and publishing essential information related to significant number of the reviewed episodes that took place in Canada. Thanks to Professor Jiska Cohen-Mansfield for helpful suggestions for addressing a series of questions regarding the circumstances surrounding the reviewed episodes. Her suggestions substantially improved the clinical insights presented in this review. Thanks to Terry Eicher for discussion and very helpful suggestions.

References

- Caspi E. Aggressive behaviors between residents with dementia in an assisted living residence. *Dementia* 2015;14:528–546.
- Malone ML, Thompson L, Goodwin JS. Aggressive behaviors among the institutionalized elderly. *J Am Geriatr Soc* 1993;41:853–856.
- Lachs M, Bachman R, Williams CS, O’Leary JR. Resident-to-resident elder mistreatment and police contact in nursing homes: Findings from a population-based cohort. *J Am Geriatr Soc* 2007;55:840–845.
- Shinoda-Tagawa T, Leonard R, Pontikas J, et al. Resident-to-resident violent incidents in nursing homes. *J Am Med Dir Assoc* 2004;291:591–598.
- Rosen T, Lachs MS, Bharucha AJ, et al. Resident-to-resident aggression in long-term care facilities: Insights from focus groups of nursing home residents and staff. *J Am Geriatr Soc* 2008;56:1398–1408.
- Sifford-Snellgrove KS, Beck C, Green A, McSweeney JC. Victim or initiator? Certified nursing assistants’ perceptions of resident characteristics that contribute to resident-to-resident violence in nursing homes. *Res Gerontol Nurs* 2012;5:55–63.
- Snellgrove S, Beck C, Green A, McSweeney JC. Resident-to-resident violence triggers in nursing homes. *Clin Nurs Res* 2013;22:461–474.
- Cohen-Mansfield J, Billing N, Lipson S, et al. Medical correlates of agitation in nursing home residents. *Gerontology* 1990;36:150–158.
- Pillemer K, Chen EK, Van Haitsma KS, et al. Resident-to-resident aggression in nursing homes: Results from a qualitative event reconstruction study. *Gerontologist* 2012;52:24–33.
- Castle NG. Resident-to-resident abuse in nursing homes as reported by nurse aides. *J Elder Abuse Negl* 2012;24:340–356.
- Brazil K, Maitland J, Walker M, Curtis A. The character of behavioural symptoms on admission to three Canadian long-term care homes. *Aging Ment Health* 2013;17:1059–1066.
- Snellgrove S, Beck C, Green A, McSweeney JC. Putting residents first: Strategies developed by CNAs to prevent and manage resident-to-resident violence in nursing homes. *Gerontologist* 2015;55:S99–S107.
- Rosen T, Lachs MS, Teresi J, et al. Staff-reported strategies for prevention and management of resident-to-resident elder mistreatment in long-term care facilities. *J Elder Abuse Negl* 2015 Aug 20 [Epub ahead of print].
- Bonifas RP. Resident-to-resident aggression in nursing homes: Social worker involvement and collaboration with nursing colleagues. *Health Social Work* 2015;40:e101–e109.
- Trompette H, Scholte R, Westerhof G. Resident-to-resident relational aggression and subjective well-being in assisted living facilities. *Aging Ment Health* 2011;15:59–67.
- Lachs M, Pillemer K, Teresi JA, et al. Resident-to-resident elder mistreatment: Findings from a large-scale prevalence study. Paper presented at: The 67th Annual Scientific Meeting of the Gerontological Society of America; Washington, DC; 2014.
- Teresi JA, O’cepek-Weiikson K, Ramirez M, et al. Development of an instrument to measure staff-reported resident-to-resident elder mistreatment (R-REM) using item response theory and other latent variable models. *Gerontologist* 2014;54:460–472.
- Teresi JA, Ramirez M, Ellis J, et al. A staff intervention targeting resident-to-resident elder mistreatment (R-REM) in long-term care increased staff knowledge, recognition and reporting: Results from a cluster randomized trial. *Int J Nurs Stud* 2013;50:644–656.
- Rosen T, Pillemer K, Lachs M. Resident-to-resident aggression in long-term care facilities: An understudied problem. *Aggress Violent Behav* 2008;13:77–87.
- McDonald L, Sheppard C, Hitzig SL, et al. Resident-to-resident abuse: A scoping review. *Can J Aging* 2015;34:215–236.
- Ferrah N, Murphy BJ, Ibrahim JE, et al. Resident-to-resident physical aggression: A systematic review. *Age Ageing* 2015;44:356–364.
- Caspi E. Archival Blog: The Center for Prevention of Resident-to-Resident Altercations in Dementia in Long-Term Care Home. Available from: <http://eiloncaspiabbr.tumblr.com>. Accessed November 10, 2015
- Ibrahim JE, Murphy BJ, Bugeja L, Ranson D. Nature and extent of external-cause deaths of nursing home residents in Victoria, Australia. *J Am Geriatr Soc* 2015; 63:954–962.
- Mosqueda L, Wiglesworth A. Coroner investigations of suspicious elder deaths. 2012. The Regents of the University of California, UC Irvine, School of Medicine, Program in Geriatrics. Available from: <https://www.ncjrs.gov/pdffiles1/nij/grants/239923.pdf>. Accessed November 10, 2015
- Allin SJ, Bharucha A, Zimmerman J, et al. Toward the automated assessment of behavioral disturbances of dementia. Paper presented at: The Meeting of the Fifth International Conference on Ubiquitous Computing and the Second International Conference on Ubiquitous Computing for Pervasive Healthcare Applications, Seattle, WA; 2003.
- Bharucha AJ, Vasilescu M, Dew MA, et al. Prevalence of behavioral symptoms: Comparison of the minimum data set assessments with research instruments. *J Am Med Dir Assoc* 2008;9:244–250.
- Caspi EMDS. 3.0: A giant step forward, but what about items on resident-to-resident aggression? *J Am Med Dir Assoc* 2013;14:624–625.
- Rabinovitch SN, Feldman F, Yang Y, et al. Video capture of the circumstances of falls in elderly people residing in long-term care: An observational study. *Lancet* 2013;381:47–54.
- Bartelme T. Alzheimer’s and violence. *The Post and Courier*. May 17, 2009. Available from: <http://www.postandcourier.com/article/20090517/PC1602/305179931>. Accessed November 10, 2015.
- Lachs M. Resident to resident elder mistreatment (RREM) in long term care. Paper presented at 1-Day Meeting for Development of Research Agenda on Resident-to-Resident Aggression in Canada. Toronto, Ontario, Canada: Hosted by the Institute for Life Course & Aging, University of Toronto. Funded by the Canadian Institutes for Health Research – Institute of Aging; 2014.
- Caspi E. Policy recommendation: The National Center for Prevention of Resident-to-Resident Aggression in Dementia. *J Am Med Dir Assoc* 2015;16: 532.
- Pillemer K. Intervening in resident-to-resident elder mistreatment. Paper presented at: 1-Day Meeting for Development of Research Agenda on Resident-to-Resident Aggression in Canada. Toronto, Ontario, Canada: Hosted by the Institute for Life Course & Aging, University of Toronto. Funded by the Canadian Institutes for Health Research – Institute of Aging; 2014.
- Silverberg E, Gentile A, Brewster V. Seeking action for safety in long-term care facilities. Response to the W5 Documentary, *Crisis in Care*. 2013.