Resident-to-Resident Abuse: A Scoping Review*

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RÉSUMÉ

L'abus de résidents par d'autres résidents parmi de foyers de soins de longue durée (SLD) implique l'agressivité et la violence et peut avoir des conséquences graves pour tous les deux, agresseurs et victimes. Jusqu'à présent, il n'y a eu aucune tentative d'évaluer systématiquement la portée de ce problème au Canada. Pour combler cette lacune, nous avons entrepris une étude de délimitation de l'étendue pour améliorer la compréhension de l'abus chez les résidents des foyers de SLD. Nous présentons aussi un ensemble redigé de données canadiennes sur l'abus chez les résidents. On a cherché neuf bases de données bibliographiques électroniques; un total de 784 résumés a été trouvés, mais seulement 32 ont satisfait les critères d'inclusion. La majorité des documents (75 pour cent) étaient des études de cas rétro-perspectives, des études qualitatives et critiques/commentaires. Parmi eux, seuls 14 se consacrent exclusivement à l'abus parmi les résidents. L'ensemble redigé de données canadiennes suggère que l'abus des résidents par d'autres résidents représente environ un tiers des cas d'abus signalés. Afin de faire connaître cette phénomène et d'aider à diminuer son incidence, des recommandations pour la recherche future, la pratique clinique et la politique sont fournis.

ABSTRACT

Resident-to-resident abuse involves aggression and violence that occurs between long-term care (LTC) home residents and can have serious consequences for both aggressors and victims. To date, there has been no attempt to systematically assess the breadth of the problem in Canada. To address this gap, we undertook a scoping review to enhance understanding of resident-to-resident abuse in LTC homes. A redacted Canadian data set on resident-to-resident abuse is also reported on. Nine electronic literature databases were searched; a total of 784 abstracts were identified, but only 32 satisfied the inclusion criteria. The majority of records (75%) were retrospective case studies, qualitative studies, and reviews/commentaries. Of these, only 14 focused exclusively on resident-to-resident abuse. The redacted Canadian data set suggests resident-to-resident abuse makes up approximately one-third of reported abuse cases. Recommendations for future research, clinical practice, and policy are provided to raise awareness of this phenomenon to help decrease its incidence.

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In coming decades, the proportion of Canada's aging population will double as the baby boomers reach age 65. Older Canadians will represent approximately 28 per cent of the population by 2060 (Statistics Canada, 2010). As a consequence of this demographic shift, the demands for long-term care (LTC) will continue to rise (Alzheimer Society, 2010).

LTC homes, or nursing homes, where older adults can live and receive support services (i.e., nursing care; Canadian Institute for Health Information [CIHI], 2013), are home to the frailest of seniors. The majority of these residents are over age 80 (Statistics Canada, 2011; Turcotte & Schellenberg, 2007) and display complex behavioural disturbances (CIHI, 2008; Patel & Hope, 1993; Spector, Fleishman, Pezzin, & Spillman, 2001) due to a heightened incidence of chronic disability and cognitive impairment (Beck, Rossby, & Baldwin, 1991; Caffrey et al., 2012; Rovner et al., 1990) that may result in expressions of aggression (CIHI, 2008; Smith, Gerdner, Hall, & Buckwalter, 2004). Although the rate of institutionalization has remained about the same in Canada since 1981 at seven per cent (Ramage-Morin, 2006), residents in LTC homes tend to be frailer and more dependent on others to provide care than they were a decade ago (McGregor & Ronald, 2011), and therefore are more vulnerable to abuse from both staff and each other.

Nevertheless, elder abuse research within LTC homes has focused on abuse within the resident-caregiver relationship. There are no prevalence or incidence studies of institutional abuse in Canada, and there are less than a handful of smaller studies devoted to the topic (McDonald et al., 2012). Data from the United States detailing reports from nursing home staff suggest that expressions of verbal and physical aggression from residents are alarmingly frequent (Gates, Fitzwater, & Meyer, 1999; Gates, Fitzwater, Telintelo, Succop, & Sommers, 2004). For example, nearly 20 per cent of certified nursing assistants experienced physical violence from residents on a daily basis (Astrom, Bucht, Eisemann, Norberg, & Saveman, 2002). Given that physical and verbal aggression is relatively common within LTC homes, there is growing evidence that residents can be aggressive towards fellow residents – a phenomenon that is surprisingly under-represented in the literature.

In light of the ongoing debate about definitions of the other forms of abuse, it should come as no surprise that defining resident-to-resident abuse is problematic (McDonald, 2011). Some researchers use such terms as resident-to-resident elder mistreatment (Lachs, Backman, Williams, & O'Leary, 2007), or resident-to-resident aggression (Pillemer et al., 2012; Rosen, Lachs, et al., 2008; Rosen, Pillemer, & Lachs, 2008), resident-to-resident violence (Snellgrove, Beck, Green, & McSweeney, 2013), resident-to-resident relational aggression (Trompetter, Scholte, & Westerhof, 2011), and resident-to-resident abuse (Castle, 2012; CIHI, 2008; Ramsey-Klawsnik, Teaster, Mendiondo, Marcum, & Abner, 2008; Zhang, Page, Conner, & Post, 2012). Table 1 reports the various terms and definitions used to describe resident-to-resident abuse. The use of different terms is likely related to the embryonic state of this form of violence and perhaps the desire to avoid labeling the older person as an abuser.

At the outset, little is known about what acts constitute this form of aggression (Pillemer et al., 2012), making abusive incidents hard to identify. Furthermore, aggression between residents is hard to classify because the violence does not entirely fit into typical definitions of elder abuse. Both the perpetrator and victims can suffer harm, and the perpetrator is likely to be confused and usually not responsible for an ostensibly unprovoked act. Some researchers view this violence as a separate category within the group of agitated behaviors associated with dementia and other chronic mental health illnesses in nursing home residents (Shah, Dalvi, & Thompson, 2005; Snowden, Sato, & Roy-Byrne, 2003). In addition, the conceptualization of elder abuse usually entails a relationship of trust that may or may not be relevant in resident-to-resident abuse. In this light, intervention takes on a different meaning with no proven approaches. For the purpose of consistency in this article, the term resident-to-resident abuse is used and refers to "abuse of one resident in the nursing home (long-term care home) by another resident" (Castle, 2012, p. 340). This abuse can be verbal, material, physical, psychological, and/or sexual in nature (Castle, 2012; Rosen, Pillemer, et al., 2008). Currently, there has been no attempt to systematically assess the problem's breadth in Canada, despite the potential harmful consequences of such abuse.

Given the knowledge gap on this important topic, we undertook a scoping review to gain a better understanding of resident-to-resident abuse in LTC homes for residents. Whereas there has been increased awareness on elder abuse issues within LTC homes (Hirst, 2000; Hirst, 2002; Pillemer & Moore, 1989), very few research initiatives have focused on resident-to-resident abuse directly. Much of this research (e.g., Allen, Kellett, & Gruman, 2003; Jogerst, Daly, & Hartz, 2005; Lachs et al., 2007; Zhang et al., 2011) spans different perspectives (e.g., official reports; anecdotal evidence from family, residents, or nursing staff) and identifies and analyses only a small component of resident-to-resident abuse (e.g., abuse type; triggers or risk factors). Therefore, we initiated a scoping review to elucidate the overall experience of resident-to-resident abuse in LTC homes.

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Table 1: Terms and definitions

Term	Definition
Resident-to-Resident Abuse	Abuse of one resident in the nursing home by another resident (Castle, 2012)
Non-Staff Abuse	Maltreatment of nursing home residents by people who are not staff or caregivers in the nursing home; mistreatment can be broadly defined and can include physical, sexual, verbal, emotional, and material abuse (Zhang et al., 2012)
Resident-to-Resident Aggression	Negative and aggressive physical, sexual, or verbal interactions between long-term care residents that in a community setting would otherwise be unwelcome and potentially cause physical or psychological distress to the recipient (Pillemer et al., 2012; Rosen, Lachs, et al., 2008; Rosen, Pillemer, et al., 2008)
Resident-to-Resident Elder Mistreatment	Aggressive behaviours between residents (Lachs et al., 2007; Lachs et al. 2010; Teresi et al., 2012)
Resident-to-Resident Relational Aggression	A non-physical form of aggressive behaviour that causes damage to relationships between residents (Trompetter et al., 2011)
Resident-to-Resident Violence	Delivery of noxious stimuli by one resident to others that is clearly not accidental (Patel & Hope, 1992; Snellgrove et al., 2013)
Resident-to-Resident Violent Incidents	One nursing home resident is physically injured by another resident (Shinoda-Tagawa et al., 2004)

The aims of this scoping review were to (1) characterize the nature and extent of resident-to-resident abuse in LTC homes; (2) examine factors that increase risk of initiating or becoming victim to resident-to-resident abuse; (3) identify the frequency with which resident-to-resident abuse occurs in LTC homes; (4) identify strategies for minimizing resident-to-resident abuse; and (5) identify gaps in knowledge. A second goal of the review was to provide an estimate of the extent of resident-to-resident abuse in Canadian LTC homes through a secondary data analysis of alleged and reported cases of abuse in Canadian LTC homes in 2011. The aims were to determine the frequency of resident-to-resident abuse and to assess if the data were reflective of the scoping review results. By reviewing these issues and data reports, we have formulated recommendations for future research, clinical practice, and policy with the intention of raising awareness of this phenomenon while propelling action to decrease its incidence.

Methods

Scoping Review

A scoping review was conducted to examine resident-to-resident abuse within LTC home settings. Whereas systematic reviews aim to evaluate the methodology and findings of included studies (Rumrill, Fitzgerald, & Merchant, 2010), scoping reviews map existing literature in order to examine the nature of research activity, disseminate research findings, and identify research gaps within the literature (Arksey & O'Malley, 2005). As such, scoping reviews can be useful for identifying trends and areas in need of future and more focused research, and might inform whether the state of a field is ready for a full systematic review.

Methods for conducting this scoping review followed the five main steps outlined by Levac, Colquhoun, and O'Brien (2010), which provided recommendations to enhance the original scoping review framework developed by Arksey and O'Malley (2005). The five steps are as follows: (1) identify the research question; (2) identify relevant studies; (3) select the study; (4) chart the data; and (5) collate, summarize, and report results.

Search Strategy

In consultation with an expert librarian, we developed a search strategy. We searched a total of nine electronic databases, including four peer-reviewed and five grey-literature databases. The four peer-reviewed databases included Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, PsycINFO, and AgeLine. The five grey-literature databases included the (a) Institute for Scientific Information (ISI) Social Sciences Citation Index, (b) ISI Conference Proceedings Citation Index – Social Science & Humanities, (c) ProQuest Dissertations & Theses – Full Text, (d) the Canadian Institute for Health Information, and the (e) U.S. National Institutes of Health. In addition, we also completed a manual search of the references in the selected articles/reports for inclusion in the scoping review. To maximize information retrieval, both subject headings and key terms were systematically searched. Table 2 shows a complete list of search terms used.

Inclusion and Exclusion Criteria

The inclusion criteria for this review were abstracts published in English and after 1985. The search in both the peer-reviewed and grey-literature databases was

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Table 2: Search terms for literature on resident-to-resident abuse

Setting		
Nursing home[a]	Home for the age[a]	Assisted living facility[a]
Long-term care home[a]	Residential care facility[a]	
Abuse		
Psychological abuse	Physical abuse	Emotional abuse
Sexual abuse	Verbal abuse	Elder abuse
Elder mistreat[a]	Elder maltreat[a]	Elder assault
Elder aggress[a]	Elder violence	Elder exploit[a]
Aged abuse	Aged mistreat[a]	Aged maltreat[a]
Aged assault	Aged aggress[a]	Aged violence
Aged exploit[a]	Bully[a]	Harass[a]
Resident-to-resident		
Resident-to-resident	Resident-to-resident abuse	Resident-to-resident elder mistreatment
RRA[b]	RREM[c]	

[a] **Universal or wild card terms.**
[b] **Resident-to-Resident Abuse.**
[c] **Resident-to-Resident Elder Mistreatment.**

carried on until 30 April 2013. Included sources from the peer-reviewed literature were qualitative and quantitative studies, published abstracts, and literature reviews. Included sources from the grey literature were theses/dissertations, reports, and other sources that identified barriers to, or provided guidelines for, researching and preventing resident-to-resident abuse within an institutional setting. Among sources (from both the peer-reviewed and grey literature) that were excluded were those that (1) had no content on resident-to-resident abuse; and (2) focused on residents in a non-LTC home setting, such as a hospital or a psychiatric facility.

Data Extraction

Figure 1 outlines how article selection was conducted. First, electronic databases, including peer-reviewed and grey-literature databases, were searched to identify abstracts examining resident-to-resident abuse. Second, two authors independently reviewed each abstract to identify relevant studies that met the inclusion criteria. In cases where the two reviewers either could not achieve consensus for inclusion/exclusion or were unsure of the suitability of an abstract, a third reviewer was brought in to mediate.

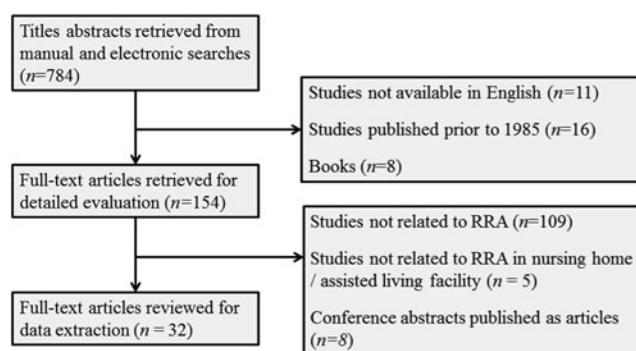

Figure 1: Article selection process

Following the recommendations put forth by Levac et al. (2010), we conducted a descriptive numerical summary, whereby selected abstracts were collated into a form we designed that identified key study characteristics. The information collated included the following: (a) author, (b) year of publication, (c) country of origin, (d) study design and characteristics, (e) outcome measures, and (f) main finding/conclusions. This process was undertaken by one author, and reviewed by another member of the team. Using the main research questions for the present review as a guide for summarizing the findings from the studies, the following categories were generated: (1) extent of resident-to-resident abuse; (2) setting and timing of abuse; (3) type of abuse; (4) initiator and victim characteristics; (5) triggers of resident-to-resident abuse; (6) staff and resident responses to the abuse; and (7) outcomes of resident-to-resident abuse. A separate category was later created for "interventions for resident-to-resident abuse". The categorization of findings was done in an iterative process, whereby two authors met to discuss the findings listed in the extraction table, as well as the initial drafts of the manuscript, to ensure that the categories were sufficiently expansive to capture the core findings of each included abstract. This approach is consistent

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with a directive content analysis (Potter & Levine-Donnerstein, 1999).

Secondary Analysis of Canadian Resident-to-Resident Abuse Data

To date, no prevalence data has been collected on resident-to-resident abuse in Canada or in most countries. In a preliminary attempt to estimate the magnitude of the problem in Canada, we conducted a secondary analysis (Kiecolt & Nathan, 1985) on a non-random data set collected by a media organization that turned it over to the Institute for Life Course and Aging, University of Toronto. The data consisted of data reports and a redacted data set on alleged and reported cases of abuse in Canadian LTC homes in 2011. These data were obtained from various Ministries across the country through publicly available documents or via the Access to Information Act of Canada (R.S.C, 1985, C-A1). From these various sources, data were obtained from various health regions across Canada, which have representation from some or all of the country's health regions except from the Yukon, Northwest Territories, or Nunavut. The data comprised sections from publicly available documents, copies of individual case report forms from various LTC homes in a province, or summarized reports of abuse from the health regions in a particular province. From these data, we extrapolated preliminary estimates of resident-to-resident abuse (by our examining the coding in the forms, and/or reading the open comments on the forms) and calculated frequencies of resident-to-resident abuse (and types of abuse in some cases).

Results

Resident-to-Resident Abuse Scoping Review

A total of 784 abstracts were identified. After reviewing the abstracts, only 32 articles satisfied all the inclusion criteria. Six studies were classified as grey literature, and the remaining 26 studies were peer-reviewed. Studies took place in the United States (n = 29), Canada (n = 2), and the United Kingdom (n = 1) and included a range of methodologies, including cross-sectional surveys or interviews with staff and/or residents (n = 14), retrospective case analyses (n = 10), literature reviews (n = 3), commentaries or reports (n = 2), a narrative analysis (n = 1), a case control study (n = 1), and a randomized cluster trial (n = 1). With the exception of one study, which examined resident-to-resident abuse in an assisted living facility (Trompetter et al., 2011), all articles examined resident-to-resident abuse within LTC homes or nursing home facilities. Methodological characteristics and major findings from each study can be found in Table 3.

Extent of Resident-to-Resident Abuse

A cross-sectional survey of nursing home staff reported that 16.4 per cent of residents were involved in incidents of resident-to-resident abuse (Rosen, Lachs, Pillemer, & Teresi, 2012), and 62 per cent of nursing home incident reports involved resident-to-resident abuse (Malone, Thompson, & Goodwin, 1993). Furthermore, a qualitative study (Pillemer et al., 2012) aiming to reconstruct major forms of resident-to-resident abuse reported 122 events in a two-week period, which were identified in three nursing facilities. These facilities encompassed 53 units, seven of which were dementia care units and seven of which were short-stay units (Pillemer et al., 2012).

The remaining research examining the number of resident-to-resident abuse events in nursing facilities (Allen et al., 2003; Jogerst et al., 2005) relied largely on official complaints made to reporting bodies including ombudspersons, adult protective services, or law enforcement. Reports to the ombudsperson suggested that resident-to-resident abuse rates represented the second highest reported abuse after physical abuse by non-residents (Jogerst et al., 2005); however, other reports indicated only five per cent of ombudsperson cases were classified as resident-to-resident abuse (Allen et al., 2003), representing the least-reported abuse form.

Prospective studies examining adult protective services reports (Ramsey-Klawsnik et al., 2008; Teaster & Roberto, 2004; Teaster et al., 2007) focused exclusively on sexual abuse, with one study (Teaster & Roberto, 2004) noting that 68.8 per cent of sexual abuse perpetrators were other residents. Adult protection services reports also confirmed that nursing home residents were the most often substantiated perpetrators of sexual abuse (Ramsey-Klawsnik et al., 2008; Teaster et al., 2007).

One mixed-methods study examining law enforcement cases indicated that nearly 90 per cent of cases in nursing homes that involved police were considered resident-to-resident elder abuse (Lachs et al., 2007). Furthermore, a retrospective case report study found that resident-to-resident abuse represented 15 per cent of sexual abuse cases examined in civil court (Burgess, Dowdell, & Prentky, 2000).

Reported rates of resident-to-resident abuse appear to vary depending on the source. Two dissertations (one cross-sectional survey study, one qualitative study) examining resident perspectives of bullying and aggression in the nursing home environment suggested that resident-to-resident bullying or aggression represented 46 to 60 per cent of incidents described by residents (Lapuk, 2007; Wood, 2007).

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Table 3: Summary of resident-to-resident abuse abstracts

Author, Country of Origin, Study Design	Study Characteristics (Purpose & Sample)	Outcome Measures	Findings and Conclusions[a]
Allen et al., 2003 USA Retrospective case record review	*Purpose:* To examine complaints from nursing home residents of abuse and neglect made to Connecticut Ombudsman Reporting System (ORS) *Sample:* 269 cases	– Sub-categories derived from the ORS that included abuse threatening physical or mental well-being, including physical, sexual, verbal and financial, gross neglect, exploitation and RRA	– 5% of abuse cases (n = 14) were classified as RRA; the second least-common form of abuse reported
Burgess et al. (2000) USA Retrospective case record review	*Purpose:* To examine sexual abuse cases involving nursing home residents *Sample:* 20 cases, all being presented in civil court system	– Victim and perpetrator characteristics – Reporting of assault – Forensic evidence – Legal outcomes	– 10 cases did not have forensic examinations – 55% of victims died within 12 months of abuse – Assault to family or staff - Victims experienced psychological distress, including fear, anxiety, and withdrawal – Cognitive impairment impedes abuse reporting and collection of forensic evidence – Staff response to abuse included ridicule, victim blaming, and ignoring abuse
Burgess & Phillips (2006) USA Retrospective case record review	*Purpose:* To examine forensic sexual abuse cases of demented and non-demented elderly *Sample:* 284 cases, all reported to law enforcement, APS or sexual assault forensic examiners	– Data from case review were transferred to the Comprehensive Sexual Assault Assessment Tool (CSWAT) – Victim characteristics – Relationship to offender – Assault location – Case outcomes	– Victims were female residents over age 80 – 16 cases of RRA; 15 victims had dementia – Police notified in 20% of cases – Presence of cognitive impairment impacts ability to self-report abuse – Resident initiators appear to target victims with cognitive impairment
Castle (2012) USA Cross-sectional survey	*Purpose:* To report on the scale and scope of RRA from full-time Nurse's Aides *Sample:* 4,451 Nurse's Aides from 29 nursing homes in 10 states (AR, CO, DE, FL, KS, MI, NV, VY, OR, SC) over a were interviewed over a 3 month period	– Abuse questionnaire capturing information on RRA types, including verbal, physical, psychological, material exploitation, and sexual	– All types of abuse are witnessed; however, sexual abuse is the least common – RRA, in all categories, is highly prevalent in nursing homes and creates an unpleasant atmosphere for other residents
Clough (1999) UK Review	*Purpose:* To review an earlier study on scandals in residential care *Sample:* Ten inquiry reports, wherein 2 reports were about homes for older people	N/A	– Struggle to identify behaviours as abusive and determining when to intervene – Factors that influence prevalence of RRA include resident characteristics and personalities, environmental stressors, and structural concerns (holding older residents in low esteem)
Jogerst et al. (2005) USA Retrospective case record review	*Purpose:* Assess the association between ombudsman report rates of abuse and ombudsman's program characteristics *Sample:* Cases from 1997–2002	– Data spanned all abuse types, including verbal, physical, sexual, neglect, financial exploitation and RRA – Ombudsman program characteristics including public and staff education, investigative procedures, funding	– Highest reported abuse was physical (median rate = 1.40) followed by RRA (median rate = 0.90) – RRA was not correlated with any ombudsman program characteristics except program funding (r = 0.30)

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Table 3. Continued

Author, Country of Origin, Study Design	Study Characteristics (Purpose & Sample)	Outcome Measures	Findings and Conclusions[a]
Koehn et al. (2011) Canada Qualitative	*Purpose:* To conduct a critical constructionist case study of resident with frontotemporal dementia *Sample*: Purposive sampling of residents (*n* = 3), nursing staff (*n* = 9), and family (*n* = 7)	– Unstructured, open ended one-on-one interviews and focus groups	– Resident displayed compulsive food seeking behaviours and excessive eating, hoarding tendencies, and a loss of ability to emphasize with others – Others construct resident as a deviant, undermining his quality of life
[b]Lachs et al. (2010) USA Qualitative	*Purpose:* To conduct event re-construction of RREM *Sample:* 10 nursing homes	– Resident characteristics – Event characteristics, including initiating factors and outcomes	– RREM topology includes resident co-morbidity, medication use, personality, environmental stressors, and physical space and configuration
Lachs et al. (2007) USA Retrospective case record review / Qualitative	*Purpose:* To determine nursing home abuse cases that had police involvement and to describe episodes of RREM *Sample:* 79 cases examined	– Victim and offender characteristics – Relationship between victim and offender – Event characteristics – Crime type	– 90% of cases were RREM – 90% of cases were aggravated or simple assault – Reasons for RREM include unprovoked assault, invasion of space, competition for resources, long-standing disruptive behaviours, or "male unbonding"
[b]Lapuk (2007) Canada Qualitative	*Purpose:* To elicit resident perspectives on aggression in long-term care *Sample:* Convenience sample of 8 nursing home residents in Winnipeg, Canada	– Open-ended questions describing resident aggression – Responses analysed using content analysis	– 60% of aggressive incidents were between residents – Residents believe that resident aggression is part of life in a nursing home and often attribute aggression to dementia or Alzheimer's disease – Residents respond by calling for help, avoiding the aggressive resident, or handling situation themselves
Malone et al. (1993) USA Retrospective case record review	*Purpose:* To describe the incidence and characteristics of aggression in institutionalized elderly *Sample:* 94 reports made between 1990 and 1991	– Description of aggressive behaviour – Time, date, and location of incident – Type of attach (kick, bite, hit, pinch, spit, push, scratch, other)	– 62% of victims were other residents – Aggressive incidents most often occurred in the evening (50%) and day shift (46.7%), and 57.4% of cases involved hitting – Incidence of aggressive behaviour per resident per year was higher in Alzheimer's unit (0.75) than rest of facility (0.27) – 6 residents with the most aggressive incidents (accounting for 46% of incidents) had dementia
Pillemer et al. (2012) USA Cross-sectional survey	*Purpose:* To conduct event re-construction of RR aggression to identify major forms *Sample:* Data collected from 3 nursing homes (53 nursing home units) over a 2-week period included information from staff, residents, and interviewer observations	– RR aggression characteristics (date, time, duration, event description) – Reporting source – Witness and participant information – Environmental factors (such as noise, lighting, crowding)	– 122 aggressive RR incidents identified – 5 categories of aggression included invasion of personal space, roommate problems, hostile interactions, unprovoked attacks, and inappropriate sexual behaviours – "One size fits all" intervention model unlikely to be effective due to the multitude of RR aggression forms

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Table 3. Continued

Author, Country of Origin, Study Design	Study Characteristics (Purpose & Sample)	Outcome Measures	Findings and Conclusions[a]
Ramsey-Klawsnik et al. (2008) USA Retrospective case record review	*Purpose:* To examine cases of alleged sexual abuse of nursing home residents *Sample:* 119 alleged sexual perpetrators, from 5 states (NH, OR, TN, TX, WI) over a 6-month period were examined; cases reported to APS, Division of Aging and Disability Services, and Bureau of Quality Assurance	– Data collected on the Sexual Abuse Survey – Some information collected from minimum data set – Victim characteristics – Description of abuse – Alleged offender characteristics – Case resolution – Victim outcomes	- 41% of alleged cases and 78% of substantiated cases were RRA – Majority of victims were female residents and majority of perpetrators were male with cognitive impairment – Fondling was the most common form of alleged and substantiated abuse – A number of cases go unsubstantiated due to impairment in both victim and perpetrator – No confirmed perpetrators were arrested or convicted, although 73% of perpetrators were transferred to another facility
Robinson & Tappen (2008) USA Commentary	*Purpose:* To provide recommendations for policy changes in nursing homes to reduce violence towards staff and other residents	N/A	– Increase staff training and education – Staffing levels should reflect behavioural and care needs of residents – More research needed to identify triggers and effective interventions to reduce violence
[b]Rosen et al. (2012) USA Cross-sectional survey	*Purpose:* To identify staff responses to nursing home RREM *Sample:* 1,688 staff from 5 nursing homes reported on RREM over a 2-week period	– Modified instrument to measure behavioural problems in nursing homes	– 16.4% of residents involved in RREM incidents – 22 staff responses were described, including talking calmly, separating residents, and verbally intervening – Physicians and psychiatrists were not consulted to assist in management and prevention of RREM
Rosen et al. (2010) USA Literature review	*Purpose*: Review of RR sexual aggression in nursing homes *Sample:* 8 articles identified	N/A	– 1 review article and 8 original studies located – Victims tend to be unable/ reluctant to report incidents – Perpetrators are often viewed as victims because they suffer from a degenerative disease – Victims tend to be cognitively impaired
Rosen, Lachs, et al. (2008) USA Qualitative	*Purpose:* To characterize the spectrum of RRA *Sample:* Residents (n = 7) and staff (n = 96) participated in 16 focus groups	– Structured and semi-structured questions on type and characteristics of RR aggression, and outcomes	– 35 types of RR aggression were described – Triggers for RR aggression include calling out, impatience, jealousy, loneliness, or frustrations with the facility, environmental challenges, and dementia – Staff identified 25 self-initiated responses, including physically intervening, removing resident from environment, or calling social services

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Table 3. Continued

Author, Country of Origin, Study Design	Study Characteristics (Purpose & Sample)	Outcome Measures	Findings and Conclusions[a]
Rosen, Pillemer, et al. (2008) USA Literature review	*Purpose*: A narrative review of RR aggression in nursing homes	N/A	– Only 2 publications have directly studied RR aggression. – Anecdotal evidence and statistics from official reports differ in frequency of RR aggression – Large body of indirect evidence may provide insight into RR, such as evidence on agitated and disruptive behaviours or evidence, violence towards staff, and mental illness – No longitudinal studies examining the health and functional implications of being a victim or perpetrator of RR
Shinoda-Tagawa et al. (2004) USA Case control study	*Purpose:* To assess risk-factors for injury to nursing residents inflicted by other residents *Sample:* 294 incidents that occurred between January and December 2000 that were documented in the Massachusetts Department of Public Health Complaint and Incident Reporting System and the Minimum Data Set	– Resident characteristics, including behavioural symptoms and cognition Incident characteristics (facility location, injury type, and body location)	– Residents most likely to receive a laceration (28%) or a bruise (36%) – Injury most often inflicted to the head/face region (56%) and upper extremities (26%) – Injured residents 2 times more likely to wander (95% CI [1.4-3.8], p = .001) and be verbally abusive (95% CI [1.2–3.9], p = .007) – Residents who are dependent (AOR [0.3], 95% CI [0.2–0.6], p = .001) or require excessive assistance (AOR [0.12], 95% CI [0.05–0.27], $p < .001$) had a reduction in injury – Residents in Alzheimer's unit were 3 times more likely to receive injury (95% CI [1.4–7.5], p = .007) – Injured residents, due to behavioural symptoms, may have provoked attack – Interventions to prevent RR physical violence should focus on the behaviours of the injured resident
[b]Sifford (2010) USA Qualitative	*Purpose:* To identify strategies developed by nursing staff to manage and prevent nursing home RRV *Sample:* 11 nurses' aides participated in semi-structured interviews	– Open-ended questions probing RRV occurrences, reasons for abuse, abuse triggers, and mechanisms to reduce RRV	– Factors that impact staff's ability to manage and prevent RRV includes knowing the residents well, keeping residents safe, spending quality time with residents, and finding something for residents to do – Development of successful interventions to reduce RRV may rely on distracting residents and keeping them busy

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Table 3. Continued

Author, Country of Origin, Study Design	Study Characteristics (Purpose & Sample)	Outcome Measures	Findings and Conclusions[a]
Sifford-Snellgrove et al. (2012) USA Qualitative	*Purpose:* To explore nurses' perceptions of RRV victim and initiator characteristics *Sample:* 11 nurses' aides participated in semi-structured interviews	– Open-ended questions probing RRV occurrences, reasons for abuse, abuse triggers, and mechanisms to reduce RRV	– Initiator characteristics: strong personality, short fuse, "more with it", and influenced by life history – Victim characteristics: poor communication, mobile, and "don't know" what they are doing – Difficult to determine who will commit RRV and it is challenging to differentiate between victim and initiator in many cases – Personality factors may shed light on risk for involvement in RV
Snellgrove et al. (2013) USA Qualitative	*Purpose:* To describe nurses' aides' perceptions of RRV to provide insight into RRV triggers *Sample:* 11 nurses' aides participated in semi-structured interviews	– Interview guide modified from Gates, Fitzwater, & Succop (1999) – Open-ended questions probing RRV occurrences, reasons for abuse, abuse triggers, and mechanisms to reduce RRV	– Active triggers: environment, taking possessions, violence – Passive triggers: competition, communication barriers, boredom – Social environment plays a large role in RRV
Teaster & Roberto (2003) USA Retrospective case record review	*Purpose:* To examine sexual abuse cases of nursing home women *Sample:* 50 cases investigated by APS over a 5-year period	– Questionnaire developed from Ramsey-Klawsnik (1991) and input from APS – Victim and offender characteristics – Description of abuse – Witness to abuse – Case resolution – Resident outcomes	– 90% of perpetrators are nursing home residents; all offenders were male – Women over 80 more vulnerable to sexual abuse than those under 80 ($\chi^2 = 4.02$; $p < .05$) – Sexualized kissing/fondling (75%) and unwelcome sexual interest in body (38%) most common forms of abuse – 60% of cases had insufficient evidence for prosecution and conviction – 16% of victims and 17% of perpetrators were re-located after incident - 12% of victims received follow-up intervention/treatment – Training and education needed
Teaster & Roberto (2004) USA Retrospective case record review	*Purpose:* To develop a profile of sexual abuse cases among older adults *Sample:* 82 cases investigated by APS over a 5-year period	– Questionnaire developed from Ramsey-Klawsnik (1991) and input from APS – Victim characteristics – Description of abuse – Case resolution – Victim outcomes	– 69% of abuse committed in nursing homes was RRA – 16% of victims and 29% of perpetrators were re-located to another facility – 11% of victims received follow-up interventions/treatment
Teaster et al. (2007) USA Retrospective case record review	*Purpose:* To examine alleged sexual abuse cases of older male nursing home residents *Sample:* 26 cases from 5 U.S. states over a 6-month period	– Data collected on Sexual Abuse Survey – Victim characteristics – Description of abuse – Alleged offender characteristics – Case resolution – Victim outcomes	– 29% of alleged and 67% of substantiated cases were RRA – Fondling was the most common form (35%) – Majority of perpetrators were male – Majority of victims were not cognitively impaired, were mot ambulatory, and did not have communication problems – 35% of alleged victims did not receive any intervention/treatment

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Table 3. Continued

Author, Country of Origin, Study Design	Study Characteristics (Purpose & Sample)	Outcome Measures	Findings and Conclusions[a]
Teresi et al. (2013) USA Prospective cluster randomized trial	*Purpose:* An evaluation of a RREM staff intervention training program *Sample:* 1,405 residents (685 control and 702 intervention) from 47 nursing home units (23 experimental and 24 control) in 5 nursing homes	– Certified nurses' aides on all experimental units were given training on (1) recognition of RREM; (2) management of RREM; (3) RREM best-practice implementations	– Staff knowledge of RREM increased after module 1 ($p < .001$) and module 2 ($p < .001$) – Higher recognition and documentation was observed in the experimental group ($p < .001$) – Experimental group reported more RREM events over time than did control group ($p = .0058$)
Tripp (2011) USA Narrative analysis	*Purpose:* Narrative analysis of medical and legal aspects of sexual abuse in nursing homes by demented residents	N/A	– Abuse by a dementia patient is rarely viewed as "abuse" as it is often attributed as a consequence of dementia; as such, victims are rarely viewed as "victims", influencing the frequency that abuse is reported – There are no regulations specifying how a home is to maintain abuse-free environments for residents
Trompetter et al. (2011) USA Cross-sectional survey	*Purpose*: To examine relational aggression in assisted living facility residents and the implications on residents' subjective well-being *Sample:* 121 residents from 6 assisted living facilities and 2 to 5 nurses from every facility completed questionnaires	– Questionnaires developed from Olweus Bully/Victim Questionnaire and Negative Acts Questionnaire	– 19% of residents self-report as victims of RR relational aggression, compared to nursing reports suggesting 41% of residents are victims – Self-reported victimization related to life satisfaction ($B = -0.31$, $p < .001$), depression ($B = 0.26$, $p < .001$), anxiety ($B = 0.28$, $p < .01$) and loneliness ($B = 0.19$, $p < .05$)
[b]Williams (2004) USA Commentary	*Purpose:* Commentary examining RRA in nursing homes	N/A	– To reduce incidence of RRA, require sufficient staff to monitor all clients, modify environment to reduce agitation, train and educate staff and families on RR abuse, report and investigate all abuse allegations
[b]Wood (2007) USA Cross-sectional survey	*Purpose:* To examine bullying in nursing homes *Sample:* 156 non-demented residents completed surveys over a 6-month period	– Resident demographics – Bullying instances from Negative Acts Questionnaire – Psychological well-being from General Health Questionnaire (GHQ)	– 72 residents indicated experiencing bullying "every now and then" – Those under 80 years of age report more instances of bullying than those over age 80 ($F = 10.75$, $df = 1/155$, $p < .001$; ES = 0.90) – GHQ scores higher in bullied residents ($M = 7.06 \pm 4.62$) than in non-bullied residents ($M = 4.93 \pm 4.02$) ($F = 9.45$, $df = 1/155$, $p < .05$; ES = 0.48)

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Table 3. Continued

Author, Country of Origin, Study Design	Study Characteristics (Purpose & Sample)	Outcome Measures	Findings and Conclusions[a]
Zhang et al. (2012) USA Cross-sectional survey	*Purpose:* To examine nursing home resident mistreatment from the perspective of family members *Sample:* 2004 respondents from the 2005 and 2007 Michigan Survey of Households with Family Members in Long-Term Care	– Resident characteristics – Victimization by nursing home staff – Incidence of abuse in past 12 months by non-staff member (i.e., other resident or family member)	– 10% reported non-staff abuse – Residents with behavioural problems (16.4%) report more incidences of non-staff abuse (χ^2 = 11.83, p = .001) and are 1.8 times more likely to be abused by non-staff (CI [1.03, 3.15], p = .039) – Victims of staff abuse (19%) report more instances of non-staff abuse (χ^2 = 51.15, p < .001) and are 4.59 times more likely to be abused by non-staff (CI [2.73, 7.71], p < .001) – For every one year increase in age, odds of non-staff abuse decrease by 5% (CI [0.30, 0.98], p = .043) – Family members require more education on types of and prevention of non-staff abuse
Zhang et al. (2011) USA Cross-sectional Survey	*Purpose:* To estimate the incidence and risks associated with elder neglect in nursing homes *Sample:* 414 respondents from the 2005 Michigan Survey of Households with Family Members in Long-Term Care	– Resident characteristics – Institutional characteristics (including RRA) – Incidents of neglect in past 12 months by staff and other caregivers	– 0.1% of residents were victims of RRA – Victims of RRA were 4 times more likely to experience neglect from staff (B = 1.43, p < .001) – RRA represents a risk factor for neglect by staff and caregivers; may be linked to poor management of institution and high tolerances for abusive environments

[a] The findings and conclusions from each study described in this table are those most pertinent to resident-to-resident elder abuse.
[b] Grey literature.
APS = adult protective services.
ES = Effect size.
ORS = ombudsman reporting system.
RR = resident-to-resident.
RRA = resident-to-resident abuse.
RREM = resident-to-resident elder mistreatment.
RRV = resident-to-resident violence.

However, a cross-sectional survey study (Trompetter et al., 2011) surveying nursing home residents found that only 19 per cent of residents self-reported as victims of resident-to-resident abuse. With regard to stakeholder perceptions, staff from the same study (Trompetter et al., 2011) reported that 41 per cent of residents were victims of such abuse, whereas two cross-sectional telephone survey studies found that family members of nursing home residents indicated that only 0.1 per cent of residents were victims of resident-to-resident abuse (Zhang et al., 2011) whereas 10 per cent of residents were perceived to be victims of non-staff abuse (Zhang et al., 2012).

Setting and Timing of Resident-to-Resident Abuse

A qualitative study (Lapuk, 2007) found that nursing home residents stated that resident-to-resident abuse could occur "anywhere" in the home; however, the most common location of abuse was in residents' rooms. Data from a variety of study types (cross-sectional survey; Malone et al., 1993; qualitative; Rosen, Lachs, et al.,

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2008; case-control; Shinoda-Tagawa et al., 2004) have confirmed that a significant proportion of abuse (38% to 48%) occurs in the resident's room. Publicly shared spaces within the facility were also common locations of resident-to-resident abuse (Lapuk, 2007; Malone et al., 1993): 17 to 47 per cent of abuse occurred in dining halls, 15 to 26 per cent of abuse occurred in hallways, and 13 to 15 per cent of abuse occurred in the TV lounge or common room (Rosen, Lachs, et al., 2008; Shinoda-Tagawa et al., 2004).

Nursing home residents also stated that resident-to-resident abuse could occur at "any time" of the day (Lapuk, 2007; Rosen, Lachs, et al., 2008). However, days/afternoons (24% to 46%) and evenings (10% to 50%) were the most commonly noted times when abuse was initiated (Malone et al., 1993; Rosen, Lachs, et al., 2008). Abuse during night hours accounted for only three to four per cent of abuse (Malone et al., 1993; Rosen, Lachs, et al., 2008).

Type of Resident-to-Resident Abuse

As shown in Table 4, five categories of resident-to-resident abuse were identified across the various studies: verbal, physical, psychological, sexual, and material exploitation. Cross-sectional survey (Castle, 2012) and qualitative (Rosen, Lachs, et al., 2008) studies found that verbal abuse was the most frequent form of resident-to-resident abuse, often displayed through cursing or yelling (Castle, 2012, Lapuk, 2007; Rosen, Lachs, et al., 2008). Physical abuse, including pushing and punching, was also frequently identified by staff and residents (Castle, 2012; Lapuk, 2007; Lachs et al., 2007; Rosen, Lachs, et al., 2008). However, more extreme forms of physical violence, including smothering, bending arms, and slamming fingers in doors, were less common (Castle, 2012; Rosen, Lachs, et al., 2008).

A qualitative study (Rosen, Lachs, et al., 2008) reported that sexual abuse between residents was much less common. Cross-sectional survey studies (Castle, 2012; Ramsey-Klawsnik et al., 2008; Teaster & Roberto, 2003, 2004) reported that sexual abuse was often expressed as unwelcomed sexualized kissing or fondling.

Resident-to-resident psychological abuse and material exploitation has been studied less extensively, with only four studies exploring this type of resident-to-resident abuse. However, nursing home staffs have reported that threats and intimidation techniques are recurrent forms of resident-to-resident abuse (Castle,

Table 4: Common types of resident-to-resident elder abuse

Abuse Type	Study	Examples
Verbal	Castle (2012)	Yelling, cursing, insulting or humiliating remarks
	Lapuk (2007)	Yelling, screaming, cursing
	Pillemer et al. (2012)	Insults, mean-spirited comments, sarcasm
	Rosen, Lachs, et al. (2008)	Screaming/yelling, telling others to "shut up", cursing, arguing, bossing around, racial slurs
Physical	Castle (2012)	Pushing, grabbing, pinching, kicking
	Lachs et al. (2007)	Aggravated assault, simple assault
	Lapuk (2007)	Punching, whipping, pounding, fighting
	Malone et al. (1993)	Hitting, grabbing, throwing, kicking, pinching, pushing, scratching, biting
	Rosen, Lachs, et al. (2008)	Pushing, punching, fighting over food, slapping, ramming with wheelchair
Psychological	Castle (2012)	Threats, intimidation, critical remarks
	Pillemer et al. (2012)	Jeering, teasing, threats
	Rosen, Lachs, et al. (2008)	Threats, intimidation
Sexual Abuse	Castle (2012)	Fondling, exposure of private body parts, unwelcome sexualized kissing, discussions of sexualized activities
	Pillemer et al. (2012)	Intentional nudity, unwanted sexual advances
	Ramsey-Klawsnik et al. (2008)	Inappropriate interest in body, fondling/molestation, sexualized kissing
	Rosen, Lachs, et al. (2008)	Attempting to get into bed, inappropriate touching, verbal sexual abuse
	Teaster & Roberto (2003)	Sexualized kissing, fondling, unwelcome sexualized interest in body, sexual jokes/comments, unwelcome sexualized discussion
	Teaster & Roberto (2004)	Unwelcome sexualized interest, unwelcome sexualized discussions, sexual jokes/comments, sexualized kissing, fondling
	Teaster et al. (2007)	Fondling, inappropriate interest in body
Material Exploitation	Castle (2012)	Theft of possessions, theft of assets
	Koehn et al. (2011)	Theft of food, theft of possessions
	Pillemer et al. (2012)	Theft of possessions
	Rosen, Lachs, et al. (2008)	Theft of possessions

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2012; Pillemer et al., 2012; Rosen, Lachs, et al., 2008). Furthermore, theft of possessions (Castle, 2012; Pillemer et al., 2012; Rosen, Lachs, et al., 2008) and theft of food (Koehn, Kozak, & Drance, 2011) were common forms of material exploitation.

Initiator and Victim Characteristics

A number of studies have identified factors that increase the likelihood of a resident becoming an initiator or victim of resident-to-resident abuse (see Table 5). From these studies, a profile emerges. Individuals at high risk include female residents (Burgess & Phillips, 2006; Ramsey-Klawsnik et al., 2008; Teaster & Roberto, 2004) who are cognitively impaired (Burgess et al., 2000; Burgess & Phillips, 2006; Malone et al., 1993; Ramsey-Klawsnik et al., 2008; Rosen, Lachs, et al., 2008; Rosen, Lachs, & Pillemer, 2010; Shinoda-Tagawa et al., 2004; Sifford-Snellgrove, Beck, Green, & McSweeney, 2012; Teaster & Roberto, 2004) and who exhibit wandering behaviours (Rosen, Lachs, et al., 2008; Shinoda-Tagawa et al., 2004; Sifford-Snellgrove et al., 2012). Survey and qualitative studies, however, note that victims of resident-to-resident sexual abuse appear to have physical impairments that limit independent mobility (Rosen et al., 2010; Teaster & Roberto 2004, Teaster et al., 2007).

Less attention has been given to identifying initiator characteristics. What little research that has been done has suggested that male residents are more likely to initiate resident-to-resident abuse (Lachs et al., 2007; Ramsey-Klawsnik et al., 2008; Teaster & Roberto, 2003, 2004; Teaster et al., 2007). The influence of gender on resident-to-resident abuse was especially evident in situations of "male unbonding", a term that has been used to describe incidents with two males, who are known to be argumentative, engaging in "fisticuffs" over inconsequential issues (Lachs et al., 2007).

Individual characteristics of residents, including personalities and histories, affected resident-to-resident abuse (Clough, 1999; Lachs et al., 2010). Qualitative studies (Rosen, Lachs, et al., 2008; Sifford-Snellgrove et al., 2012) have found that residents with pre-morbid prejudices and racial and stereotypical opinions were

Table 5: Victim and initiator characteristics

Study	Initiator Characteristics	Victim Characteristics
Burgess et al. (2000)	No data provided	– Cognitively impaired
Burgess & Phillips (2006)	No data provided	– Cognitively impaired – Female
Lachs et al. (2007)	– Male – Functional dependencies	– Cognitively impaired
Malone et al. (1993)	No data provided	– Cognitively impaired
Ramsey-Klawsnik et al. (2008)	– Male – Slight cognitive impairment	– Cognitively impaired – Female – Functional dependencies
Rosen, Lachs, et al. (2008)	– Impatient and intolerant – Racial and stereotypical opinions – Territorial – Aggressive towards wandering	– Cognitively impaired – Verbally agitated (calling out/making noise) – Wanderer
Rosen et al. (2010)	No data provided	– Cognitively impaired – Physical impairments limiting ambulation
Shinoda-Tagawa et al. (2004)	No data provided	– Cognitively impaired – Wanderer – Socially inappropriate – Verbally aggressive / abusive
Sifford-Snellgrove et al. (2012)	– Life history, teachings, and pre-morbid prejudices – Strong personalities – Short tempers – "More with it" (sharp memory)	– Cognitively impaired – Communication problems (e.g., hearing problem, language production difficulties) – Ambulatory/wanderer
Teaster & Roberto (2003)	– Male – Psychiatric illness	No data provided
Teaster & Roberto (2004)	– Male	– Cognitively impaired – Female – Physically impaired
Teaster & Roberto (2007)	– Male	– Oriented to person and place – Physical impairments limiting ambulation
Zhang et al. (2013)	No data provided	– Aggressive – Victim of staff abuse

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often perpetrators of resident-to-resident abuse. Specifically, one review (Clough, 1999) noted that the majority of abuse perpetrators have strong personalities with short tempers and are "more with it", having sharp memories and little empathy and patience for other residents. A qualitative study (Sifford-Snellgrove et al., 2012) yielded similar findings, and also that perpetrators had a more pronounced lack of empathy and patience for residents who were more cognitively impaired.

Triggers of Resident-to-Resident Abuse

Despite the fact that some acts of aggression and violence between residents appeared to be unprovoked, in a qualitative (Pillemer et al., 2012) and mixed-methods study (Lachs et al., 2007), researchers have identified a number of factors that trigger resident-to-resident abuse. Invasion of personal space and other challenges associated with communal living were commonly noted triggers across a variety of studies (Clough, 1999; Lachs et al., 2010; Pillemer et al., 2012; Rosen, Lachs, et al., 2008; Snellgrove et al., 2013). Specifically environmental issues such as crowding, TV volume/channel, room temperature, and lighting were major concerns noted in several studies to have fueled aggression between residents (Koehn et al., 2011; Lachs et al., 2007; Lachs et al., 2010; Pillemer et al., 2012; Rosen, Lachs, et al., 2008; Snellgrove et al., 2013).

Social environments within the facility also triggered resident-to-resident abuse. Communication barriers between residents (Rosen, Lachs, et al., 2008; Snellgrove et al., 2013), agitated residents with loud outbursts (Rosen, Lachs, et al., 2008), residents displaying longstanding disruptive behaviours (Lachs et al., 2007; Lapuk, 2007), and exclusionary social cliques (Snellgrove et al., 2013) have been identified by staff and residents as factors that foster environments conducive to resident-to-resident abuse.

Furthermore, hostile actions – including violence, sexual aggression, and theft – have been shown to provoke abusive responses from the targeted resident (Koehn et al., 2011; Pillemer et al., 2012; Rosen, Lachs, et al., 2008; Snellgrove et al., 2013).

Staff and Resident Responses to Resident-to-Resident Abuse

While the main concerns of residents surrounding resident-to-resident abuse focus on their own safety and privacy, one qualitative study (Lapuk, 2007) noted that many residents believed that resident aggression was an unavoidable element of nursing home living. To protect themselves from resident-to-resident abuse, residents indicated they would call staff for assistance, try to diffuse the aggressive situation themselves, or avoid known aggressive residents altogether (Lapuk, 2007).

Qualitative studies (Rosen, Lachs, et al., 2008; Sifford, 2010) and a cross-sectional study (Rosen et al., 2012) have provided an overview of staff strategies. For instance, nursing staff, like residents, have also developed a number of self-initiated responses to manage and prevent resident-to-resident abuse (Rosen, Lachs, et al., 2008). The most common response has been to separate the residents (Rosen, Lachs, et al., 2008; Rosen et al., 2012), either by re-directing them with other meaningful activities (Sifford, 2010), physically intervening, changing the resident's room, or temporarily removing residents from the environment (Rosen et al., 2012). Talking calmly to residents (Rosen et al., 2012), explaining the nature of communal living, and encouraging compromise (Rosen, Lachs, et al., 2008) have also been common techniques to manage resident-to-resident abuse.

Although researchers have found instances where staff would notify the nurse (Rosen, Lachs, et al., 2008), rarely do staff consult with a physician or psychiatrist to manage the aggressive behaviours between residents (Rosen et al., 2012).

Outcomes of Resident-to-Resident Abuse

One review article (Rosen et al., 2010) found that victims of resident-to-resident abuse tended to be reluctant or unable to report abusive incidents. Furthermore, retrospective (Burgess & Phillips, 2006) and prospective case studies (Ramsey-Klawsnik et al., 2008; Teaster et al., 2007) found that many sexually abusive situations were difficult to substantiate due to cognitive impairment present in both victims and initiators.

Qualitative findings (Lapuk, 2007) illustrated that nursing home residents view aggression in residents as a symptom of dementia. Indeed, in situations of resident-to-resident sexual abuse, staff often viewed perpetrators as victims of their degenerative brain disease (Rosen et al., 2010; Tripp, 2011). In resident-to-resident sexual abuse cases, 35 per cent of abuse victims did not receive any interventions (Teaster et al., 2007), and only 11 to 12 per cent received psychological and physical treatment (Teaster & Roberto, 2003, 2004). Due to insufficient evidence, the majority of perpetrators were not arrested, prosecuted, or convicted (Ramsey-Klawsnik et al., 2008; Teaster & Roberto, 2003, 2004).

Victims of resident-to-resident abuse and bullying experienced a decline in overall psychosocial health. Self-reported victimization was associated with a reduction in life satisfaction and a greater risk for depression, anxiety, loneliness, low self-esteem, and overall negative mood (Trompetter et al., 2011; Wood, 2007). In addition, victims of resident-to-resident abuse

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were shown to be four times more likely to experience neglect from nursing home staff (Zhang et al., 2011). However, in their review article, Rosen, Pillemer, et al. (2008) noted that there have been no longitudinal studies on the long-term health implications of being victims or initiators of resident-to-resident abuse, nor were any studies identified for the present review.

Only one case-control study (Shinoda-Tagawa et al., 2004) examining visible injuries – which occurred when residents inflicted physical abuse on other residents – found that residents were most likely to receive lacerations and bruises to the head or face region and upper extremities. Furthermore, residents who wandered or were verbally aggressive were more likely to be injured (Shinoda-Tagawa et al., 2004). Unsurprisingly, residents in Alzheimer's units were three times more likely to be injured (Shinoda-Tagawa et al., 2004). Data from a retrospective case study (Malone et al., 1993) indicated that residents residing in Alzheimer's units have higher incidences of aggressive behaviours when compared to residents in the rest of the facility (Malone et al., 1993).

Interventions for Resident-to-Resident Abuse

A prominent recommendation in the literature highlighted the need for staff and family to receive education and training on resident-to-resident abuse to enhance protection of residents in nursing facilities (Koehn et al., 2011; Robinson & Tappen, 2008; Teaster & Roberto, 2003; Teresi et al., 2013; Williams, 2004; Zhang et al., 2012). Teresi et al. (2013) evaluated a resident-to-resident elder mistreatment staff intervention-training program. They found that staff who received the training experienced a significant increase in recognition and documentation of resident-to-resident abuse, which resulted in more resident-to-resident elder mistreatment events being reported.

Resident-to-Resident Abuse in Canada – Secondary Data Analysis

The data reports, along with the redacted data set, described a wide range of abuse cases that included resident-to-resident abuse, staff-to-resident abuse, and resident-to-staff abuse. Data and/or reports were obtained from Newfoundland and Labrador, Prince Edward Island, New Brunswick, Nova Scotia, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia. No data from the Yukon, Northwest Territories, or Nunavut were available for analysis (see Table 6). The total number of incidents of alleged/reported abuse in LTC homes was 23,472. The total number of resident-to-resident abuse cases in 2011 was 6,455, representing 28 per cent of all abuse cases (see Table 6).

Of the redacted data, abuse incident report forms (n = 662) were obtained from four locations in Canada: Saskatchewan (n = 64); Manitoba (n = 290); New Brunswick (n = 56); and Nova Scotia (n = 252). Of these reports, 192 were clearly identified as resident-to-resident abuse (29%). According to the data, the most prevalent types of resident-to-resident abuse reported were physical abuse (104 cases); physical and verbal abuse (37 cases); sexual abuse (36 cases), and verbal abuse (13 cases). The nature of two cases was not described.

Discussion

The purpose of this scoping review was to gain a better understanding of the current level of knowledge related to resident-to-resident abuse in order to inform practice, research, and policy in Canada. The review identified a relative paucity of literature on the topic (27 peer-reviewed articles; 5 grey-literature articles), with only two studies being from Canada, including an unpublished master's thesis and one qualitative report. The majority of records (75%) were retrospective case studies, qualitative reports with in-depth interviews, reviews, and commentaries. The rest of the studies were mainly non-random, cross-sectional surveys, and only one intervention study. Of these studies, only 14 (44%) focused exclusively on resident-to-resident abuse. By itself, the scoping review provides us with a good sense of the research "landscape" on this topic, and suggests that a systematic review on resident-to-resident abuse would be premature at this time.

The findings from the scoping review detail the significant burden of resident-to-resident abuse to its victims, perpetrators, family members, and staff working in LTC homes, and the redacted data provide a crude overview of the issue in Canada, which indicates that the problem is extensive. Without doubt, there is a clear need to develop stronger action on a number of fronts to better understand this ignored form of violence which, from anecdotal reports, continues to take people's lives, and to identify means to help minimize its occurrence. The redacted data set on resident-to-resident abuse in Canada provides some indication that this type of abuse makes up approximately one-third of reported abuse cases. Similarly, data from the National Ombudsman Reporting System in the United States for all 50 states from 2000 to 2011 suggest that resident-to-resident abuse represents 21 per cent of abuse cases in nursing homes, a lower figure than reported for Canada using the non-random data. The problem, however, is that these figures do not necessarily represent a complete picture of nursing home abuse, wherein allegations can be reported to a number of different authorities, including adult

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Table 6: Resident-to-resident abuse (RRA) rates in Canada

Province / Health Region	Total # of Incidents	Total # of RRA Incidents	% of RRA Incidents	Total # of Homes Included	Private Homes Included	Total # of Beds
Newfoundland & Labrador	*1,767*	*828*	*47%*	*39*		*2,723*
Labrador-Grenfell[a]	52	19	37%	4	No	117
Western[a]	157	51	32%	6	No	434
Eastern[a]	1,348	679	50%	18	No	1,654
Central[a]	210	79	38%	11	No	518
Prince Edward Island[a]	*299*	*N/A*	*N/A*	*8*	*No*	*591*
New Brunswick[b]	*56*	*30*	*54%*	*62*	*Yes (All Private)*	*4,000*
Nova Scotia[b]	*252*	*41*	*16%*	*93*	*N/A*	*N/A*
Quebec[c]	*5,661*	*N/A*	*N/A*	*N/A*	*No (All Public Health Facilities)*	*N/A*
Ontario[d]	*3,216*	*1,788*	*56%*	*643*	*Yes (All Homes Included)*	*77,933*
Manitoba	*7,576*	*2,717*	*36%*	*48*		
Winnipeg[a]	4,668	1,915	41%	38	Yes	5,721
Assiniboine[a]	839	252	30%	N/A	N/A	839
Brandon[a]	313	82	26%	N/A	N/A	313
Parkland[a]	192	98	51%	N/A	N/A	192
Interlake[b]	196	56	29%	11	N/A	552
North Eastman[b]	94	23	24%	5	N/A	196
South Eastman[a]	270	N/A	N/A	N/A	N/A	N/A
Central[a]	788	287	36%	N/A	N/A	N/A
Burntwood[a]	14	4	29%	1	N/A	35
Norman[a]	202	N/A	N/A	3	No	126
Churchill[a]	0	N/A	N/A	N/A	N/A	N/A
Saskatchewan	*2,923*	*662*				
Saskatoon[a]	298	N/A	N/A	10	N/A	N/A
Heartland[a]	247	75	30%	N/A	N/A	N/A
Cypress[a]	235	102	43%	12	N/A	504
Sun Country[a]	270	125	46%	19	No	N/A
Keewatin Yatthe[a]	19	7	37%	2	N/A	24
Sunrise[a]	472	130	28%	N/A	N/A	N/A
Five Hills[a]	71	12	17%	N/A	N/A	N/A
Prairie North[a]	243	35	14%	13	N/A	579
Regina Qu'Appelle[a]	750	N/A	N/A	N/A	N/A	N/A
Prince Albert Parkland[a]	231	125	54%	11	No	444
Mamawetan Churchill River[a]	23	10	43%	1	No	16
Kelsey Trail[b]	64	41	64%	N/A	N/A	N/A
Alberta[a]	*183*	*N/A*	*N/A*	*58*	*N/A*	*N/A*
British Columbia	*1,539*					
Vancouver Coastal[a]	277	N/A	N/A	43	N/A	N/A
Vancouver Island[a]	178	N/A	N/A	19	No	1,491
Interior[a]	939	389	41%	36	N/A	N/A
Fraser[a]	144	N/A	N/A	N/A	N/A	N/A
Northern[a]	1	0	0%	N/A	N/A	N/A

[a] Data report obtained through the Access to Information Act of Canada (R.S.C, 1985, C-A1).
[b] Redacted intake forms obtained through the Access to Information Act of Canada (R.S.C, 1985, C-A1).
[c] Data report "Rapport Semestriel des Incidents et Accidents Survenus Lors de la Presetation Des Soins et Services de Santé au Québec"; http://publications.msss.gouv.qc.ca/acrobat/f/documentation/2012/12-735-01W.pdf.
[d] Data report "Long-Term Care Task Force on Resident Care and Safety May 2012 An Action Plan to Address Abuse and Neglect in Long-Term Care Homes"; http://longtermcaretaskforce.ca/images/uploads/LTCFTReportEnglish.pdf.

protective services, the ombudsman, or law enforcement (Jogerst et al., 2005). Based on the findings of the scoping review and secondary data analysis, a number of suggestions relevant to clinical practice, research, and policy in Canada can be derived.

Recommendations for Research

Overall, the need for further research on resident-to-resident abuse in Canada is apparent. The literature, along with the redacted data set, suggest that the incidence of resident-to-resident abuse accounts for

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approximately one-third of all cases, and includes a diverse range of aggressive physical, verbal, psychological, and sexual behaviours (Castle, 2012; Pillemer et al., 2012; Rosen, Lachs, et al., 2008). Given issues with the data and the challenges in obtaining clear estimates from the literature, there is a demonstrated need to get a better depiction of its incidence and prevalence in Canada. At the least, there is a need for a national prevalence study, and at best, a prospective cohort study should be conducted to document the phenomena. There are 10 robust studies that examined the prevalence of institutional abuse worldwide, but not one of these studies considered resident-to-resident abuse (McDonald, 2011). There are no extant prospective cohort studies anywhere, indicating that geriatricians and gerontologists are missing evidence of a significant form of violence.

Successful implementation of such studies would require the development of outcomes that not only captured the range of resident-to-resident abuse types but also articulated contributing precipitating factors (e.g., location, time, and resident and perpetrator characteristics) and outcomes of the abusive incident (e.g., documented in chart, medical care provided/required, law enforcement involvement, and family members informed). Although multi-site national studies are needed, pilot work in one province on the prevalence of resident-to-resident abuse, and associated outcomes, should be first conducted in order to inform larger national-scale studies.

More importantly, there is a need to develop more intervention studies to reduce/prevent the occurrence of resident-to-resident abuse. The study by Teresi et al. (2013) has provided some evidence on the benefits of staff training for reducing resident-to-resident abuse, but further research is needed to empirically evaluate the effectiveness of staff-developed responses to resident-to-resident abuse (Rosen et al., 2012). Additionally, the multitude of resident-to-resident abuse triggers, such as environmental factors, warrants additional research examining the manipulation of these factors for preventing resident-to-resident abuse (Pillemer et al., 2012).

The high number of qualitative studies on resident-to-resident abuse serves as an excellent resource for informing the selection of appropriate outcome measures. In addition to physical and psychological outcomes, the economic burden of resident-to-resident abuse should also be documented. The associated costs of resident-to-resident abuse, both direct (e.g., police services or additional health care) and indirect (e.g., lost productivity of family members caring for resident-to-resident abuse victims) are potentially staggering, and their documentation may be useful for spurring changes within the health care system.

Recommendations for Policy

A national strategy is needed to address resident-to-resident abuse in Canada. Although research is needed to help inform policy, potential actions that could be undertaken to achieve this goal include developing nationwide standardized abuse reporting practices within LTC homes, developing recommendations for how LTC homes can foster environments to minimize the risk for resident-to-resident abuse, and to inform legislation on how to manage occurrences of resident-to-resident abuse.

LTC homes in the United States have been criticized for adopting unplanned approaches to care due to the lack of guidelines for reporting and documenting abuse (Teresi et al., 2013), and the same could be said about Canada. The implementation of a minimum data set in Canada may prove helpful in establishing the incidence and prevalence of resident-to-resident abuse across different regions in Canada, providing insight on the magnitude of the problem. Furthermore, such a data set could provide data on abuse trends over time, identify factors that are correlated with and predict resident-to-resident abuse, and may assist in identifying targets for intervention. These data have significant policy implications because they would help determine the human and financial resources needed to contain the problem.

Whereas LTC homes are required to provide an environment wherein residents are free from all forms of abuse and neglect, including that between residents (Tripp, 2011), there are a dearth of guidelines and recommendations available for LTC homes to consider when developing policies to fulfill this mandate. For example, guidelines pertaining to crowding and space configuration (Clough, 1999; Lachs et al., 2010; Pillemer et al., 2012; Rosen, Lachs, et al., 2008; Snellgrove et al., 2013), staffing levels to reflect behavioural needs of clients (Teaster & Roberto, 2003; Williams, 2004), and types and frequency of activities available to residents (Sifford, 2010; Snellgrove et al., 2013) may all be helpful in reducing the incidence of resident-to-resident abuse. Although not covered in the institutional elder abuse literature (i.e., Cohen, Halevy-Levin, Gagin, Priltuzky, & Friedman, 2010), organizational and management theories may provide useful insights into the organizational and systematic characteristics of LTC homes that lead to resident-to-resident abuse (McDonald et al., 2012). Staff quotas, staff mix, management policies and protocols, and governance and ownership would be issues to consider within some acceptable theoretical framework like institutional theory (McDonald, 2008).

An important aspect of resident-to-resident abuse requiring further clarification pertains to the legal

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implications of such abuse. Currently, there is low involvement of the criminal justice system, including the police, in abuse cases in LTC (Lachs et al., 2007), especially in resident-to-resident sexual abuse cases (Burgess & Phillips, 2006; Ramsey-Klawsnik et al., 2008). There need to be clear guidelines on when authorities should be called in to investigate cases of resident-to-resident abuse, and police should have procedures to rely upon to help determine what action to undertake with the perpetrator of the abuse (e.g., when to arrest or what to document). Further policies are needed to assist health care staff and policing bodies in working with resident-to-resident abuse perpetrators who have dementia and may not know what they have caused (Tripp, 2011). Laying charges in these situations makes little sense, but holding the organization responsible may be more sensible.

Recommendations for Practice

Several authors have suggested that staff training and education are mechanisms that can be used to help reduce resident-to-resident abuse (Robinson & Tappen, 2008; Teaster & Roberto, 2003; Teresi et al., 2013; Williams, 2004); however, only one study has formally evaluated a training intervention program for nursing staff on knowledge, recognition, management, and reporting of resident-to-resident abuse events (Teresi et al., 2013). The longitudinal evaluation of the program demonstrated that participating nursing staff were more knowledgeable of what constitutes and contributes to resident-to-resident abuse and thoroughly documented more resident-to-resident abuse events (Teresi et al., 2013). Detailed documentation of resident-to-resident abuse can allow for effective care strategies that reflect the trends of abuse within a specific institution to be developed and implemented. Although training staff seems to be the common solution to most institutional mistreatment, there likely need to be other approaches that go beyond subtly blaming staff that have to do with the organization and governance.

Due to the diversity of resident-to-resident abuse forms, triggers, and outcomes, management of these events will require patient-centered interventions that consider both needs and characteristics of residents (Lachs et al., 2007; Lapuk, 2007; Rosen, Lachs, et al., 2008; Snellgrove et al., 2013) and reflect the environmental factors present in the facility (Clough, 1999; Lachs et al., 2010; Pillemer et al., 2012; Rosen, Lachs, et al., 2008; Snellgrove et al., 2013). Furthermore, it is critical that an interdisciplinary approach to care be implemented to assist in the management of resident-to-resident abuse. Whereas one study indicated that nursing staff rarely consulted with physicians and psychiatrists to assist with the management and prevention of mistreatment (Rosen et al., 2012), this collaboration may prove to be valuable in working with patients who suffer from cognitive impairments and display many behavioural outbursts that trigger resident-to-resident violence. Part of the enduring problem is that physicians tend to avoid working in LTC because of the nursing home culture that makes teamwork difficult (Kapp, 2010).

Limitations

This scoping review described the nature, extent, and frequency of resident-to-resident abuse in LTC homes but did not provide an in-depth review of the literature, nor did it assess the quality of the studies identified. Additionally, scoping reviews include an optional final step that involves consultation with key stakeholders, practitioners, and policy makers (Levac et al., 2010). This step, not included in our scoping review, may have provided additional insight into resident-to-resident abuse. Finally, although efforts were made to conduct a thorough scan of both the peer-reviewed and grey literature, it is possible that not all pertinent records were identified on this topic.

The redacted data set on resident-to-resident abuse in Canada provides some indication that this type of abuse makes up approximately one-third of reported abuse cases, but this data is extremely limited on a number of fronts. Firstly, the standards, forms, and times when alleged/reported resident-to-resident abuse cases are documented varied dramatically within and across provinces, and data were not collected from all 88 health regions across the country. Additionally, some provinces and their regions have more detailed data collection forms and are more diligent with collecting and reporting data than are other areas. Consequently, significant amounts of data were missing, or were pooled together due to challenges in obtaining the data (e.g., cost associated with obtaining data). Taking into consideration the size of a province (population), and the proportion of nursing home residents in each province, the issue of abuse in institutions, including resident-to-resident abuse, is likely under-reported. As a result, abuse seems to be a larger issue in some provinces, when in fact it may be that some provinces are more responsible in documenting and reporting the estimates of abuse, and providing details on the type of abuse that occurred. Further, the delivery of health care was not consistent across provinces. In particular, the province of Quebec had many other health services integrated with LTC. In short, the data are incomplete and uneven and only provide a glimpse of what may be occurring in Canada.

Conclusion

Resident-to-resident abuse is a serious societal issue that is under-researched and requires further investigation in order to minimize its occurrence, and strategies developed to appropriately manage its

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consequences. Although dementia and other mental health issues are contributing factors to the occurrence of resident-to-resident abuse, health care professionals and authorities should not use them as an excuse for inaction against resident-to-resident abuse. Older adults living in LTC homes should expect a living environment that preserves their dignity, well-being, and safety. As such, further action by researchers, health care professionals, and policy makers is needed to reduce resident-to-resident abuse and other types of abuse in LTC homes.

References

Allen, P. D., Kellett, K., & Gruman, C. (2003). Elder abuse in Connecticut nursing homes. *Journal of Elder Abuse and Neglect*, *15*(1), 19–42.

Alzheimer Society. (2010). *Rising tide: the impact of dementia on Canadian society*. Retrieved 11 July 2013, from http://www.alzheimer.ca/en/Get-involved/Raise-your-voice/Rising-Tide.

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32.

Astrom, S., Bucht, G., Eisemann, M., Norberg, A., & Saveman, B. I. (2002). Incidence of violence towards staff caring for the elderly. *Scandinavian Journal of Caring Sciences*, *16*(1), 66–72.

Beck, C., Rossby, L., & Baldwin, B. (1991). Correlates of disruptive behaviour in cognitively impaired elderly nursing home residents. *Archives of Psychiatric Nursing*, *5*(5), 281–291.

Burgess, A. W., Dowdell, E. B., & Prentky, R. A. (2000). Sexual abuse of nursing home residents. *Journal of Psychosocial Nursing & Mental Health Services*, *38*(6), 10–18.

Burgess, A. W., & Phillips, S. L. (2006). Sexual abuse, trauma and dementia in the elderly: A retrospective study of 284 cases. *Victims and Offenders*, *1*(2), 193–204.

Caffrey, C., Sengupta, M., Park-Lee, E., Moss, A., Rosenoff, E., & Harris-Kojetin, L. (2012). Residents living in residential care facilities: United States, 2010. (NCHS Data Brief No. 91).

Canadian Institute for Health Information. (2008). *Continuing Care Reporting System, 2003-2004 to 2006-2007*. Retrieved on 19 March 2014 from https://secure.cihi.ca/free_products/ccrs_aib_aggressive_behaviour_e.pdf.

Canadian Institute for Health Information. (2013) *When a Nursing Home is Home: How do Canadian Nursing Homes Measures Up on Quality?* Ottawa, ON. Retrieved on 6 June 2014 from https://secure.cihi.ca/free_products/CCRS_QualityinLongTermCare_EN.pdf.

Castle, N. G. (2012). Resident-to-resident abuse in nursing homes as reported by nurses aids. *Journal of Elder Abuse & Neglect*, *24*(4), 340–356.

Clough, R. (1999). Scandalous care: Interpreting public enquiry reports of scandals in residential care. *Journal of Elder Abuse & Neglect*, *10*(1–2), 13–27.

Cohen, M., Halevy-Levin, S., Gagin, R., Priltuzky, D., & Friedman, G. (2010). Elder abuse in long-term care residences and the risk indicators. *Ageing and Society*, *30*(6), 1027–1040.

Gates, D., Fitzwater, E., & Meyers, U. (1999). Violence against caregivers in nursing homes: Expected, tolerated and accepted. *Journal of Gerontological Nursing*, *25*(4), 12–22.

Gates, D., Fitzwater, E., & Succop, P. (1999). Reducing assaults against nursing home caregivers. *Journal of Gerontological Nursing*, *25*(4), 12–22.

Gates, D., Fitzwater, E., Telintelo, S., Succop, P., & Sommers, M. S. (2004). Preventing assaults by nursing home residents: Nursing assistants' knowledge and confidence – A pilot study. *Journal of the American Medical Directors' Association*, *5*(Suppl. 2), S17–S21.

Gouvernement du Québec. (2012) Rapport Semestriel des Incidents et Accidents Survenus Lors de la Presetation Des Soins et Services de Santé au Québec. (ISBN: 987-2-550-65367-7). Retrieved on 8 January 2013 from http://publications.msss.gouv.qc.ca/acrobat/f/documentation/2012/12-735-01W.pdf

Hirst, S. P. (2000). Resident abuse: An insider's perspective. *Geriatric Nursing*, *21*(1), 38–42.

Hirst, S. P. (2002). Defining resident abuse within the culture of long-term care institutions. *Clinical Nursing Research*, *11*(3), 267–284.

Jogerst, G., Daly, J., & Hartz, A. (2005). Ombudsman program characteristics related to nursing home abuse reporting. *Journal of Gerontological Social Work*, *46*(1), 85–98.

Kapp, M. B. (2010). Nursing home culture discourages physician involvement. *Archives of Internal Medicine*, *170*(15), 1405–1406.

Kiecolt, K. J., & Nathan, L. E. (1985). *Secondary analysis of survey data*. Beverly Hills, CA: Sage Publications.

Koehn, S. D., Kozak, J. F., & Drance, E. (2011). 'The problem with Leonard': A critical constructionist view of need-drive dementia-compromised behaviours. *Dementia*, *11*(6), 725–741.

Lachs, M., Bachman, R., Williams, C. S., & O'Leary, J. R. (2007). Resident-to-resident elder mistreatment and police contact in nursing homes: Findings from a population based cohort. *Journal of the American Geriatrics Society*, *55*(6), 840–845.

Lachs, M., Van Haitsma, K., Teresi, J. A., Pillemer, K., Haymowitz, E., & Del Carmen, T. (2010). Why they fight: Event reconstruction of resident-to-resident elder mistreatment (RREM) in long term care facilities. *The Gerontologist*, *50*(S1), 358.

Lapuk, D. S. (2007). Resident aggression in a long-term care setting: Concerns and meanings from perspectives of

https://doi.org/10.1017/S0714980815000094 Published online by Cambridge University Press

other residents. (Unpublished doctoral dissertation). The University of Manitoba, Manitoba, Canada.

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, *5*(69), 1–9.

Long-Term Care Task Force on Resident Care and Safety. (2012) An Action Plan to Address Abuse and Neglect in Long-Term Care Homes. Retrieved on 25 January 2013 from http://longtermcaretaskforce.ca/images/uploads/LTCFTReportEnglish.pdf.

Malone, M. L., Thompson, L., & Goodwin, J. S. (1993). Aggressive behaviours among the institutionalized elderly. *Journal of the American Geriatrics Society*, *41*(8), 853–856.

McDonald, L. (2008). Where is the support for community nursing? *Canadian Nurse*, *104*(4), 4–5.

McDonald, L. (2011). Elder abuse and neglect in Canada: The glass is still half full. *Canadian Journal on Aging*, *30*(3), 437–465.

McDonald, L., Beaulieu, M., Harbison, J., Hirst, S., Lowenstein, A., Podnieks, E., & Wahl, J. (2012). Institutional abuse of older adults: What we know, what we need to know. *Journal of Elder Abuse and Neglect*, *24*(2), 138–160.

McGregor, M. J., & Ronald, L. A. (2011). *Residential Long-Term Care for Canadian Seniors: Nonprofit, For-Profit or Does It Matter?* IRPP Study, No. 14. Montreal: Institute for Research on Public Policy.

Patel, V., & Hope, R.A. (1992). A rating scale for aggressive behaviour in the elderly – the RAGE. *Psychological Medicine*, *22*(1), 211–221.

Patel, V., & Hope, T. (1993). Aggressive behaviour in elderly people with dementia. A review. *International Journal of Geriatric Psychiatry*, *8*(6), 457–472.

Pillemer, K., Chen, E. K., Haitsma, Van, K. S., Teresi, J., Ramirez, M., Silver, S., et al. (2012). Resident-to-resident aggression in nursing homes: Results from a qualitative event reconstruction study. *The Gerontologist*, *52*(1), 24–33.

Pillemer, K., & Moore, D. W. (1989). Abuse of patients in nursing homes: Findings from a survey of staff. *The Gerontologist*, *29*(3), 314–320.

Potter, W. J., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, *27*(3), 258–284.

Ramage-Morin, P. L. (2006). Successful aging in health care institutions. *Health Reports*, *16*, 47–56.

Ramsey-Klawsnik, H. (1991). Elder sexual abuse: Preliminary findings. *Journal of Elder Abuse & Neglect*, *3*(3), 73–90.

Ramsey-Klawsnik, H., Teaster, P. B., Mendiondo, M. S., Marcum, J. L., & Abner, E. L. (2008). Sexual predators who target elders: Findings from the first national study of sexual abuse in care facilities. *Journal of Elder Abuse & Neglect*, *20*(4), 353–376.

Robinson, K. M., & Tappen, R. M. (2008). Policy recommendations on the prevention of violence in long-term care facilities. *Journal of Gerontological Nursing*, *34*(3), 10–14.

Rosen, A., Lachs, M. S., Pillemer, K., & Teresi, J. (2012). Staff responses to resident-to-resident elder mistreatment in nursing homes. Results of a multi-site survey. *Journal of the American Geriatrics Society*, *60*(Suppl. 4), S166.

Rosen, T., Lachs, M. S., Bharucha, A, J., Stevens, S. M., Teresi, J. A., Nebres, F., et al. (2008). Resident-to-resident aggression in long-term care facilities: Insights from focus groups of nursing home residents and staff. *Journal of the American Geriatrics Society*, *56*(8), 1398–1408.

Rosen, T., Lachs, M. S., & Pillemer, K. (2010). Sexual aggression between residents in nursing homes: Literature synthesis of an underrecognized problem. *Journal of the American Geriatrics Society*, *58*(10), 1970–1979.

Rosen, T., Pillemer, K., & Lachs, M. (2008). Resident-to-resident aggression in long-term care facilities: An understudied problem. *Aggressive and Violent Behaviours*, *13*(2), 77–87.

Rovner, B. W., German, P. S., Broadhead, J., Morriss, R. K., Brant, L. J., Blaustein, J., et al. (1990). The prevalence and management of dementia and other psychiatric disorders in nursing homes. *International Psychogeriatrics*, *2*(1), 13–24.

Rumrill, P., Fitzgerald, S., & Merchant, W. (2010). Using scoping literature reviews as a means of understanding and interpreting existing literature. *Work*, *35*(3), 399–404.

Shah, A., Dalvi, M., & Thompson, T. (2005). Behavioural and psychological signs and symptoms of dementia across cultures: Current status and the future. *International Journal of Geriatric Psychiatry*, *20*(12), 1187–1195.

Shinoda-Tagawa, T., Leonard, R., Pontikas, J., McDonough, J. E., Allen, D., & Dreyer, P. I. (2004). Resident-to-resident violent incidents in nursing homes. *Journal of the American Medical Association*, *291*(5), 591–598.

Sifford, S. (2010). In their shoes: Strategies developed by certified nurses' assistants to manage and prevent resident-to-resident violence in nursing homes. *The Gerontologist*, *50*(S1), 108.

Sifford-Snellgrove, K. S., Beck, C., Green, A., & McSweeney, J. C. (2012). Victim or Initiator? Certified nurses' assistants' perceptions of resident characteristics that contribute to resident-to-resident violence in nursing homes. *Research in Gerontological Nursing*, *5*(1), 55–63.

Smith, M., Gerdner, L. A., Hall, G. R., & Buckwalter, K. C. (2004). History, development, and future of the progressively lowered stress threshold: A conceptual model for dementia care. *Journal of the American Geriatrics Society*, *52*(10), 1755–1760.

Snellgrove, S., Beck, C., Green, A., & McSweeney, J. C. (2013). Resident-to-resident violence triggers in nursing homes. *Clinical Nursing Research*, *22*(4), 461–474.

https://doi.org/10.1017/S0714980815000094 Published online by Cambridge University Press

Snowden, M., Sato, K., & Roy-Byrne, P. (2003). Assessment and treatment of nursing home residents with depression or behavioral symptoms associated with dementia: A review of the literature. *Journal of the American Geriatrics Society*, *51*(9), 1305–1317.

Spector, W. D., Fleishman, J., Pezzin, L., & Spillman, B. (2001). The characteristics of long-term care users. *AHRQ Publication No. 00-0049*, Rockville: Agency for Healthcare Research and Policy.

Statistics Canada. (2010). *Population Projections for Canada, provinces and territories: 2009 – 2036*. (Catalogue no. 91-520-XWE).Retrieved on 5 July 2013 from http://www.statcan.gc.ca/pub/91-520-x/91-520-x2010001-eng.pd.

Statistics Canada. (2011). *Living arrangements of seniors. Families, households and marital. Status structural type of dwelling and collectives*, 2011 Census of Population. (catalogue no. 98-312-X2011003). Retrieved on 10 March 2014 from http://www12.statcan.gc.ca/census-recensement/2011/as-sa/98-312-x/98-312-x2011003_4-eng.cfm.

Teaster, P. B., & Roberto, K. A. (2003). Sexual abuse of older women living in nursing homes. *Journal of Gerontological Social Work*, *40*(4), 105–119.

Teaster, P. B., & Roberto, K. A. (2004). Sexual abuse of older adults: APS cases and outcomes. *The Gerontologist*, *44*(6), 788–796.

Teaster, P. B., Ramsey-Klawsnik, H., Mendiondo, M. S., Abner, E., Cecil, K., & Tooms, M. (2007). From behind the shadows: A profile of sexual abuse of older men in nursing homes. *Journal of Abuse and Elder Neglect*, *19*(1–2), 29–45.

Teresi, J.A., Ramirez, M., Ellis, J., Silver, S., Boratgis, G., Kong, et al. (2013). A staff intervention targeting resident-to-resident elder mistreatment (RREM) in long-term care increased staff knowledge, recognition and reporting: Results from a cluster randomized trial. *International Journal of Nursing Studies*, *50*(5), 644–656.

Tripp, L. (2011). The medico-legal aspects of dementia-driven sexual abuse in nursing homes. *Marquette Elder's Advisor*, *12*(2), 363–414.

Trompetter, H., Scholte, R., & Westerhof, G. (2011). Resident-to-resident relational aggression and subjective well-being in assisted living facilities. *Aging & Mental Health*, *15*(1), 59–67.

Turcotte, M., & Schellenberg, G. (2007). *A portrait of seniors in Canada: 2006.* (Catalogue no. 89-519-XIE). Retrieved on 5 July 2013 from Statistics Canada: http://www.statcan.gc.ca/pub/89-519-x/89-519-x2006001-eng.pdf.

Williams, L. (2004). In perspective: Liability landscape. When residents attack residents. *Nursing Homes Long-Term Care Magazine*, *53*(8), 64–67.

Wood, F. (2007). Bullying in nursing homes: Prevalence and consequences to psychological health. (Unpublished doctoral dissertation). Walden University, USA.

Zhang, Z., Page, C., Conner, T., & Post, L. A. (2012). Family members' reports of non-staff abuse in Michigan nursing homes. *Journal of Elder Abuse & Neglect*, *24*(4), 35–369.

Zhang, Z., Schiamberg, L. B., Oehmke, J., Barboza, G. E., Griffore, R. J., Post, L. A., et al. (2011). Neglect of older adults in Michigan nursing homes. *Journal of Elder Abuse & Neglect*, *23*(1), 58–74.

https://doi.org/10.1017/S0714980815000094 Published online by Cambridge University Press