

Elder Abuse in Residential Long-Term Care: An Update to the 2003 National Research Council Report

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Abstract

A synthesis of the last decade of literature on elder abuse in residential long-term care (i.e., Nursing Homes and Assisted Living) is discussed. Presented are definitions of abuse, theoretical and conceptual models, prevalence rates of abuse, outcomes and costs, and sources of abuse. The synthesis represents an update to the literature in the influential 2003 National Research Council report. We identify many of the same issues and concerns exist that were surfaced in this prior report. Many theoretical and conceptual models need further elaboration. Conflicting definitions of abuse are pervasive. Rates of abuse are generally inaccurate, and probably under-reported. However, we also identify progress in many areas. An increase in empirical studies that exist in this area (although very few in Assisted Living). Other forms and types of abuse have also been identified as important, such as resident-to-resident abuse. These areas are discussed, along with potential suggestions for additional research.

Keywords

nursing homes, assisted living, abuse

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A synthesis of the literature on elder abuse in residential long-term care, specifically as encountered in nursing homes (NHs) and assisted living (AL) is presented in this review. Summarizing the current evidence about elder abuse may help to provide a baseline assessment of the state-of-the-science and to identify areas requiring future attention and research.

Understanding elder abuse is important because it is clearly objectionable from a moral standpoint, and has the potential to negatively impact the daily lives of elders. Abuse can influence quality-of-life and is associated with suffering and adverse health consequences (Lachs, Williams, O'Brien, & Pillemer, 2002).

There are an estimated 16,100 certified NHs (National NH Survey [NNHS], 2004) and an estimated 38,000 AL residences (Mollica, Sims-Kastelein, & O'Keeffe, 2007). AL is a general term often used to represent several types of settings; here we mean facilities that provide residents with support for basic activities of daily living (ADLs) and instrumental activities of daily living (IADLs), which is a commonly used definitional criterion of AL (Hawes & Phillips, 2007). On a daily basis, NHs provide care and treatment for about 1.5 million chronically ill and disabled elders (NNHS, 2004) and AL to approximately 1 million residents (Mollica, Sims-Kastelein, & O'Keeffe, 2007).

National Research Council Report

In 2003, The National Research Council issued a report summarizing the state of scientific knowledge in the area of elder abuse (Bonnie & Wallace, 2003), and the same approach is followed in our review. Of note, The National Research Council identified only "a modest body of knowledge" (Bonnie & Wallace, 2003, p. 2) in this area. The synthesis presented here represents an update to the literature presented in this report and covers primarily the years 2003 through 2012.

The 2003 National Research Council report examined elder abuse in general, and did not focus solely on residential long-term care (Bonnie & Wallace, 2003). That report identified issues regarding definitions of abuse, the conceptual and theoretical models, prevalence estimates, and outcomes and costs of abuse. These major emphasis areas are used in this synthesis but specifically as applied to residential long-term care. The 2003 National Research Council report also presented a summary chapter addressing abuse in residential long-term care, and concluded with a recommended research agenda based on the findings. Here a summary addressing sources of abuse in residential long-term care is provided, and further areas of research are also recommended.

Review Methods

We searched the MEDLINE and Cumulative Index for Nursing and Allied Health Literature (CINAHL) databases from 2003 to 2012. This time period was chosen because it covers the years following the National Research Council report cited above, and represents contemporary thinking/evidence on resident abuse in residential long-term care.

These searches were conducted with a combination of the key words: “abuse, mistreatment, maltreatment, neglect, elderly, seniors,” and was limited to nursing homes/nursing facilities and AL and English language publications. A further technique used to identify articles to review was “snowballing” (also known as cross-checking citations). Publications from government reports were included because of substantial interest in the area of elder abuse by government agencies.

Based on the areas of interest presented above the search identified: defining abuse ($n = 38$), theories and conceptual models addressing abuse ($n = 7$), prevalence rates of abuse ($n = 13$), and outcomes and costs of abuse ($N = 10$). In addition, studies focused on resident abuse by staff ($n = 10$) and resident-to-resident abuse ($n = 10$). Each of these areas is discussed below. Not discussed here is family to resident abuse or resident to staff aggression, two less studied forms of abuse. First presented are findings relevant to definitions, theories and conceptual models of abuse, prevalence estimates, outcomes and sources (types) of abuse. Tables provide details of the literature summarized. The Discussion section focuses on a summary and identification of gaps in the areas of definitional clarity and conceptual models; methods and challenges in prevalence estimation; and, methodological and measurement approaches for studying different types of abuse. Finally, policy and practice implications are presented.

Definitions of Abuse

A very broad definition of elder abuse provided by the American Medical Association (AMA) is: “an act of commission or omission that results in harm or threatened harm to the health or welfare of an older adult” (AMA, 1990, Stiles, Koren, & Walsh, 2002, p. 34). This definition is often cited (e.g., Castle, 2012a); however, as shown in Table 1, numerous other definitions exist in the literature. Few common factors appear in these definitions (see Table 1).

There is no consistent federal definition of elder abuse. The Code of Federal Regulations (2010) that applies to NHs states that, “The resident has the right to be free from verbal, sexual, physical, and mental abuse, corporal punishment, and involuntary seclusion” (Section 483.13). Little consensus appears to exist regarding the federal definition of elder abuse. Likewise,

Table 1. Definitions of Elder Abuse.

Author	Definition
Action on Elder Abuse (1992)	"Elder abuse is a single or repeated act or lack of appropriate action occurring within any relationship where there is an expectation of trust, which causes harm or distress to an older person."
Action on Elder Abuse (2012)	"A single or repeated act or lack of appropriate action, occurring within any relationship where there is an expectation of trust, which causes harm or distress to an older person."
The American Medical Association (1993)	"Abuse shall mean an act or omission which results in harm or threatened harm to the health or welfare of an elderly person. Abuse includes intentional infliction of physical or mental injury; sexual abuse; or withholding of necessary food, clothing, and medical care to meet the physical and mental health needs of an elderly person by one having the care, custody or responsibility of an elderly person."
Amstadter et al. (2011, p. 2948)	"Intentional harm inflicted on an elder or failure to protect the elder from harm or meet the elder's basic needs (National Research Council)."
Administration on Aging (AoA; 2010)	"Any knowing, intentional, or negligent act by a caregiver or any other person that causes harm or a serious risk of harm to a vulnerable adult."
AoA National Center on Elder Abuse (www.ncea.aoa.gov)	"Domestic elder abuse generally refers to any of several forms of maltreatment of an older person by someone who has a special relationship with the elder (a spouse, a sibling, a child, a friend, or a caregiver), that occur in the elder's home, or in the home of a caregiver."
AoA National Center on Elder Abuse (www.ncea.aoa.gov)	"Institutional abuse, on the other hand, generally refers to any of the above-mentioned forms of abuse that occur in residential facilities for older persons (e.g., NHs, foster homes, group homes, board and care facilities). Perpetrators of institutional abuse usually are persons who have a legal or contractual obligation to provide elder victims with care and protection (e.g., paid caregivers, staff, and professionals)."
Anthony, Lehning, Austin, & Peck, (2009) \	(Elder mistreatment) "(a) intentional actions that cause harm or create a serious risk of harm (whether or not the harm was intended) to a vulnerable elder by a caregiver or other person who stands in a trust relationship to the elder or (b) failure by a caregiver to satisfy the elder's basic needs or to protect the elder from harm."

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Table 1. (continued)

Author	Definition
British Geriatrics Society (Harris, 1988, p. 813)	"Misuse of power resulting in a reduction of the quality of an elderly person's life."
Burnight, & Mosqueda (2011, p. 4)	"Intentional actions that cause harm (whether or not harm was intended) or create a serious risk of harm to an older adult by a caregiver or other person who stands in a trust relationship to the elder, or failure by a caregiver to satisfy the elder's basic needs or to protect the elder from harm."
California State Panel Code (n.d.)	"(a) Physical abuse, neglect, financial abuse, abandonment, isolation, abduction, or other treatment with resulting physical harm or pain or mental suffering. (b) The deprivation by a care custodian of goods and services which are necessary to avoid physical harm or mental suffering."
Collins (2006, p. 1290)	"(Elder maltreatment) An act or omission that results in harm or threatened harm to the health or welfare of an elderly person (AMA)."
Daly et al. (2011)	"Elder mistreatment refers to (a) intentional actions that cause harm or create a serious risk of harm (whether or not harm is intended) to a vulnerable elder by a caregiver or other person who stands in a trust relationship to the elder or (b) failure by a caregiver to satisfy the elder's basic needs or to protect the elder from harm. (National Research Council)"
Families Commission New Zealand (Peri et al., 2008, p. 13)	"Elder abuse and neglect is usually committed by a person known to the victim with whom they have a relationship implying trust. A person who abuses an older person usually has some sort of control or influence over him/her. Family members, friends staff in residential facilities or anyone the older person relies on for basic needs, may be abusers."
Fulmer (2002, Chapter 13, p. 370)	"Elder mistreatment refers to serious, potentially fatal events or circumstances that occur with older adults and that are caused by others in the elder's environment."
Gorbein, & Eisenstein (2005, p. 280)	"Willful infliction of injury, unreasonable confinement, intimidation, or cruel punishment with resulting physical harm or pain or mental anguish, or the willful deprivation by a caretaker of good or services which are necessary to avoid physical harm, mental anguish or mental illness." (1985 Elder Abuse Prevention, Identification and Treatment Act)

(continued)

Table 1. (continued)

Author	Definition
HELPGUIDE.org	"Harmed in some substantial way often by people who are directly responsible for their care."
Hildreth, et al. (2011, p. 568)	"Elder abuse refers to the mistreatment of an older adult that threatens his or her health or safety."
Hudson (1989, p. 16)	"Destructive behavior through the use of physical or psychological force with improper or indecent use of an elder's person or property resulting in harmful physical, psychological, economic, and/or social effects and unnecessary suffering in the elder."
Jayawardena and Liao (2006) (AMA, 1987)	"Acts of commission or omission that result in harm or threatened harm to the health or welfare of an older adult . . . Mistreatment of the elderly person may include physical, psychological, or financial abuse or neglect, and it may be intentional or unintentional."
Johns et al. (1991, p. 55-56)	"Abuse is a social act involving at least two persons, one of whom is violating the boundaries of the other. The role of the witness is crucial in violent events. Actions are violent if they are judged by someone to be illegitimate."
Kurrie (2004)	"Any pattern of behavior which causes physical, psychological, financial, or social harm to an older person (pg. 807)."
Levenberg et al. (1983, p. 67)	"An intentional overt act which entails harm, or threatens harm, or curtailment of physical activities, or emotional battering (mental cruelty) directed at a person over 60 years and a noninstitutionalized person."
Lowenstein (2009, pg. 258-259)	"Destructive and offensive behavior inflicted on an elder person within the context of a trusting relationship. This behavior occurs consistently and with such severity and frequency that it produces physical and psychological pain, social or financial harm to the older person's quality of life."
MedicineNet.com	"The physical, sexual, or emotional abuse of an elderly person, usually one who is disabled or frail."
National Academy of Sciences. (Bonnie & Wallace, 2002)	"Elder abuse has been described as intentional actions that cause harm or risk of harm or as a caregiver's failure to satisfy the elder's basic needs and safe living conditions."
National Clearinghouse on Abuse in Later Life (NCALL) (ND)	"Elder abuse is considered physical, sexual, or psychological abuse, as well as neglect, abandonment, and financial exploitation of an older person by another person or entity. Elder abuse can occur in any setting and can occur either in a relationship where there is an expectation of trust and/or when an older person is targeted based on age or disability."

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Table 1. (continued)

Author	Definition
National Library of Medicine (NLM) (www.definitions.net)	"Emotional, nutritional, or physical maltreatment of the older person generally by family members or by institutional personnel."
O'Malley et al. (1979, p. 2)	"The willful infliction of physical pain, injury, or debilitating mental anguish, unreasonable confinement or deprivation by a caretaker of services which are necessary to maintain physical health."
Ogioni et al. (2007, p 71)	"A single or repeated act or lack of appropriate action, occurring within any relationship where there is an expectation of trust, which causes harm or distress to an older person (WHO)."
O'Malley et al. (1983, p. 1000)	"Active intervention by a caretaker such that unmet needs are created or sustained with resultant physical, psychological, or financial injury."
Phillips (1983, p. 382)	"The degree to which the elderly individual was perceived by an outside evaluator to be subjected to maltreatment by his related caregiver."
Pillemer et al. (2011)	"Negative and aggressive physical, sexual, or verbal interactions that in a community setting would likely be construed as unwelcome and have high potential to cause physical or psychological distress in the recipient."
Pritchard (2007, p. 113)	"Abuse may be described as physical, sexual, psychological, or financial. It may be intentional or unintentional or the result of neglect. It causes harm to the older person, either temporarily or over a period of time."
Pritchard (2007, p. 113)	"Abuse may consist of a single act or repeated acts. It may be physical, verbal, psychological, it may be an act of neglect or an omission to act, or it may occur when a vulnerable person is persuaded to enter into a financial or sexual transaction to which her or she has not consented, or cannot consent."
Queen Sofia Center (2008)	"Elder abuse is any voluntary—that is, nonaccidental—act that harms or may harm an elderly person, or any omission that deprives an elderly person of the care they need for their well-being, as well as any violations of their rights. To be classified as elder abuse, such actors or omissions must take place within the framework of an interpersonal relationship in which one expects trust, care, confidence ('living together') or dependency. The perpetrator can be a family member, staff from an institution, "a hired caregiver, a neighbor, or friend."

(continued)

Table 1. (continued)

Author	Definition
Stanford School of Medicine (2011)	"Elder abuse refers to an act or omission that results in harm or potential harm to the health or welfare of a person age 65 or older."
United Kingdom Department of Health (2004, p. 7)	"A violation of an individual's human and civil rights by any other person or persons."
Sturdy and Heath (2007, p. 20)	"A violation of an individual's human and civil rights' and it can take place in any context (DH, 2000)."
Teaster, Lawrence, Cecil (2007, p. 116)	"(Elder mistreatment) Intentional and unintentional acts of harm by a trusted other."
Tracy and Skillings (2007, p. 304)	"Elder mistreatment ranges from omission of care and attention (neglect) to the actual commission of acts that result in harm or threatened harm (abuse)."
Wagenaar, et al. (2010, p. 703)	"Elder abuse is comprehensive and may refer to abuse, neglect, exploitation, or abandonment of an older adult by someone who is not identified as a stranger."
World Health Organization (McAlpine, 2008, p. 132)	"A single, or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust which causes harm or distress to an older person."

state legislators also have varying definitions of abuse. Many of these are listed in Bonnie and Wallace (2003, Appendix B).

There are several categories (or types) of abuse. For example, The National Center on Elder Abuse has promoted seven abuse categories. These are: (a) Physical Abuse; (b) Financial or Material Exploitation; (c) Sexual Abuse; (d) Neglect; (e) Emotional or Psychological Abuse (including verbal assaults); (f) Abandonment; and, (g) Self-Neglect (www.ncea.aoa.org). However, authors use varying categories of abuse and differ in how they define these categories. For example, some authors have stated that elder abuse excludes self-neglect (Bonnie & Wallace, 2003), while others include self-neglect (Hildreth, Burke, & Golub, 2011). For parsimony, definitions used in the literature for the categories of abuse are not provided. It is noted however that some of these typologies may not capture adequately the nosology of abuse in residential long-term care settings. For example, verbal assaults may be an important and prevalent type of abuse not captured well under the rubric of Emotional or Psychological Abuse.

A further issue with varying definitions of abuse is that terms other than "abuse" can be and are used. Publications vary on their use of the terms, with many using maltreatment, mistreatment, and neglect as synonyms for abuse

and others using the terms in more specific ways. In this synthesis, for simplicity, we use the term *abuse* to represent all of these labels.

Theories and Conceptual Models

Many theories and conceptual models exist in the literature, and variously attempt to delineate abusers, the abused, context, and outcomes. Several of these were reviewed by others (e.g., Perel-Levin, 2008) and many are also presented in Table 2. There can be a number of abusers (i.e., family members, other residents, nurse aides) who inflict harm on the elderly (the abused) in the NH/AL (context), which can cause increased isolation, sense of fear, morbidity, and mortality (possible outcomes).

As noted by Gorbien and Eisenstein (2005), caregiver stress theories have been popular in explaining abuse. Caregiver stress is defined as “the emotional and physical strain of caregiving” (Department of Health and Human Services [DHS], 2008, p. 1). In NHs and AL, nurse aides and Direct Care Workers (DCWs) provide the most “hands-on” care for residents. Nurse aides/DCWs typically account for the largest group of staff members in residential facilities; therefore, it is believed (but not necessarily proven) that they are more likely to be involved in conflict situations. For example, one early study (Ramirez, Teresi, Holmes, & Fairchild, 1998) showed that staff-resident conflict reflecting racial bias was a stressor significantly related to burnout and to demoralization among nurse aides/DCWs.

A number of factors can contribute to caregiver stress, including: decreased satisfaction, long hours, low pay, physical demands, staff shortages (increased workload), and minimal education and training (Baker & Heitkemper, 2005; Shinan-Altman & Cohen, 2009). The increased number of stressors, combined with burnout and decreased job satisfaction for nurse aides/DCWs and other caregivers may lead to elder abuse, especially when dealing with residents with behavior problems or decreased physical functionality. Nursing staff may be the recipients of abuse from residents (Lachs et al., 2012; Zeller et al., 2009), thus increasing stress and creating the potential for retaliation. Furthermore, the inadequate hiring and screening protocols and lack of administrative supervision can contribute to the risk factors for elder abuse (Baker & Heitkemper, 2005).

Prevalence Estimates of Abuse

Community Settings

In a population-based survey of community resident elderly in the United States, Pillemer and Finkelhor (1988) using three domains of elder abuse

Table 2. Conceptual and Theoretical Models Used in Elder Abuse.

Author	Theory	Definition/Example/Assumption(s)
Austin, Anthony, Lehning, & Peck (2007)	The Web of Dependency	"Caretaker is dependent on the elder for housing and money; elder is dependent on caregiver for daily activities due to poor health."
	Psychopathology in the Abuser	"Alcohol or drug abuse by the abuser and/or mental illness among family members are risk factors for abuse."
	Transgenerational Violence	"Children who are victims of abuse or witness abuse between their parents are more likely to become perpetrators of violence when they reach adulthood."
	Caregiver Stress	"Increasing care needs (or problematic behavior) combined with the caregiver feeling forced to care for unwanted elder or external stress for caregiver contribute to abuse."
	Caregiving Context	"Factors such as social isolation, shared living arrangement, lack of close family ties, and lack of community support or access to resources contribute to abuse."
	Sociocultural Climate	"Factors such as inadequate housing, recent relocation, and adaptation to American culture, loss of support systems, and the decline of stature within the family create a climate that supports abuse."
Baker (2007)	Risk-and-Vulnerability Conceptual Framework	"Risk refers to characteristics of the caregiver that contribute to elder mistreatment, whereas vulnerability refers to contributing victim characteristics including health and illness factors (p. 314)." (Diagram, p. 315)
Burnight and Mosqueda (2011)	Caregiver Stress Theory	"Elder mistreatment occurs when an adult family member caring for an impaired older adult is not able to manage his or her caregiving responsibilities. The elderly victim is viewed

(continued)

Table 2. (continued)

Author	Theory	Definition/Example/Assumption(s)
		as dependent on the caregiver who becomes overwhelmed, frustrated, and abusive because of the continuous caretaking needs of the infirm care recipient."
	Social Learning Theory (Cycle of Violence Theory; Social Learning Theory; and Intergenerational Transmission of Violence Theory)	"Violence is a learned behavior passed on through the generations."
	Social Exchange Theory	"Interactions between people as a process of negotiated exchanges."
	Dyadic Discord Theory	"Relationship discord and behaviors are the central constructs in family violence."
	Power and Control Theory	"The abuser's use of a pattern of coercive tactics to gain and maintain power and control in the relationship."
	Ecological Theory	"Promotes the inclusion of variables from both the victim and perpetrator." "Tries to capture a number of potential causes and organize them into groups."
Hurme (AARP) 2002	Lack of Knowledge Dependency	"Neglect reaction." "Abusers may ill-treat the elder as a compensation for their lack of power."
	Abuser Impairment	"The abusers have disabling conditions such as addictions to alcohol or other drugs, a sociopathic personality, grave psychiatric disturbances, dementia, mental retardation, or an inability to make appropriate judgments regarding the care of a dependent older person."

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Table 2. (continued)

Author	Theory	Definition/Example/Assumption(s)
Perel-Levin (2008)	Societal Attitudes	For example ageism, sexism, and greed
	Situational Theory	"An overburdened and stressed caregiver creates an environment for abuse."
	Exchange Theory	"Addresses reciprocity and dependence between the abused and the perpetrator. It suggests that abuse can occur within a framework of tactics and responses in family life."
	Intra-Individuals Dynamics (Psychopathology) Theory	"A correlation between a mentally or emotionally disturbed abuser and abuse."
	Intergenerational Transmission or Social Learning Theory	"An adult's behavior relates to learned behavior as a child, thus reverting to the same pattern in adulthood."
	Feminist Theory	"Domestic violence models, highlighting the imbalance of power within relationships and how men use violence as a way to demonstrate power."
Thomson et al. (2011)	Political Economic Theories	"Structural forces and the marginalization of elders within society have created conditions that lead to conflict and violence."
	Socioeconomic Model	Risk factors for elder abuse and neglect (Diagram, p. 272).

(i.e., physical abuse, psychological abuse, and neglect) identified an overall prevalence rate of 3.2%. More recently, Beach and associates (2010) found rates of financial exploitation and psychological mistreatment to be 9.7% and 14.2%, respectively.

Long-Term Care Settings

Relatively few estimates of rates of abuse exist in residential long-term care settings. Page and colleagues (2009) examined elder abuse in different care settings using a telephone survey of relatives of persons in long-term care ($n = 718$) and found that NHs had the highest rate of abuse (all types) when

compared to home care and AL settings. This study was conducted with a limited sample of Michigan residents (Page et al., 2009). In NHs, neglect (9.8%) and caretaking abuse (17.4%) were the most common; whereas in AL emotional abuse (10.0%) and neglect (9.8%) were the most common (Page et al., 2009).

Among the few studies of AL, one examined facility characteristics in relation to substantiated mistreatment and abuse, based on complaints to the Arizona Department of Health (Phillips & Guo, 2011). This study found that substantiated physical abuse was more likely in larger facilities, and psychological abuse and neglect were more likely in smaller facilities. Complaints were also related to type of facility and care provided.

Deficiency citation data provide some evidence regarding the extent of elder abuse in nursing homes. For example, a special investigation by the U.S. House of Representatives identified abuse of residents by staff to be “a major problem in U.S. NHs” (Minority Staff Special Investigations Division, 2001, p. 15). This report used data from certification inspections during 1999 and 2000 (i.e., deficiency citations). It was found that in 10% of all NHs, abuse had caused actual harm to at least one resident under the care and protection of the facility. This Minority Staff Special Investigations Division (2001) report was recently updated by Castle (2011a). Abuse deficiency citation rates were found to be relatively stable (from 2000 to 2007), with approximately 20% of facilities per year receiving any one of these citations.

Castle (2012) examined the opinions of nurse aides ($N = 4,451$) regarding observations of staff abuse of residents. Nurse aide responses to the verbal abuse and psychological abuse items were higher than for the other categories of abuse examined. For example, 36% of nurse aides observed argumentative behavior with residents and 28% intimidation. Prevalence rates were estimated and extrapolated to 792,000 NH residents potentially experiencing verbal abuse (i.e., yelling) from staff and 648,000 potentially experiencing psychological abuse (i.e., intimidation). Although these estimates are based on reports that cannot be verified, to the extent that nurse aides are the most likely witnesses of other staff abusing residents, they may be the best source for reporting abuse.

Very little information exists on abuse in AL; however, several anecdotal sources, observational studies, and incident reports indicated that elder abuse may be an issue of concern in these settings. Hawes (2002) reported to Congress that her data showed that 15% of staff had reported witnessing verbal abuse of residents by staff in AL. States have reported abuse statistics coming from licensing inspections. For example, in 2009 Pennsylvania reported that 8% (i.e., 116) of 1,441 complaints received and 6% (i.e., 1,231)

of 20,550 incident reports were for resident abuse in AL (PA Department of Public Welfare, 2010).

Descriptive information on elder abuse reported by nurse aides ($N = 855$) working in AL was recently presented (Castle, 2012a). In the verbal abuse from staff category, 59% of nurse aides observed or had evidence of staff cursing at residents and in the physical abuse by staff category, 52% suspected other staff of pulling the hair of residents.

Outcomes and Costs of Abuse

There has been little research conducted to examine the outcomes of abuse of elders in residential long-term care. For these residents it has been proposed that consequences of abuse can be drastic (e.g., decreased cognitive function, decreased physical health, and aggression) because those living in these settings are typically the most frail and chronically ill seniors (Lindbloom et al., 2007). Furthermore, Lindbloom and colleagues found that there are a number of problems and outcomes associated with abuse in NHs (2007). Problems were found to include substandard staffing levels, deficient supervision, inappropriate food options (i.e., ethnic options), and lack of help with solid foods. Outcomes included dehydration, undernourishment, pressure sores, and increased mortality rates. Elder abuse can also be linked with inadequate management of chronic diseases and functional disability (Rodriguez et al., 2006). Medical problems present themselves in abuse victims such as gynecological and gastrointestinal ailments, headaches, depression, anxiety, and increased dementia (Schofield & Mishra, 2004).

Sources of Abuse in Residential Long-Term Care

Abuse by Staff

The study by Pillemer and Moore (1989) noted above, is often recognized as the first to have empirically examined abuse in U.S. NHs. Subsequent studies of NH abuse have appeared in the peer reviewed literature, and seven such studies addressing NH abuse were the subject of a recent review (Lindbloom et al., 2007). Lindbloom and colleagues noted that studies of elder abuse only began gaining momentum in 1987; they found that 324 citations from 1980 to 2005 that included elder abuse, mistreatment, maltreatment, assault, violence, and/or neglect in NHs, intermediate care facilities, and/or skilled nursing facilities. Many of these were case studies that focused on physical abuse by staff and other residents, sexual abuse, psychological abuse, and neglect. Moreover, Lindbloom and colleagues reported four peer-reviewed studies

specific to residential care since 2003 (Allen, Kellett, & Gruman, 2003; Burgess & Hanrahan, 2004; Lindbloom et al., 2005; Teaster & Roberto, 2003). Given this recent review, the findings of these studies are not presented in detail here.

Since this prior review, we identified 10 additional studies that examined staff abuse in residential care settings (see Table 3a). Most of the studies questioned staff and relatives of residents in NHs. Research varied in the outcomes studied and their results. Some research examined all types of abuse (Post et al., 2010), while others focused on one type of abuse (i.e., physical; Schiamberg et al., 2012). Other research focused on the causes of abuse (i.e., work stressors and burnout; Cohen & Shinan-Altman, 2011). Some studies also examined staff knowledge of abuse and training (Daly & Coffey, 2010). No empirical studies were identified examining abuse in AL.

Resident-to-Resident Abuse

Resident-to-resident abuse is defined as abuse of one resident in the NH by another resident (Lachs et al., 2005). However, as noted with other forms of abuse, several synonyms exist in this area, including resident-to-resident aggression (RRA), resident-to-resident violence (RRV), and resident-to-resident mistreatment (RREM). This is a relatively new area of NH abuse research, with studies appearing in press within the past 10 years (e.g., Lachs et al., 2005). Some research suggests that about 4.8% of residents experienced physical abuse resulting in police investigations (Lachs et al., 2007). Findings such as these would indicate that resident-to-resident abuse may be the most highly prevalent form of abuse in residential care. Lachs and associates (2007) previously reviewed many of these studies; therefore, they are not described in detail here (e.g., Shinoda-Tagawa, Leonard, & Pontikas, 2004). These studies are listed in Table 3b.

Rosen and colleagues (2008) examined RRA by conducting focus groups ($n = 16$) of NH residents and staff members (both clinical and nonclinical; $n = 7$ residents and 96 staff members). These researchers found that the focus groups identified 35 different types of abuse (physical, verbal, and sexual). The RRA characteristics that were most prevalent were calling out and making noises (i.e., verbal aggression).

Pillemer and associates (2011) utilized event reconstruction to define the different forms of RRA that took place in NHs. Researchers identified RRA events over a 2-week period in New York City NHs units ($n = 53$). Information from residents, staff, and other involved were taken to create narrative reconstructions ($n = 122$) of the RRA events; common features were then

Table 3A. Staff to Resident Abuse.

Author	Sample size	Methods	Results
Schiamberg et al. (2012)	<i>N</i> = 452 adults relatives of elders (\geq 65 years old) residing in a NH	Random digit dial telephone survey	<ol style="list-style-type: none"> 1. 24.3% reported at minimum one physical abuse incident by NH staff. 2. Risk factors for abuse include: limitations in ADLs; behavior problems; and previous abuse by nonstaff.
Conner et al. (2011)	<i>N</i> = 769 responsible adults for a person 65 or older in long-term care in Michigan	Random digital dial survey	<ol style="list-style-type: none"> 1. Physical impairment is related to susceptibility to abuse. 2. Behavior problems are related to susceptibility. 3. Cognitive impairment is related to susceptibility only if the cognitive impairment causes behavior problems.
Cohen and Shinan-Altman (2011)	<i>N</i> = 188 Nurse Aides at 18 NHs	Questionnaire	<ol style="list-style-type: none"> 1. Nurse aides were found to more likely condone abuse if they were new immigrants, unmarried, and had higher work stressors. Burnout was also correlated with a higher rate of condoning abuse.
Natan, Lowenstein, and Eisikovits (2010)	<i>N</i> = 510 staff; 22 directors (22 NHs)	Correlational quantitative method; Questionnaire	<ol style="list-style-type: none"> 1. 513 accounts of maltreatment reported (~2/3 neglect). 2. 70% participants reported being present at time of abuse (mostly mental abuse and mental neglect)
Daly and Coffey (2010)	<i>N</i> = 66 Nurses; 48 Care Assistants; 3 LTC Facilities	Quantitative descriptive correlational design; Questionnaire	<ol style="list-style-type: none"> 1. 59% of nurses and 52% of care assistants were confident about recognizing elder abuse. 2. Elevated level of uncertainty of what elder abuse entails.

(continued)

Table 3A. (continued)

Author	Sample size	Methods	Results
Post et al. (2010)	<i>N</i> = 816	Random-digit-dial survey (Occurrence rates and conditional occurrence rates for physical, caretaking, verbal, emotional, neglect, and material abuse.	1. 14.1% of LTC recipients encountered one type of abuse, 29.1% encountered one or more types of abuse, and 15% encountered two or more types of abuse.
McCool et al. (2009)	<i>N</i> (Questionnaire) = 49(15%); <i>N</i> (Interview) = 22 (7%); 2 NHs	Questionnaire (28 items); In-person interview (11 open-ended questions)	1. 53% suspected abuse; 35% had not reported the suspicion. 2. The interview found four themes: a) Need for more education/training; b) Difficult to determine if an action needs reported; c) Reporting barriers; & d) Some abuse may occur because of overworked staff.
Shinan-Altman and Cohen (2009)	<i>N</i> = 208 NAs in 18 NHs	Demographic, work stressors, burnout and perceived control questionnaires; Case vignette questionnaire	1. Condoning abusive behaviors was 3.24 (1-4 scale) and associated with high levels of work stressors, burnout, and lower income.
Griffore et al. (2009)	<i>N</i> = 452 (Adults in Michigan with a relative, 65 or older, living in a NH)	Random digit dialing phone interview	1. The number of cases of abuse reported by family members (<i>N</i> = 350) was significantly higher than the data reported to ombudsmen (<i>N</i> = 30).
Ramsey-Klawnsnik et al. (2008)	<i>N</i> = 124 cases of alleged sexual abuse of adults in care facilities	File reviews of random cases was completed in five states (NH, OR, TN, TX, & WI) over	1. Researchers found 119 alleged sexual perpetrators in the reports, with an average age of 57. 60% were White and

(continued)

Table 3A. (continued)

Author	Sample size	Methods	Results
		a six-month period using the Sexual Abuse Survey (SASU).	23% were Black; while 78.4% were male. 2. The largest group of the alleged perpetrators were facility employees ($n = 51$, 43%), with 46 being direct care workers. 3. There were 33 confirmed cases, 25 of which were in a NH.
Lindbloom et al. (2007)	$N = 324$ citations (1980-2005)	Literature Review	

Table 3B. Resident to Resident Abuse (RRA).

Author	Sample size	Methods	Results
Sifford-Snellgrove et al. (2012)	$N = 11$ Certified Nursing Assistants (CNAs)	Qualitative study Interviews with CNAs.	1. Initiators of resident-to-resident violence (RRV) are "more with it and have strong personalities, a short fuse, and life history" that makes them more likely to impose harm on fellow residents. 2. Victims of RRV are not as cognitively aware, are unable to communicate, and do not get around as well.
Castle (2012a)	$N = 4,451$ Nurse Aides	Qualitative study	1. All NHs were found to experience verbal and physical abuse. The severity of events did vary. 2. Abuse that was reported, but less common than above was psychological abuse, material exploitation, & sexual abuse.
Pillemer et al. (2011)	$N = 53$ (New York City NH units) $N = 122$ RRA events	Qualitative event reconstruction	1. Researchers evaluated 122 events and found 13 key forms of RRA, of which they sorted into five themes.

(continued)

Table 3B. (continued)

Author	Sample size	Methods	Results
Rosen, Lachs, and Pillemer (2010)	N/A	Literature review	1. More research is needed surrounding resident-to-resident sexual aggression (RRSA) to better understand the issues and help improve knowledge and prevention.
Rosen et al. (2008)	N = 7 residents and 96 staff members	Focus group study and self report	1. 35 resident-to-resident aggression (RRA) types were described. 2. RRA was found to be most common in the dining room and in residents' rooms. 3. RRA seemed to occur mostly in the afternoon.
Rosen, Pillemer, and Lachs (2008)	N/A	Literature review	1. There is a need for formulating and designing interventions. 2. There are many needs for more in-depth research.
Lachs et al. (2007)	N = 747 older adults placed in NHs (42 were involved in incidents).	Qualitative and quantitative study	1. Police were contacted to investigate 79 incidences. 2. Most reports were for simple assault. 3. Violent episodes were more likely in the NHs than in community-dwellings.
Lachs et al. (2005)	N = 2,321 elders	Observational study	1. 214 police records included these elders. 2. 42 events occurred in NHs and were primarily resident-to-resident incidents. 3. 41 events were considered assault and one event was considered a robbery.
Allen, Kellett, & Gruman (2005)	N = 261 NHs	Retrospective case record review	1. 47% of NHs had one or more reports of abuse. 2. 5.2% (N = 14) of those reports were resident-to-resident abuse reports.

(continued)

Table 3B. (continued)

Author	Sample size	Methods	Results
Shinoda-Tagawa et al. (2004)	N = 294 serious injuries N = 1,994 controls N = 101,429 (Residents with a MDS completed)	Case Control study (Massachusetts Department of Public Health's Complaint and Incident Reporting System and MDS)	<ol style="list-style-type: none"> 1. Residents who were injured were more probable to be cognitively impaired, wanderers, exhibit socially inappropriate behaviors, and verbally abusive. 2. The most dependent residents were less likely injured. 3. Residents living in an Alzheimer unit were approximately three times as likely to suffer an injury.

identified. They discovered five themes (1. Invasion of privacy or personal integrity; 2. Roommate problems; 3. Hostile interpersonal interactions; 4. Unprovoked actions; and, 5. Inappropriate sexual behavior). The authors included 13 different forms of RRA (e.g., invasion of privacy, roommate disagreements, teasing, etc.).

Castle (2012a) examined resident-to-resident abuse as reported by nurse aides ($N = 4,451$) working in NHs. Overall, 97% of all nurse aides observed residents yelling at each other in the prior 3 months. For the physical abuse category, overall, 94% of nurse aides observed residents pushing, grabbing, or pinching each other in the prior 3 months.

Sifford-Snellgrove and colleagues (2012) examined 11 nurse aides' opinions of what resident characteristics led to RRV. The researchers examined characteristics of both the initiators ("Those who were physically, verbally, or emotionally abusive to other residents [p. 59].") and victims of RRV. The nurse aides described the initiators of RRV "to be more with it," "have strong personalities, a short fuse, and life history" (p. 59). Victims of RRV were found to be able to get around, have difficulties communicating, and have impaired cognition (i.e., dementia or difficulties remembering).

Information on resident-to-resident abuse in AL came from a study of nurse aides ($N = 832$) in Pennsylvania (Castle, 2012b). Using a time frame of the past 3 months, 16% of nurse aides reported observing one resident throwing something at another resident (physical abuse) and 35% reported insulting remarks between residents (verbal abuse). Resident-to-resident abuse was common enough to be considered an issue of concern impacting the quality of life and safety of many residents (Castle, 2012a).

Discussion

Recently Mickey Rooney, in testimony to the Senate Special Committee on Ageing, stated that he was abused (verbally, emotionally, and financially) by family members (ABC News, 2011). The goal of the senate hearing (Justice for All: Ending Elder Abuse, Neglect, and Financial Exploitation) was to draw attention to elder abuse; however, the senate hearing also highlighted the need for more scientific knowledge in this area. In the synthesis presented here, the last decade of literature on elder abuse in residential long-term care is reviewed and areas where more scientific knowledge would be beneficial are further highlighted.

Definitions of Abuse

As stated in a report on elder abuse sponsored by the National Research Council, “Definitions have differed so widely from study to study” (Bonnie & Wallace, 2003, p. 19). Our review lends confirmation to the lack of definitional clarity related to elder abuse, mistreatment, neglect, and exploitation. On the one hand, varying definitions make “the results of research almost impossible to compare (Bonnie & Wallace, 2003, p. 19).” On the other hand, this may be inevitable to the extent that long-term care and community settings are quite different. As a behavior, abuse has varying implications for institutional, legal, and cultural frameworks; with varying thresholds of tolerance and remedies. Defining and investigating abuse in what could be considered less important areas may actually be very important in residential long-term care. Some cases of abuse represented very small incursions by staff (e.g., taking food). Nevertheless, small incursions, negative remarks, and slight pushes can all contribute to an abusive environment for some residents. Similar to bullying in the school yard, abuse can be incremental and chronic—leading to adverse consequences. With limited freedoms and few possessions, small incursions can be of consequence, and have a cumulative effect on outcomes such as quality of life. Therefore, the components of abuse (such as bullying) may be important. In the context of resident-to-resident abuse, cognitive impairment and intention need to be considered. Although physical actions that result in harm to another typically connote abuse, intent and capacity are additional factors requiring consideration in formulating definitions and adjudicating possible cases of abuse.

We also note that definitions of elder abuse also vary across countries to reflect and include “cultural, ethnic, and religious variability in norms and traditions” (Lowenstein, Eisikovits, Band-Winterstein, & Enosh, 2009, p. 282). This further complicates literature reviews, research, and efforts to

identify rates of abuse. More qualitative research is needed to understand the meaning and interpretation of terms that are used to measure and define abuse. One such effort by the U.S. National Institute of Justice (NIJ) is using concept mapping (Conrad et al., 2011) to obtain a wide sampling of abuse concepts from leaders in the field. Concept mapping uses the results of cluster and factor analyses to present visual representations showing how different ideas are related to each other (Trochim, 1989). Similar items representing ways of describing a concept can cluster together, in this case giving more information on the meaning and interpretation of abuse (Conrad, Iris, & Ridings, 2011).

Theories and Conceptual Models

Caregiver stress theories and conceptual models are often used in explaining abuse. However, these theories tend to be simplistic and “one-dimensional” (Gorbien & Eisenstein, 2005, p. 283). In residential long-term care settings theories and conceptual models of abuse are needed that expand to include characteristics of the caregiver, institution, and elder. Shinan-Altma and Cohen (2009), for example, conducted a study that examined the attitudes about elder abuse and acceptance among 208 nurse aides from 18 different NHs in Israel. The study examined a number of factors including demographics, work stressors, burnout, and attitudes. Characteristics of the caregiver included emotional exhaustion and depersonalization; characteristics of the elder included behavioral problems and vulnerability; and, characteristics of an institution included unskilled staff, lack of organization, and substandard staffing levels.

In a further example using U.S. NHs, Castle (2011a) used an organizational-based conceptual framework. This was used because the NH was the unit of analysis, with the number of deficiency citations for abuse per facility examined. Internal, organizational, and external factors associated with these deficiency citations for abuse were examined.

Expanding theories and conceptual models for residential long-term care settings is important. Specification of potential mediating and moderating factors included in these theories and conceptual models may better inform training interventions and prevention strategies.

Prevalence Rates of Abuse

Reports based on population studies show that 1 to 2 million elders (65 and older) are affected by abuse (Thomson et al., 2011). This is potentially a large underestimate; it has been estimated that for every reported case of abuse,

there are five cases of abuse that remain unreported (Bonnie & Wallace, 2003). The same is likely true for abuse in residential long-term care. Elders themselves will often not report abuse because of the feeling of shame, intimidation, and fear; as well as because the abuse may be initiated by a loved one (Thomson et al., 2011). Moreover, if abuse is perpetrated by staff, the elder may be somewhat reticent to report abuse given that repercussions may be feared. In addition, residents may be communication impaired and unable to self-report abuse. Because of possible reputational harm or federal or state sanctions, administrative staff may be less inclined to report abuse formally unless it rises to the level of serious physical harm. Thus, much abuse may go undocumented.

Reporting of elder abuse is not mandated in every state and has not been proven to “improve the lives of those it seeks to protect” (Rodriguez et al., 2006, p. 404). Each individual state defines and examines elder abuse differently (Jogerst, Daly, & Hartz, 2008). Some states require certain professionals (i.e., doctors, nurses, researchers) to report elder abuse; while others have voluntary reporting. There is little research surrounding what encourages or prevents elder abuse reporting (Rodriguez et al., 2006).

It is important, not only for mandated reporters to report abuse, but also those who are considered voluntary reporters. This requires caregivers and family members to be aware of their state’s statutes to define and address elder abuse, as well as know which agency to contact about suspected abuse (this also varies by state). Agencies that can be contacted about elder abuse are NH regulating agencies, local ombudsman, law enforcement officials, and adult protective services (Jogerst, Daly, & Hartz, 2005).

In residential long-term care the Long-term Care Ombudsman Office may be especially important. As many as one third of NHs in the United States have had reported complaints of abuse, and according to the Long-term Care Ombudsman Office, 10% of the overall complaints they received were substantiated abuse (Bern-Klug & Sabri, 2012). Although, with these multiple reporting agencies/authorities (listed above) underreporting may also be especially problematic. That is, abuse may be reported to one agency/authority, but not all.

In 2004, a federal complaint/incident system was executed to help monitor abuse and promote the well-being of residents (Jogerst, Daly, & Hartz, 2008). Organizations (i.e., Archstone Foundation) have funded different pilot projects to develop ways to train and educate mandated reporters (Gironda et al., 2010). One of many important facets to training and educating mandatory reporters is to institute standard training and curriculums to increase awareness of abuse, help identify risk factors, and help make reporters feel comfortable about recognizing and reporting suspected abuse.

More information from residents may help improve the reporting of abuse. However, barriers to obtaining information from elders include comprehension and cognitive limitations. Some lessons from other initiatives with elders in residential long-term care may be helpful; for example, The Consumer Assessment of Healthcare Providers and Systems (CAHPS). CAHPS is a family of survey instruments designed to capture and report people's experiences obtaining medical care. Several pertinent barriers to collecting information from NH residents were examined in the development of these instruments. These include sampling issues, cognitive screeners, and survey content. In addition, lessons may be learned from initiatives that collect information from other sensitive areas (such as substance use). In these cases interviewers are trained in nonconfrontational approaches to obtaining this information (Gordon et al., 2006).

To further complicate the problem of underestimates of reports of abuse, medical personal and staff are often unable to detect abuse because of the lack of education and/or training (Thomson et al., 2011). However, addressing this issue with medical personal in residential long-term care presents a challenge because physicians spend relatively little time in residential long-care facilities (Caprio, Karuza, & Katz, 2009). On the other hand, other direct care staff may be trained to recognize and report abuse (e.g., Teresi et al., in press).

Outcomes of Abuse

Several adverse outcomes associated with abuse are identified above. However, much of this research was conducted in noninstitutional settings. Clearly, the normal aging process and factors associated with this progression can confound examinations of outcomes (Gironda et al., 2010). Indeed, as Baker (2007) discusses, geriatric syndrome (i.e., falls, delirium, and frailty) outcome causality may be reversed in that these geriatric syndromes make an elder more vulnerable to elder mistreatment, leading to early mortality. Given the current emphasis on Patient Centered Outcomes Research (PCOR) this would seem like a particularly significant omission, and a much needed initiative.

Subgroup analysis may be important when examining outcomes of abuse, for example, examining residents with dementia. Dementia is prevalent in residential long-term care settings, and such residents may be more susceptible to adverse outcomes from abuse than other residents. Outcomes may also be associated with the type of NH in which an elder resides. Ben Natan and Lowenstein (2010) report that the work environment can influence the treatment of elders (2010) and that larger for-profit NHs with more residents

are associated with a higher incidence of abuse as measured by staff reports (Ben Natan & Lowenstein, 2010). Larger size was also a factor related to more abuse complaints in AL facilities (Phillips & Guo, 2011).

Source of Abuse in Residential Long-Term Care

Abuse by Staff

We found most studies of abuse by staff were conducted in NHs. Interest, data availability, and research efforts appear to be growing with respect to abuse in NHs. In contrast, very few studies were identified in AL. Thus, research in AL represents an area of potential need.

Despite the growth in empirical studies, the literature, in general, was limited in providing a nuanced understanding of abuse. Overall, many of these more recent studies of abuse had relatively small sample sizes, did not necessarily examine all forms of abuse (i.e., sexual, financial, physical, etc.), and did not specifically ask the elders about abuse (i.e., substantiated cases); but rather, studied the responses of NH staff or the relatives of a resident. When possible, residents should be asked directly about abuse experienced. However, as discussed above, the advanced cognitive impairment of a substantial number of residents of long-term care presents a challenge in terms of obtaining reliable and valid self-reports of abuse.

More detail in many areas is needed. For example, racial and ethnic differences/considerations are rarely identified (Ramirez et al., 1998). Members of different racial/ethnic groups may have systematically varying interpretations of the same set of interactions because they value particular aspects of these interactions in different ways. This may be important given that NH residents are often Caucasian; while caregivers include a high proportion of racial and cultural minorities (Ramirez et al., 1998). There is evidence that populations use differences in interpreting events based on lifelong personal experiences (Elliott et al., 2009). This challenges the accuracy of assessing experiences such as resident abuse because the complex set of lifelong and personal experiences can fundamentally transform the ways in which abuse is perceived, evaluated, or reported to others. This complexity coupled with differential perceptions may also be important factors in designing for interventions as well as identifying and measuring abuse.

Use of anchoring vignettes may be useful in this area. These are brief descriptions of hypothetical people or situations that survey researchers can use to correct otherwise incomparable survey responses. Anchoring vignettes represent a fixed case (i.e., a concrete question) that respondents consider.

The response represents the individual's norms and values. Respondents provide a response to an anchoring vignette; and subsequent survey items can then be rescaled relative to the anchoring vignette (King, Murray, Salomon, & Tandon, 2004). However, anchoring vignettes are untested with nurse aides/ DCWs, and may be limited in application due to the lower average educational level for such staff.

Elder abuse is often represented as a solitary incident, when in reality it encompasses several problems (Harbison et al., 2012). Many studies examine abuse with little attention to issues of scale and scope. More attention to scale would address how many times a resident was abused. For example, studies examining ombudsman complaints "do not give occurrence rates per person" (Page et al., 2009, p. 240). More attention to scope would address constellations of abuse, such as residents who are the recipients of both physical and psychological abuse.

Interaction influences may also be important. For example, a resident who experiences resident-to-resident abuse may become more vulnerable to abuse by a staff member (Schiamberg et al., 2012), or vice versa. Moreover, these interactions may not occur contemporaneously. Longitudinal data and methods are needed to better inform in this area.

Psychological abuse would appear to be prevalent in residential long-term care (Castle, 2011a). Pillemer and Moore (1989) identified physical abuse, verbal abuse, and neglect to be common types of abuse in NHs and note that verbal and psychological abuse may be "basic features of NH life." These and similar constructs, for example bullying, could be examined further. A definition of bullying is "a repeated pattern of intentional negative actions (physical and/or psychological) used by one or more persons with the intent to injure or disturb another, in which there is an imbalance of power" (Moran, 2011). In one study by (Rex-Lear, 2011), 24% of elders (age 60-99) reported being bullied by other elders. Because it is important for elders to develop and maintain social relationships with other elders bullying can have a drastic effect by disrupting their social relationships and possibly causing isolation (Rex-Lear, 2011). Stress that is associated with bullying can lead to detrimental health consequences for elders.

Bonifas (2011) found that 10% to 20% of institutionalized adults suffer from bullying. There are a number of causes that can lead to bullying, including: the need for control, retribution, jealousy, and emotional problems (Turkel, 2007). There have been reports of social bullying in AL facilities (Span, 2011). A related construct relevant to residential long-term care settings is unwanted caregiving, defined as residents providing unsolicited comments and physical actions aimed at providing care to other residents against their will (Pillemer et al., 2011).

Resident-to-Resident Abuse

Many studies in this area are characterized by having a small sample size. For example, Shinoda-Tagawa and associates (2004) identified 294 NH residents with injuries coming from another resident. Lachs and associates (2005) found that of all violent events in police records regarding elders ($n = 214$), 42 occurred in NHs. These NH events were described primarily as resident-to-resident abuse. In a subsequent study, Lachs, Bachman, Williams, and O'Leary (2007) found 36 of 747 NH elders to have summoned police due to resident-to-resident abuse.

Measurement of Abuse

Although beyond the scope of this review, it is important to state that measurement has an important influence on estimation of rates and on relationships of abuse to outcomes. One of the earliest measurement efforts derives from sociological literature on family violence: The Conflict Tactics Scale (CTS; Strauss, 1979). The CTS approach was an advance in measurement of abusive behavior in community settings. It is used to identify and quantify the level of abuse in families (e.g., wife beating and child abuse). There has been very little measurement work on abuse in the context of residential long-term care.

A beginning effort to develop such a measure used qualitative and quantitative methods. The development strategy and the modification and refinement of items using a variety of qualitative methods are described in Ramirez et al. (2013). Advanced measurement methods, including factor analyses and item response theory were used to evaluate the psychometric properties of the measure develop a measure of resident-to-resident elder mistreatment (Teresi et al., in press). Such nascent efforts need to be expanded in order to provide the requisite tools for proper assessment and evaluation of elder abuse in residential long-term care settings.

Policy and Practice Implications

With nurse aides/DCWs providing 80% to 90% of the direct care to NH/AL residents, it may be more important to educate and train these staff on resident rights and abuse. Hawes reported to the U.S. Senate Committee that one preventable cause of elder abuse was inadequate training (Bern-Klug & Sabri, 2012). The Patient Protection and Affordable Care Act of 2010 requires that NHs provide staff with abuse prevention training. Additional evaluation research could help identify effective content and types of training in which staff should participate. One such training program on resident-to-resident abuse has been evaluated recently, and found to increase abuse recognition and reporting (Teresi et al., in press).

Such training is important, as abuse recognition and reporting can be difficult. Bruising, for example, can be used as an indicator of abuse. However, it can be difficult to distinguish if a bruise is caused accidentally or intentionally. Many bruises can be caused accidentally by caregivers and the elders themselves (Wiglesworth, Austin, Corona, & Mosqueda, 2009).

Much of the literature discussing elder abuse training focuses on detection and reporting of elder abuse. There is little information on the training available for prevention. Staff training plays a crucial role in reducing the number of elder abuse victims in residential long-term care facilities. Due to the high turnover rate often associated with job dissatisfaction (Castle & Engberg, 2007); there is a need to increase abuse prevention training among these direct-care staff members.

Nurse aides, themselves, are often assaulted (physically/verbally) by residents (Lachs et al., 2012). Many nurse aides are not equipped with the knowledge or skills to handle residents in these difficult situations, which can lead to nurse aides abusing the residents. DeHart and colleagues (2009) have found that with training, proper competencies "might address interpersonal skills, managing difficult situations, problem solving, cultural issues that affect staff-resident relationships, conflict resolution, stress reduction, information about dementia, and witnessing and reporting abuse (p. 362)."

NHs must abide by both state and federal regulations when caring for elderly residents. States are responsible for approving NHs' licenses. Federal regulations are put into place to monitor and protect the quality of care for residents whose care is paid for care through the Medicaid and/or Medicare program(s). The federal regulations typically "set a floor" and state regulations are then often more rigorous than federal regulations (Gittler, 2010). However, both state and federal regulations are thought to be insufficient with respect to elder abuse (Gittler, 2010).

Conclusion

The synthesis of findings presented here represents an update to the literature review on elder abuse provided in the 2003 National Research Council report (Bonnie & Wallace, 2003). We identify many of the same issues and concerns that surfaced in this prior report; however, we also identify progress in many areas, including more empirical studies, identification of different forms of abuse, and refined definitions and conceptualizations of abuse. Several areas that are needed as next steps to guide the field include: (a) more appropriately specified theoretical models with inclusion of potential mediating and moderating variables; (b) reducing the multiple conflicting definitions of elder abuse; (c) improving measurement of abuse and examining the best reporting

sources; (d) improving the accuracy of estimates of rates of abuse; (e) developing more abuse recognition training programs and reporting guidelines; (f) more studies in other settings such as AL; and, (g) more research into different forms of abuse (e.g., resident-to-resident mistreatment).

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