This article was downloaded by: *[Zhang, Zhenmei]* On: *1 April 2011* Access details: *Access Details: [subscription number 935902388]* Publisher *Routledge* Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journal of Elder Abuse & Neglect

Publication details, including instructions for authors and subscription information: http://www.informaworld.com/smpp/title~content=t792303995

Elder Abuse in Nursing Homes: An Ecological Perspective

Lawrence B. Schiamberg^a; Gia G. Barboza^b; James Oehmke^c; Zhenmei Zhang^d; Robert J. Griffore^a; Robin P. Weatherill^e; Levente von Heydrich^a; Lori A. Post^c ^a Department of Human Development and Family Studies, Michigan State University, East Lansing, Michigan, USA ^b Department of Criminal Justice, Northeastern University, Boston, Massachusetts, USA ^c Emergency Medicine, Yale University, New Haven, Connecticut, USA ^d Department of Sociology, Michigan State University, East Lansing, Michigan, USA ^e National Center for PTSD, VA Boston Healthcare System, Boston, Massachusetts, USA

Online publication date: 01 April 2011

To cite this Article Schiamberg, Lawrence B., Barboza, Gia G., Oehmke, James, Zhang, Zhenmei, Griffore, Robert J., Weatherill, Robin P., von Heydrich, Levente and Post, Lori A.(2011) 'Elder Abuse in Nursing Homes: An Ecological Perspective', Journal of Elder Abuse & Neglect, 23: 2, 190 - 211

To link to this Article: DOI: 10.1080/08946566.2011.558798

URL: http://dx.doi.org/10.1080/08946566.2011.558798

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.



Elder Abuse in Nursing Homes: An Ecological Perspective

LAWRENCE B. SCHIAMBERG, PhD

Department of Human Development and Family Studies, Michigan State University, East Lansing, Michigan, USA

GIA G. BARBOZA, PhD Department of Criminal Justice, Northeastern University, Boston, Massachusetts, USA

JAMES OEHMKE, PhD Emergency Medicine, Yale University, New Haven, Connecticut, USA

ZHENMEI ZHANG, PhD Department of Sociology, Michigan State University, East Lansing, Michigan, USA

ROBERT J. GRIFFORE, PhD

Department of Human Development and Family Studies, Michigan State University, East Lansing, Michigan, USA

ROBIN P. WEATHERILL, PhD

National Center for PTSD, VA Boston Healthcare System, Boston, Massachusetts, USA

LEVENTE VON HEYDRICH, PhD, MSW

Department of Human Development and Family Studies, Michigan State University, East Lansing, Michigan, USA

LORI A. POST, PhD

Emergency Medicine, Yale University, New Haven, Connecticut, USA

Population trends suggest that the next 20 years will witness a dramatic increase in the adult population aged 65 and older.

Work for this was supported by a grant from the Centers for Medicaid/Medicare Service # CFDA 93.778 to Michigan State University. The authors wish to thank Christopher Belous, graduate research assistant, for his assistance with the bibliography.

Address correspondence to Lawrence B. Schiamberg, Department of Human Development and Family Studies, College of Social Science, Michigan State University, 8 Human Ecology Building, East Lansing, MI 48824, USA. E-mail: schiambe@msu.edu

Projected increases in the elderly population are expected to significantly increase the stress on family and professional caretakers. Stress, in the context of caregiving relationships, is a risk factor associated with increased prevalence of elder abuse in familial and institutional settings. As increasing numbers of older adults are moved from family caregiving to nursing home care settings, it becomes important to identify the pattern of elder abuse risk factors in nursing home facilities. An ecological model is proposed for better understanding the risk factors associated with elder abuse in nursing homes and the complex interaction of individual/person characteristics and contextual factors in institutional elder abuse. An ecological perspective to institutional elder abuse provides a framework for guiding and informing future research on the risk factors of nursing home abuse and, in turn, for the development of effective interventions and relevant social policies.

KEYWORDS ecological perspective, elder abuse, nursing homes, risk factors

INTRODUCTION

As the population continues to age, caregiving responsibilities for dependent elders in both families and nursing homes have increased, with an accompanying increase in risk for elder abuse. Given this social concern, the scientific understanding of the dimensions of elder abuse in both the community/family and in institutions is critical. The Institute of Medicine (IOM), the National Institute on Aging (NIA) and the National Research Council/National Academy of Sciences (NRC/NAS) have recognized this challenge by issuing recommendations for elder abuse theory and research, emphasizing the need for comprehensive, ecological perspectives or theories that will inform the understanding of elder abuse in both community and institutional settings (Chalk & King, 1998; National Research Council, 2003; Stahl, Prenda, & Cooper, 2001). This article describes an ecological framework for elder abuse in nursing homes, building on existing ecological perspectives of elder abuse in the community settings (Schiamberg & Gans, 1998, 1999, 2000), related ecological perspectives to health promotion and health communication (Rimer & Glanz, 2005), and perspectives on the general ecology of human development (Bronfenbrenner & Morris, 1998).

THE NEED FOR AN ECOLOGICAL PERSPECTIVE TO ELDER ABUSE IN NURSING HOMES

Demographic Changes: Implications for Families and Institutional Contexts

Changes in the demographic landscape of the population potentially have significant repercussions for the incidence of elder abuse in family and institutional contexts. Projections for the year 2030 suggest that not only will the proportion of older adults continue to increase to as much as 20 % of the total population, but also that there will be an even more dramatic growth in numbers of the "oldest old," people over age 85 (He, Sengupta, Velkoff, & DeBarros, 2005). These individuals are at greater risk for health problems, including chronic disabling diseases and other health issues that restrict activities of daily living, and as a result are more likely to need long-term care (Feder, Komisar, & Niefeld, 2000). The need for both family care and institutional assistance to the elderly thus will increase, with a related increase in the level of stress associated with providing care for older adults with increased needs (Manton, Corder, & Stallard, 1993; Murray, 2002; Keidel, 2002). Unfortunately, such an augmentation of stress levels may increase the likelihood of elder abuse in families and institutional settings (Goodrich, Johnston, & Thompson, 1996; Schiamberg & Gans, 1999).

Limitations in Previous Research

The utility and generalizability of findings on the factors related to elder abuse in institutional settings is often related to methodological problems, including the absence of clear definitions of elder abuse. Studies of institutional elder abuse may employ a range of research paradigms, including surveys of professionals administering or providing services, interviews with professional caregivers, summary agency data (e.g., Adult Protective Services or APS), or aggregate data across multiple institutional sites. However, these approaches vary in data collection techniques, measurement instruments, and types of data which, in turn, may yield conflicting results (Chalk & King, 1998; National Research Council, 2003; Stahl, Prenda, & Cooper, 2001).

Little empirical data exists on the incidence of elder abuse in institutional settings (National Research Council, 2003). In fact, the absence of a national study documenting the prevalence of institutional elder abuse is a major concern, given the extensive evidence demonstrating that quality of life for neglected and abused individuals is severely jeopardized (e.g., in reduced levels of functioning, progressive dependency, poorly self-rated health, feelings of helplessness, social isolation, stress and further psychological decline) (Dong, 2005). A major limitation of prevalence estimates of nursing home abuse is the reliance on data derived from reports of caregiving, administrative, and support staff of abuse they had witnessed or committed themselves and hence are subject to sampling bias (Payne & Fletcher, 2005; Post, 2006). These limitations have led to speculation that mistreatment of older residents may be even more extensive than is generally believed.

For example, several studies of institutionalized elder abuse utilizing self-report data have revealed an array of rates and patterns of such abuse. A random sample study of 577 nursing assistants from one state disclosed that 10% of the respondents had themselves committed one or more acts of physical abuse in the past year, and 40% admitted to psychologically abusing residents (Pillemer & Moore, 1990). In a pilot study of residents in German nursing homes, 23% of caregivers reported observing physical abuse, 6% had actually committed at least on act of physical abuse themselves, and approximately 60% reported witnessing psychological abuse (Goergan, 2001). The latter investigation also found that verbal abuse and excessive use of restraints were the most prevalent types of abuse perpetrated against individuals in nursing homes. However, in a study using data derived from the Medicaid Fraud Reports, the majority of reported acts of patient abuse were physical abuse (84.2%), followed by sexual (8.8%), dutyrelated (3.1%) and financial abuse (1.4%) (Payne & Cikovic, 1995). These findings were based exclusively on prosecuted cases, which are relatively infrequent and likely subject to prosecutorial discretion (Nerenberg, 2006, 2008).

Beyond these methodological problems, many studies employ differing definitions of elder abuse, requiring care in making comparisons and drawing conclusions. In addition to inconsistent and unstandardized definitions of abuse, there is a notable absence of empirical data about how health care providers operationalize and conceptualize abuse and neglect of the aged and the decision processes involved in assessing and identifying neglectful and abusive relationships (Lachs & Pillemer, 2004). Table 1 summarizes commonly used definitions in the current literature that are relevant to institutional elder abuse.

Research in Elder Abuse: National Studies and Recommendations

The Institute of Medicine (IOM) has suggested that elder abuse in the community and particularly in long-term residential care settings, such as nursing homes, is characterized by a significant and striking paucity of research, ironically in an arena that has considerable impact on the health and quality of life of an increasingly older adult population (Chalk & King, 1998). More specifically, the National Institute on Aging (NIA), in identifying a research agenda for elder abuse, identified a major shortcoming of current knowledge as "the lack of scientifically based information on elder abuse and

TABLE 1 Definitions of Elder Abuse in Nursing Homes

Type of Abuse	Definition
Physical Abuse	 Physical assault includes the infliction of physical harm and pain and physical coercion (Kosberg & Nahmiash, 1996; Pillemer & Finkelhor, 1988). The most common acts of physical abuse include slapping, hitting, and striking with objects (Lachs & Pillemer, 1995). Caretaking mistreatment by staff or caregivers includes overadministration of drugs, inappropriate use of physical restraints, unjustified force-feeding, and inappropriate toileting. Sexual abuse is a subset of physical abuse that includes sexual coercion or sexual assault.
Psychological/Emotional Abuse	This is an act carried out with the intention of causing psychological distress or emotional pain or anguish (Lachs & Pillemer, 1995; Pillemer & Finkelhor, 1988). Examples include inflicting mental anguish, such as name-calling, humiliation, harassment (including sexua harassment), intimidation and/or threats of punishment, or deprivation (e.g., involuntary seclusion or separation of resident from other residents). Psychological/emotional abuse includes the use of oral, written, or gestured language that willfully includes disparaging and derogatory terms to residents or their families, or within their hearing distance, regardless of their age, ability to comprehend, or disability. Examples of verbal abuse include, but are not limited to, threats of harm and saying things to frighten a resident, such as telling a resident that he/she will never be able to see his/her family again.
Mental Abuse/Financial Exploitation	This refers to the illegal exploitation and/or unauthorized use of funds or other resources of the older person (Kosberg & Nahmiash, 1996).
Neglect	Neglect is the refusal or failure to fulfill caretaking obligations and to meet the needs of the elder in order to punish or harm him/her, including behavior such as deliberate abandonment or denial of food, medication and health services (Lachs & Pillemer, 1995; Pillemer & Finkelhor, 1988).

neglect risk factors and prevalence" (Stahl, Prenda, & Cooper, 2001). As well the National Research Council (2002) cited previous applications of an ecological perspective to elder abuse as particularly helpful in understanding the interaction of individual and contextual risk factors in explaining domestic elder abuse by adult children (Schiamberg & Gans, 1998, 1999, 2000). In addition to these ecological perspectives to elder abuse in community settings, useful and related models of ecological applications to individual health are found in health promotion and health communication research and interventions (Rimer & Glanz, 2005). This article uses these ecological frameworks of domestic elder abuse, human development, and health promotion/communication as starting points for developing a comprehensive ecological model of elder abuse in nursing homes. Since elder abuse in both domestic and institutional settings involves, at the most immediate level, the interaction of two key participants—an abuser and an older adult victim, the proposed model focuses on the older adult nursing home resident and the institutional caregiver, as cofocal or bifocal participants in institutional elder abuse.

Elder Abuse Risk Factors in Nursing Homes

To date, much of the empirical work on elder maltreatment has focused on domestic mistreatment occurring in private homes (Carp, 1999; Drake & Freed, 1998). Research on elder maltreatment in both family and institutional settings implicates those frequently in contact with the older adult (e.g., spouses and adult children in family settings, nursing home staff and caregivers in institutional settings) as the most likely perpetrators of abuse (Schiamberg & Gans, 1998, 1999, 2000). While the catalysts or risk factors that precipitate this abuse are documented in familial settings, they are less well understood in institutional settings (Lachs & Pillemer, 2004; Lachs, Williams, O'Brien, Hurst, & Horwitz, 1997; Pillemer & Bachman-Prehn, 1991). Differences in the character of family member/older adult relationships in the home setting and caregiver-staff/older adult relationships in institutional settings suggest that the factors precipitating abuse in institutional settings may differ from the factors in familial settings. Consequently, it is important to develop a conceptual model that can guide future research and policy development to better understand the distinctive risk factors of elder abuse in nursing homes.

AN ECOLOGICAL MODEL OF RISK FACTORS FOR INSTITUTIONAL ELDER ABUSE

The ecological framework proposed herein addresses the distinctive risk factors for elder abuse in nursing homes (see Figure 1). Such an ecological perspective will focus on the interaction between the older adult nursing home resident and the institutional caregiver (i.e., by caregivers, we mean persons who undertake the fiduciary responsibility to provide residents with care and protections, and include paid caregivers, accessory staff and other professionals), as the unit of interest. The first level of analysis is therefore the characteristics of both the adult nursing home resident (e.g., health status or limitations in ADL's or activities of daily living, such as walking) and

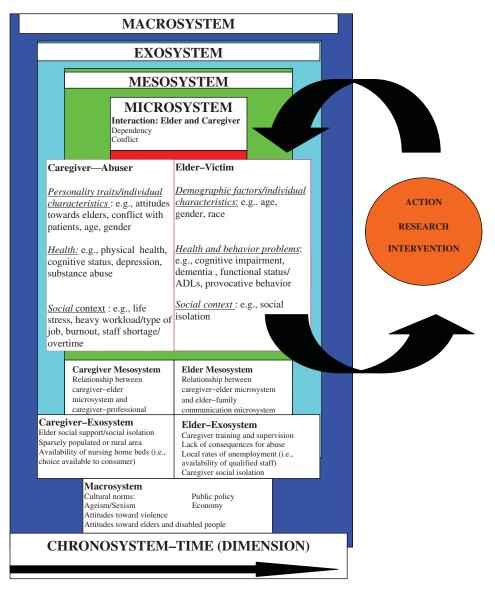


FIGURE 1 An ecological model of risk factors of elder abuse in the context of long-term care: Cofocusing on the caregiver and elder.

the institutional caretaker (e.g., level of stress, level of training). In turn, the interaction between the older adult nursing home resident and the institutional caregiver plays out in, and is influenced by, the immediate context of the nursing home setting (e.g., physical and spatial arrangements, organized program of activities) and the more distal contexts (i.e., beyond the immediate context of the nursing home for either the adult nursing home resident or the institutional caregiver). Such spatially distal contexts include the family, for example, the relationship between the older adult nursing home resident and family members, or the relationship/communication patterns between institutional staff and the family of the nursing home resident (Donohue, Dibble, & Schiamberg, 2008).

Bifocal Perspective

A distinctive and unique feature of the proposed ecological framework is that it is bifocal, focusing simultaneously on the older adult resident and the institutional caregiver as a dyad. Such a focus provides a framework for describing the dual nature of risk factors of elder abuse. The focus is on the older individual, the institutional caregiver, and the patterns of interactions that take place between them in the context of the nursing home setting. Such a focus provides a strategy for comprehensively identifying the patterns of risk factors specifically associated with elder abuse in the nursing home context.

Interaction in Context

The primary focus of the ecological perspective to institutional elder abuse is on the dynamic relationship of the coparticipants (i.e., older adult and caregiver) in context. In turn that context has multiple levels, as follows (Bronfenbrenner & Morris, 1998): (a) an immediate institutional setting or context of elder abuse or a *microsystem*, including (1) key characteristics of the nursing home setting such as location, size, or physical design of the nursing home, and (2) the impact of broad institutional design features on the older adult-caregiver dyad (e.g., an older adult with specific health/dependency characteristics interacting with an institutional caretaker, with a specific level of training, stress and institutional support, in a nontraditional, "Eden Alternative," nursing home replete with plants and pets); (b) a *mesosystem* or the cumulative impact of at least two such microsystems on the likelihood of abuse (e.g., from the perspective of an institutional caregiver, the joint influence of the older adult-caregiver microsystem and a caregiver-institutional support/training microsystem); (c) the *exosystem* or the relationship between at least two microsystems, one of which does not contain either the older adult or the institutionalized caregiver but which, in turn, may have a potentially significant impact on the welfare/successful functioning of that individual (e.g., from the perspective of the older adult nursing home resident, the relationship of the older adult-institutional caregiver dyad, a context which obviously contains the older adult, and the family-nursing home staff communication microsystem, which does not contain the older adult); (d) the *macrosystem* or the interaction between the welfare of the older adult nursing home resident and the more distal

yet significant context of broad social values and related stereotypes of the aging process and aging individuals, including the level of policy making and social engagement in addressing or preventing institutional elder abuse; and (e) the *chronosystem* or the impact of time on the multiple levels or contexts of potential abuse (e.g., the impact of length of residence in a nursing home on the likelihood of abuse occurring).

Individual Characteristics: The Elderly Victim

Since the 1970s, researchers have reported that women are the most likely victims of elder abuse in general (Wyandt, 2004). Some evidence portrays females as the typical victims of elder abuse, comprising 62% of all cases, with abuse of females more severe than abuse of males (Pillemer & Finkelhor, 1988). However, other studies suggest that the potential for elderly male victims of abuse is real and substantial (Kosberg, 1998). For example, a study of Medicaid fraud reports included more male than female victims of nursing home abuse (Payne & Cikovic, 1995).

Several studies have documented that cognitive impairment and limitations in activities of daily living are important risk factors for elder mistreatment. For example, increased older adult needs for assistance with ADLs or with IADLs (instrumental activities of daily living, e.g., telephone use) is significantly associated with potentially harmful caregiver behavior (Beach et al., 2005). In addition, inabilities to perform ADL activities and limitations on mobility have both been shown to be strongly related to the use of physical restraints (Bredthauer, Becker, Eichner, Koczy, & Nikolaus, 2005; Hamers, Gulpers, & Strik, 2004). More recent studies find that poor health and functional impairment predict neglect but not physical abuse (Fulmer et al., 2005; Podneiks, 1992). With reference to cognitive impairment, abuse prevalence of dementia patients in nursing homes is significantly higher than incidents of abuse and neglect in the general population aged 65 and older (Anetzberger et al., 2000). On the other hand, certain medical conditions, such as diabetes or hypertension, have not been associated with an increased risk for abuse (Dyer, Pavlik, Murphy, & Hyman, 2000).

Behavior problems of older adult nursing home residents also are related to the likelihood of abuse in nursing homes. In particular, provocative or disruptive behavior, such as hitting, pinching, kicking, scratching, grabbing, inappropriate touching, making verbal threats, pulling hair or throwing objects, has been associated with elder abuse (Pillemer & Moore, 1989; Shaw 1998). Verbal provocation or physically aggressive behaviors that are characteristic of, but not exclusive to, individuals with Alzheimer's disease, have been shown to be problematic for caregivers as well (Jiska Cohen-Mansfield, 1999).

Social connections with family and peers are related to both the overall well-being of older adult nursing home residents and to the likelihood of elder abuse. Although there is abundant evidence for the link between elder abuse and limited social connections of older adults in community settings (Lachs & Pillemer, 1995; Lachs, Williams, O'Brien, Pillemer, & Charlson, 1998), fewer studies have addressed the link between social isolation of older adults and elder abuse in nursing homes (Nerenberg, 2002; Tarbox, 1983). However, social isolation has been shown to be a risk factor for elder abuse in nursing homes for the older adult without significant contact with peers in and out of the nursing home and out of touch with family (Menio, 1996; Port, 2004)

Individual Characteristics: The Institutional Caregiver

Much of the research on nursing home abuse or quality of care in institutions has focused on the social, behavioral, and personal problems of institutional caregivers (Payne & Cikovic, 1995). Institutional caregivers frequently balance a heavy and potentially stressful workload with their own personal stressors such as family problems, physical and emotional exhaustion, substance abuse, or in some cases, a history of domestic violence (Shaw, 1998). Shaw (1998) has identified workers' personality traits coupled with a tolerance to handle patients' aggressive behaviors as a factor contributing to abuse. He posits that individuals with a higher tolerance level for aggressiveness by residents assume personality traits such as resiliency, patience, and placing value on caring for others. On the other hand, nursing home staff abusers have never developed immunity to residents' aggression and react to these behaviors in abusive ways. Factors contributing to lower levels of tolerance include fatigue, financial stresses, and substance abuse.

In addition, nursing assistants often have poor morale and little motivation to perform work-related duties. For example, nursing assistants may come from a wide range of often dysfunctional families with typically harsh socioeconomic backgrounds (V. Tellis-Nayak & M. Tellis-Nayak, 1989). Likewise, the same study identified two categories of nursing assistants: strivers, who choose the health profession out of genuine, affective concern for their patients, and endurers, who are typically employed in nursing because they are unable to find work elsewhere. It is the latter type of caregiver that presents a significant risk factor for abuse as their cynical realism is carried over into the nursing home in the form of relational distance from patients. Further, there is evidence for a variety of typologies of caregiving in nursing homes, including a dysfunctional type, termed "rough-hand" care, which reflects nurses threatening, bullying, rough handling, being impatient, not being dependable, ignoring and treating patients as objects and increasing patient vulnerability (Iruritia, 1999).

Potentially harmful caregiver behavior is more likely when caregivers themselves are more cognitively impaired, have more physical symptoms, and are at risk for clinical depression (Beach et al., 2005). Higher burden and depression scores were noted among caregivers who admitted to direct physically abusive behavior toward dementia patients in their care (Coyne, Reichman, & Berbig, 1993). The consistent finding of higher abuse prevalence among patients suffering from dementia or Alzheimer's disease suggests that the relatively high psychological and physical demands characterized by these debilitating diseases triggers abusive situations (Paveza et al., 1992; Dyer, et al., 2000).

Microsystems and Institutional Abuse

A central theme of an ecological perspective to elder abuse in nursing homes is that elder abuse occurs in the microsystem context, specifically in the staff caregiver/older adult resident dyad (or, in the case of resident-on-resident abuse, in the older adult/other resident dyad). This microsystem context is the focal point for the expression of the individual characteristics and experiences of both dyad participants (often reflecting the impact of other contexts; see Figure 1) in the expression of abusive behavior. While studies of individual characteristics that place older adult nursing home residents at risk for abuse are far fewer than comparable studies of community-dwelling elderly, the pattern of factors that might emerge in the older adult/staffcaregiver microsystem dyad are similar to those of community-dwelling elderly (Hawes, 2002). A significant dependency relationship between the older adult and the institutional caregiver based on the need for care, protection, and safety is associated with a greater risk for abuse (Burgess, Dowdell, & Prentky, 2000). While dependence on caregivers for help with physical functioning is, as might be expected, relatively common for a majority of nursing home residents (Krauss & Altman, 1998), the tendency of staff caregivers to view older adult attempts to resist care or patient aggressiveness as intentional efforts to injure staff increases the likelihood of abuse (Hawes, Blevins, & Shanley, 2001).

Mesosystems and Institutional Abuse

Mesosystems in elder abuse involve the combined influence of two or more microsystems in precipitating conditions conducive to elder abuse (Schiamberg & Gans, 1998, 1999, 2000). Evidence in the study of human development for a variety of lifespan developmental outcomes points to the power of multiple microsystems (rather than a single microsystem) in insuring either positive or negative outcomes (Bronfenbrenner & Morris, 1998). Consistent with those findings, a reasonable hypothesis for reducing the likelihood of elder abuse is the participation of the institutional caregiver in a mesosystem (i.e., multiple microsystems) which enhances the likelihood of more positive/less negative relationships between the caregiver and the older adult. For example, the participation of an institutional caregiver in an institutional training microsystem and in an institution staff-family communication microsystem, both of which focus on the welfare of the older adult resident, is more likely to diminish the likelihood of elder abuse than participation in only one microsystem (Duncan & Morgan, 1994). Mesosystem effects can occur when both the institutional caregiver and the older adult resident are involved in several microsytems, which can multiply the likelihood for either the presence or absence of institutional abuse. For example, nursing home characteristics affect caregiver stress and satisfaction, which in turn may be associated with resident maltreatment (Goergen, 2001). Many studies have confirmed a relationship between nursing home abuse and stressful staff workplace environments (Goodridge, Johnston, & Thomson, 1996; Pillemer & Moore, 1989). Two studies have found that nursing home staff believe that abuse by caregivers is in part due to stressful workplace environments (Georgen, 2001; Harrington, Zimmerman, Karon, Robinson, & Beutel, 2000; Pillemer & Moore, 1989). Follow-up analyses of the Pillemer and Moore (1989) study found that stressful working conditions and staff burnout were significant risk factors for maltreatment of nursing home residents. In addition, Pillemer (2004) noted that high turnover contributes to malcontent among existing staff, which may lead to increased workload, staff stress, and the potential for abuse.

Exosystems and Institutional Abuse

While microsystems and mesosystems involve immediate environments that include one or both of the cofocal participants-the older adult and the institutional caregiver, the exosystem involves more distal contexts that do not include either cofocal participant (e.g., the older adult or the institutional caregiver), but which may have a significant impact on the likelihood of abuse. For example, in the case of the older adult nursing home resident, effective communication between a responsible family member of the older adult and the nursing home staff, an interaction which may not include the older adult, can potentially reduce the likelihood of abuse (Donohue, Dibble, & Schiamberg, 2008). A critical exosystem factor (for the older adult) in elder abuse is the relationship between staff and the patient's family to the quality of care (caregiver/older adult dyad) provided by nursing homes (Friedemann, Montgomery, Maiberger, & Smith, 1997; Gaugler, Leitsch, Zarit, & Pearlin, 2000). Problems between caregivers and family members also may result from structural barriers to cooperation between the family and caregivers, particularly when family members have been previously involved with caregiving that is now largely assumed by nursing home staff. Specifically, problems emerge when there is a mismatch between the nursing home structure, which seeks to take over primary group tasks such as personal care, and fitting the performance of such tasks into a routinized framework (Pillemer et al., 2003).

Furthermore, mistreatment by abusers is inhibited by the presence of concerned relatives and friends (Pillemer, 2004). The situations that cause relatives to detach themselves from the context of caregiving have not been clearly defined in the literature. Nevertheless, a few explanations have focused on isolation and detachment as a byproduct of the stress that family members feel after placement of their emotionally, physically, and cognitively impaired relatives in a nursing home (Gaugler et al., 2000). Stress also may result from exhaustion due to preplacement caregiver burnout. Nevertheless, very little research has investigated the effect of such isolation, including infrequent visits, on nursing home abuse (Nerenberg, 2006, 2008; Tarbox, 1983).

From the perspective of the older adult (at the exosystem level), limited training and staffing patterns in nursing homes may create situations conducive to abuse. For example, the fact that there is only one RN per 100 residents but one Certified Nursing Assistant (CNA) per 11 residents has lead to the conclusion that CNAs are primary caregivers of nursing home residents (Beck, 1999). CNAs typically hold only a high school diploma and receive little more than minimum wage. Apart from the inadequate pay and minimal educational requirements of CNAs, there exist other institutional barriers that curtail effective caregiving and the provision of high quality care in nursing homes. These factors include hierarchical organization, minimal long-term benefits, inadequate staffing, and lack of recognition and support for provider services.

There is some evidence that the incidence of sexual abuse (treated by some investigators as a type of physical abuse; see Table 1) in nursing homes is an example of the significance of exosystems (from the perspective of the older adult victim), in particular institutional supervision or staff training. In a study of APS reports of sexual abuse, Teaster & Roberto (2004) found that in cases of sexual abuse occurring in nursing homes, the perpetrator was most often another resident (69%), with staff members named as perpetrators in only 5% of sexual assault cases. Because many of the victims showed poor cognitive orientation and dementia, they depended upon staff supervision to prevent assault by other residents; thus, sexual assault may be a particularly severe consequence of inadequate supervision or neglect on the part of the caregiver and the institution.

THE MACROSYSTEM AND INSTITUTIONAL ABUSE: CULTURAL VALUES, SOCIAL POLICY, AND EFFECTIVE INTERVENTION

Cultural Values

Nursing home staff (or professional caregivers) bring their own personal issues, beliefs and values into the institution. Therefore, the same cultural attitudes that devalue older adults by increasing the likelihood that family caregivers might engage in elder abuse also may affect the nursing home environment (Georgen, 2001; Schiamberg & Gans, 1999). For example, there is evidence that negative stereotypes held by nurses adversely influence the delivery of care to older adult nursing home residents, effectively increasing the level of patient vulnerability (Iruritia, 1999). Additionally, employees' negative attitudes toward residents have been shown to be a risk factor for psychological abuse (Nerenberg, 2006, 2008). Staff who view patients as "needing to have everything done for them," "waiting to die," and "like children who sometimes need to be disciplined" have been found to be more likely to engage in abusive behavior (Pillemer & Moore, 1990).

Approximately 47% of institutional caregivers are African-American or Hispanic, many of whom are foreign born (Beck, 1999). Therefore, cultural attitudes and values that might motivate or protect against abuse are particularly salient for identifying and understanding possible risk factors of elder mistreatment at the macro level. Foreign-born nurses present a challenge due to possible language barriers, educational levels, and cultural attitudes about chronic illness, dementia and ADL limitations. If, in some countries, dementia is viewed as an embarrassing mental illness that should be hidden because it interferes with family life (Beck, 1999), caregiver abuse of an irritating older adult nursing home resident may be a defensible behavior. Such attitudes toward violence against dependents also may conflict with the goal of minimizing abuse in nursing homes (Kosberg & Nahmiash, 1996).

The presence of racism in nursing homes has been associated with certain forms of provocative behaviors among residents, including discriminatory language and use of racial slurs (Mercer, Heacock, & Beck, 1993, 1994). For example, elders may maintain racial prejudices and stereotypes that were commonly accepted when they were young, but are no longer acceptable in the dominant U.S. culture. In turn, the same racial/ethnic conflict between patients and staff that may increase the likelihood of abusive encounters also was significantly related to staff burnout, demoralization, and dissatisfaction (Ramirez, Addington-Hall, & Richards, 1998).

Social Policies and Interventions

The need to protect elderly victims from acts of violence has been responsible for the enactment of a series of laws intended to protect older individuals from elder abuse. Four federal statutes specifically provide the majority of protection for seniors, namely, the Older Americans Act, the Family Violence Prevention and Services Act, the Nursing Home Reform Act, and the Civil Rights of Institutionalized Persons Act. An additional law that is part of the Nursing Home Reform Act protects against elder abuse in nursing homes that receive federal Medicaid funds by requiring states to investigate alleged acts of patient abuse or mistreatment. To date, all fifty states and the District of Columbia have enacted legislation authorizing the provision of APS in cases of elder abuse (National Center on Elder Abuse, 2006) and require mandatory reporting by health professionals in cases of suspected abuse (Murphree et al., 2002). Although such laws have helped to increase the reporting of elder abuse, the problem is still believed to be widely underreported. Training programs to increase public awareness and better prepare those required by law to report have been implemented in some states, as an attempt to further promote reporting of elder abuse. Nevertheless, the criminalization of abuse and lack of long term solutions continue to suggest reluctance by health care professionals to report elder abuse (Schiamberg & Gans, 1999). Thus, even when elder abuse is detected, it will frequently be ignored.

The Chronosystem and Institutional Abuse

The chronosystem addresses the time element of institutional elder abuse. In addition to the ecological contexts, ranging from immediate to more distal (e.g., from microsystem to macrosystem), the chronosystem is a lifespan dimension of development and experience that captures the nature of the trajectory or pattern of elder abuse over time, including the causal character of risk factors relating to elder abuse in institutions. While little research has been done on the prevalence and risk factors of elder abuse in nursing homes, perhaps even less has addressed the longitudinal character of elder abuse in nursing homes. Elder mistreatment in nursing homes can be usefully articulated as a systematic, sometimes chronic, and context-based occurrence that happens over a period of time (i.e., both time in the nursing home and time prior to nursing home admission). From a chronosystem perspective, specific time-dimension aspects of elder abuse in nursing homes are particularly relevant in fully understanding institutional elder abuse and developing effective interventions. For example, while social isolation has frequently been associated with elder abuse in nursing homes, few studies have specifically examined the time pattern and trajectory of older adult intergenerational relationships with family, or older adult relationships with friends, in relation to social isolation of the older adult nursing home resident as a risk factor for mistreatment in nursing homes (Donohue, Dibble, & Schiamberg, 2008). In addition, little is known about the trajectory of the institutional caregiving relationship, including the factors that transform it into a power relationship from which vulnerable adults cannot readily extricate themselves.

RECOMMMENDATIONS FOR FUTURE RESEARCH, POLICY DEVELOPMENT, AND INTERVENTION STRATEGIES

Research on risk factors of elder abuse in institutional settings tends to focus almost exclusively on aspects of the microsystem to the exclusion of risk factors at other ecological levels, including the chronosystem. Much like elder abuse in the family/community, a key to understanding systematic and sometimes chronic patterns of institutional abuse lies in identifying the patterned interactions of the older adult–institutional caregiver microsystem with the broader institutional environment including the macrosystem, mesosystem, exosystem, and chronosystem. The following research and intervention strategies are recommended.

- At the level of *individual characteristics*, further research should be directed at understanding how risk factors for elder abuse, including characteristics of the older adult (e.g., poor health, cognitive impairment, feelings of helplessness, dependency, and provocative behavior) and characteristics of the institutional caregiver (e.g., level of education, training, economic circumstances, stress management skills) manifest themselves in the *older adult-caretaker microsystem* for each of the types of elder abuse (e.g., physical abuse, sexual abuse, emotional abuse, neglect; see Table 1).
- At the *mesosystem level*, research designs can incorporate the impact on elder mistreatment of the multiple and diverse microsytems, in addition to the caretaker-older adult microsystem, which operate in the lives of older adults and institutional caretakers. The role of multiple microsystems in institutional elder mistreatment is similar to the repeated finding of the impact of multiple microsystem contexts on developmental outcomes over a variety of life course stages (Bronfenbrenner & Morris, 1998). For example, for the older adult, the quality of the older adult-family communication microsystem may significantly influence the likelihood of institutional mistreatment (Donohue, Dibble, & Schiamberg, 2008). With respect to nursing home caregivers, understanding the situational and contextual factors that lead to caregiver stress are important in efforts designed to minimize abuse. This is particularly relevant as these factors might be mitigated by training nursing home staff in ways to manage stressful situations that occur on a regular basis in the careregiver-staff microsystem.
- At the *exosystem level*, research and intervention efforts also should include the critical effect on mistreatment in the older adult–caregiver microsytem of other microsystems in which either the older adult or the caregiver does not participate. From an ecological perspective, contexts that do not directly include a developing person or, in this case an older adult nursing home resident, can have a powerful impact on the development or quality of life of that individual. For example, such microsytem contexts such as family–nursing home staff communication or nursing home caregiver training and sensitivity programs likely would have a prominent role in reducing the likelihood of mistreatment.
- Although the macrosystem is the most distal of all contexts of institutional elder abuse (and, in turn, may include neither the older adult or the institutional caretaker), it nonetheless exerts a prominent influence through the

social policies and values that provide a blueprint for organizing specific strategies for addressing elder abuse. For example, macrosystem policies for organizing the structure and design of nursing homes often have focused on facilities primarily for the efficient and economical delivery of services, with less attention to the uniquely personal character of nursing home residences. More recent nursing home design philosophies reflect a movement to humanize nursing homes by making them more like home residences, with plants or pets, including opportunities for recreational events, interpersonal/friendship exchanges and resident responsibilities, where possible, for participation in decision making. Also, at the macosystem level, media efforts should begin to reflect the value and importance of normative communication about elder abuse, in the same way that child abuse is openly discussed and recognized as a real problem for which help is available.

 Successful and effective intervention directed at problems such as institutional abuse requires multilevel/multicontext strategies, including policies that mandate effective reporting of abuse and corrective action, training, and institutional support programs for caregivers, and family-institution communication enhancement efforts. Emerging research findings point to the importance of identifying the distinctive patterns of risk factors (e.g., individual person characteristics and contextual factors) associated with each type of institutional elder abuse as a basis for effective intervention (Schiamberg et al., in press; Zhang et al., 2011). In general, attention should be directed at potentially protective individual and contextual factors that may reduce the elder's risk for abuse. These include facilitating both a sense of elder independence and a sense of connection to emotionally supportive family members. The ecological perspective highlights the importance of developing ways to facilitate communication between caregivers and family members, thereby decreasing social isolation and elder abuse.

The primary strength of an ecological perspective is in eliminating the perception that any one factor alone is a risk factor for abuse. This perspective provides a key element to the development of effective interventions more likely to prevent and/or address elder abuse in nursing homes. The ecological perspective suggests that elder abuse should be studied as a dynamic interaction between individual and contextual factors that lead to abusive situations. Much of the research in elder mistreatment, ever since Pillemer (1988) first articulated a comprehensive research paradigm, has focused on each component of elder abuse individually. The problem of elder abuse within the context of nursing home settings, as in families, is not a consequence of a single event and cannot be explained by a single cause (Schiamberg & Gans, 1999). Rather, risk factors for elder abuse in nursing homes appear to exist at all levels of the ecological context of human

development, including interpersonal/psychological, interpersonal/familial, social network, community, institutional/societal, and cultural and historical.

REFERENCES

- Anetzberger, G. J., Palmisano, B. R., Sanders, M., Bass, D., Dayton, C., Eckert, S., & Schimer, M. A. (2000). A model intervention for elder abuse and dementia. *The Gerontologist*, 40, 492–497.
- Beach, S. R., Schulz, R., Williamson, G. M., Miller, L. S., Weiner, M. F., & Lance, C. E. (2005). Risk factors for potentially harmful informal caregiver behavior. *Journal* of the American Geriatrics Society, 53, 255–261.
- Beck, C. (1999). Enabling and empowering certified nursing assistants for quality dementia care. *International Journal of Geriatric Psychiatry*, 14, 197–211.
- Bredthauer, D., Becker, C., Eichner, B., Koczy, P., & Nikolaus, T. (2005). Factors relating to the use of physical restraints in psychogeriatric care: A paradigm for elder abuse. *Zeitschrift & Gerontologie und Geriatrie*, 38(1), 10–18.
- Bronfenbrenner, U., & Morris, P. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *The bandbook of child psychology. Volume 1: Theoretical models of human development* (5th ed., pp. 993–1029). New York, NY: Wiley.
- Burgess, A. W., Dowdell, E., & Prentky, R. (2000). Sexual abuse of nursing home residents. *Journal of Psychosocial Nursing*, 38, 11–18.
- Carp, F. M. (1999). *Elder abuse in the family: An interdisciplinary model for research*. New York, NY: Springer.
- Chalk, R., & King, P. A. (1998). *Violence in families*. Washington, DC: National Academies Press.
- Coyne, A. C., Reichman, W. E., & Berbig, R. M. T. (1993). The relationship between dementia and elder abuse. *American Journal of Psychiatry*, *150*, 643–646.
- Donohue, W. A., Dibble, J. L., & Schiamberg, L. (2008). A social capital approach to the prevention of elder abuse. *Journal of Elder Abuse & Neglect*, *20*(1), 1–23.
- Dong, X. (2005). Medical implications of elder abuse and neglect. *Clinics in Geriatric Medicine*, 21(2), 293–313.
- Drake, V., & Freed, P. (1998). Research applications: Domestic violence in the elderly. *Geriatric Nursing*, 19, 165–167.
- Duncan, M. T., & Morgan, D. L. (1994). Sharing the caring: Family caregivers' views of their relationships with nursing home staff. *The Gerontologist*, *34*, 235–244.
- Dyer, C. B., Pavlik, V. N., Murphy, K. P., & Hyman, D. J. (2000). The high prevalence of depression and dementia in elder abuse or neglect. *Journal of the American Geriatrics Society*, 48, 205–208.
- Feder, J., Komisar, H. L., & Niefeld, M. (2000). Long-term care in the United States: An overview. *Health Affairs*, 19(3), 40–56.
- Friedemann, M. L., Montgomery, R. J., Maiberger, B., & Smith, A. (1997). Family involvement in the nursing home: Family-oriented practices and staff-family relationships. *Research in Nursing & Health*, 20, 527–537.
- Fulmer, T., Paveza, G., VandeWeerd, C., Fairchild, S., Guadagno, L., Bolton-Blatt, M., & Norman, R. (2005). Dyadic vulnerability and risk profiling for elder neglect. *The Gerontologist*, 45, 525–534.

- Gaugler, J. E., Leitsch, S. A., Zarit, S. H., & Pearlin, L. I. (2000). Caregiver involvement following institutionalization: Effects of preplacement stress. *Research on Aging*, 22, 337–335.
- Goergen, T. (2001). Stress, conflict, elder abuse and neglect in German nursing homes: A pilot study among professional caregivers. *Journal of Elder Abuse & Neglect*, *13*(1), 1–26.
- Goodridge, D. M., Johnston, P., & Thomson, M. (1996). Conflict and aggression as stressors in the work environment of nursing assistants: Implications for institutional elder abuse. *Journal of Elder Abuse & Neglect*, 8(1), 49–67.
- Hamers, J. P. H., Gulpers, M. J. M., & Strik, W. (2004). Use of physical restraints with cognitively impaired nursing home residents. *Journal of Advanced Nursing*, 45, 246–251.
- Harrington, C., Zimmerman, D., Karon, S. L., Robinson, J., & Beutel, P. (2000). Nursing home staffing and its relationship to deficiencies. *Journals of Gerontology: Psychological Sciences and Social Sciences*, 55, 278–287.
- Hawes, C. (2003). Elder abuse in residential long-term care settings: What is known and what information is needed? In R. J. Bonnie & R. B. Wallace (Eds.), *Elder mistreatment: Abuse, neglect, and exploitation in an aging America. National Research Council* (pp. 446–500). Washington, DC: The National Academies Press.
- Hawes, C., Blevins, D., & Shanley, L. (2001). Preventing abuse and neglect in nursing homes: The role of the nurse aide registries. Report to the Centers for Medicare and Medicaid Services. College Station, TX: Texas A&M University System.
- He, W., Sengupta, M., Velkoff, V., & DeBarros, K. A. (2005). U.S. Census Bureau, Current Population Reports, P23-209, 65+ in the United States: 2005.
 Washington, DC: U.S. Government Printing Office.
- Irurita, V. (1999). Factors affecting the quality of nursing care: The patient's perspective. *International Journal of Nursing Practice*, *5*(2), 86–94.
- Jiska Cohen-Mansfield, P. W. (1999). Longitudinal predictors of non-aggressive agitated behaviors in the elderly. *International Journal of Geriatric Psychiatry*, *14*, 831–844.
- Keidel, G. C. (2002). Burnout and compassion fatigue among hospice caregivers. *American Journal of Hospice and Palliative Medicine*, *19*, 200–205.
- Kosberg, J. I. (1998). The abuse of elderly men. *Journal of Elder Abuse & Neglect*, 9(3), 69–88.
- Kosberg, J. I., & Nahmiash, D. (1996). Characteristics of victims and perpetrators and milieus of abuse and neglect. In L. A. Baumhorer & S. C. Bell (Eds.), *Abuse, neglect and exploitation of older persons: Strategies for assessment and intervention* (pp. 31–50). Baltimore, MD: Health Professions Press.
- Krauss, N. A., & Altman, B. M. (1998). Characteristics of nursing home residents— 1996 (AIICPR Pub. No. 99-0006). Rockville, MD: Agency for Health Care Policy and Research.
- Lachs, M. S., & Pillemer, K. (1995). Current concepts—abuse and neglect of elderly persons. New England Journal of Medicine, 332, 437–443.
- Lachs, M. S., & Pillemer, K. (2004). Elder abuse. Lancet, 364(9441), 1263-1272.

- Lachs, M. S., Williams, C., O'Brien, S., Hurst, L., & Horwitz, R. (1997). Risk factors for reported elder abuse and neglect: A nine-year observational cohort study. *The Gerontologist*, 37, 469–474.
- Lachs, M. S., Williams, C. S., O'Brien, S., Pillemer, K. A., & Charlson, M. E. (1998). The mortality of elder mistreatment. *Journal of the American Medical Association*, 280, 428–432.
- Manton, K. G., Corder, L. S., & Stallard, E. (1993). Estimates of change in chronic disability and institutional incidence and prevalence rates in the US elderly population from the 1982, 1984 and 1989 National Long-Term Care Survey. *Journal of Gerontology*, 48, 153–166.
- Menio, D. A. (1996). Advocating for the rights of vulnerable nursing home residents: Creative strategies. *Journal of Elder Abuse & Neglect*, 8(3), 59–72.
- Mercer, S. O., Heacock, P., & Beck, C. (1993). Nurse's aides in nursing homes: Perceptions of training, work loads, racism, and abuse issues. *Journal of Gerontological Social Work*, 21, 95–112.
- Mercer, S. O., Heacock, P., & Beck, C. (1994). Nurse's aides in nursing homes: A study of caregivers. *Journal of Women and Aging*, 6, 107–121.
- Murphree, K., Campbell, P., Gutmann, M., Plichta, S., Nunn, M., McCann, A., & Gibson, G. (2002). How well prepared are Texas dental hygienists to recognize and report elderly abuse? *Journal of Dental Education*, 66, 1274–1280.
- Murray, M. K. (2002). The nursing shortage: Past, present, future. *Journal of Nursing Administration*, *32*(2), 79–84.
- National Center on Elder Abuse. (2006). *Abuse of adults age 60+ 2004 survey of Adult Protective Services*. Washington, DC: Administration on Aging.
- National Research Council. (2003). *Elder mistreatment: Abuse, neglect, and exploitation in an aging America.* Washington, DC: The National Academies Press.
- Nerenberg, L. (2006). Communities respond to elder abuse. *Journal of Gerontological Social Work*, 46(3/4), 5–33.
- Nerenberg, L. (2008). *Elder abuse prevention: Emerging trends and promising strategies*. New York, NY: Springer.
- Paveza, G. J., Cohen, D., Eisdorfer, C. E., Freels, S., Shram, T. S., Ashford, W., . . . Levy, P. (1992). Severe family violence and Alzheimer's disease: Prevalence and risk factors. *The Gerontologist*, *32*, 493–497.
- Payne, B., & Cikovic, R. (1995). An empirical examination of the characteristics, consequences, and causes of elder abuse in nursing homes. *Journal of Elder Abuse & Neglect*, 7(4), 61–74.
- Payne, B. K., & Fletcher, L. B. (2005). Elder abuse in nursing homes: Prevention and resolution strategies and barriers. *Journal of Criminal Justice*, 33(2), 119–125.
- Pillemer, K. (1988). Maltreatment of patients in nursing homes: Overview and research agenda. *Journal of Health and Social Behavior*, 29, 227–238.
- Pillemer, K. (2004). Elder abuse is caused by the deviance and dependence of abusive caregivers. In D. Loseke, R. Gelles, & M. Cavanaugh (Eds.), *Current controversies on family violence* (2nd ed., pp. 207–220). Newbury Park, CA: Sage Publications.
- Pillemer, K., & Bachman-Prehn, R. (1991). Helping and hurting: Predictors of maltreatment of patients in nursing homes. *Research on Aging*, 13(1), 74–95.

- Pillemer, K., & Finkelhor, D. (1988). The prevalence of elder abuse: A random sample. *The Gerontologist*, 28(1), 51–57.
- Pillemer, K., & Moore, D. W. (1989). Abuse of patients in nursing homes: Findings from a survey of staff. *The Gerontologist*, 29(3), 314–320.
- Pillemer, K., & Moore, D. W. (1990). Highlights from a study of abuse of patients in nursing homes. *Journal of Elder Abuse & Neglect*, 2(1/2), 5–29.
- Pillemer, K., Suitor, J. J., Henderson, C. R., Meador, R., Schultz, L., Robison, J., & Hegeman, C. (2003). A cooperative communication intervention for nursing home staff and family members of residents. *The Gerontologist*, 43, 96–106.
- Podnieks, E. (1992). National survey on abuse of the elderly in Canada. *Journal of Elder Abuse & Neglect*, 4(1/2), 5–58.
- Port, C. L. (2004). Identifying changeable barriers to family involvement in the nursing home for cognitively impaired residents. *The Gerontologist*, *44*, 770–778.
- Post, L. (2006). *The design and content of the Michigan Survey of Households with Family Members Receiving Long-Term Care Services*. Lansing, MI: College of Communication Arts and Sciences, Michigan State University.
- Ramirez, A., Addington-Hall, J., & Richards, M. (1998). ABC of palliative care: The carers. *British Medical Journal*, *316*(7126), 208–211.
- Rimer, B. K., & Glanz, K. (2005). Theory at a glance: A guide for health promotion practice (2nd ed., NIH Pub. No. 05-3896). Washington, DC: National Cancer Institute, National Institutes of Health, U. S. Department of Health and Human Services.
- Schiamberg, L., & Gans, D. (1998, September). An ecological perspective to elder abuse by adult children. Paper presented at the World Conference on Family Violence, Singapore.
- Schiamberg, L., & Gans, D. (1999). An ecological framework for contextual risk factors in elder abuse by adult children. *Journal of Elder Abuse & Neglect*, 11(1), 79–105.
- Schiamberg, L., & Gans, D. (2000). Elder abuse by adult children: An applied ecological framework for understanding contextual risk factors and the intergenerational character of quality of life. *The International Journal of Aging and Human Development*, 50(4), 329–359.
- Schiamberg, L., Oehmke, J., Zhang, Z., Barboza, G., von Heydrich, Griffore, R., ... Post, L. (in press). Physical abuse of older adults in nursing homes: A random sample telephone survey of adults with an elder family member in a nursing home. *Journal of Elder Abuse & Neglect*.
- Shaw, M. M. (1998). Nursing home resident abuse by staff: Exploring the dynamics. *Journal of Elder Abuse & Neglect*, *9*(4), 1–21.
- Stahl, S. M., Prenda, K. M., & Cooper, H. (2001). Research directions on elder abuse and neglect. Bethesda, MD: National Institute on Aging / National Institutes of Health.
- Tarbox, A. R. (1983). The elderly in nursing homes: Psychological aspects of neglect. *Clinical Gerontology*, *1*(4), 39–52.
- Teaster, P. B., & Roberto, K. A. (2004). Sexual abuse of older adults: APS cases and outcomes. *The Gerontologist*, 44, 788–796.

- Tellis-Nayak, V., & Tellis-Nayak, M. (1989). Quality of care and the burden of two cultures: When the world of the nurse's aide enters the world of the nursing home. *The Gerontologist*, *29*, 307–313.
- Wyandt, M. A. (2004). A review of elder abuse literature: An age old problem brought to light. *California Journal of Health Promotion*, *2*(3), 40–52.
- Zhang, Z., Schiamberg, L., Oehmke, J., Barboza, G., Griffore, R., Post, L., . . . Mastin, T. (2011). Neglect of older adults in nursing homes, *Journal of Elder Abuse & Neglect*, 23, 75–88.