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The Effect of Education on Elder Abuse

Kathleen M. Evanina

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THE EFFECT OF EDUCATION ON ELDER ABUSE

A Dissertation

Submitted to the School of Nursing

Duquesne University

In partial fulfillment of the requirements for

the degree of Doctor of Philosophy

By

Kathleen Evanina

May 2014

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Kathleen Evanina

2014

THE EFFECT OF EDUCATION ON ELDER ABUSE

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Approved April 4, 2014

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ABSTRACT

THE EFFECT OF EDUCATION ON ELDER ABUSE

By

Kathleen Evanina

May 2014

Dissertation supervised by Dr. Kathleen Sekula

The education of nursing professionals and care providers regarding elder abuse is vital to the protection of a growing senior citizen population. The literature suggests that healthcare professionals are not adequately prepared to identify, prevent or respond to elder abuse (Allan, 2005). This study was designed to examine the effect of an educational seminar entitled “Competence with Compassion: A Universal Core Curriculum” from the Center for Advocacy for the Rights and Interests of the Elderly (CARIE) on long term care nurses’ prevention of elder abuse. A sample of four long term care centers from a rural county in Pennsylvania was used in this prospective quasi-experimental design. A control group received no treatment and the experimental group received the education seminar treatment. Responses to items from the Conflict Tactics 2 scales (CTS2), the Knowledge and Management of Abuse (KAMA) scale and the number of abuse reports to the area ombudsman for each long term care center were collected

during the study. The control and treatment groups were compared to determine if the educational intervention had any effect on elder perception of conflict (as measured by the CTS2 scale), if it changed staff knowledge of abuse (as measured by the KAMA scale) or abuse report rates. Much research states that the education of nursing staff will reduce the risk of elder abuse; however no studies support this theory. This study contributes to evidenced based nursing practice by supporting the claims that education is the key to reduce potential harm to patients. Findings from this study support elder abuse education as an effective strategy to prevent abuse in long term care centers.

DEDICATION

This dissertation is dedicated to my family especially my mother who told me that I can do anything; my grandmother who was so proud to see me do this. My husband, the light of my life who helped with everything so I could focus; my sister, who spent countless hours editing and reviewing information “in Greek terms”; my husband who read “dry as toast” excerpts. My children (Kayla and Liam), who supported me through their independence and interest in the topic; I cannot wait to read both of your dissertations!

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I would also like to thank my committee members, who worked hard on this document. First I would like to thank my committee chair, Dr. Sekula who provided much needed guidance, encouragement and patience. Dr. Sekula inspired me to keep going and to create the best study I could. Dr. Colbert and Dr. Pearsall guided my decisions along the way to create a study I could be proud of. Your input and expertise was invaluable to me and I am a better researcher because of it.

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LIST OF ABBREVIATIONS

| | |
|-----------|-----------------------------------------|
| KAMA..... | knowledge and management of abuse scale |
| CTS2..... | cognitive tactics scale |
| LTC | long term care center |
| RN | registered nurse |
| LPN | licensed practical nurse |
| CNA..... | nursing assistant |

Chapter 1 Introduction

According to the National Elder Abuse Incidence Study (1998), over 2.1 million elderly people are abused yearly in the United States. This study included physical, verbal, and financial abuse. Although this is an extraordinary number, for every case of elder abuse that is reported an estimated five are unreported (Allan, 2005). This extraordinary number stems from population health characteristics which deteriorate with age such as physical limitations, behavioral abnormalities or cognitive limitations. These characteristics of declining health have been found to be risk factors for abuse (Burgess, Dowdell, & Prentky, 2000; Dyer, Pavlik, Murphy, & Hyman, 2000; Lachs & Pillemer, 1995; Lachs, Williams, O'Brien, Pillemer, & Charlson, 1998; Pillemer & Bachman-Prehn, 1991). Many healthcare professionals do not receive specialized training and education in recognition or prevention is deficient across the broad spectrum of service providers' (Fulmer, Guadagno, & Connolly, 2004; Kennedy, 2005; Sellas & Krause, 2006; WHO/INPEA, 2002). The exact prevalence is currently unknown, but studies estimate that between 2%-10% of the international elderly population are victims of abuse (Brozowski & Hall, 2003; Gorbien & Eisenstein, 2005; Whindam, 2000). This estimate is comparable to the National Elder Abuse Incident Study. These studies used reported abuse incidents from either victims themselves or reports from victim advocates. The estimates are not actual found and verified reports of abuse, thus they are estimates because reporting to investigative sources is known to be inadequate to represent this population. Difficulty in caring for victims arises when large populations of elders are abused and healthcare providers are not equipped to

prevent, deal with or detect it. In this study, the definition of elder is a person aged 60 years and older.

Background

In the United States, over 2.1 million elderly people are abused according to findings in The National Elder Abuse Incidence Study (1998) and the incidence of abuse is three times more likely in seniors over 80 years of age (Tatara, Kuzmeskus-Blumerman, & Duckhorn, 1998). The Commonwealth of Pennsylvania Department of Aging (2006) reported that more than 20% of the population in Pennsylvania is over the age of 80, the higher abuse risk age. Woman aged 75 years and older comprise 72% of substantiated abuse cases in Pennsylvania, while 33.3 % of these abuse victims live in residential care facilities (Pennsylvania Department of Aging, 2006). Elder abuse victims may be hesitant, incapable or unwilling to report maltreatment (Shryock, Hunsaker, Corey, & Weakley-Jones, 2005). This unwillingness to report stems from multiple factors including lack of knowledge about who to inform or what to expect when abuse is divulged and fear of potential consequences after reporting abuse (GAO, 2002; Moskowitz, 1998).

The majority of the persons committing the reported abuse cases are caretakers, both professional and non-professional (Pennsylvania Department of Aging, 2006). Pennsylvania statistics reflect national norms (Teaster et al., 2006). A major challenge in addressing elder abuse is the identification of elderly victims and prevention of abuse. Three studies have found that the majority of abused elders are acquainted with and dependent on their assailants (Homer & Gilleard, 1990; Stein & Barrett-Connor,

2000; Teaster & Roberto, 2004). This finding is synonymous with the dependent relationship residents have with nursing staff in long term care homes. Studies have shown many elder abuse victims are cared for in a long term care setting (Dunlop, Rothman, Condon, Hebert, & Martinez, 2001).

Pillemer and Moore (1989) completed a study that included 577 long term care staff from 31 facilities. This study focused on knowledge of nursing home abuse and found that 31% of staff witnessed and 10% committed physical abuse to residents while 81% witnessed and 40% committed a form of psychological abuse to residents. In this study and throughout the literature a recurrent theme is a scenario of a hostile environment where conflict is created between residents and long term care staff in the form of elder frustration and miscommunication with staff, which in turn creates potential and actual abuse (Almvik, Rasmussen, & Woods, 2006; Åström et al., 2004; Isaksson, Åström, & Graneheim, 2008; Pillemer & Moore, 1989; Sandvide, Fahlgren, Norberg, & Saveman, 2006; Snyder, Chen, & Vacha-Haase, 2007). These researchers recommend that the proper ability to manage conflict may have a positive effect and reduce abuse instances (Almvik et al., 2006; Åström et al., 2004; Isaksson et al., 2008; Montoro-Rodriguez & Small, 2006; Sandvide et al., 2006; Snyder et al., 2007). Education on prevention of abuse may enable nurses to change a possible hostile environment, recognize, or prevent abuse situations. Long term care nurses may be the first contact with an elder abuse victim. This also places nurse in a position to identify this hidden population (Allen, Kellett, & Gruman, 2004; GAO, 2002). Long term care

nursing staff should be aware of how to prevent, identify and care for elder abuse victims; however, training may be an issue (Tilden et al., 1994).

Most long term care nurses do not receive specialized training or education in the assessment of elder abuse (GAO, 2002; Zeller et al., 2009). In a sample of 300 nursing home staff members, Tilden et al. (1994) found that one third of the healthcare professionals had no education in identification of elder abuse. They also found that three quarters of the respondents who had received education in abuse did not have education in elder abuse. There is a gap in the literature on studies that examine the effect of education on prevention of elder abuse in nursing home staff. Two studies have been completed on nursing school education and elder abuse by Woodtli and Breslin in 1996 and 2002. In their study of 298 nursing school curricula and elder abuse, Woodtli and Breslin (2002) found that nursing programs are not adequate in comparison to the topic of child abuse in the amount of time spent or the quality of the information presented to students about elder abuse. Forty-six percent of the schools studied provided elder abuse material in less than one hour in class or through readings assignments, and 63% of schools had no faculty development in violence curricula even though it had been strongly recommended in the 1996 study to support addition of elder abuse topics into the curriculum (Woodtli & Breslin, 2002).

Studies have shown that many healthcare professionals inadequately screen the elderly for abuse (Lachs & Pillemer, 2004; Lachs et al., 1998). Three large studies show that healthcare professionals have disclosed concerns about knowledge deficits in abuse prevention, recognition, interventions and that education in the area of elder

abuse is deficient across the broad spectrum of service providers (Fulmer, Guadagno, Bitondo dyer, & Connolly, 2004; Krueger & Patterson, 1997; WHO/INPEA, 2002).

Since many long term care residents fit into high risk groups associated with abuse (over aged 80, female, dependent on caregivers) long term care providers should receive education in the areas of assessment strategies and remedies in order to enhance detection and prevention of elder abuse (WHO/INPEA, 2002). While Krueger and Patterson (1997) posit that the education of nursing staff will reduce elder abuse, little research has been conducted regarding the outcomes of nursing education in this area.

Researchers have surveyed healthcare professionals about their knowledge of abuse and found that there is a lack of skill and familiarity in dealing with elder abuse (Kennedy, 2005; Krueger & Patterson, 1997; McCreadie, Bennett, Gilthorpe, Houghton, & Tinker, 2000; Tilden et al., 1994; Woodtli & Breslin, 2002). Two researchers have investigated the effects of an educational experience in producing a change in knowledge level of participants using a pre and posttest survey (Richardson, Kitchen, & Livingston, 2002; Roberts, Raphael, Lawrence, O'Toole, & O'Brien, 1997). However no studies were found that tested the outcomes of an educational intervention focused on increasing knowledge related to abuse prevention and how to deal with abuse if discovered. Many claims have been made that education is the key to abuse prevention, but no studies were found that investigated the outcomes of education on abuse risk and prevention in the elderly. This project filled that gap by adding clinical evidence of the effect of education on abuse risk in long term care centers.

Theoretical Framework

The Roy Adaptation Model (RAM) describes and defines characteristics into four domains; person, nursing, environment and health. The revisited framework also provides a systematic delivery for nursing care and provides an overall goal of nursing (Roy, 2009). This was the basis for the formulation of the research questions and the foundation for the current study.

Three concepts are basic to the RAM: adaptation, the human being, and nursing. Humans are biopsychosocial beings that interact with the environment. The goal of the human being is to achieve adaptation through interaction with the environment. According to Roy and Roberts (1981, p. 43), "The person has two major internal processing subsystems, the regulator and the cognator." The regulator subsystems are physical mechanisms like the central nervous system. The cognator subsystem includes the psychosocial aspect of the human like thoughts, emotions, learning and judgments. These internal subsystems are used by humans to adapt and cope with internal and external environmental stimuli. These two subsystems are connected by human perception (Roy & Roberts, 1981). These subsystems were the foundation for the research question: Will the perception of maltreatment by long term care center residents and nursing staff change after an educational seminar is provided to nursing staff?

Adaptation in abuse prevention is achieved in four modes; Physiologic Mode, Self-Concept Mode, Role Function Mode, & Interdependence Mode. The physiologic mode involves the provision of the basic necessities like food, shelter, and clothing.

This is related to the upkeep of the regulator subsystems and is an integral part of abuse prevention. The educational seminar teaches nurses the importance of keeping themselves physically healthy. The self concept mode is the view of oneself, personal goals, values and definition of self. This mode is highly involved in the merging of both the cognator and regulator subsystems because it is highly dependent on perception. This is addressed in the educational seminar as self perception and how it relates to long term care work. The Role function mode is the person's role in relation to their environment. This includes their role in conflict and conflict resolution which is a fundamental part of the abuse prevention seminar. This role is also related to both the regulator subsystem (physical strength) and also the cognator subsystem (mental strength). The interdependence mode is the ability for the person to act independently, achieve goals and rely on support systems provided. This is a vital aspect of abuse prevention and directly related to both the cognator and regulator subsystems. The educational seminar reviews this aspect thoroughly. The four modes of adaptation were the basis for the research question: Is there a relationship between the implementation of an educational seminar on elder abuse and the number of abuse cases reported to the area ombudsman.

The subsystems of the cognator and regulator are a fundamental part of abuse prevention. The regulator is the physical status of the person and includes strength, nutritional state and availability of physical resources. Elderly persons have a higher incidence of physical limitations, which increase their risk of decline in the regulator subsystem and increase their risk of abuse (Burgess et al., 2000; Dyer et al., 2000;

Pillemer & Bachman-Prehn, 1991). Long term care staff should recognize these limitations in the elderly. The educational seminar teaches long term care staff to recognize possible limitations so they can adjust care for frail elders. Therefore, an inadequate regulator system dictates a potential for physical harm or unmet safety needs if the fundamental physical needs of a person are not met (Barone, Roy, & Frederickson, 2008; Roy, 2009; Straus, 2013). On the contrary, if a person is physically fit and not dependent, their risk of abuse is lowered (Lachs & Pillemer, 1995; Lachs et al., 1998; Pillemer & Bachman-Prehn, 1991). The cognator subsystem encompasses the thought processes, belief patterns, ability to learn and values a person holds (Roy, 2009). A strain on long term care staff's cognator subsystem from resident behavioral or cognitive abnormalities creates a potential for psychological aggression leading to abuse (Burgess et al., 2000; Dyer et al., 2000; Lachs & Pillemer, 1995; Pillemer & Bachman-Prehn, 1991; Pillemer & Finkelhor, 1988; Straus, 2013).

The RAM also describes goals for nursing care. The goal of nursing is “the promotion of adaptation for individuals and groups in each of the four adaptive modes, thus contributing to health, quality of life and dying with dignity” (Roy 2009, p. 16). The provider of nursing care, which in this study was the long term care nursing staff, is an adaptive system that operates interdependently with others and with the environment. Expanding and refining the theory originally formulated in 1970, Roy defined adaptation as “the process and outcomes whereby thinking and feeling people, as individuals or in groups, use conscious awareness and choice to create human and environmental integration” (Roy, 2009, p. 26). Changes in stimuli place stress on the

coping ability of an individual (Roy, 2009). There are three types of stimuli; focal (what is confronting the individual), contextual (affect the person or response to the focal stimuli) and residual (indeterminate effects). The environment encompasses all conditions, situations, and forces that affect the development and actions of individuals with particular emphasis on interactions between human beings and the environment. The environment is held to be a key factor in the health of the individual or group (Roy & Andrews, 2009). For the purpose of this project, the environment was the long term care center, which impacts an individual through not only the physical surroundings, but the social context of the nurse/resident relationship. The resident was part of the environment. Nurses strive to create adaptive responses in residents through interventions that promote effective coping. If nurses are deficient in knowledge, this stimulus affects their ability to effectively promote an adaptive response (Roy, 2009, p. 66). These nursing goals were origin for the research question: Do knowledge levels of nursing home staff regarding elder abuse change after the Center for Advocacy for the Rights and Interest of the Elderly (CARIE) educational intervention is provided.

The Roy Adaptation model also underpins the current study. Conflict was the focal stimuli examined in this project. Focal stimuli refer to changes or situations immediately confronting the person. For the purpose of this study, the educational intervention was residual stimuli (individual's views that can influence the situation) provided to staff, based upon the study's findings. This information was carried through the coping process used in the nursing staff's cognator/regulator subsystem (Roy, 2009). Therefore, the reports of abuse from the area ombudsman and the resident

scores on the conflict tactics scale were used as benchmarks to test the effectiveness of the educational intervention.

“Adaptation level represents the condition of the life processes. Three levels are described: integrated, compensatory, and compromised life processes” (Roy 2009 p. 33). An integrated adaptation level denotes that the life processes are operating holistically and productively. Compensatory adaptation levels signify challenges to an integrated life process. A compromised adaptation level means that both the integrated and compensatory life processes are insufficient, which can produce problems with adaptation. The adaptation level combines with all other stimuli to produce a range of coping mechanisms which are derived from the regulator and cognator subsystems (Roy, 2009). The coping process operates to sustain human integrity within four adaptive modes: physiological, self-concept, role function, and interdependence. The adaptive modes serve as the foundation for nursing diagnoses and interventions. Education is considered a nursing intervention, which is used in this project. These modes serve as a basis for nursing assessments and interventions (Roy, 2009). In the current study, the assessment occurs with the recognition of conflict stimuli by the nurse. The information learned from the educational intervention provides knowledge for appropriate interventions to initiate a proper adaptive response from staff with a residual effect of adaptive response from the elder.

According to Pillemer and Wolf (1986), abuse is most likely to occur under the context of conflict. This conflict ultimately affects a person physically, socially, psychologically and influences their environment. According to the Roy Adaptation

Model, the person's level of adaptation is constantly changing in response to the demands of the environment, which, is impacted by conflict (Pillemer & Wolf, 1986; Roy, 2009). The use of the educational intervention to impact the environment as well as the cognator and regulator subsystems of staff to ultimately create an abuse free behavioral response was the fundamental proposal in the project and was supported by Roy's Adaptation Model. Central to the Roy's Adaptation Model is the idea that human beings are adaptive systems functioning in a state of interdependence with other systems within the environment (Roy, 2009). This use of the model has clear implications for creating an environment free of abuse and neglect for frail elderly nursing home residents, which is illustrated in figure one. This figure is drawn as a chain, which delineates how these responses will then ignite more stimuli and continue on as an unbroken circle.

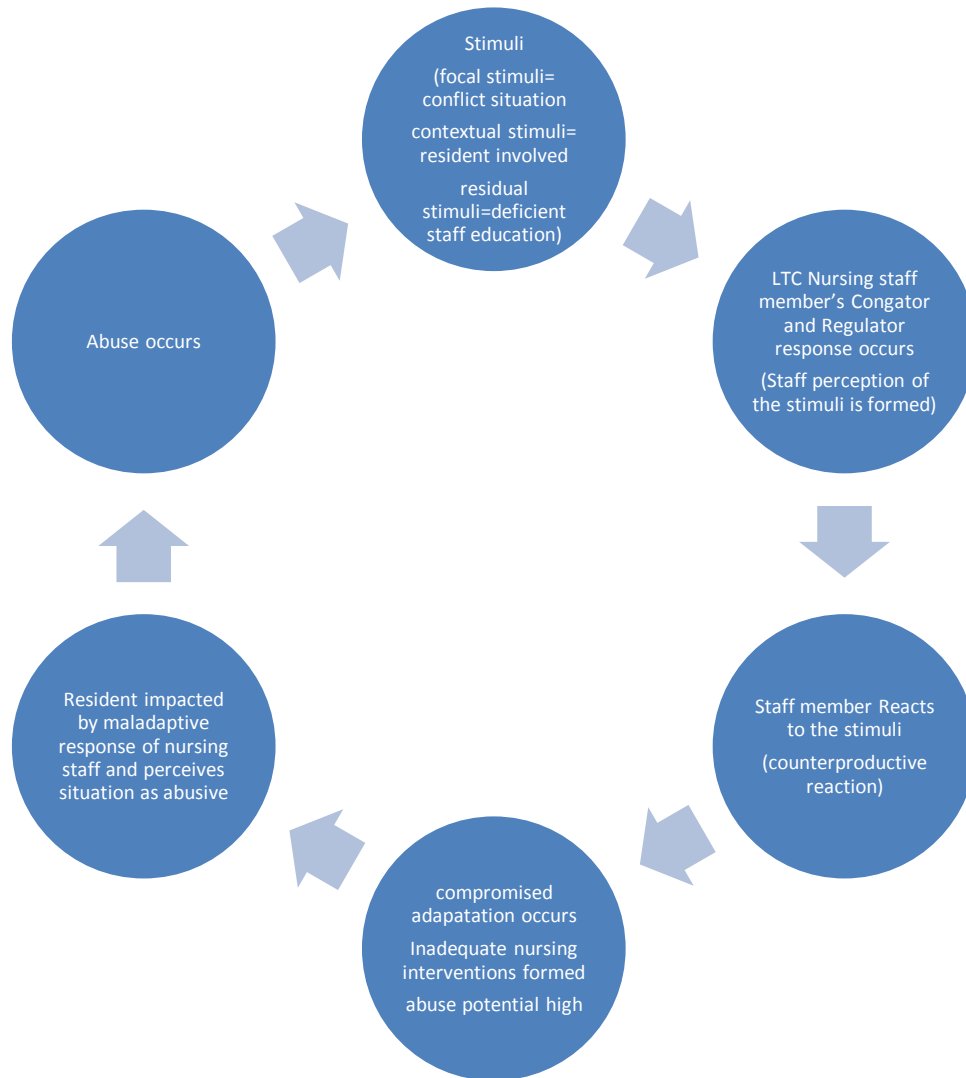


Figure 1. The application of Roy's adaptation model prior to educational intervention

According to the model, as adaptive systems, individuals experience stimuli, which was conflict for the purpose of this study (inputs). The staff nurse must cope with the

stimuli using the adaptive modes and process this information through the cognator and regulator subsystems, which gives them a perception of the events to develop coping strategies and behaviors that generate responses (outputs). These responses can alternately be adaptive or counterproductive (Tolson & McIntosh, 1996). The educational intervention variable in the study was utilized to generate an adaptive response from the nursing staff by adding knowledge of abuse prevention and interventions, thus providing them with cognator and regulator tools, which changed their response (perception), thus affecting their coping strategy to one that will yield a productive response. In turn this productive response will have residual effects on resident perceptions of the situation. Then, according to the RAM, the nurse will continue with the goal of nursing, which was to create an adaptive response and use a systematic approach to patient care based upon the educational intervention and ultimately prevent resident abuse (see figure 2). This figure is drawn in a linear fashion to show that resolution of the situation is formed.

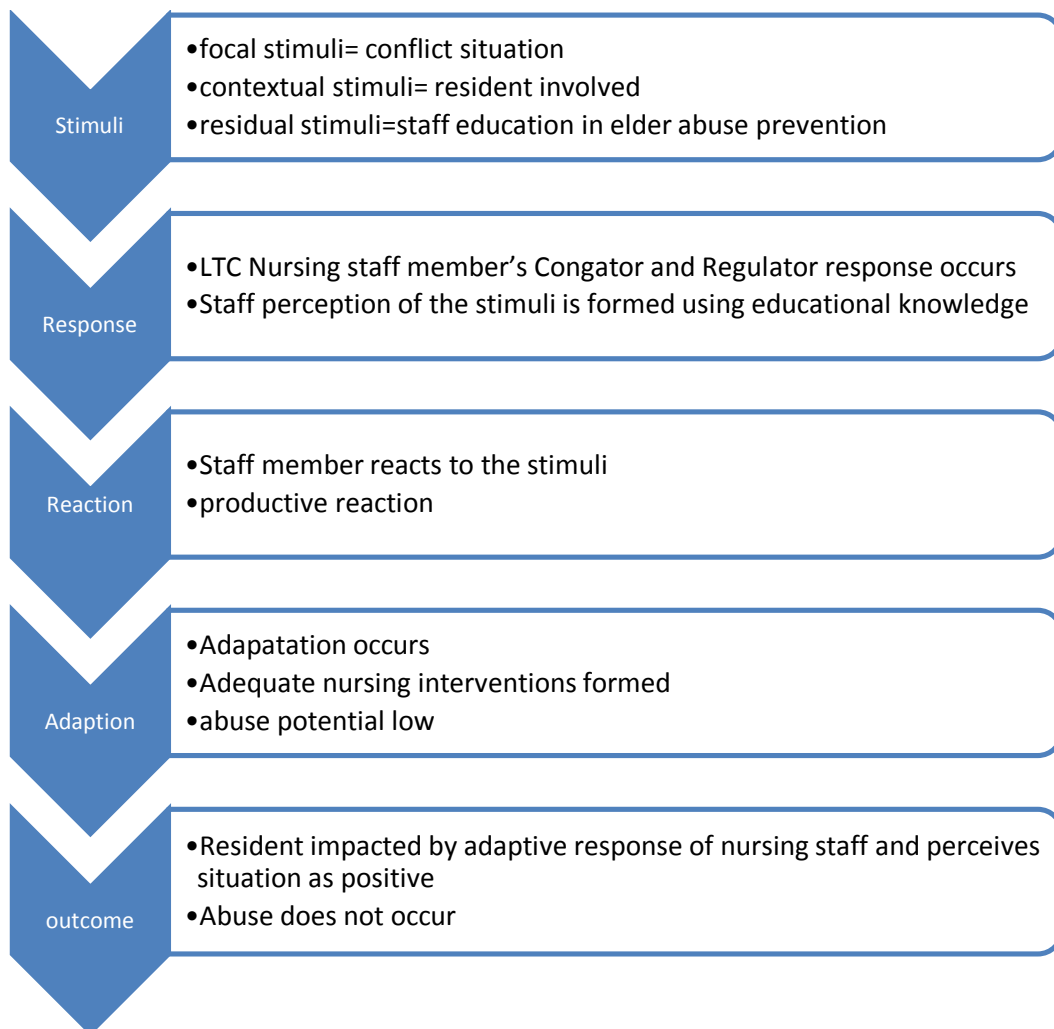


Figure 2. The application of Roy's adaptation model with CARIE educational intervention

Tolson and McIntosh (1996) used the Roy Adaptation model as a conceptual framework for an intervention to guide nurses and nursing assistants in creating a pleasant listening environment for elderly residents with hearing loss. Dixon (1999)

outlined a framework for applying the Roy model to community public health promotion. Limandri (1986) took an explanatory implementation of the Roy Adaptation model to conceptualize behaviors in abused women. These three applications of the Roy Application Model seem especially pertinent to the present study.

Tolson and McIntosh (1996) applied the Roy Adaptation Model to an intervention designed to promote use of a hearing aid by infirm elderly residents with impaired hearing. According to the authors, “One of the key features of the model is the belief that people have the capacity to adapt to chronic health problems...even when they are in a state of dependence and deteriorating health” (p. 986). This models the elderly dependent patient in a long term care center. Tolson and McIntosh did not view their intervention as a panacea for the problems faced by the elderly hospital residents but rather as a springboard for discussion on the role of nurses in enhancing the surrounding environment. In the current study the nurse uses her conflict management knowledge to create interventions to promote adaptation. The project of Tolson and McIntosh (1996) was driven by the philosophy that one of the central tenets of nursing research is demonstrating that nursing interventions have the power to impact patient care outcomes. This parallels the present study, which used the nursing intervention of education to impact patient abuse outcomes.

Dixon (1999) proposes using the Roy Adaptation Model as a framework for community health promotion. Their study used the model to determine appropriate nursing interventions to manage stimuli and promote effective adaptation. This

parallels the current project which determined if using a nursing intervention (education) to manage stimuli (conflict) allows for adaptation of the nursing staff and thus affect elderly resident. The authors also suggest the use of the model for public health issues through nursing interventions and mass education. The model has rarely been applied in this context. In light of the present study it can be used to guide efforts to raise awareness of elder abuse as a serious public health issue and the role of nursing in the creation of interventions and diagnosis to lead the way.

Limandri (1986) used the Roy's Adaptation Model to conceptualize the help seeking behaviors of 40 interviewed abused women. The researcher found that the model is exceptional for organization and identification of complex needs and nursing goals to help abused women. In the current study, the model was used in much the same way, to organize the study and explain the relationships between the elderly resident and the nursing home staff.

Purpose of Study

The purpose of this study was to test the effectiveness of an elder abuse educational intervention on staff and residents in a long term care setting. This study tested the outcomes associated with an educational intervention created by Center for Advocacy for the Rights and Interest of the Elderly (CARIE). First, this study determined if education had an effect on elder abuse reporting rates in a long term care setting. Second, this study examined if staff learn from the education and finally if the perception of abuse was changed in nursing staff and long term care residents. Results

provided answers to questions regarding outcomes of education on long term care nursing staff's detection, response to and prevention of elder abuse.

Research Questions

1. Is there a relationship between the implementation of an educational seminar on elder abuse as measured by the number of abuse cases reported to the area ombudsman?
2. Will the perception of maltreatment by long term care center residents and nursing staff change after an educational seminar is provided to nursing staff as measured by scores on the Conflict Tactics Scale Two (CTS2)?
3. Do knowledge levels of nursing home staff regarding elder abuse change after the Center for Advocacy for the Rights and Interest of the Elderly (CARIE) educational intervention is given as measured by the Knowledge and Management of Abuse scale (KAMA)?

Definitions

Elder abuse is defined by the US National Academy of Sciences as “(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” (Bonnie & Wallace, 2003, p. 40). The definition of Elder is from the Center for Advocacy for the Rights and Interest of the Elderly (CARIE), which is a person, aged 60 years and older (CARIE, 2007).

A nursing care provider is defined as an individual who assists in the detection, treatment or prevention of illness or disability (Swanson, 1993). For the purpose of the proposed study, this includes only nursing staff that directly care for residents. Nursing care providers include Registered Nurses, License Practical Nurses and Certified Nursing Assistants.

The term education is the process by which an individual obtains knowledge and skill through the process of learning. The process of learning is completed in a program of instruction that is provided in a formally structured format (Helliwell & Putnam, 2007). The Educational intervention is the curriculum developed by CARIE.

The following definitions are from the Cognitive Tactics Scale. Negotiation is the discussions or actions taken to settle a disagreement. Psychological aggression includes invective language and/ or hurtful paraverbal and gestural acts. Injury is defined as physical distress, causation of pain, or need for medical attention. Physical assault is any type of corporeal violence expressed toward another (Straus, 2013).

Residents are individuals who reside in a care facility. Long term care facilities, residential facilities and nursing homes are synonymous terms that define an institution where individuals reside to be cared for twenty four hours per day by nursing staff (Commonwealth of Pennsylvania, 2009).

Adaptation is the final result of a response to stimuli. The adaptation outcome is based upon the person's choice, awareness and environment (Roy, 2009).

The Roy Adaptation Model was used to operationalize conflict using the four adaptive modes; physical (stress response, vulnerability), self concept (disunity, doubt),

role function (insecurity in social activities, uncertainty of role), and interdependence (affectional inadequacy, insecurity) (Roy, 2009). Conflict is defined as negative sanctions exchanged either intentionally or unintentionally (CARIE, 2007; Straus, 2013). Conflict is a stimulus that induces adaptation (Roy, 2009). The personal response to conflict is expressed as integrated, compensatory and compromised. In this study conflict is a stimulus that causes a response from any party associated with it.

Variables

The variables in this study were selected based upon the research questions, the ability to be measured, Roy's Adaptation Model's theoretical framework and their use in other research studies.

Independent variables:

1. Educational intervention;
2. Demographic information such as age, gender, race, socioeconomic status, position, education and past training in abuse; and
3. Contextual variables of residents and healthcare workers such as shift worked, experience, and time at the residence.

Dependent variables:

1. Response to conflict and behaviors measured by the Conflict Tactics Scale 2;
2. The number of abuse reports to the area ombudsman for six weeks following the educational intervention as compared with baseline data of reported abuse to area ombudsman; and

3. Long term care staff's knowledge of abuse before and learning after the intervention as measured by the KAMA instrument.

Assumptions

The main assumptions in this project are: participants (residents and staff) are willing to honestly complete all survey instruments, staff participants are actually direct care workers who deal with elderly residents consistently, and elder abuse education was never provided or has not been provided to the facility staff in the past six months. Humans are adaptive systems that interact with a continually changing environment. The regulator and cognator subsystems are internal control mechanisms of coping and direct physiological responses, perception, judgment, and emotions. A person that effectively responds by using these coping mechanisms adapt positively. Adaptation is the integration of the person and their environment. The role of nursing is to assist the patient in adaptation and changing maladaptive behaviors. Nurses want to promote and restore health in their patients.

Chapter 2 Literature Review

The literature presented in this review was drawn from a Google Scholar search, PubMed, MEDLINE, and the following EBSCO databases: Academic Search Premier, MasterFILE Premier, MasterFILE Select, Psychology and Behavioral Sciences Collection, Health Source: Nursing/Academic Edition, PsycINFO, and PsycARTICLES. Keywords used either individually or in conjunction included: elder abuse, elder mistreatment, domestic violence, elderly, frail older adults, nurses, nursing assistants, direct care providers, clinicians, nursing homes, long-term care, caregivers, risk, vulnerability, education, training, programs, assessment, prevention, intervention, CTS2 and Roy Adaptation Model.

Organization of Review

The literature review begins with a broad review of the current state of elder abuse and a more thorough look at the state of education in relation to elder abuse. A brief discussion of the theoretical framework in the context of elder abuse and major concepts and definitions follows. The focus then narrows to risk factors and prevalence of elder abuse with a specific concentration in the long term care area. Perspectives associated with elder abuse are explored with a concentration on health professional's knowledge, current education and training models. Finally outcomes from current education and gaps in the literature are reviewed.

State of Elder Abuse

Elder abuse first came to public attention in 1975 with the publication of Baker's pioneering work on "granny battering" in the United Kingdom (Richardson et

al., 2002; Selwood, Cooper, & Livingston, 2007; Shinan-Altman & Cohen, 2009). During the same era, Butler described a “battered old person syndrome,” evidence of “battered parents” arose from family violence research, and social work researchers illuminated “abuse of the elderly by informal care providers”(Anetzberger, 2000, p. 46). Testimony on “parent battering” was included in a 1978 U.S. congressional subcommittee hearing on family violence (Wolf, 2000). Yet despite coming to light at the same time as domestic violence and child abuse, understanding of elder abuse lags far behind other forms of abuse (McNamee & Murphy, 2006; Pillemer et al., 2011; Sellas & Krause, 2006; Zeranski & Halgin, 2011).

One reason for this gap is that there is no “gold standard” for evaluating abuse and neglect of the elderly (Henderson, 2011; McNamee & Murphy, 2006). Further complicating the issue, family caregivers, professionals, and older adults may have different conceptions of what constitutes abuse (Erlingsson, Carlson, & Saveman, 2006; Hempton et al., 2011; Selwood et al., 2007). Race, ethnicity, and culture also play a role in how older adults perceive abuse as well as their willingness to disclose it (Moon, 2000; Pillemer et al., 2011). Yet another dilemma facing clinicians is that while dementia increases the risk of mistreatment, the available screening instruments are not appropriate for individuals who are cognitively impaired (Wiglesworth et al., 2010). In fact, older adults with dementia are deliberately excluded from studies of screening techniques.

Numerous variations in definitions and terminology make it difficult to calculate the prevalence of elder abuse (National Center on Elder Abuse, 2005;

Penhale, 2010; Pillemer et al., 2011; Sellas & Krause, 2006). In the U.S. there is no national database for reporting elder abuse and the states vary in their reporting systems as well as the way they define abuse. Even the precise age for defining the elderly population is inconsistent. Despite these discrepancies there is universal agreement that elder abuse is global in scope and vastly underreported (Cohen, Levin, Gagin, & Friedman, 2007; Dyer & Rowe, 1999; Erlingsson et al., 2006; GAO, 2011; Gray-Vickrey, 2004; Kahan & Paris, 2003; Kennedy, 2005; Lachs & Pillemer, 2004; Lachs, Psaty, Psaty, & Berman, 2011; McGarry & Simpson, 2009; McNamee & Murphy, 2006; Neno & Neno, 2005; Pillemer et al., 2011; Richardson et al., 2002; Rothman & Dunlop, 2001; Selwood et al., 2007; Wolf, 2000). The National Elder Abuse Incidence Study estimated that for every case of elder abuse, neglect, financial exploitation, or self-neglect reported to authorities, there are five more that go undetected (Tatara et al., 1998).

A number of reasons underlie the low rates of reporting. These include lack of awareness, denial, shame, ageism, reluctance to admit any abuse took place, dependence on the abuser, fear of retaliation, perceptions that the problem will be resolved, and lack of knowledge of the available resources (Buri, Daly, Hartz, & Jogerst, 2006; Fulmer et al., 2005; Jogerst, Daly, Dawson, Peek-Asa, & Schmuck, 2006; Pillemer & Moore, 1989; Risco et al., 2005). In particular, Asian and Hispanic victims of elder abuse may be unwilling to disclose what they consider “family shame” (Moon, 2000). Language can also present a barrier to disclosing abuse to authorities. Screening is difficult in clinical settings where an infirm elderly patient may be

accompanied by the abuser (Lachs & Pillemer, 2004). Furthermore, older adults with dementia represent the most vulnerable group for abuse (Cooney et al., 2006; Cooper, Manela, Katona, & Livingston, 2008; Coyne, 2001; GAO, 2011; Wiglesworth et al., 2010). Thus a segment of victims may be incapable of articulating abuse or even recognizing they were mistreated.

For victims of physical abuse, hospital emergency departments are frequently the initial point of contact with the authorities (Dyer & Rowe, 1999; Sellas & Krause, 2006). However, signs of abuse can be masked by the physical frailty of elderly victims. Accurately assessing and intervening in cases of abuse is a complex process and most health care professionals have no formal training in dealing with elder abuse (Kennedy, 2005; Sellas & Krause, 2006; Tilden et al., 1994). While all 50 states and the District of Columbia have laws mandating that health care professionals report confirmed cases of elder abuse and 43 states mandate reporting suspected cases, few hospitals have established protocols and there is no federal statute for preventing elder abuse analogous to those governing domestic violence and child abuse (Sellas & Krause, 2006).

At the same time, the laws for reporting elder abuse are derived from child abuse laws, which presuppose that the victims are unable to act on their own behalf (Sellas & Krause, 2006). As a result, many clinicians feel that mandatory reporting is disempowering and degrading to mentally competent elder abuse victims. Some states take mental and physical condition into consideration and limit the definition of elder abuse to only those older adults with cognitive or physical impairments (Zeranski &

Halgin, 2011). Most states, however, use an age cut-off although the precise age varies from state to state. The laws also give insufficient attention to issues such as financial abuse since most children have no financial assets for others to exploit. Few studies of elder abuse even include financial exploitation although it is quite prevalent (Acierno et al., 2010; Jackson & Hafemeister, 2012; Zeranski & Halgin, 2011).

According to Anetzberger (2000), although the first discussions of elder abuse emerged from a variety of professional disciplines, social work,--in the form of adult protective services--overrode other channels for intervention for several reasons. First, abused elderly adults were originally perceived in a similar vein to abused children. Second, elder abuse was defined as a social problem as opposed to a public health issue or a crime. And third, there was already a nationwide system of adult protective services created through funding from Title XX of the Social Security Act of 1974.

To Lachs and Pillemer (2004), the concentration of much of the body of elder abuse research in the social sciences has created a sizable “gap between basic research and clinical application” (p. 1263). The authors point out that social science researchers have no direct knowledge of medicine whereas clinical guidelines come from nursing and medicine. They place elder abuse within the context of an expanding list of social and family problems that have become part of medical practice but face time and resource constraints in health care systems worldwide.

Psychologists, who are designated as mandated reporters of elder abuse in all states with the exceptions of Colorado, Pennsylvania, North Dakota, and South Dakota, Zeranski and Halgin (2011) state that practitioners should report suspected instances of

elder abuse when they have “reasonable” cause to believe that an older person is being subjected to abuse or neglect. Their claim that “the obligation to report abuse while preserving the therapeutic relationship poses a challenge to even the most experienced psychologist” can be extended to other health and mental health professionals as well (p. 299). The authors’ call for the establishment of “best practice” standards for reporting elder abuse is equally applicable across disciplines and professions.

Zeranski and Halgin (2011) and Rabins and Black (2010) both recommend that mental health professionals consult with colleagues when grappling with challenging issues related to the suspected abuse of elderly clients. Both authors argue that professionals must respect the experience and integrity of older adults and consider the unique features of each case and the ethical implications of their actions.

Education on Elder Abuse

Nurses are ideally positioned as advocates for the prevention and intervention of elder abuse (Biggs, Manthorpe, Tinker, Doyle, & Erens, 2009; Harrison & Bell, 2007; McGarry & Simpson, 2007, 2009; Neno & Neno, 2005; Sandmoe & Kirkevold, 2011; Winterstein, 2012). Sayles-Croft (1988) envisioned the advocate role for nurses two decades ago. Recognition of elder abuse as a global public health issue provides an excellent backdrop for nurses to take on that role. A condition to the role entails comprehensive, ongoing education and training about elder abuse. In fact, there is a growing call for education on elder abuse ranging from community public health campaigns to training for health professionals in all settings and in particular, long-term care settings (CARIE, 2007; Dunlop et al., 2001; Harrison & Bell, 2007; Kahan &

Paris, 2003; McGarry & Simpson, 2007; Menio & Keller, 2000; Pennsylvania Department of Aging, 2006; Richardson et al., 2002; Rothman & Dunlop, 2001; Underwood, 2005; Westley, 2005). Neno and Neno (2005) argue that education on elder abuse should be mandatory for all nursing and support staff that work with elderly patients and should be requisite in the nursing curriculum and continuing professional education.

According to figures for 2003, state Long Term Care Ombudsman programs investigated 20,673 complaints of abuse, gross neglect, and exploitation on the part of nursing home and long-term care residents in the United States (National Center on Elder Abuse, 2005) in the United States. Physical abuse was the most prevalent complaint. A government report the previous year documented that there are serious gaps in safeguards protecting nursing home residents from abuse (GAO, 2002). Based in Philadelphia, the Coalition of Advocates for the Rights of the Infirm Elderly (CARIE) has worked diligently for more than 30 years to transform the quality of care and services provided to the residents of long-term care facilities (CARIE, 2007; Menio & Keller, 2000). The curriculum used for this study will be an educational seminar from CARIE designed to teach nurses to recognize and respond to elder abuse, specifically within the long term care setting. Nursing home administrators are acutely aware of the need for staff training but are often unsure of the most appropriate educational programs (Enyeart, 2008). Designed to be “interactive, dynamic, and practical,” the learner-centered CARIE long-term care training program has been used extensively (over 2000 direct care workers experienced the training in long term care

centers) since 1989 and has a sound theoretical and empirical evidence base (Menio & Keller, 2000, p. 30; Pillemer & Hudson, 1993).

Defining Elder Abuse

Variations in defining elder abuse heighten the complexity of recognizing abuse and responding appropriately. In the broadest sense, elder abuse is an umbrella term encompassing all forms of abusive behavior or mistreatment toward older adults (Wolf, 2000). The mistreatment can take the form of an act of commission (abuse) or omission (neglect) and can be deliberate or unintentional. Elder abuse is distinguished from random instances of violence or exploitation in that it typically involves actions that are repeated (Sellas & Krause, 2006). However, a single act is sufficient to meet the criteria for elder abuse (Lachs & Pillemer, 2004).

The U.S. National Academy of Sciences defines elder abuse as:

- 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 trusted relationship to the elder.
- Failure by a caregiver to satisfy the elder's basic needs or to protect the elder from harm.

As interpreted by Lachs and Pillemer (2004), this conception of elder abuse is driven by two major ideas. The first is that the older adult “has suffered injury, deprivation, or unnecessary danger” (p. 1264). The second is that there is a specific person or persons who caused the harm or failed to prevent it from happening. It is also congruent with definitions that have arisen from international groups. For example, the

Action on Elder abuse (1993) established a definition of elder abuse that was adopted by the World Health Organization (WHO) (Action on Elder Abuse, 1993; WHO/INPEA, 2002). They define elder abuse as “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, 1993). Given the high global prevalence of elder abuse, the WHO has been striving toward collaborative international research on the issue.

Both clinical and legal perspectives generally recognize five types of elder abuse: 1) physical abuse, encompassing all acts committed with intent to inflict physical pain or injury; 2) psychological abuse, construed as acts intended to cause emotional pain or injury; 3) sexual assault, the use of sexual behavior to violate an elderly person without consent and through coercion; 4) material exploitation, denoting the misappropriation of the older person’s money or property, and 5) neglect, denoting the failure of a designated caregiver to meet the needs of a dependent elder (Lachs & Pillemer, 2004).

Self-neglect, referring to behaviors in which the person compromises his or her own health such as refusal to have needed help with activities of daily living (ADL) or take medication also falls under the blanket term of elder abuse (Sellas & Krause, 2006). Although by definition, self-neglect does not involve another person it raises ethical issues about the appropriate actions others should take to address self-neglect. Some actions that both professional and family caregivers may consider acceptable can be interpreted as abusive (Erlingsson et al., 2006; Selwood et al., 2007). In fact, failure

to respect the older person's dignity and autonomy is included in a category of miscellaneous abuse, along with other forms of abuse such as abandonment and medical abuse (Sellas & Krause, 2006).

From an alternative perspective, chronic self-neglecting behaviors can trigger an angry response from a frustrated caregiver that escalates into abuse (Anetzberger, 2000; Erlingsson et al., 2006). For example, refusal to bathe consistently surfaces as a point of frustration for caregivers. Typically such behaviors provoke verbal abuse but a caregiver may attempt to force the person to do something that inadvertently results in physical harm. Anetzberger (2000) emphasizes that while abuse within a caregiving situation typically emanates from actions and reactions on the part of both parties, the perpetrator is the one who is responsible and accountable for his or her actions. Erlingsson et al. (2006) found tendencies toward blaming the victims of elder abuse to be prevalent among professionals, volunteers, and community members whose roles involve protecting and supporting victims of elder abuse.

Measuring Abuse

Upon exploration of the literature, 13 tools were located that have been used in the past to detect abuse. Many tools such as the Risk of Abuse Tool, Suspected Abuse Tool, Actual Abuse Tool (Bass, Anetzberger, Ejaz, & Nagpaul, 2001), Caregiver Abuse Screen, Abuse Intervention Description Form (Myrna Reis & Daphne Nahmiash, 1995), Health Attitudes Toward Aging, Living Arrangement and Finances (Ferguson & Beck, 1983) and Partner Violence Screen (Feldhaus, Koziol-McLain, Amsbury, & Norton, 1997) had a lack of reliability and validity information. Several tools screened

only the elderly resident and did not account for any information from the caregiver, which included the Vulnerability to Abuse Screening Scale (Schofield & Mishra, 2003), Elder Assessment Instrument (Fulmer, 2003) and Brief Abuse Screen for the Elderly (Reis, Nahmiash & Shrier, 1993). Finally, tools such as the Indicators of Abuse Tool (Reis & Nahmiash, 1998) and Hwalek-Sengstock Elder Abuse Screening Test (Neale, Hwalek, Scott, Sengstock, & Stahl, 1991) required extensive training, a very intensive personal screen of residents and were directly looking for actual abuse. The Cognitive Tactics Scale 2 (CTS2) was the only tool that measured both a caregiver and elder for conflict and did not require specialized training or a lengthy examination of the elderly person.

The CTS2 scale measures the number of times a person either perpetrates or is victimized by three “tactics”, which are negotiation, psychological aggression and physical assault. An interdependent relationship is required to use the CTS2. The following relationships have been studied using the CTS2 scale; intimate partner, elder-caregiver and parent-child (Cooper, Maxmin, Selwood, Blanchard, & Livingston, 2009; Lafontaine & Lussier, 2002; Yan & Tang, 2001). Data is collected using this scale on both people in the relationship, which in this study is elder and caregiver. Limitations to the tool include questions only about selected violent acts, response categories are estimates because they are based upon recalled information, it is based upon patient and caregiver honest reports, and it asks only about current caregivers (Straus, 2013). Studies have found an 84% response rate with the use of this tool (Gelles & Straus, 1988; Hamby, Sugarman, & Boney-McCoy, 2006) with a total implementation time to

completion at about 15 minutes (Straus & Douglas, 2004). The scoring on the CTS2 scale reveals information about the prevalence, severity, frequency and mutuality of conflict (Archer, 2000).

Knowledge of abuse. The literature yielded one tool that measured knowledge of abuse. The Knowledge and Management of Abuse instrument measures baseline and change of applied knowledge of abuse situations through the use of vignettes. According to Richardson, Kitchen, and Livingston (2003) the tool was created to fill the void of assessment of knowledge instruments. The tool has two versions to prevent recall bias and enable the tool to be useful for pre and post tests. The test was designed for direct care workers in long term care settings and tested in that setting. Each version has seven separate vignettes and scores are weighted equal for pre-determined answer responses. The tool was tested and achieved an internal consistency for version A of 14.2 and version b 16.0 and a test-retest reliability ($p=0.01$) with a 0.69 correlation coefficient. The test-retest reliability was calculated with 29 days between testing (Richardson et al., 2003). A 0.82 reliability coefficient showed a similarity in measurements between both versions. This test takes about 20 minutes to complete and has been tested in multiple disciplines including long term care registered nurses, license practical nurses and nursing assistants (Cooper, Selwood, & Livingston, 2009).

Screening in dementia care. Designed to gain information from individuals who are cognitively competent and capable of responding to questions about experiences of neglect or abuse as well as their risk situation, screening tools for elder abuse exclude some of the most vulnerable older adults, namely those with dementia.

To address this issue, Wigglesworth et al. (2010) sought to identify characteristics of individuals with dementia and their caregivers that are linked with abuse and neglect with the aim of devising a brief screening tool for helping clinicians disclose abuse. Their mixed methods study involved 129 elderly adults with dementia and their caregivers, with data presented to a LEAD (Longitudinal, Experts, All Data) panel. The LEAD panel reviewed medical records, observations of home visits, and responses from the caregivers' self-reports on the CTS2 Physical Assault and Psychological Aggression Scales and the clinicians' responses on the Elder Abuse Instrument and the Safety of the Environment section of the Self-Neglect Assessment Scale (SoE).

The LEAD panel, which included 3 experienced geriatricians who are part of an elder abuse forensic center response team, a nursing researcher who specializes in dementia, and a gerontologist specializing in elder abuse research, discerned evidence of elder abuse in nearly half (47.3%) of the cases they reviewed (Wigglesworth et al., 2010). Based on the CTS2 responses, the vast majority of the caregivers who mistreated the dementia patient were subjected to physical and/or verbal aggression by the care recipient during the previous year. In terms of the physical assault responses, almost all the caregivers who mistreated the care recipient (94.7%) had experienced at least one of three violent incidents: the care recipient threw something at them that could hurt, the care recipient pushed or shoved them, and/or the care recipient grabbed them. The CTS2 psychological aggression scale revealed that 88% of the caregivers who mistreated the dementia patient had experienced some form of aggression at least three times during the same year: the care recipient insulted or swore at them, the care

recipient shouted or yelled at them, and/or the care recipient stomped out of the room, house, or yard in the midst of a disagreement.

The findings highlight both the utility of the CTS2 as the basis of a screening tool for abuse and neglect of older adults with dementia and the potential role of nurses and other clinicians in identifying patients and their caregivers who are at high risk for abuse. According to Wigglesworth et al. (2010), clinicians should be attuned to caregivers who display signs of depression or anxiety or who disclose difficult behavior on the part of the care recipient because these caregivers are more likely to be mistreating the care recipient. Additionally, they recommend that caregivers who have limited education or few social ties or who have emotional problems that affect their activities should also be screened. The researchers also assert that clinicians should pay special attention to dementia patients who exhibit aggressive behavior, who have a high probability of being mistreated. The overall implication is that asking dementia caregivers a few brief questions about the care recipient's behavior drawn from the CTS2 may be an effective screening technique for prevention and early intervention of abuse of elderly patients with dementia.

Standardized risk assessment. According to Henderson (2011), adult protective services have a critical need for a standardized protocol for risk assessment and intervention. The lack of standardization precludes the ability of adult protective services (APS) programs to produce objective outcome data. The author describes the risk assessment and intervention (RAI) approach adopted by Ventura County, California, which could serve as a model for other programs. The RAI is based on the

premise that abuse and neglect may progress along a continuum analogous to the disease process. That is, it may subtly unfold over time in a pattern marked by periods of deterioration, stability, and recurrence. In disease diagnosis, clinicians examine risk factors and active symptoms. In parallel fashion, the RAI integrates biological, psychological, and social factors that tend to predispose people to mistreatment. Additionally, the tool standardizes a constellation of factors indicative of actual abuse or neglect. The RAI components were derived from research conducted by the University of California at Berkeley School of Social Welfare as well as from social work field experience.

Social workers who have adopted the RAI have found it to be a useful tool that offers “a systematic and comprehensive biological, psychological, and social analysis of the client’s situation and needs” (Henderson, 2011, p. 28). While it provides a coherent structure for analyzing the abuse or neglect of elderly and/or dependent adults, the RAI also provides a mechanism that allows each case to be viewed and treated according to the unique sets of factors involved. The RAI represents a tremendous advance from the treatment of elder abuse by APS as if it paralleled child abuse and it also situates elder abuse within the biopsychosocial model that recognizes the need for collaboration between social workers and medical and nursing professionals. Lachs and Pillemer (2004) criticized the lack of interdisciplinary research and collaboration. Furthermore, because the RAI also charts interventions and outcome evaluations, it provides policymakers with evidence of program effectiveness, affecting public policy and funding, as well as helping practitioners improve services to clients in need.

Future Directions

“Research-to-Practice Consensus Workshops” are a recent addition to the programs sponsored by the Cornell Institute for Translational Research on Aging (CITRA). As implied by the term “translational,” CITRA is driven by the goal of “translating” research findings into practices that benefit older adults (Pillemer et al., 2011). Lachs and Pillemer (2004) pointed out that there is a massive gap between research and practice. Drs. Lachs and Pillemer are both key players in CITRA. Each consensus workshop is preceded by the preparation of a research review paper. Pillemer et al. (2011) presented a set of 10 recommendations drawn from their critical review of the existing research on elder abuse. These 10 recommendations represent the top research priorities distilled from a list of 41 recommendations spanning 14 domains.

Not surprisingly, the first recommendation is to clarify the definition and classification of elder abuse (Pillemer et al., 2011). To Zeranski and Halgin (2011), this is one of the major challenges in reporting suspected elder abuse. In addition to noting that there is no standard age for defining older adults, Zeranski and Halgin (2011) and Pillemer et al. (2011) both raise the question of whether age per se should even be used as the criterion and whether other characteristics such as functional status might be better suited to determining status as a vulnerable population. The consensus workshop participants also brought up the question of what distinguishes “elder abuse victims” from “crime victims.” This dilemma may be one reason why financial

exploitation is excluded from most studies of elder abuse; in the eyes of the general public, misuse of another person's finances may be most recognizable as a criminal act.

The second workshop recommendation is for the creation of mechanisms that allow researcher to gain access to victims and abusers for research purposes. Barriers include the frequent social isolation of victims and their accusers, the victims' fear of retaliation or nursing home placement, the physical and mental fragility of abuse victims, the abusers' accompanying the victims to medical visits resulting in the victim attempting to hide the abuse during screening, and the concern of agency administrators that research may violate their clients' privacy or upset them (or the abuser). To surmount these challenges the workshop recommended much greater interaction between researchers and practitioners, and Pillemer et al. (2011) observed that that the practitioners gave very high ratings to this recommendation.

The third recommendation was determining the best ways of intervening with the abusers. According to the workshop participants, there has only been one major study of intervention with alleged perpetrators of elder abuse and the outcomes were unexpectedly negative (Pillemer et al., 2011). Proposed interventions include support groups for abusers with adjunctive services such as counseling and anger management and coping techniques, support services including emergency shelters, and specialized programs targeting grandchildren who mistreat their grandparents, a problem that has been increasing in urban areas.

Fourth, the workshop participants recommended that researchers should draw from existing data sets (such as the records of agencies and police departments) in their

work on elder mistreatment (Pillemer et al., 2011). The fifth recommendation is the identification of risk factors, including profiles of likely victims and abusers. The RAI was designed for this purpose (Henderson, 2011). Its widespread adoption would be helpful for advancing the CITRA goals. The sixth recommendation involves further investigation of how culture affects elder abuse. Pillemer et al. (2011) note that factors such as poverty, poor health, and social isolation may intensify the risk for abuse of minority elders. At the same time, cultural influences may make people especially reluctant to disclose abuse (Moon, 2000).

Seventh, the workshop participants strongly support the use of evidence-based practices for preventing and treating elder abuse (Pillemer et al., 2011). Notably, the consensus workshop members include practitioners who were instrumental in the design of CARIE. The participants are aware that there is a dearth of elder mistreatment interventions that have been subjected to rigorous evaluation, which they strongly advocate. A particular recommendation is that studies be conducted to determine what types of programs are most effective for different subgroups of older adults. Nursing home residents represent a unique and extremely vulnerable group of elders.

For their eighth recommendation, the workshop participants called for exploration of how cognitive impairment affects the investigation of elder mistreatment. Indeed, this is a vital issue for preventing and treating elder abuse given that investigations rely on the victims' testimony. According to Pillemer et al. (2011), this issue was given high priority by the practitioners, who find themselves frustrated

by the lack of appropriate instruments or techniques for assessing the validity of accounts of abuse of elderly adults who may be cognitively impaired. The screening technique developed by Wiglesworth et al. (2010) facilitates the identification of high risk dementia patients and caregivers. However, Pillemer et al. (2011) also recognize the need for screening tools that can aid in determining the accuracy of accounts by alleged victims with varying degrees of cognitive impairment that may affect their memory and judgment.

One of the final recommendations was the application of forensic techniques to elder mistreatment. For example, the participants proposed that elder abuse investigators collaborate with the financial industry in developing software programs and algorithms that would alert financial employees to the possibility that older adults were being financially exploited (Pillemer et al., 2011). In many cases there is no knowledge of financial mishandling until the victim's resources have been depleted. Led by Dr. Lachs, the research team for the New York State Elder Abuse Prevalence Study called for collaboration with the financial industry, as well as for educating the general public about financial abuse, in combating the financial exploitation of older adults (Lachs et al., 2011). In fact, the New York State researchers emphasized the importance of making people aware of the prevalence of elder abuse.

The final recommendation targeted the need for developing evidence-based strategies for improving the training of professionals in identifying and reporting elder mistreatment (Pillemer et al., 2011). Two key areas include the rigorous assessment of whether training effectively improves the ability of professionals and gatekeepers to

detect abuse and aid victims and whether training on the issue of cognitive impairment in older adults improves investigation. Not unexpectedly for a panel that has been instrumental in creating programs such as CARIE, the participants advocate that researchers create and evaluate novel training strategies.

Professionals and researchers from Cornell University medical colleges are involved with both CITRA and the New York State Elder Abuse Prevalence Study thus both groups arrived at similar conclusions and recommendations. Collaboration and cross training across disciplines, systems, and agencies dealing with elder abuse, greater emphasis on the prevention and intervention of the more common types of abuse, and efforts to increase awareness and knowledge of elder abuse among members of the general public as well as professional are strongly advocated by both groups (Lachs et al., 2011; Pillemer et al., 2011). The aging of the population in the U.S. and internationally has given momentum to the issue of elder abuse, which had been overshadowed by other issues since it was brought to public attention.

Prevalence of Elder Abuse

Reported incident studies. Much of the national data on elder abuse comes from reporting by the NCEA. The National Elder Abuse Incidence Study investigated elder abuse during 1996 (Tatara et al., 1998). The study was based on 236,479 reports of abuse, neglect, and self-neglect in domestic settings of which close to half (48.7%) were substantiated, 39.3% were unsubstantiated, and 8.2% were still under investigation at the end of the year. The remaining reports involved incidents in which the alleged victim died, could not be located, or had other inconclusive evidence.

When self-neglect was excluded, the data disclosed that roughly 450,000 elderly individuals living in the community were abused or neglected during 1996.

When broken down into different forms of abuse, there were notable differences in the rates of substantiated reports (Tatara et al., 1998). Physical abuse was substantiated 61.9% of the time; abandonment, 56%; emotional or psychological abuse, 54.1% financial abuse, 44.5%; and neglect, 41%. Hospitals were the second most frequent reporters of abuse and neglect next to family members (17.3% and 20%, respectively). Community health care settings were responsible for about 8% to 10% of reported incidents of elder abuse.

While women were the perpetrators in a slightly higher proportion of cases involving neglect (52.4%), men comprised a majority of perpetrators in incidents of abandonment (83.4%), physical abuse (62.6%), emotional abuse (60.1%), and financial exploitation (59%). Reflecting the predominance of adult children among the abusers, the largest segment of abusers fell in the 41 to 59 year old age group (Tatara et al., 1998). Approximately one-third of the abusers were age 60 or older, with spouses accounting for 19.3% of the substantiated incidents of abuse or neglect.

The NCEA also included data from 248 sentinel agencies, which do not officially report to Adult Protective Services thus the incidents were unsubstantiated. However, the researchers noted that the sentinel agencies diligently screen suspected cases of abuse (Tatara et al., 1998). The overarching conclusion of the report was that for every case of elder abuse, neglect, financial exploitation, or self-neglect reported to officials there are five more that are never reported. This is further supported by Lachs

and Pillemer (2004) Drawing data from various sources employing different definitions of elder abuse and different survey and sampling strategies, Lachs and Pillemer (2004) estimate that between 2% and 10% of the elderly population experience some form of abuse.

A discrepancy between reported cases and the suspected incidence of elder abuse is a prominent issue among investigators. Florida has the nation's largest concentration of elderly residents. A 1997 study by Rothman and Dunlop (2001) yielded an incident rate for elder abuse of 5.36 per 1,000 in Miami-Dade County, equivalent to only 54% of the national rate. The authors attribute much of the disparity to underreporting while conceding that the reasons for this are not clear. One proposed reason is that close to 60% of older adults in Miami-Dade are Hispanics, who are often reluctant to report abuse especially when it involves family members. While it is important to recognize that the term Hispanic covers a broad and diverse range of cultural groups, there is empirical evidence to support that assumption (Moon, 2000). However, the Florida state agency with the task of investigating abuse reports and providing services to victims does not gather data on ethnicity; therefore if a very low number of Hispanic elders were found that may account for the broad under-reporting, thus Rothman and Dunlop (2001) were unable to pursue that line of research.

The respective ages of the victims and perpetrators emerged as the most striking finding (Rothman & Dunlop, 2001). The overwhelming majority of abusers (>86%) were under age 60 compared to two-thirds in the NCEA report. On the other hand, close to half of all the abuse cases involved victims who were at least 80 years old. In

fact, the rate for victimization in this age group was more than 2.5 times the rate for the total population of aging adults. Women represented close to two-thirds of the victims.

Another important finding with clear implications for intervention was that a third of the Miami-Dade cases involved at least one prior incident within a year's time. Rothman and Dunlop (2001) propose using identified risk factors for elder abuse as a mechanism for structuring prevention and intervention efforts. They also note that Florida's efforts to stem elder abuse are impeded by funding constraints as well as the limited extent of available services. These obstacles not unique to any one state or country but rather represent a common impediment to combating elder abuse (Lachs & Pillemer, 2004).

The 2005-2006 report by the Older Adults Protective Services in Pennsylvania confirmed that the oldest persons are the most vulnerable to elder abuse (Pennsylvania Department of Aging, 2006). Individuals over age 85 constitute 12.3% of the state's population age 60 and older but 30% of those with substantiated reports of abuse. The next oldest group, age 80-84, comprised 21% of substantiated elder abuse cases. Roughly two-thirds of the cases (68%) involved female victims who were dependent upon their caregivers.

Fifty-eight percent of the alleged abusers were women, however given the overrepresentation of women among caregivers the researchers found the proportion of male perpetrators more significant (Pennsylvania Department of Aging, 2006). Individuals between 31 and 60 comprised the largest segment of abusers. About one-third of the abusers were females who were not relatives of the victims. Sons

accounted for 30.4% of alleged perpetrators, daughters for 15.1%, and males not related to the victim, 12.7%. In cases where the abuser was a spouse it was more likely the husband.

The proportion of non-relatives reflects abuse perpetrated by home and nursing home care providers as well as other individuals. The researchers noted that while the majority of elder abuse victims are community residents, long-term care residents appear to be at high risk for abuse (Pennsylvania Department of Aging, 2006). They found this especially troubling in view of the fact that “a state-licensed facility is a professionally staffed setting intended to provide for the health, safety and security of its residents” (p. 20). As a result, the Pennsylvania Department of Aging has made the problem of elder abuse in long-term care facilities a top priority.

General Population Research

Laumann, Leitsch, and Waite (2008) used the term elder mistreatment although their definition corresponds to the NCEA definition of elder abuse. Noting that most information comes from criminal justice, agency, and caregiver reports, the researchers sought to explore the prevalence of mistreatment in a nationally representative sample of the aging population. Their data were derived from the National Social Life, Health and Aging Project (NSHAP) involving adults who were between 57 and 85 in 2004. A segment of the study included questions related to physical, verbal, or financial mistreatment by a family member.

Due to the population selected by Laumann et al. (2008), the findings have less relevance to the present study than the NCEA research. By definition the self-report

survey was limited to individuals who were cognitively intact and the oldest older (>85 years) were excluded. However, the findings supported the assumption that older adults who were more physically fragile and were more vulnerable to verbal abuse. Physical abuse was unusual in the sample, probably due to the negligible representation of individuals who were cognitively impaired or dependent on caregivers or to reluctance to disclose physical abuse. Laumann et al. (2008) were surprised at the relatively low levels of financial exploitation reported by the oldest and most physically vulnerable respondents, suggesting that they might have been hesitant to disclose financial mistreatment. However, the researchers failed to account for the possibility that the elder may have simply been unaware of it.

In 2006-2007, the first national survey of elder abuse was conducted in the U.K. The UK National Study of Abuse and Neglect Among Older People consisted of in-person interviews with more than 2,111 individuals aged 66 and older (Manthorpe et al., 2007). Potential abusers were defined under the heading of persons with whom the older respondent had a “relationship of trust,” a designation encompassing relatives, close friends, and caregivers including health, mental health, and human service professionals, home caregivers, and home assistants. Using these criteria 2.6% of the respondents had experienced abuse or neglect. When the list was expanded to include neighbors and acquaintances the figure rose to 4%. Placed in the context of the total older adult population of the U.K., the narrower criteria yielded an estimate of one in 40 older adults enduring some form of abuse or neglect.

The most prevalent form of abuse was neglect, followed by financial exploitation (Manthorpe et al., 2007). Similar proportions of older adults were subjected to physical or psychological abuse and the incidence of sexual abuse reported was very low. Similarly, in the NCEA report, the incidence of substantiated sexual abuse was not significant (Tatara et al., 1998). The U.K. findings also paralleled U.S. studies in that women were more often victims of abuse or neglect with the risk increasing with advancing age (Manthorpe et al., 2007).

An advantage of the U.K. study is that used interviews rather than incident reports but asked participants if they had sought help for abuse. Contrary to the assumption that abused older people are reluctant to disclose abuse nearly three-quarters said they had discussed the abuse with someone (Manthorpe et al., 2007). The confidantes were equally divided between relatives, friends, health care professionals, and social workers. However, twice as many of those who experienced abuse (as opposed to neglect) sought help from a friend or relative rather than a professional, which could suggest distrust of how health or social work professionals would respond to reported abuse. About three-quarters of victims described the abuse as serious (43%) or very serious (33%).

Manthorpe et al. (2007) described the 2.6% prevalence estimate as “almost certainly a conservative one,” emphasizing the fact that the survey excluded older people who were cognitively impaired or could not participate in the face-to-face interviews due to poor health or hospitalization (p. 25). In effect, the most vulnerable elders were not included. They also acknowledged that some abuse victims might have

declined to participate out of shame, guilt, or denial, or could have been prevented from participating. An encouraging finding was that many participants had social networks of friends and relatives. Those who reported loneliness, depression, and poor quality of life had the highest incidence of abuse, a finding consistent with identified risk factors for elder abuse (Heath, Kobylarz, Brown, & Castano, 2005; Lachs & Pillemer, 2004; Sellas & Krause, 2006).

Direct care providers accounted for only a small fraction of abuse cases, typically willful neglect. According to the Office for National Statistics, the UK has 288,000 residents in nursing homes while the US, according to Fastats (2004) has 1.4 million (Comas-Herrera, Wittenberg, & Pickard, 2003). Manthorpe et al. (2007) theorized that some cases of neglect might have been due to a lack of available services sufficient to meet the needs of the older individual. An intriguing pattern arose with respect to the interplay of advancing age and neglect committed by partners. This type of neglect rose sharply for women aged 85 and older, causing the researchers to speculate that the “partner effect,” or partner caregiving worked successfully up to that age until the partner became too debilitated to continue. Therefore, “what is being reported is not necessarily deliberate neglect, but rather the kind of neglect that comes about as a consequence of two people with increasing disabilities trying to support each other—and failing” (p. 26).

Notably, Manthorpe et al. (2007) published their work in a nursing journal with the goal of raising the awareness of nurses, particularly community nurses, to the prevalence and risk factors for abuse in the elderly population. They call on nurses to

act as advocates for older adults especially older caregivers. The publication of the study generated a response among nurses advocating for education and training on issues related to detection, prevention, and intervention in elder abuse (McGarry & Simpson, 2007, 2009).

GAO (2011) estimates that roughly 14% of older adults residing in the community have experienced physical, psychological, or sexual abuse, neglect, or financial exploitation over the course of a year. The GAO investigators acknowledge that elder abuse is an escalating problem nationwide, with APS programs overwhelmed by increasing caseloads and scarce resources. Building on earlier research including the pioneer National Elder Abuse Incidence Study, the most recent and comprehensive study of elder abuse in the U.S. involved 5,777 older adults ranging in age from 60 to 97 years with an average age of 71.5 years (Acierno et al., 2010). Women comprised a majority of respondents (60.2%). One flaw in the study was that the respondents were overwhelmingly white (87.5%) and thus did not represent the diversity of the American population.

Slightly more than 10% of the respondents reported enduring some form of abuse or potential neglect (with the exclusion of financial exploitation) over the last year (Acierno et al., 2010). Notably, limited social support heightened the risk for virtually all types of mistreatment. Low social support, and in many cases virtual social isolation, is a known risk factor for elder abuse (GAO, 2011; Pillemer et al., 2011). The abuse was rarely reported (Acierno et al., 2010). Similarly, the New York State study found a tremendous gap between the prevalence of elder abuse as reported by the

survey respondents and the number of cases reported to formal authorities (Lachs et al., 2011).

Prior traumatic experiences, including interpersonal and domestic violence raised the probability of emotional, sexual, and financial mistreatment (Acierno et al., 2010). This phenomenon is consistent with the overall body of research on trauma and repeated victimization. One way, in which the findings departed from most research is that the younger respondents (>70 years) were more likely than the oldest group to have been emotionally, physically, or financially abused by strangers. However, this finding is consistent with Laumann et al. (2008). Both studies excluded cognitively impaired and institutionalized older adults (or their representatives), thereby eliminating a very vulnerable segment of the elderly population. Acierno et al. (2010) noted that neglect is difficult to classify or define thus they used the term “potential neglect.” Their findings produced a prevalence of 5.1% for potential neglect, 1.6% for physical abuse, 0.6% for sexual abuse, and 5.2% for financial abuse. Low social support and prior trauma experience were the most prominent risk factors.

Financial abuse. Financial exploitation emerged as the most common form of abuse in the national study and Acierno et al. (2010) acknowledged that this prevalent form of abuse has been given the least amount of attention. Jackson and Hafemeister (2012) and Beach, Schulz, Castle, and Rosen (2010) both explored the occurrence of financial abuse in conjunction with other types of abuse. As part of a larger study, Jackson and Hafemeister (2012) compared the factors associated with exclusively financial exploitation and financial exploitation taking place concurrently with physical

abuse or neglect. The study focused on cases reported to APS agencies in Virginia and most of the interviews were conducted with APS caseworkers rather than victims due to the cognitive infirmity of many guardians. In those cases the interviews were conducted with the guardians. The victims that participated in the study averaged 76 years old were roughly-three quarters female, 81% white, and more than half were widowed (53%) and had not graduated from high school (56%). According to the researchers this profile is largely consistently with the Virginia APS database. Relatives comprised close to two-thirds of the representatives of the non-participants.

There were 54 cases of elder mistreatment of which 38 were financial exploitation only, 6 cases involved financial exploitation in conjunction with physical abuse, 9 were financial exploitation and neglect, and 1 case involved all three types of mistreatment (Jackson & Hafemeister, 2012). The results showed that the victims of concurrent financial exploitation and physical abuse or neglect were more likely to be in fair or poor health. The researchers acknowledged that their study does not show cause and effect. It is equally plausible that the poor health resulted from abuse or neglect or that infirmity made the victims more vulnerable to abuse. A South Carolina study reported that older adults who had experienced *emotional* but not physical abuse were likely to be in poor physical health (Cisler, Amstadter, Begle, Hernandez, & Acierno, 2010). According to Cisler et al. (2010) physical abuse may be more closely associated with factors such as economic disadvantage, functional limitations that warrant assistance with ADLS, and emotional symptoms than physical health. The

researchers see an intricate relationship among the risk factors and the manifestations of abuse.

In the Virginia study, many victims of multiple types of abuse admitted being afraid of the abuser but at the same time were dependent upon them for caregiving (Jackson & Hafemeister, 2012). Frequently, the abuser was an adult child who resided with the elderly victim and acted as a caregiver. Additionally, the perpetrators of concurrent financial and physical abuse or neglect were often chronically unemployed and financially dependent upon the elderly person. Among the perpetrators of financial abuse only, about half were non-relatives and they were more inclined to commit fraud. The hybrid abuse was more complicated because the perpetrators were frequently caregivers and was also more detrimental to the victims, who were more likely to have been declared incompetent and appointed guardians as well as to be in poorer physical health. By definition, fraud is a crime regardless of victim, which makes the classification more straightforward than financial and physical abuse or neglect by caregiving relatives (Pillemer et al., 2011). The relationships of the elderly persons to the perpetrators of exclusively financial abuse tended to be shorter duration, suggesting that the victims were more capable and predisposed to end the exploitative relationship (Jackson & Hafemeister, 2012).

Beach et al. (2010) investigated racial differences in the prevalence and characteristics of financial and psychological abuse of older adults residing in the Pittsburgh area. The respondents were 210 African Americans and 693 non-African Americans age 60 years and older. Financial exploitation was significantly more

prevalent among the African Americans (23% versus 8.4% since turning 60 and 24.4% versus 13.2% for the last 6 months). Similarly, psychological mistreatment was also more prevalent among the African American respondents (24.4% versus 13.2% since turning 60 and 16.1% versus 7.2% for the last 6 months). The racial differences held even after controlling for sociodemographic, cognitive and functional status factors. The findings were similar to Acierno et al. (2010) in that the oldest-old were less likely to experience psychological abuse than those between 65 and 74. However, needing assistance with even one ADL increased the risk for abuse and the risk for depression was linked with both types of mistreatment regardless of race (Beach et al., 2010).

Beach et al. (2010) were especially troubled by the high rate of financial exploitation among the African American respondents. Pillemer et al. (2011) pointed out that stressors related to economic disadvantage may place ethnic minority older adults at higher risk for mistreatment. Even the lower rates of financial exploitation Beach et al. (2010) observed for the non-African American respondents confirms its high prevalence in the general population and adds to the calls for greater attention to the financial exploitation of older adults (Acierno et al., 2010; Jackson & Hafemeister, 2012; Lachs et al., 2011; Pillemer et al., 2011).

Abuse in Long-Term Care Facilities

Most of the clinical research on elderly residents of long-term care facilities is focused on quality of care issues (Wolf, 2000). At the same time, accounts of abuse have been well documented through government reports, ethnographic studies, personal accounts, and ombudsman programs. A proportion of nursing home residents have

been victims of elder abuse prior to entering the facility. Placement in a care facility is one of the interventions employed in cases of elder abuse (Heath et al., 2005). Ideally, placement decisions are made with the active participation of the older adults but the high prevalence of dementia often precludes this. In the cases of elder abuse in New Jersey reviewed by Heath et al. (2005), guardianship and placement decisions were frequently made concurrently.

The Pennsylvania study documented that nursing home residents are at high risk for abuse (Pennsylvania Department of Aging, 2006). A survey of nursing home staff conducted by Pillemer and Moore (1989) revealed that more than one-third of nurses and nurses' aides witnessed at least one episode of physical abuse by other staff members during the year and 10% admitted to committing at least one act of physical abuse (Wolf, 2000). The vast majority (81%) witnessed at least one occurrence of psychological abuse and 40% admitted to committing an act of psychological abuse.

A study of nurses and care attendants in long-term facilities in Taiwan found only one respondent had never committed an act of psychological abuse over a six-month time frame (Wang, 2005). In general, respondents who were younger, less educated, and had less specialized training in geriatric care were more likely to display abusive behavior. However, they found that nurses tended to be more abusive than direct care attendants. Research sponsored by CARIE found similar evidence of psychological abuse by nursing assistants (Menio & Keller, 2000). Most who have studied the problem acknowledge that abuse is not uncommon in nursing facilities (Wolf, 2000).

Bužgová and Ivanová (2011) frame the issue of elder abuse in nursing home care as a violation of nursing ethics. Their study of elder abuse by nursing home (“senior home”) staff members took place in the Czech Republic and involved 454 direct care providers and 488 residents. More than half of the caregivers (54%) admitted committed at least one of the 26 types of abuse presented in the questionnaire during the last year and two-thirds (65%) said they witnessed abuse by other staff members. Interestingly, the residents reported far fewer incidents of abuse. Only 11% of the residents mentioned any type of abuse committed by an employee and only 5% reported seeing another resident being abused.

The reason for the disparity may be that most of the abuse reported by the staff members was psychological, which is less clear-cut than the much less common physical abuse (Bužgová & Ivanová, 2011). Alternately, the residents might have been reluctant to disclose abuse or did not recognize shouting and verbal humiliation, which were commonly reported by staff, as types of abuse. Bužgová and Ivanová (2011) questioned whether the clients feared retaliation or other consequences if they said they were abused. The residents who were most likely to be abused were those who were aggressive, dissatisfied with their care, or had dementia or other cognitive impairment. The staff members who were most predisposed to committing abuse had been institutional caregivers for more than 5 years, had insufficient knowledge of social services, and had signs of burnout. Underwood’s (2005) approach to education, with parallel programs for staff members and residents and a component to address burnout, would be appropriate for that setting.

Ben Natan and colleagues investigated the factors underlying the abuse of elderly nursing home residents in Israel (Ben Natan & Ariela, 2010; Natan, Lowenstein, & Eisikovits, 2010). The framework for their research was the theory of reasoned action, which is based on the premise that human behavior is contingent on the influences of behavioral attitudes (expectations and appraisals of the value of actions) and subjective norms. The proportion of nursing home staff members (nurses, nursing aides, and practical nurses) who acknowledged committing some type of mistreatment of the elderly residents was about 54%, virtually identical to the figure reported by Bužgová and Ivanová (2011). Most of the incidents involved mental and physical neglect (Natan et al., 2010). Mental and physical abuse was less common, accounting for 23% and 12.3% of the incidents, respectively.

Also analogous to the findings of Bužgová and Ivanová (2011), burnout was a major factor in the abuse and neglect of the residents by the nursing home staff members (Natan et al., 2010). The analysis also supported the role of subjective norms in the incidence of abuse and neglect. That is, the more that the staff members believed that other staff caregivers were mistreating residents, the more likely they were to do so themselves. In fact, a substantial majority of respondents (70%) witnessed some type of mistreatment. The nursing aides and practical nurses displayed the highest incidence of mental abuse.

Ben Natan and Ariela (2010) proposed that the high incidence of reported neglect compared to abuse may reflect a belief that failing to meet the clients' needs is more of a failure of the system (for example, due to understaffing or work overload)

than a personal failure. It does not signify any deliberate personal intent. Thus the staff members had no reluctance about reporting neglect. Certain features of the facility were associated with neglect and abuse. Larger facilities (numbers of patients and staff) had higher rates of staff turnover which in turn, resulted in greater risk for mental and physical neglect and a higher incidence of mistreatment. Higher staff-to-patient ratios, which tax staff resources, were associated with physical neglect and more instances of mistreatment.

Ben Natan and Ariela (2010) cited research conducted by Pillemer in support of the role played by high staff turnover in the mistreatment of elderly long-term care patients. They also turned to Pillemer in emphasizing the importance of staff training. Pillemer and his colleagues have recently reiterated both points. Pillemer refers to nursing homes as “one of the highest conflict workplaces one can imagine” (Boscia, 2010, p. 4). He also points out that certified nursing assistants (CNAs) are “the backbone of the eldercare system” yet they have minimal training, are poorly paid, and “are often treated like second-class citizens” (p. 6). Consequently, CNAs are very susceptible to stress and burnout. Some long-term care facilities have turnover rates of 100%.

Recognition that conflicts with residents’ families are a major source of stress for nursing home staff, Pillemer and his colleagues developed Partners in Caregiving (PIC), which includes training for relatives and staff, with particular emphases on communication techniques, empathy, and conflict resolution (Boscia, 2010). Similar features are built into CARIE. Pillemer and his colleague Rhoda Meador have been

investigating programs designed to reduce turnover and improve the quality of work life for nursing home personnel. They discovered that the adoption of a model program can substantially reduce CNA turnover. Furthermore, many CNAs reported that they felt much more respected and valued. Some of the abusive responses described by Bužgová and Ivanová (2011) were provoked by disrespectful behavior by nursing home residents (for example, referring to staff members as “servants” and treating them accordingly). In their study as well as in the study of Natan et al. (2010), burnout was a major factor in resident mistreatment. High staff turnover and the presence of burned out staff members that remain on the job can be equally detrimental. Programs designed by retention specialists have shown that even fairly minor changes can be effective in addressing both problems to the advantage of nursing home personnel and residents alike (Boscia, 2010). Reductions in staff burnout and turnover translate into higher quality resident care and fewer incidents of neglect and abuse.

Formal protocols. The GAO’s (2002) report on abuse in nursing homes documented cases of physical and sexual abuse as well as psychological abuse of frail elderly residents. There is no federal statute mandating criminal background checks of employees and as the Medicare and Medicaid project revealed, many individuals with criminal histories secure jobs caring for elders at home (Shishkin, 2008). The GAO report documented parallel findings for nursing home caregivers (GAO, 2002). The authors concluded that protocols protecting nursing home residents from abuse are severely deficient. The lack of a cohesive system or national registry makes it difficult

to cross-check information on employees and residents and family members who report abuse to authorities often find it extremely difficult to prosecute abuse.

From a consumer standpoint, nursing home executives are aware of prospective legal and financial ramifications if their facility gains a reputation for allowing abuse. In response, many are providing education and training about elder abuse (Underwood, 2005). In addition to conducting criminal background checks on employees, the Illinois Department of Public Health filed an emergency rule in July 2005 requiring a criminal background check on every prospective nursing home resident before admitting them as a resident. Underwood speculates that this may signify a trend toward expanding the scope of background checks to all personnel, volunteers, and other individuals who regularly enter the home.

To Ealey and Gilstad (2011), compliance with government regulations for long-term care facilities has practical as well as legal and ethical importance for a facility that strives to maintain a good reputation. In 2009, the Patient Protection and Affordable Care Act made it mandatory for care facilities to draw a compliance and ethics plan. Resident safety, which covers mistreatment, abuse, and neglect, is an essential element of an “effective compliance program” as defined by the Office of the Inspector General (OIG) of the Department of Health and Human Services (HSS) (Pennsylvania Department of Health, 2008). The program should include mechanisms for preventing, investigating, and responding to incidence of abuse and neglect by nursing home staff, resident-on-residence abuse, and abuse from unknown causes or sources. Central to this endeavor is a confidential internal reporting system with

follow-up to ensure that incidents that compromise resident safety are taken seriously and handled appropriately.

Resident aggression. Calling for police background checks on potential nursing home residents is not unwarranted. Using data from the New Haven Established Populations for Epidemiological Studies in the Elderly (EPESSE), Lachs, Bachman, Williams, and O'leary (2007) found that most calls to police from long-term facilities involved incidents of abuse between nursing home residents. The vast majority (89%) were occurrences of simple assault, usually between male residents with dementia. In some cases the abuse was perpetrated by fairly unimpaired residents out of frustration against the behavior of residents with dementia. A limited number of police reports involved theft, elopement, or abuse by a resident against a staff member. Only two out of 79 reports involved abuse of a resident by nursing home personnel.

Lachs et al. (2007) find the term “elder mistreatment” misleading in describing resident-to-resident assault because the major cause is typically dementia and the resident is not acting deliberately. At the same time, the behavior can have dangerous consequences and Lachs et al. (2007) note that this form of behavior is rarely included in education and training on dementia and nursing homes have no protocols or guidelines for dealing with it. They also emphasize that allowing abusive behavior between residents to continue can be interpreted as staff neglect. They recommend developing standardized protocols for addressing this issue. From the standpoint of the present study, information on resident-to-resident abuse should be included in training on both dementia and elder abuse and is included in the CARIE training.

Lachs, Pillemer and Rosen observed 35 different types of physical and verbal abuse taking place among residents of a large urban nursing home (Boscia, 2010). Screaming was the most common type of abuse but acts of physical violence such as punching and pushing were also prevalent. Lachs pointed out that given the physical frailty of many nursing home residents, physical violence can be especially detrimental and difficult to recover from. In addition, according to Lachs, “verbal abuse can also have damaging mental and emotional effects for residents who may already be withdrawn because of their mental state” (Boscia, 2010, p. 6). The Cornell researchers are currently exploring strategies for raising staff awareness of resident-on-resident aggression, including training designed to help staff members recognize the precursors of resident violence and thus prevent incidents from occurring.

According to Pulsford, Duxbury, and Hadi (2011) the attitudes of nursing home staff toward aggression perpetrated by elderly residents with dementia may be symbolic of their philosophy of care. They delineate two types of approaches they label *controlling* and *interpersonal*, which depend upon the way the staff members conceive of dementia care. The *standard paradigm* is derived from the biomedical model and focuses on the neurological and neuropsychiatric features of dementia. In contrast, the *person-centered paradigm* reflects a holistic viewpoint in which the neurological disease is one of many factors affecting the behavior of a person with dementia, along with that person’s biography and personality, physical and mental health, and interactions with other people. According to the standard paradigm, there is little more that care staff can do to deal with aggression by residents with dementia than control it

with medication or restraints. For those who espouse the person-centered paradigm, aggressive behavior is an expression of “poorly communicated need” (p. 98).

Theoretically, the degree to which nursing home staff members endorse the standard or person-centered models should influence their response to aggressive behavior.

Pulsford et al. (2011) examined their theory in a study of nurses and other direct care staff members of four nursing homes in Northwest England. The researchers utilized a specially designed instrument, the Management of Aggression in People with Dementia Attitude Questionnaire (MAPDAQ), along with a record of aggressive incidents documenting how the aggression was handled in practice. The findings showed that the staff members were more disposed toward the person-centered paradigm in their responses to the aggressive behavior of dementia patients. That is, “Aggressive behaviour is largely seen by staff as an interpersonal phenomenon” (p. 101).

While there was some support for the use of medication to deal with aggressive behavior, Pulsford et al. (2011) observed that the staff members were especially disinclined to isolate aggressive residents or use physical restraints. Two studies reviewed for this project examined the effectiveness of training programs designed to minimize the use of restraints by nursing home staff (Koczy et al., 2011; Pellfolk, Gustafson, Bucht, & Karlsson, 2010). Although these training programs do not deal with issues of abuse and mistreatment, changes in knowledge and attitudes that result in a more person-centered approach to working with residents may have broader implications for the interactions between nursing home staff and residents. To the

Cornell research team, equipping staff members with strategies for preventing and coping with resident aggression greatly reduces the stress experienced by nursing home staff (Boscia, 2010).

Review of the documented incidents of aggression substantiated the staff perspectives although Pulsford et al. (2011) observed that there were several incidents of aggression assessed by staff members as having no apparent provocation. Outbursts by dementia patients might fall under this heading. Where the causes were apparent, the incidents tended to occur during personal care, interactions with other resident, or the person being denied something by staff members. More than half the incidents involved physical aggression. Staff members were the targets of most violent incidents though a substantial number of violent acts were directed at other residents.

In most cases the staff members responded with interpersonal strategies such as talking to the residents, reassuring them or distracting them (Pulsford et al., 2011). The most common “controlling” technique was having the staff members move the person away from the scene of the event. Physical restraint was utilized in 11% of the cases and medication was used in only one case. Pulsford et al. (2011) found this somewhat ironic given that the staff members endorsed the use of medication but not restraints. At the same time, they noted that restraint and other controlling methods were used far less frequently than in a similar study that documented extensive use of physical restraint, seclusion, and oral medication in response to aggressive incidents.

Hempton et al. (2011) declare physical restraint to be “an infringement of human rights” (p. 471). They point out that being restrained is a distressing experience

and especially so for people with dementia who are incapable of understanding the reason for it. At the same time, the authors recognize that in institutional settings, factors such as inadequate staffing and the belief that restraining someone is for the benefit of their own safety makes it difficult to reduce or avoid the use of restraint. In the home environment, caregivers may restrain the person in order to take some time from having to constantly monitor the care recipient or ensure that the person gets medication. Despite their philosophical opposition to restraint, Hempton et al. (2011) concede that in some cases it may be the most practical solution (or even the only viable solution for a lone home caregiver) when caring for elderly people with dementia. They consider restraint essentially a last resort as did the nursing home staff members who displayed a clear preference for interpersonal responses to resident aggression (Pulsford et al., 2011).

Resident sexual aggression. According to Rosen, Lachs, and Pillemer (2010), sexual aggression against older adults is far more likely to take place in nursing homes than in the community and contrary to popular stereotypes most sexual abuse of nursing home residents is perpetrated by other residents rather than staff. The authors argue that resident-to-resident sexual aggression must be considered in policy and practices to promote the safety and prevent the abuse of elderly nursing home residents. However, the issue has been largely ignored. Rosen et al. (2010) found only 8 studies and one review article focused exclusively on the topic which they analyzed for their own review.

Traditionally, the idea of any sexual activity between elderly nursing home residents was viewed unfavorably. Currently there is increasing tolerance and support for consensual sexual activity between residents, aided by staff education and nursing home policies that include sexuality policies in residents' rights documents (Rosen et al., 2010). At the same time, distinguishing consensual and nonconsensual activity can be challenging given the diminished mental capacity and control of residents with dementia. The term "nonconsensual" can refer to a perpetrator who is unaware of committing an inappropriate or unwanted sexual act as well as the victim. Despite the limited evidence, Rosen et al. believe that resident-to-resident sexual aggression may be quite common and underreported, with serious lingering consequences for victims.

The main recommendation of Rosen et al. (2010) to nursing home staff and administrators in cases where there is a clear violation is to report the behavior to the relatives or guardians of the perpetrator and the victim as well as to the appropriate state agency. Many cases are more nebulous. As with other types of elder abuse, staff education and training are needed to deal with the problem in long-term care facilities. However, Rosen et al. (2010) acknowledge that there are virtually no evidence based strategies for preventing and managing resident-to-resident sexual aggression as well as minimal understanding of the phenomenon. The existing knowledge can be incorporated into staff training programs and future research targeted toward the design and evaluation of prospective interventions.

Risk Factors for Elder Abuse

It is recognized that elder abuse can take place in virtually any setting including the person's home, hospitals, assisted living facilities, and nursing homes (Lachs & Pillemer, 2004; Wolf, 2000). Early research focused on elder abuse in the home environment, creating a stereotypical image of a frail elderly person (typically female) cared for by an overburdened, stressed daughter (Wolf, 2000). Some facets of the portrayal were accurate. In reviewing literature from the 1980s, Sayles-Cross (1988) found evidence that caregiver stress was often an important factor and adult children or other relatives were frequently the abuser. At the same time, caregiver burden accounted for no more than 60% of incidents (according to one study) and there were other family factors linked with abuse.

The National Elder Abuse Incidence Study (2000) revealed certain predominant characteristics. Women were more prone to abuse than men even after accounting for their greater presence in the elderly population (Phillipson, 2000). The oldest persons were the most vulnerable to abuse; those over age 80 were subjected to abuse and neglect at two and three times their representation in the population. The effect for age corresponds to the high proportion of abuse victims who were physically dependent on others for care or had some degree of cognitive impairment. In the vast majority of cases where the perpetrator was known (close to 90%) the abuser was a relative of the victim and two-thirds were the victim's adult children. In cases of self-neglect, the elders were typically depressed, confused, or extremely infirm. GAO (2011) determined that cognitively impaired elders are at the highest risk for abuse.

Caregiver burden and stress. According to Anetzberger (2000), framing elder abuse within a model of caregiver burden and stress served as the justification for making adult protective services the lead agency to address the problem. The author argues that both the conception of elder abuse as a consequence of caregiver burden and making protective services the main point of intervention are far too simplistic for dealing with a highly complex and multifaceted issue. In addition, neither perspective withstands close scrutiny.

Anetzberger (2000) points out that the literature of the 1980s revealed other explanations for elder abuse than caregiver burden. A research review by Sayles-Cross (1988) confirmed this. Many cases of family elder abuse occur in families with histories of family violence. Most of the perpetrators were elderly themselves or in late middle age. In these settings elder abuse reflected spouse abuse which extended into old age or simply behaviors that had occurred among family members for years. Thus the abuser is often a child who was once abused. A history of family violence has been identified as a risk factor for elder abuse as has caregiver burden, substance abuse or psychopathology on the part of the abuser, and physical and cognitive impairment in the elderly victim (Sellas & Krause, 2006). However, no single factor is sufficient to explain a complicated social phenomenon. These same factors are present in situations where no abuse takes place and therefore must be viewed within the context of other features of the abuser, the victim, and the social environment.

Arguing that the acceptance of caregiver burden in caring for persons with Alzheimer's disease (AD) is largely based on assumptions supported by anecdotal

reports, Gainey and Payne (2006) reviewed data from 751 Adult Protective Services case records from three cities in eastern Virginia. Slightly more than half of the cases utilized the Virginia Uniform Assessment Instrument, which provides a detailed account of all aspects of the situation. The researchers used additional measures to assess the presence of caregiver burden.

According to the analysis, there was no distinction in caregiver burden between cases involving victims with AD and other cases of elder abuse. As a result, Gainey and Payne (2006) concluded that, "Caregiver burden is not a primary cause of abuse in Alzheimer's cases any more than it is a primary cause in other kinds of elder abuse cases" (p. 254). They do not discount the theory that caregiver burden plays a role in elder abuse. Indeed, there is evidence that it does although there are other predisposing factors such as stressors related to poverty, living arrangements, the interaction history between the victim and the abuser as well as other characteristics of the abuser, the victim, and the setting (Anetzberger, 2000; Lachs & Pillemer, 2004; Sayles-Cross, 1988; Sellas & Krause, 2006).

While the victims of abuse are often dependent on their caregivers for assistance, the abusers are also often financially dependent upon the victims (Lachs & Pillemer, 2004). In some cases, abuse arises from relatives' (particularly adult children) attempts to gain control of the elder's financial assets. In some situations, a tense and antagonistic family relationship is sustained because a financially dependent daughter or son is reluctant to leave and risk losing the parent's financial support.

Caregiver burden is increased by the demands of the physically infirm elder. Physical infirmity can indirectly be a risk factor for abuse because it diminishes the aging person's capacity for self-defense or escape (Lachs & Pillemer, 2004). However, there is no direct link between physical frailty and abuse. A specific set of risk factors are not present in the literature, more there are circumstances and indirect accumulation of factors that predispose a patient to risk. Abuse of elderly individuals is common but is not a simple matter of caregiver burden as the early literature seemed to claim (Cooney et al., 2006; Cooper, Dow, Hay, Livingston, & Livingston, 2013; Cooper, Selwood, Blanchard, et al., 2009; Coyne, 2001; Lachs & Pillemer, 2004).

The LEAD panel identified caregiver signs of caregiver depression and anxiety, along with the care recipient's challenging behavior, as risk factors for the abuse of dementia patients (Wiglesworth et al., 2010). Smith, Williamson, Miller, and Schulz (2011) built on this theme in a longitudinal study of informal caregivers who were interviewed at the inception of the study and one year later. The researchers found a clear link between the caregivers' depression and declining quality of informal care. Declining physical health on the part of the caregiver, manipulative and controlling behavior on the part of the care recipient, and restrictions in the normal activities of the caregivers' lives resulting from their care obligations were all linked with depression over the course of a year, which in turn compromised the care they provided and increased the probability of abusive behavior. The more depressed the caregivers became, the more they reported yelling and screaming at the care recipient and threatening them with nursing home placement. Noting that the emphasis in caregiver

interventions is on decreasing depression Smith et al. state that there should be more attention given to improving the caregivers' quality of life.

Home care assistance. Recently, the popular media has called attention to the abuse of frail older adults by home health care providers (Shishkin, 2008). Increasing incidents of abuse, neglect, and financial exploitation by home caregivers are occurring as an offshoot of an upsurge in the home health care industry. San Diego district attorney's office has seen an increase in the number of elder abuse cases involving home care aides rise to 80% of all cases referred to his office (Shishkin, 2008; Zhu et al., 2008). According to the U.S. Department of Labor, home health care providers and caregiving aides who provide services such as housekeeping and non-medical assistance are the second and third fastest growing occupations in the country.

Home health aides are typically certified nursing assistants (CNAs) who are licensed and subject to regulatory legislation (Shishkin, 2008). Most abuse cases involve home caregivers who are hired to perform non-medical services but are not required to undergo specialized training and are not strictly supervised. In many states they do not have to undergo background checks. An investigation conducted as part of a seven-state pilot program by Medicare and Medicaid Services found that out of 214,167 individuals who held or sought jobs working with elderly populations, 5,462 had criminal histories and thus should have immediately been disqualified.

The study was conducted by researchers at Michigan State University between April 2006 and November 2007. Shishkin (2008) noted that while Michigan requires background checks for caregivers of elderly adults, the lack of a centralized registry

results in problems going undetected. The first place most prospective employers would turn is state agencies that frequently do not have access to records. As in most aspects related to elder care and elder abuse, the states vary considerably in requiring background checks and credentials for providers of non-professional care to the elderly.

Perspectives and Understanding of Elder Abuse

Selwood et al. (2007) explored the perspectives of family caregivers and professionals to discern how the two groups perceive what constitutes elder abuse. The participants were part of the London and South-East Region of England (LASER-AD) study of caregiving for persons with Alzheimer's disease (Cooper et al., 2008). The participants surveyed by Selwood et al. (2007) included 74 family caregivers and 38 professionals (13 nurses, eight health care assistants, four occupational therapists, three physicians, three social workers, one other therapist, and one pharmacist). They were presented with a case scenario accompanied by a list of various strategies to work with a person with dementia and asked to assess whether each one was a good idea, a bad idea, or abusive (for example, telling the care recipient she cannot have breakfast until after a bath).

Although the participants generally agreed about what strategies were unwise, the professionals and family caregivers had substantially different attitudes about what actions represent elder abuse (Selwood et al., 2007). The caregivers were more likely to see behaviors constraining the mobility of someone with AD as acting in their best interests although they could actually cause harm. At the same time, the professionals were not necessarily accurate in classifying abusive behavior. Selwood et al. (2007).

also noted that certain behaviors such as yelling at someone one time in anger are accepted in most relationships “and while the parameters change within a relationship in which one member is dependent and vulnerable, this does not mean that such actions automatically constitute abuse” (p. 1012). They believe that behavior has to reach a designated level of severity or frequency to constitute abuse, adding that successful guidelines must be consistent with societal attitudes of what is abusive and acceptance of the idea that “prevention leads to better outcomes.”

Erlingsson et al. (2006) conducted a focus group exploration of perspectives of elder abuse among representatives of groups that serve as sources of help and support for abused older adults. Noting that estimates from the U.S. place the incidence of elder abuse much higher than the reported cases, the authors surmise that the situation is probably analogous in Sweden. The sample of 31 participants was drawn from six diverse groups: police officers, primary care providers (two RNs, one district nurse, one occupational therapist, and three home care coordinators), caregiver support group members, a crime victim support organization (two victims support assistants and four volunteers), a Swedish Lutheran Church, and municipal elder care (five nurses).

Erlingsson et al. (2006) observed that while there were differences of opinion within groups and even sharper differences between them, these were outweighed by similarities in the views held by the participants. All groups concurred that elder abuse was “wrong” and saw it as a symbol of society’s lack of respect for older people, which in itself was viewed as a form of abuse (p. 154). They also perceived a lack of respect in budget cuts for services for older adults.

Only two groups, the police and the crime victims, did not regard themselves as potential abusers. The fact that nurses were not one of these groups raises issues for training nurses and other direct care providers given their high representation. Four themes emerged from the discussions: good intentions in abusive experiences, older generation's responsibility for elder abuse, failing to report elder abuse, and preventing elder abuse (Erlingsson et al., 2006).

Fulmer et al. (2003) conducted a grounded theory study with a convenience sample of twenty three adults over the age of 70 with a mini-mental score of at least 18 and use a caregiver at least 20 hours per week. The study used a grounded theory analysis of themes for conceptual framework, then a selective coding method to deductively anticipate neglect in the data. The four themes that emerged were understanding the socioeconomic and life circumstances, the health status of both elder and caregiver, data credibility and outcome consequences. The findings were consistent with the need to add education and a specialized team for diagnosis and abuse assessment as beneficial for the elderly.

Many comments under the first theme reflected the perspective that abusive actions might be acceptable if they were intended in the best interests of the elderly person, consistent with attitudes of the LASER-AD caregivers (Selwood et al., 2007). Of particular note, the nurses expressed conflicts emanating from pressure from several directions including legislative mandates, institutional protocols, the family's expectations, the desires of the elderly patients, and their own personal and professional

ethical principles (Erlingsson et al., 2006). There was also evidence of caregiver stress and frustration as a cause of provocation, stated explicitly in some comments.

Mental and physical impairment were also prominent under the heading of the older generation's responsibility for elder abuse. There were also comments paralleling responses to other forms of domestic abuse where victims are blamed for putting up with abuse or engaging in behaviors that provoke abuse (such as being excessively demanding or helpless). The participants also noted that older adults are commonly perceived as easy targets for financial exploitation (Erlingsson et al., 2006). There was also considerable frustration over the relatives of abused elders who failed to report abuse. However, when this occurred in elder care settings, they felt that relatives might be reluctant to report abuse out of fear of retaliation against the elderly resident. Ageism, lack of knowledge and training, and ambiguous and inefficient protocols for reporting were commonly cited as obstacles to reporting elder abuse. Confidentiality was also cited as a barrier to reporting abuse.

The importance of education and training to prevent elder abuse was highlighted consistently in the literature review of these studies (Cooper et al., 2008; Erlingsson et al., 2006; Fulmer et al., 2003; Selwood et al., 2007). The recommendations ranged from promoting intergenerational interactions in what might be considered diversity training to the importance of education and support for family caregivers and appropriate training and supervision for health care and direct care providers.

Erlingsson et al. (2006) were somewhat alarmed by the prevalence of victim blaming and the extent that many participants portrayed abusive behavior "not only as

acceptable but as appropriate” (p. 156). Frustration with the behavior of elders pervaded numerous comments. The perpetrators of abuse were frequently seen as victims as well, which is the rationale for the theory that caregiver stress is the primary cause of abuse (Wolf, 2000). The most sympathetic comments arose on the issues of reporting and abuse prevention. Ironically, the attitudes of many respondents indicate that they would benefit by the education and training they recommend.

Hempton et al. (2011) explored the perceptions of elder abuse held by health professionals, older adults, and caregivers of dementia patients in Australia. Their sample consisted of 120 health professionals, 361 older volunteers (>65 years), and 89 caregivers. The researchers utilized the Caregiving Scenario Questionnaire (CSQ), which presents the vignette of a son caring for his mother with dementia, along with 13 possible ways the son might act in response to the situation. The responses range from Good Idea to Abusive. Such scenarios are widely used in Australia as part of mental health literacy campaigns, and research with the CSQ has shown a good degree of congruence between the responses to the vignettes and actual performance.

There were no distinctions in the responses of the non-professionals regardless of whether or not they were caregivers (Hempton et al., 2011). The health professionals were more accurate in identifying abusive and potentially abusive responses. At the same time, between one-quarter and two-thirds of the health professionals did not recognize two strategies considered “definitely abusive.” Notably, both strategies involved physical restraint. However, the range of responses

highlighted the complexity of determining abuse in cases involving care recipients with dementia.

In the original study with the CSQ, conducted in the U.K., the item “*accept that it is her choice not to be clean*” was classified as abusive (Hempton et al., 2011). The underlying rationale is that “if a person does not have the capacity to understand the implications for their health, well-being, and social interactions of deciding not to be clean, then there is a duty to act in their best interests, and not to do so is neglectful” (p. 471). Despite this, only 28.4% of the British caregivers and 7.9% of the caregivers thought it was abusive. Hempton et al. (2011). re-classified the item as *potentially abusive*, which is more aligned with the guidelines for elder care in Victoria. Scarcely any of the respondents regarded it as definitely abusive: only 2.5% of the health professionals and 1.1% of the caregivers.

Self-neglect is one of the most complicated and controversial aspects of elder abuse (Daly & Coffey, 2010; GAO, 2011; Rabins & Black, 2010; Zeranski & Halgin, 2011). This is especially true in cases where the person does not have dementia but rather has milder mental impairments. In such cases, the care recipient’s safety may be the overriding factor in whether or not the caregiver or another third party should intervene (Zeranski & Halgin, 2011). Rabins and Black (2010) argue that people of any age can be considered self-neglectful and self-neglect in an older person may actually be a reflection of lifelong habits. From their perspective, it is unethical and a violation of the person’s dignity and autonomy to force older people to change their behavior when there is no diagnosis of cognitive illness or no direct threat of harm.

They recommend that significant others (health professionals, relatives, caregivers) attempt to gain the person's cooperation but ultimately if the person is mentally competent, the behavior is his or her own decision.

The two items classified as definitely abusive referred to the son locking the mother in the house while he was at work and restraining her in an armchair with a table over her lap so she could not get up while he left the house to go shopping. Despite their philosophical objection to these types of restraint, Hempton et al. (2011) conceded that there are cases where caregivers may have to resort to physical restraint. In both the U.K. and Australia the respondents considered it more acceptable to lock the person in the house than to restrain her with a table over her lap. In nursing home settings, staff members can be successfully educated and trained in alternative strategies that minimize the use of restraints (Koczy et al., 2011; Pellfolk et al., 2010; Pulsford et al., 2011).

Health Professionals' Knowledge of Elder Abuse

The majority of studies reviewed state that health professionals should be able to recognize elder abuse and respond to the situation and most acknowledge that there is a serious need for education. In the wake of an upsurge of reports of family violence, Tilden et al. (1994) explored the factors affecting the decisions of different groups of professionals regarding identification and responses to abuse. The premise of the study was that while health professionals are likely to come into contact with patients who have been abused they rarely suspect abuse. Furthermore, even when abuse is suspected, there are tremendous variations in the extent to which they intervene or even

comply with state mandatory reporting requirements. To investigate this phenomenon, the researchers surveyed 1,521 clinicians in a sample comprised of nurses, physicians, psychologists, social workers, dentists, and dental hygienists. The study addressed three types of family violence: child abuse, spouse abuse, and elder abuse. This focuses on knowledge, not prevention.

Dividing the clinicians into three main categories (nurses and physicians, dentists and dental hygienists, and social workers and psychologists), Tilden et al. (1994) found similarities between the professionals in each group but sharp differences across the three groups. One feature common to most respondents was that they had limited education on family violence in their professional training. In fact, the investigators found it troubling that one-third of the respondents in each of the three main groups had no training related to any of the three types of domestic violence. The clinicians had the least training in elder abuse: three-quarters had no education in elder abuse. There was a promising trend in that more recent graduates were more likely to have had more training in family violence, however minimal.

The clinicians were most knowledgeable about child abuse although only social workers (59%) and physicians (39%) said their primary response would be to report the abuse (Tilden et al., 1994). The high rate of reporting for social workers is consistent with the profession's association with protective services (Anetzberger, 2000). Yet interestingly, while more than three-quarters (78%) of the social workers said their most common response to suspected spouse abuse would be to discuss the suspected abuse with another professional, only 23% chose the same response in cases of elder

abuse (Tilden et al., 1994). Roughly half the nurses said they would consult another professional in cases of spouse abuse (51%) or elder abuse (52%).

Among clinicians who were in direct contact with elderly patients, the proportion who included reporting among their potential responses varied considerably among professional groups (dental hygienists, 6.5%; dentists, 12.2%; nurses, 32%; physicians, 45%; psychologists, 60.8%; social workers, 74.4%). Across professional fields, only one-third of the respondents considered mandatory reporting an effective way of dealing with the issue. Ambivalent or negative attitudes toward mandatory reporting of elder abuse are commonplace among health professionals (Lachs & Pillemer, 2004; Sellas & Krause, 2006).

According to Tilden et al. (1994), mandatory reporting presents an ethical dilemma to many clinicians who do not see it as an effective strategy for handling the problem. Instead, many express a preference for mandatory reporting for nonclinical professionals such as teachers or for those not involved in treating the patient such as office nurses. They believe that as treating clinicians they should be allowed professional discretion in how best to intervene with their patients. Most of the respondents in each discipline thought abuse to be uncommon among their patients. While they consider this disturbing in that “the unsuspecting stance of health professionals allows the problem to remain undetected much of the time,” Tilden et al. (1994) propose that to some extent this may reflect the use of denial as a strategy for resolving the quandary between mandatory reporting laws and their own ethical principles (p. 632).

In the U.K. there are no laws mandating reporting of elder abuse. However, the Nursing and Midwifery Council (NMC) Code of Professional Conduct supports reporting abuse without the patient's consent in cases "where disclosure is essential to protect the patient or client or someone else from the risk of significant harm" (NMC, cited in Neno & Neno, 2005, p. 46). Like their counterparts in the U.S., many nurses are reluctant to comply on the rationale that reporting abuse without the patient's consent violates patient-provider confidentiality as well as patient autonomy. The Community and District Nursing Association (CDNA) issued a set of guidelines for addressing suspected elder abuse that are consistent with protocols for dealing with other forms of domestic violence. The first step is questioning the patient in a sensitive manner in a safe and private setting and finding out what she or he wants to do. The CDNA endorses reporting actual or suspected abuse to the lead community agency, typically social services, and the police if necessary. They also recommend that nurses keep detailed formal incident records including the account of the abuse in the patient's own words.

An important concern for intervening in elder abuse is having appropriate evaluation instruments (Fulmer, Guadagno, & Connolly, 2004; Meeks-Sjostrom, 2004; Reis, 2000, Summer). While acknowledging that there are valid instruments for assessing elder abuse in clinical settings, Lachs and Pillemer (2004) find the usefulness of these instruments somewhat limited by the nature of the population most susceptible to abuse. Most medical screening instruments are designed for independent patients actively involved in their own health. This is in contrast to victims of elder abuse, who

have limited interest and involvement in their own care, and are often dependent upon the abuser. Lachs and Pillemer (2004) argue that the most effective assessment for elder abuse is the clinical judgment and report of a health professional that is highly trained in elder abuse. The researchers concluded that “the best policy at this time, rather than over-reliance on a specific screening strategy or clinical algorithm, seems to be education to raise awareness of elder abuse in clinicians” (p. 1268).

Kennedy (2005) examined the knowledge and attitudes of primary care physicians toward elder abuse and neglect. The sample consisted of 292 family physicians and general internists. The overwhelming majority (>75%) agreed that elder abuse represented a problem in which physicians could effectively intervene and an even higher proportion (78%) viewed primary care physicians as ideally positioned to detect domestic violence. At the same time, only 65% felt primary care physicians were the most suitable group to care for victims of elder abuse and neglect.

Despite this stance, 67% said they never or rarely queried elderly patients about mistreatment and only 23% considered it a significant problem in their own clientele (Kennedy, 2005). However, virtually all respondents (96%) thought that medical training should include components on the identification and long-term management of elder mistreatment. Kennedy surmised this might have arisen from their awareness of the paradox between national prevalence data and their perceptions of abuse among patients in their practice. In addition, Kennedy observed that the physicians’ responses to suspected incidents of abuse suggested they were informed about most aspects of elder abuse including identification, management, referral

agencies, protocols for handling abuse, and legislation. In light of the attitudes of many clinicians, however, it is probable the physicians were aware of reporting laws but felt it was not the wisest course of action (Tilden et al., 1994). Among those who encountered incidents of abuse, 94% said they could not prove the suspected abuse and ethically felt it was improper to report it (Kennedy, 2005).

In frail elderly patients, marks, bruises, and injuries that are not obvious signs of abuse can be very difficult to identify as abuse thus reinforcing the need for specific training (Dyer & Rowe, 1999). Cooper et al. (2008) found the Minimum Data Set Abuse Screen (MDS-A), an objective observer assessment tool for abuse, incapable of detecting elder abuse. Kennedy (2005) findings affirm the need for incorporating elder abuse in continuing professional education.

Nurses and Nursing Assistants

Winterstein (2012) and Sandmoe and Kirkevold (2011) both focused on nurses, in Israel and Norway, respectively. Winterstein (2012) conducted in-depth interviews with 30 nurses employed in long-term geriatric care facilities. Four key themes emerged from the interviews: neglect from the outside or neglect from within, conflicts between personal and professional reactions, the question of whose responsibility it is, and professional values and ethics in the face of neglect in informal and institutional care.

Neglect from the outside referred to neglect of the older person by family members and hired home care providers (Winterstein, 2012). Neglect from within related to neglect by nursing home staff. The nurses described an array of situations,

some of which are more appropriately classified as abuse than neglect. These included: inadequate medical care, ignoring resident needs, insufficient nutrition, not changing diapers promptly, inaccurate medical diagnoses and medical carelessness, lack of awareness of changes in the patient's condition, lack of attention to person hygiene, and in one case, force feeding a patient by a nurse who responded to criticism by stating no one "defined reasonable force," leaving her confused about what to do (p. 58).

One respondent commented that neglect in an institution is worse than neglect at home because the patient is a "helpless person who is dependent on the staff" and who "comes to the hospital to receive help" (Winterstein, 2012, p. 59). The nurses noted that while family members may be considerable morally responsible to care for their elderly relative, nurses have an ethical obligation to provide patient care in accordance with their professional ethics and values. Winterstein observed that the nurses who viewed their professional ethics as paramount were less inclined to justify neglect. Not surprisingly, Winterstein advocates efforts to raise public awareness, along with education and training for health care professionals, as frontline strategies in addressing elder neglect and abuse.

Sandmoe and Kirkevold (2011) sought the perspectives of nurses in the community on how they recognize potential elder abuse. The researchers noted that the topic of elder abuse has not had a lot of attention in Norway. For the most part, the nurses felt an intuitive sense that about the client's situation seemed "not right" based on their clinical experience and judgment (p. 100). The nurses were attuned to changes in behavior, expression, and body language that suggested potential abuse. In some

cases, they devised strategies to visit the home and talk to the client alone. However, the researchers cautioned that nurses need training in how to bring up the sensitive issue of abuse (especially when the client might be fearful of a caregiver). The findings demonstrated that even without formal training, nurses can be highly sensitive to potential abuse. At the same time, it also highlighted the importance of targeted training. In addition, whether or not the nurses had the support of community organizations made a pivotal difference in the actions they took.

Daly and Coffey (2010) surveyed nurses and nursing assistants employed in long-term care facilities in Ireland on their perceptions of what constitutes elder abuse. The respondents were 66 nurses and 48 nursing assistants drawn from 3 long-term care homes. The researchers noted that most respondents had no formal education or training about elder abuse beyond what they might have learned in their nurse education programs. However, those who did have training were more adept at recognizing elder abuse. Forced hygiene and the use of restraints elicited mixed responses, thus adding to the controversial nature of dealing with self-neglect. More than half the respondents (54%) felt that forcing nursing home residents to participate in activities violated their dignity and 70% felt the same way about enforced bedtimes. Several questions related to patients with dementia had mixed responses. The overall implication was that there was a substantial degree of uncertainty as to what constitutes elder abuse. The international research shows that lack of clarity in defining and understanding elder abuse is universal. Virtually all sources advocate targeted education and training.

Education and Training

The enactment of the Omnibus Budget Reconciliation Act (OBRA) in 1987 produced more stringent regulations for nursing homes with an emphasis on resident care, reduction and elimination of physical and chemical restraints, and customized care plans designed to maximize the functional capability of each resident (Aylward, Stolee, Keat, & Johncox, 2003). To accompany these changes, OBRA also mandated an increase in training hours for nursing assistants and regular performance evaluations of skill competency. In Canada, there has been extensive investment for all nursing home personnel in the absence of a government mandate. These efforts indicate a definite trend toward extending training in long-term care facilities.

Nursing homes typically rely on vendors and seek to find educational programs that address the unique needs of each group of direct care providers (Enyeart, 2008). There is also a range of available programs for administrators and staff not involved in direct care provision as well as innovative programs including residents and their families. With respect to education on elder abuse, Underwood (2005) recommends a dual track approach with one track for staff members and one track for residents. Topics for residents would include a review of definitions of abuse for the residents and/or family members at the time of admission and on an annual basis, a review of procedures for reporting concerns or incidents of suspected abuse, and assurance that there is no fear of reprisal (for example, providing a private, toll-free hotline for reporting), along with assurance that they will be given feedback on reported problems.

For employees, Underwood (2005) advocates orientation with continuing education about abuse prevention. According to Underwood, this is also accompanied by assurance that there is no fear of reprisal. Elements of the educational program should include attention to caregiver burnout, frustration, and stress along with the facility's operational definition of abuse. Staff members must also be able to recognize signs of abuse and be alert for incidents, patterns, and trends that might signify abuse.

The Massachusetts Model

During the 1990s, the Massachusetts Extended Care Federation (MECF) joined forces with the state's Office of the Attorney General to combat the problem of elder abuse and neglect (Harshbarger & Morse, 1998). The collaborative effort generated at least two statewide conferences and a number of regional workshops on the issue along with the development of a comprehensive training program and video entitled Keeping Nursing Facility Residents Safe, which was distributed to long-term care facilities throughout the state. The program is a two-hour workshop and training is meant to be ongoing and involving all staff members. The program is specifically designed to alert long-term care staff to subtle and unintentional forms of abuse that are often unrecognized but may still constitute a legal and ethical transgression. For example, a care provider can be held responsible for injury to a resident left alone in a bathroom when his or her care plan specifies a need for assistance even though there was no intent to cause harm.

The multi-component training program covers the full spectrum of elder abuse: physical, psychological, and sexual abuse, financial abuse and exploitation, neglect, and

mistreatment (Harshbarger & Morse, 1998). According to data from the Massachusetts Department of Public Health, since the inception of the program there was 20% decrease in reported abuse cases from 1994 to 1997. Additionally, the number of substantiated complaints against certified nursing CNAs was virtually cut in half and the number of prosecutions dropped from a high of 31 cases in 1993 to only three cases in 1997. The promising results led the American Health Care Association (ACHA), representing more than 11,000 long-term care facilities across the U.S., to endorse the Massachusetts training program and have it distributed on a nationwide basis. This training discusses the subtle and unintentional elements of abuse and not specifically all elements of abuse. It is also deficient in discussion of underlying factors that may contribute to abuse such as conflict and emotions. The training is intended as an orientation with several modules designed to be provided as a long continuing education program (Harshbarger & Morse, 1998). It also has a strong focus on Massachusetts law, which may not correlate with Pennsylvania law, which is where this study will take place.

Harshbarger and Morse (1998) deem education and training, strict enforcement of state and federal legislation, and system designed to carefully screen job applicants with histories of abusive behavior as the essential components of a three-pronged approach to putting an end to abuse and neglect in long-term care facilities.

CARIE

As part of its advocacy program, Center for Advocacy for the Rights and Interests of the Elderly (CARIE) sponsored research on elder abuse in nursing homes in

the Philadelphia area reported by Pillemer and Hudson (Menio & Keller, 2000). In the 10 nursing homes assessed, nursing assistants reported engaging in abusive behavior in the last month. Half (51%) admitted shouting at a resident in anger, 23% admitted insulting or swearing at a resident, 17% had used excessive restraint in dealing with a resident, and 10% reported pushing, shoving, or grabbing a resident.

Along with other studies, the report suggested that nursing home staff, especially nursing assistants, required specialized training if nursing homes were to successfully transform the environment to ensure there is no abuse (Menio & Keller, 2000). The justification for this effort is that, “Nursing assistants are the backbone of any facility, providing 90% of the hands-on care to residents. Nursing assistants are a tremendous resource, not a problem to be managed. “They are the key to quality care” (p. 29). To reinforce this point, Menio and Keller invoke Pillemer who stated in *Solving the Frontline Crisis in Long-Term Care*, “No matter how closely nursing homes follow regulations, no matter what new products they buy, no matter how much money they spend—none of it makes any difference without the nursing assistant” (Pillemer, cited in Menio & Keller, 2000, p. 29).

Since 1980, CARIE has been providing practical elder abuse prevention education to nursing home personnel (Menio & Keller, 2000). Funded by the Retirement Research Foundation, CARIE designed, field tested, and evaluated a novel training curriculum created to address issues that can provoke abusive behavior and provide proactive strategies for preventing abuse. The training program is based on three principles deemed essential for any successful educational program. First, there

must be clear definitions of what constitutes effective abuse prevention education. Second, the measures facilities need to take in order to conduct effective abuse education must be considered. Finally, the program must address the needs of direct care providers. These features are integral to any successful long-term care training program (Enyeart, 2008).

Since the curriculum was developed, CARIE has worked extensively training direct care nursing home staff and nursing home administrators as well as employees of home care agencies and assisted living or boarding home facilities throughout the country with the curriculum *Competence with Compassion: A Universal Core Curriculum*, formerly *Competence with Compassion: An Abuse Prevention Training Program for Long-Term Care Staff* (Menio & Keller, 2000). The innovative, interactive program addresses the paradoxical challenge involved in providing optimum nursing home care: “to provide care that is efficient yet sensitive—giving the unhurried attention that elders desire and deserve in the face of limited staffing, support, acknowledgement, and time” (p. 30).

Through a learned-centered approach the trainers present concepts to the participants in a direct manner with an emphasis on group discourse and hands-on practice (Menio & Keller, 2000). Through the course of the program, the participants are encouraged to share their experiences of the challenging situations they encounter in their daily interactions with residents. The group works collaboratively to brainstorm prospective interventions derived from the information they gain from each training module. Each module contains specific case examples of residents that focus

on different aspects of care. The current curriculum includes modules focused on elements such as knowledge and respect for cultural diversity, end of life care, and consumer focused care (CARIE, 2007). The curriculum encompasses a broad spectrum of issues that influence abuse and neglect including the phenomenon per se, risk factors for abusive situations, and warning signs of abuse (Menio & Keller, 2000). The participants discuss stresses they experience at home as well as at work, legal and ethical issues related to reporting suspected incidents of abuse, understanding feelings about caregiving, stresses experienced by care recipients, and abuse of nursing home staff by residents.

The overarching goal of the curriculum is to help participants become more capable of managing and avoiding conflict and dealing with stress through the use of practical intervention techniques (Menio & Keller, 2000). The emphasis on stress and coping is especially vital given the association between elder abuse and maladaptive coping (Cooper et al., 2008).

The key issue for any training program is whether it is effective in altering attitudes and behaviors. For more than 10 years CARIE worked in collaboration with Karl Pillemer of Cornell University to study the training curriculum (Menio & Keller, 2000). The research process had three stages: collecting baseline data on the participants, acquiring data on satisfaction with the program, and conducting a pre- and posttest analysis to determine the impact of the program. Data gathered in 1997 and 1998 from 72 Philadelphia trainees demonstrated that participation in the program was associated with a significant drop in conflict between staff members and residents.

Conflict is defined as negative sanctions exchanged either intentionally or unintentionally. In addition, the participants reported a substantial decline in the experience of burnout along with a decrease in the number of abuse incidents they witnessed. Satisfaction with the program was high. All participants said they felt comfortable during the training program, nearly all (98%) found the material easy to understand, 90% said the material was relevant to their daily work experiences, 94% rated the overall program as either excellent or good, and only one participant would not recommend the program to other staff members.

The Pennsylvania Department of Aging staunchly advocates a campaign of education on elder abuse for employees who work with older adults in all settings (Pennsylvania Department of Aging, 2006). For many years the Department has engaged in a range of activities to educate direct care providers and other professionals about all facets of elder abuse. The community groups receiving training materials include ED physicians, home health care providers, law enforcement officers, victim service workers, and domestic violence and sexual abuse workers. These interventions have no published research regarding their use or effectiveness.

The materials must be continually updated to keep up with new legislation and protocols. The CARIE curriculum has been similarly updated. The enactment of laws requiring state-approved nurse's aide training, including specialized inservice training on abuse prevention and reporting procedures for nurse's aides employed in long-term care facilities (Menio & Keller, 2000). The current curriculum was revised in March 2007 (CARIE, 2007).

Outcomes of Education and Training

Prior to the 1980s minimal training was conducted for long-term care staff (Aylward et al., 2003). Since then there have been a plethora of training programs but unlike CARIE few have evaluation built into the model. As a result, there is little knowledge of their effectiveness. To explore this issue, Aylward et al. (2003) conducted a comprehensive review of research on the effectiveness of continuing education in long-term care environments. Forty-eight studies met the researchers' selection criteria. Thirty were conducted in the U.S. and the remaining 10 came from long-term care facilities in Canada, the U.K., Sweden, Australia, and South Africa. Not unexpectedly, many of the studies focused on the mental health of the residents.

A notable finding was that 35 of the 48 training programs focused almost exclusively on imparting new knowledge without strategies for reinforcing or promoting the application of the new information to real world workplace situations (Aylward et al., 2003). The programs ranged in duration from a single 10-minute session to a series of 28 two-hour seminars. The training techniques were quite similar across programs consisting primarily of some combinations of audiovisual materials, lectures, handouts, seminars, hands-on learning activities, role play exercises, and group discussions. Thirteen of the studies described strategies to promote the practical application of new information and encourage behavior change such as feedback, clinical instructions, onsite consultation, and in one study, actual bedside learning opportunities.

Less than one-quarter of the studies included follow-ups so there was no way of assessing how effective the training program was over time. Of the 17 studies that included follow-up data, 11 reported sustained improvements but only one reported evidence of sustained changes to resident outcomes. The limited amount of research in itself presents a compelling argument for evaluation studies of training programs provided for long-term care employees. Aylward et al. (2003) concluded that, “Rigorous research is needed on the effectiveness of continuing education in long-term care facilities with attention to the role of organization and system factors” (p. 269).

Richardson et al. (2002) reported what seems to be the only randomized controlled trial of a program designed to educate individuals involved in providing care to frail elderly clients on elder abuse. The study took place in North London and the participants included nurses, social workers, care assistants, and care managers. Only workers who had never taken a previous course on managing elder abuse were eligible. The participants were randomized into two groups. One group attended a course commissioned by the National Health Service (NHS) trust and social services focused on knowledge and management of elder abuse. The second group was presented with reading material containing the same content as the seminar. The content was based on policy, practice guidelines, and protocols for responding to abuse and inadequate care of frail older adults and the focus was on the identification and management of all forms of abuse.

Overall, baseline knowledge was low, signifying that there was a definite need for education about elder abuse. Not surprisingly, the educational seminars were far

more effective in increasing knowledge and management expertise than the reading materials. In fact, Richardson et al. (2002) noted that the literature produced no gains in knowledge despite the participants' awareness they were going to be retested. An interesting finding was that participants who had more knowledge at the onset of the study learned less (15.2% increase) than those who began with less knowledge (83.9% increase), implying that there was a ceiling effect. Based on this finding, Richardson et al. deem it vital that training seminars be tailored to the initial knowledge level of the participants. A ceiling effect was also observed for attitudes toward older adults with dementia. Most participants had a positive attitude at the onset of the study that did not change over time. The professional groups displayed a more positive attitude than the care assistants.

Richardson et al. (2002) observe that the burnout scores of the participants were lower than found in other studies. They speculate this might be a "survivor" effect in a sample with a mean duration of experience exceeding 12 years (p. 340). In effect, care providers who experience high levels of dissatisfaction and stress would be more inclined to leave, resulting in low levels of burnout among those with years of experience. Years of experience could also translate into confidence and expertise that protects against burnout. The fact that care providers with years of experience working with elders had no prior exposure to training on elder abuse highlights the need for education and training on this issue.

The Croyden model. Lawrence and Banerjee (2010) reported on the Croyden care home support team (CHST), a novel interdisciplinary approach to dealing with

resident abuse in long-term care facilities. Developed in collaboration with the NHS in England, the CHST has three key aims: to improve the quality of care provided by long-term care homes in Croyden, to enable the staff members to sustain high quality of care, and to preventing issues that compromise resident safety. The Croyden area includes 27 nursing homes and 140 non-nursing residential care homes. The multidisciplinary model involves 1 district nurse, 1 community psychiatric nurse, and 1 social worker. The team provides support to the care facility staff members *without* casting judgment or blame. Though the team members are not trainers per se they hold workshops for staff members designed to provide them with guidance and promote discussion of important issues. The interactive sessions are quite similar to those advocated by Pillemer and his colleagues.

Each participating home draws up a “support plan” and the staff members are involved in ongoing sessions and consultations with the support team (Lawrence & Banerjee, 2010). While the managers of the homes acknowledged they were initially apprehensive about the support teams, there was virtually universal praise for the CHST by the professional groups. Collaboration was pivotal to the program’s success. Positive outcomes included improved communication and collaboration among staff members, increased confidence, competence, motivation, interest and pride in their work, and enhanced quality of care. The Croyden model is built on similar principles and strategies to CARIE, PIC, and other programs developed by Pillemer and the Cornell research team and could easily be adapted by long-term care homes in the U.S.

Conclusion

Elder abuse is recognized by the WHO as a global public health concern yet knowledge and understanding of the phenomenon is low among health professionals and direct care providers. Virtually all sources reviewed for this project emphasize the critical importance of educating those who work with frail older adults, both in the community and in institutional settings, on the multidimensional nature of elder abuse. Over half of the studies suggested education as a key factor to prevention of elder abuse; however this topic was never examined.

There is general agreement that the prevalence of elder abuse far exceeds the number of cases reported (Cohen et al., 2007; Dyer & Rowe, 1999; Erlingsson et al., 2006; Gray-Vickrey, 2004; Kahan & Paris, 2003; Kennedy, 2005; Lachs & Pillemer, 2004; McGarry & Simpson, 2007; McNamee & Murphy, 2006; Neno & Neno, 2005; Pillemer & Menio, 2003; Richardson et al., 2002; Rothman & Dunlop, 2001; Selwood et al., 2007; Wolf, 2000). Variations in the terminology used to define elder abuse and differences in sampling and data collection methods add to the complexity of gauging the extent of elder abuse.

The initial conception of elder abuse was based on the premise of caregiver burden in caring for a dependent person (Wolf, 2000). Although any direct association is unduly simplistic, dependence and caregiver stress are definite risk factors for abuse (Cooney et al., 2006; Cooper et al., 2008; Cooper, Selwood, Blanchard, et al., 2009; Coyne, 2001). Advancing age also heightens the risk of abuse and in some studies

reviewed for this project women were more likely than men to be victims of elder abuse (Manthorpe et al., 2007; Pennsylvania Department of Aging, 2006; Tatara et al., 1998).

There is ample documentation of elder abuse in nursing home settings (GAO, 2002, 2011; Wolf, 2000). However, far less attention is given to abuse in long-term care facilities than in the community. The CARIE curriculum stands out as one of the few training programs for care staff on elder abuse with a firm empirical foundation (Menio & Keller, 2000; Pillemer & Hudson, 1993; Pillemer & Menio, 2003). Nurses are ideally situated to act as advocates in protecting frail older adults from abuse but this endeavor entails extensive and carefully tailored education and training on elder abuse prevention and intervention.

Chapter 3 Methodology

The purpose of this study was to determine the effect of a nursing staff educational seminar on elder abuse prevention in nursing home populations. This study was designed to provide answers regarding the changes in perception of conflict and abuse when an elder abuse prevention seminar is presented to long term care nursing staff. From the findings, one is able to state the relationship between the intervention and the changes in the CTS2 scores in a long term care setting, thereby furthering efforts to minimize harm to the at-risk elderly population.

Setting

The educational seminar was held in 4 long term care centers in a group in-service format for only the staff. The residents did not receive educational training. The use of a private room conducive to holding a seminar was requested and used. The location of the seminar was determined in advance to allow ample opportunity for procurement of a space and notification of staff. This seminar was offered multiple times to capture nursing staff working on all shifts and the weekend. At the conclusion of the study, the elder abuse educational seminar was offered to the control group long term care centers.

Sample

Administrators of four area long term care centers stated they were interested in volunteering for this study from a rural County in Pennsylvania. The four long term care centers were different in size (two small and two large). The difference in size required one large and one small nursing home to be selected as controls and the

remaining two as treatment groups. Inclusion criteria for the long term care facilities in the study were:

- The facility is a state licensed Medicare certified long term care home.
- The facility cares for elderly patients over the age of 60
- Clinicians in the facility have not received elder abuse training over the past six months.

Inclusion criteria or Nursing staff included:

- They must be considered nursing staff (RNs, LPNs, and CNA's)
- They must have worked directly with residents in the facility in the past 6 weeks
- They must continue to work directly with residents during the study
- They must be willing to participate in the study

Inclusion criteria for residents included:

- Aged over 60 years
- Minimum score of 26 on the Montreal Cognitive Assessment scale
- Resident living in the facility at least 6 weeks prior to the study
- Plans to continue living in the facility for six weeks after the start of the study
- Ability to give informed consent
- Willing to participate in the study

Nursing staff and residents were selected from a convenience sample of eligible applicants to participate in the study until the minimum number of participants required was met. There was no treatment for the residents, resident surveys were used for outcome measurements only and were recruited through posted signs, announcements at resident council meetings, resident activities and flyers with the researcher's phone number. These announcements had prior authorization from the activities director and the facility administrator.

A power analysis was calculated based on previous use of the CTS2 scale, number of residents and staff available and previous use of the KAMA tool to determine the number of subjects needed to minimize sampling error. One hundred twelve subjects were recruited from the long term care centers (see table 1).

Table 1

Power analysis results number subjects

| Name | Control group | Treatment group | Totals |
|-------------------|---------------|-----------------|--------|
| Elderly residents | n=28 | n=28 | 56 |
| Nursing Staff | n=28 | n=28 | 56 |

The calculated power analysis used a lower critical effect size because there are no research studies to provide insight into the effect of education on elder abuse reporting rate or the conflict tactics scale, but education has had a positive effect on knowledge of elder abuse (Beach et al., 2005; Draucker, 2002; Heath et al., 2005; Kennedy, 2005). Using a more stringent power of 0.90 will capture small changes in the reported data (Kraemer & Thiemann, 1987). The power analysis was based on a two-tailed test of significance with an effect size of .34, a power of .90, and a .01 level of significance. Thus, 112 subjects from the four study sites should be included.

Demographics of the Long Term Care Centers

The four pre-selected long term care centers in this study were examined for similarities in demographic data as well as possible confounding variables such as the number of hours nurses spend with residents, the number of past and current reports of abuse, employment turnover rates, charges against the nursing homes licenses and types of deficiencies found by the state during the survey of the nursing home. These

variables, if not similar in the project's nursing homes, could affect the level of care a client receives and ultimately distort data collected during the study. Information about Pennsylvania licensed nursing homes is made readily available to the general public on the Pennsylvania Department of Health website.

Four long term care facilities located in a rural county in Pennsylvania were used in the study. The pre-selected long term care facilities are for profit, Medicare certified agencies that employ nursing staff to care for their residents. According to the Pennsylvania Department of Health (2008), each of the long term care facilities received a state survey within the past year and received deficits in patient care areas on the survey. Deficits or deficiencies are violations of state or federal rules with which all nursing homes must comply (Pennsylvania Department of Health, 2008).

Deficiencies are categorized as minimal citation, minimal harm, actual harm and serious harm. Minimal citation is the lowest type of deficiency and serious harm is the most severe deficiency. Further, these categories are separated into frequencies, which are isolated, pattern and widespread. The public data available online was reviewed from the Pennsylvania Department of Health (2008) for this project and each of the four long term care centers over the past year had deficits that carried either a minimal citation or minimal harm category, but none were categorized as actual or serious harm. According to the Pennsylvania Department of Health long term care website, the following deficits were found at all facilities included in this project:

1. Failure to give each resident care and services to get or keep the highest quality of life possible

2. Failure to report and investigate any acts or reports of abuse, neglect or mistreatment of residents
3. Failure to write and use policies that forbid mistreatment, neglect and abuse of residents and theft of residents' property
4. Failure to make sure each resident is being watched and has assistance devices when needed, to prevent accidents
5. Failure to let the resident refuse treatment or refuse to take part in an experiment.

Also, each facility has received patient care deficits on surveys completed in the past five years which included the five deficits above as well as:

1. Failure to provide care in a way that keeps or builds each resident's dignity and self-respect
2. Failure to try to resolve each resident's complaints quickly
3. Failure to keep each resident's personal and medical records private and confidential
4. Failure to provide activities to meet the needs of each resident
5. Failure to hire only people who have no legal history of abusing, neglecting or mistreating residents or report and investigate any acts or reports of abuse, neglect or mistreatment of residents.

According to the Pennsylvania Department of Health (2008) these complaints are common among nursing homes throughout the country.

The number of hours spent with each resident and the number of residents located in each facility were compared. The long term care facilities in the program have similar number of hours that nurses spend with each resident, called nursing hours. The state average of nursing hours per resident is 3.25 hours in long term care centers. The average nursing hours for the long term care centers included in this project were 3.81 hours with a minimum of 3.5 hours and a maximum of 4.12 hours. The average number of residents in the long term care centers is 51 with a maximum of

64 and a minimum of 38 residents (Pennsylvania Department of Health, 2008). These measures are congruent with state averages in Pennsylvania (Castle & Engberg, 2005).

According to public information from the Pennsylvania Department of Health, none of the long term care centers for this project were currently operating on a provisional or revocation of license (issued when multiple state regulations have been violated) nor had they been operating on a provisional/revocation of license in the past five years. The average employment turnover rate nationally in long term care centers is 60%, the average long term care center employment turnover in the samples are 50% with a high of 55% and a low of 45% turnover annually (Pennsylvania Department of Health, 2008).

Design of the Study

A prospective quasi-experimental design was used. The independent variables were the educational seminar, demographics of both residents and nursing staff and contextual variables. The dependent variables included the changes in behaviors measured by the conflict tactics scale, quantification if knowledge has occurred based upon the KAMA scores and the frequency of abuse reports to the area ombudsman office. Only the nursing staff received the treatment (educational seminar).

Intervention

The educational intervention created by Coalition for the Rights of the Elderly (CARIE) called “Competence with Compassion: An Abuse Prevention Training Program for Long Term Care Staff” was used in the study (CARIE, 1999). This seminar uses a learned-centered approach to directly present concepts to the

participants (Menio & Keller, 2000). The seminar modules include a lecture, handouts, directed discussions of shared experiences of participants and their personal experience of challenging situations encountered in daily interactions with residents. The seminar group works collaboratively to brainstorm prospective interventions derived from the information they gain from each seminar module. Each module contains specific case examples of residents that focus on different aspects of care such as knowledge and respect for cultural diversity, end of life care, and consumer focused care (CARIE, 2007). The curriculum encompasses a broad spectrum of issues that influence abuse and neglect including risk factors for abusive situations, and warning signs of abuse (Menio & Keller, 2000). The participants discuss stresses they experience at home as well as at work, legal and ethical issues related to reporting suspected incidents of abuse, understanding feelings about caregiving, stresses experienced by care recipients, and abuse of nursing home staff by residents. This educational seminar is directed for use by nursing staff in long term care centers to reduce risk of conflict and abuse. It has specific objectives with a very detailed account of how to administer it. It includes a Power Point presentation, handouts and a 20 minute long video.

The seminar “Competence with Compassion: An Abuse Prevention Training Program for Long Term Care Staff” was created and tested for validity and reliability of information by a selected team of abuse expert researchers working for CARIE with consultation from Mr. Karl Pillemer, a known expert in elder abuse. This intervention was administered by the researcher. Specific instructions were included in the seminar, which included method of delivery to nursing home staff to exclude confounding

variables of differences in teaching methods. The seminar was offered at convenient times to the staff to capture all nursing home shifts over a two week period. Each staff member was allowed to participate in the seminar one time. At the end of the study, the nursing homes were offered the instructors manual for Competence with Compassion education seminar and handouts to keep for future staff training and control groups received the same live seminar presented to the treatment groups at the end of the study.

Data Collection Instruments

Knowledge and Management of Abuse tool (KAMA) was created in 2003 by Barbara Richardson, Ginette Kitchen and Gill Livingston because there are no valid tools in the literature that measure knowledge of elder abuse. This 7 question tool uses vignettes of elder abuse circumstance to ask participants how they would act. The tool's initial use and testing has been with nursing staff populations. Internal consistency of versions A and B with Cronbach's alpha equal to or below 0.79 is 0.82. The tool also has established psychometric test and retest inter-rater reliability. The two versions are used for pre and post test to prevent recall bias. The KAMA essentially maps out current knowledge and when used in pre and post test format will determine if new knowledge has been acquired. Answers are scored and a quantitative result of knowledge gained is revealed (Richardson, Kitchen & Livingston, 2003).

Elderly residents and nursing staff participants were administered the 30-item Conflict Tactics Scale (CTS2) developed by Murray A. Straus. The instrument consists of eighteen scales that measure history of physical and emotional conflict that the

respondent has demonstrated and experienced over a designated time frame. The internal consistency and reliability coefficients measured in 41 articles have a mean of .77 and have consistently demonstrated a high validity and sensitivity in adult, elderly populations of various ethnic backgrounds including Caucasian, African American, and Hispanic, which were expected possible subjects in this project. The Conflict Tactics Scale 2 is written at a 6th grade reading level according to the Flesch Reading Ease scale (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). This project used the Conflict Tactics Scale 2 with modifications in language and time so the items are consistent with the context. Therefore the term “spouse” was replaced with “caregiver” when administered to patients and “residents” when administered to nursing staff and time frequencies were changed from “in the past year” to “the past 6 weeks” to account for study parameters. These modifications have been tested and revealed no change in sensitivity or specificity (Cooper et al, 2009). Scales used to measure responses from nursing staff and residents were identical in context, the only modifications were the subject used in the question.

Criteria for residents to be included in the study were a minimum score of 26 on the Montreal Cognitive Assessment scale (MoCA). The Montreal Cognitive Assessment (MoCA) is a tool that screens for mild cognitive impairment and dementia in elderly individuals (Nasreddine et al., 2005). It was developed by Nasreddine et al. (2005) as a brief screening tool that requires approximately 10 minutes to complete. The impressive psychometric properties of the MoCA are an internal consistency by Cronbach's alpha ($\alpha = 0.83$); a good test retest validity ($r = 0.92$) an excellent

correlation between the Mini Mental State Examination (MMSE) and the MoCA ($r = 0.87$) along with a stronger sensitivity (100% for mild cognitive impairment and 90% for dementia) and a specificity of 87% when compared to the mini-mental state examination in detecting mild cognitive impairment (Nasreddine et al., 2005). Another study validated the MoCA with a sensitivity to detect mild cognitive impairment at 83% and the ability to detect dementia specificity of 94%, their findings showed the MoCA to be more sensitive to mild cognitive impairment than the MMSE (Smith, Gildeh, & Holmes, 2007). The MoCA inter-rater reliability was found to be 0.81 with a test-retest coefficient of 0.79 in a study using elderly Parkinson's disease patients (Gill, Freshman, Blender, & Ravina, 2008). The cut-off for the Montreal Cognitive Assessment scale (MoCA) was a minimum score of 26 or greater.

Demographic data was collected on nursing staff including gender, marital status, age, income level, race, social information, educational and employment history. Demographic information collected on the nursing home residents included gender, marital status, age, race, LTC setting history, highest education level achieved, and what they did for a living in the past. Nursing home residents were asked demographic questions by the researcher before administration of the Conflict Tactics Scale 2.

Data Collection Procedure

The study was explained to the long term care center administrators. Long term care center staff members and residents who met inclusion criteria and were willing to complete the Conflict Tactics Scale 2 and KAMA were given consent forms and opportunities to ask questions before participating in the study.

Staff procedures. All nursing home staff were required by the nursing home to participate in the educational seminar, regardless of inclusion in the study. According to the participating nursing home administrators, nursing staff are required to have at least 16 hours of continuing education (CE) each year, and they intended this seminar to be included in their CE requirements, therefore all staff were paid by the nursing home to participate in the seminar, regardless of whether they agreed to complete surveys to participate in the proposed study. Recruitment continued until the minimum number of participants required was met.

All participants were given an envelope with a random number inside to write on the top of their surveys. The number was then placed back in the envelope and the participants printed their names on the envelopes and sealed them. The sealed envelopes were collected by the researcher. During the post test, participants were given their envelopes back as a reminder of their assigned random number. These envelopes remained with the researcher unopened in a locked box. These assigned numbers were used for data reporting to protect the identity of all residents and staff.

Four long term care homes were included in this project, two medium sized homes (over 100 residents) and two small sized homes (under 100 residents). In order to maintain an equal number of available residents one large and one small long term care home were assigned to each group-treatment and control. A coin toss that revealed heads placed the facility into the control group and tails into the treatment group, the remaining facility was placed into the opposite category. The coin toss happened twice, once to place the large facilities and a second time to place the small facilities.

After treatment and control nursing homes were established, a stratified random sample design was used within each facility.

1. Envelopes were provided to place surveys into where the participant will circle on the front of the envelope shift worked, license type and floor.
2. The envelopes were sorted by these categories.
3. The envelopes were randomly drawn from each stratum group until the minimum number of participants was reached. However, due to an overwhelming response, the researcher went beyond the minimum number of participants.
4. Unused surveys were shredded.

Each stratum consisted of the nurse licensing type, shift within the long term care center for staff and floors. A stratified sampling technique was chosen to eliminate the possibility of the sample including a disproportionate number of residents living in one hall, a single license type of staff (for example all licensed practical nurses) or a single shift of staff (for example nightshift staff only), therefore confounding variables such as excluding certain license types and staff assignment were minimized (Polit & Beck, 2004). Individual nursing homes have the possibility of a variation in the number of reports of conflict or elder mistreatment due to size, location, time of shift, staffing characteristics or resident population on a floor. Use of a stratified random sample was attempted to control confounding variables within the study. Staff continued to be recruited into the study until at least the minimum number of participants was reached. All staff were required by the nursing home administration to attend the seminar, only volunteer study participants were asked to complete the study tools pre and post intervention.

This is a single blinded study. The nursing home staff did not know which group they were assigned to in an attempt to prevent a treatment effect bias.

Employees of both control and treatment long term care centers were mandated to participate in the free educational seminar by the long term care center. Employees of nursing homes regularly attend seminars and were not asked to provide consent, unless they agreed to participate in the study.

Control group received a continuing education seminar on infection control measures in long term care centers. They were not told if their facility was in the treatment or control group. Individuals were told that completion and submission of the questionnaires implied consent. Both control and treatment group healthcare professionals in a long term care settings were educated during this study.

Resident procedures. Elderly residents were recruited for the study through posted flyers and announcements. Each resident who volunteered in the study from the recruitment efforts were administered the MoCA and after the scores had been submitted, resident volunteers were notified if they met inclusion criteria to participate in the study. If they met inclusion criteria and were willing to participate, their name and floor location were placed on an index card.

Residents were selected to participate in the study using a random stratified sample. The resident's stratum consisted of floor location of the resident's room in the long term care center. This sampling method was chosen to minimize confounding variables such as resident room location from causing misrepresentation of the entire nursing home area. Index cards were selected until at least the minimum number of

participants needed was reached. These residents were contacted to ensure their desire to be in the study and the remaining resident names were shredded. Participation by the elderly residents was strictly voluntary and they had the right to refuse or drop out of the study at any time. No monetary benefit was offered for participation to the residents.

A long term care center included in an abuse study may decrease its patient prospects based upon family or patients worrying about possible abuse occurring in the home, simply because a study about elder abuse was conducted. To protect the future business of the long term care centers, data provided by the company will be submitted under an assigned number and not the company name.

Pennsylvania ombudsman elder abuse report data were examined during this study. Reports were compared at two different time intervals. First, abuse report data from the previous year was compared to data during a time interval six weeks after the study. The ombudsman reports from the current and preceding year were compared. The collected data from the state revealed the total number of abuse reports made to the ombudsman's office.

Research Questions

1. Is there a relationship between the implementation of an educational seminar on elder abuse as measured by the number of abuse cases reported to the area ombudsman?

2. Will the perception of maltreatment by long term care center residents and nursing staff change after an educational seminar is provided to nursing staff as measured by scores on the Conflict Tactics Scale Two (CTS2)?
3. Do knowledge levels of nursing home staff regarding elder abuse change after the Center for Advocacy for the Rights and Interest of the Elderly (CARIE) educational intervention is given as measured by the Knowledge and Management of Abuse scale (KAMA)?

Data Analysis

Research questions were answered through data analysis. A repeated Multivariate Analysis of variance (MANOVA) with follow up comparisons was used to detect differences among the groups before and after treatment and between the control and treatment group. This was used to look at the specific questions individually on the Conflict Tactics 2 Scale. Research question one was answered using descriptive statistics. A repeated Analysis of variance (MANOVA) with follow up comparisons was used with the KAMA tool to determine if there is a difference between the control and treatment groups to answer question three. Data cleaning was completed using a two- step process.

During the data entry process, master degree students were asked to assist with data input. One input data; the second checked the input into SPSS. The researcher then checked every 7th line to determine that the data was correctly input and found no errors. Next, the data was carefully reviewed for omissions. This was completed by viewing the data set in SPSS for blanks. When an omission was found, the researcher

accessed the survey to obtain the missing data, if available. Two omissions were found. The researcher obtained the survey that contained the missing data for one omission and the second omission did not contain the information (survey had one area that was blank). The manual for scoring the CTS2 by Straus (2004) was consulted and the directions on page 5. The data missing was a prevalence score for emotional negotiation question 2 on the CTS2 scale for staff in the large control group. According to the instructions it was appropriate to use the mean score (compute meanvalu) from the group to enter in the data, so a score of 0 or “this never happened” was entered. The replacement effect was investigated by running the analysis with the information entered and running the analysis omitting the respondent data and no effect was found on the level of significance or the effect size.

The data was computed in two ways. First the small and large treatment and control groups were analyzed separately, and then analyzed combined. There were no significant differences found in the data when comparing small and large groups, so it was decided that the best representation of the data was to combine the small treatment with the large treatment into one treatment group and the small control and large control groups into one control group. Descriptive statistics with Pearson product-moment correlation coefficients are proposed to detect relationships between potential abuse and factors such as age, gender, and social contacts. Fishers exact probability test will be used to determine if there are any differences in reporting rates to area ombudsman.

Ethical Considerations

Research provides potential for both great benefit as well as great burden. There are no greater risks to the elderly individual participating in the study than those that may occur with normal daily activity. The Conflict Tactics Scale 2 tool was intended to assess risk and not proof of actual violence or harm (Kantor & Jasinski, 1997). Residents and staff may experience some discomfort talking about such issues and potential experiences, however, such psychological distress is expected to be minimal. They have the right to drop out of the study at any time or refuse to answer questions on any survey.

If actual harm is found during interviews with residents, a resident reports being abused or asks for help during the interview, the area ombudsman's office will be notified as per the normal legal procedure whenever any indication or suspicion of abuse is determined. Participation will not preclude the researcher from reporting a claim of abuse to the area ombudsman as required by Pennsylvania law. This will be clearly explained and stated on the consent form provided prior to participation in the research study. This situation is similar to any healthcare professional speaking to an elderly resident. If any elderly resident in a long term care facility claims abuse, a report to the area ombudsman must be made. The law must be followed.

Chapter 4 Results

After analyzing the data, it was determined that the four groups could be combined into two groups; A preliminary MANOVA was conducted to assess if there were differences in the sixteen scores by size (small vs. large). The results of the MANOVA for residents was not significant, $F(13, 92) = 0.68, p = .781$, suggesting that there were no differences between the small and large groups for the residents. The results of the MANOVA for nurses was also not significant, $F(15, 218) = 1.27, p = .221$, suggesting that there were no differences between the small and large groups for nurses. Because significant differences between the small and large groups were not found, two treatment groups (treatment vs. control) were used instead of four groups (small treatment vs. large treatment vs. small control vs. large control).

Descriptive statistics were conducted on the demographic data for nurses and residents, and on the reports to the area ombudsman to the research question.

Characteristics of Nursing Staff

Two hundred and thirty-four staff members completed the survey. This included 35 males and 199 females. Staff members were in one of two groups (control or treatment). Staff had a mean age between 33.05 and 34.96; descriptive statistics for staff age are presented by group in Table 2.

Table 2

Descriptive Statistics for Age by Nursing Staff Group

| Nursing staff group | <i>N</i> | <i>Min.</i> | <i>Max.</i> | <i>M</i> | <i>SD</i> |
|---------------------|----------|-------------|-------------|----------|-----------|
| Control | 112 | 19.00 | 55.00 | 33.05 | 9.93 |
| Treatment | 122 | 18.00 | 60.00 | 34.96 | 9.12 |

Nearly all of the staff members were white and non-Hispanic (234, 97.4%), and the majority was married (180, 76.9%). A large number (138, 58.9%) reported their highest level of education as high school, while 65 (27.8%) reported technical school (two-year) level of education. Household income varied, with 135 (57.7%) staff members reporting between \$20,000 and \$39,000. Frequencies and percentages for characteristics of staff members are presented by group in Table 3.

Table 3

Frequencies and Percentages for Demographic Characteristics of Nursing Staff by Group

| Characteristic | Control | | Treatment (n | |
|--------------------------------|---------|------|--------------|------|
| | n | % | n | % |
| Gender | | | | |
| Male | 17 | 15.2 | 18 | 14.8 |
| Female | 95 | 84.8 | 104 | 85.2 |
| Ethnicity | | | | |
| Hispanic/Latino | 3 | 2.7 | 3 | 2.5 |
| Not Hispanic/Latino | 109 | 97.3 | 119 | 97.5 |
| Marital status | | | | |
| Now married | 79 | 70.5 | 101 | 82.8 |
| Widowed | 3 | 2.7 | -- | -- |
| Divorced | 7 | 6.3 | 7 | 5.7 |
| Separated | 3 | 2.7 | 2 | 1.6 |
| Never married | 20 | 17.9 | 12 | 9.8 |
| Education | | | | |
| No formal education | -- | -- | 1 | 1.0 |
| High school or equivalent | 65 | 58.0 | 73 | 59.8 |
| Vocational/technical (2 years) | 35 | 31.3 | 30 | 24.6 |
| Some college | 8 | 7.1 | 9 | 7.4 |
| Bachelor's degree | 3 | 2.7 | 6 | 4.9 |
| Master's degree | 1 | 0.9 | 2 | 1.6 |
| Other | -- | -- | 1 | 0.8 |
| Total household income | | | | |
| Less than \$10,000 | 1 | 1 | -- | -- |
| \$10,000 to \$19,000 | 30 | 26.8 | 14 | 11.5 |
| \$20,000 to \$29,999 | 44 | 39.3 | 48 | 39.3 |
| \$30,000 to \$39,999 | 17 | 15.2 | 26 | 21.3 |
| \$40,000 to \$49,999 | 9 | 8.0 | 19 | 15.6 |
| \$50,000 to \$59,999 | 10 | 8.9 | 4 | 3.3 |
| \$60,000 to \$69,999 | 1 | 1 | 5 | 4.1 |
| \$70,000 to \$79,999 | -- | -- | 5 | 4.1 |
| \$80,000 to \$89,999 | -- | -- | 1 | 0.8 |

Sixty-six staff members (28.2%) had between 2-5 years and 57 (24.3%) staff members had between 5-10 years of work experience at their current nursing facility. Half (56, 50%) of the control group had worked at a nursing home in the past, and half

had not, whereas the majority of the treatment group (61, 66.4%) had past experience in comparison to no experience. Previous years of experience varied, and the largest frequency (44, 18.8%) was found in the 2-5 years of experience category, with the majority (162, 69.2%) of staff members reporting work as a Nursing Assistant (NA/CNA). The majority (162, 69.2%) of staff were direct care workers opposed to supervisory roles. Frequencies and percentages for work characteristics of staff members are presented by group in Table 4.

Table 4

Frequencies and Percentages for Work Characteristics of Nursing Staff Members by Group

| Work characteristic | Control | | Treatment (n | |
|----------------------------------|---------|------|--------------|------|
| | n | % | n | % |
| Years worked in this facility | | | | |
| 1-2 years | 12 | 10.7 | 20 | 16.4 |
| 2-5 years | 37 | 33.0 | 29 | 23.8 |
| 5-10 years | 39 | 34.8 | 48 | 39.3 |
| 10-20 years | 19 | 17.0 | 19 | 15.6 |
| 20-30 years | 5 | 4.5 | 6 | 4.9 |
| Worked in nursing home in past? | | | | |
| Yes | 56 | 50.0 | 81 | 66.4 |
| No | 56 | 50.0 | 41 | 33.6 |
| Years worked in previous nursing | | | | |
| Under 1 year | 8 | 7.1 | 7 | 5.7 |
| 1-2 years | 15 | 13.4 | 31 | 25.4 |
| 2-5 years | 20 | 17.9 | 24 | 19.7 |
| 5-10 years | 11 | 9.8 | 15 | 12.3 |
| 10-20 years | 1 | 0.9 | 4 | 3.3 |
| Primary area of employment | | | | |
| Registered Nurse (RN) | 12 | 10.7 | 13 | 10.7 |
| Licensed Practical Nurse (LPN) | 22 | 19.6 | 25 | 20.4 |
| Nursing Assistant (NA/CNA) | 78 | 69.7 | 84 | 68.9 |
| Role in long-term care facility | | | | |
| Floor Supervisor | 25 | 22.3 | 27 | 22.1 |
| Administrative staff | -- | -- | 1 | 0.8 |
| Direct care worker | 78 | 69.6 | 84 | 68.9 |
| Trained professional | 9 | 8.0 | 10 | 8.2 |

There were no significant differences between the treatment and control groups in characteristics of nursing staff.

Characteristics of Residents

One hundred and five residents completed the survey. This included 37 males and 68 females. Residents were in one of two groups (control, treatment). Residents had a mean age between 76.24 and 79.38 years; descriptive statistics for resident age are presented by group in Table 5.

Table 5

Descriptive Statistics for Age by Resident Group

| Resident group | <i>N</i> | <i>Min.</i> | <i>Max.</i> | <i>M</i> | <i>SD</i> |
|----------------|----------|-------------|-------------|----------|-----------|
| Control | 43 | 67.00 | 95.00 | 79.38 | 6.99 |
| Treatment | 62 | 66.00 | 90.00 | 76.24 | 5.66 |

Nearly all of the residents were non-Hispanic (99, 94.3%). Residents in the control group reported being widowed at a higher frequency (21, 39.6%) than the other options, and residents in the treatment group reported being currently married with a higher frequency (35, 40.3%).

A large number (67, 63.8%) reported their highest level of education was high school or equivalent, while 16 (15.2%) reported a vocational or technical school (two-year) level of education. Household income varied, with a greater frequency (60, 57.1%) of residents reporting between \$20,000 and \$39,000. Regarding residents' past employment role, the largest frequencies were found in skilled labor (26, 24.8%) and

self-employment (22, 21%). Frequencies and percentages for individual characteristics of residents are presented by group in Table 6.

Table 6

Frequencies and Percentages for Demographic Characteristics of Residents by Group

| Characteristic | Control | | Treatment (<i>n</i>) | |
|------------------------------------|----------|------|------------------------|------|
| | <i>n</i> | % | <i>n</i> | % |
| Gender | | | | |
| Male | 16 | 37.2 | 21 | 33.9 |
| Female | 27 | 62.8 | 41 | 66.1 |
| Ethnicity | | | | |
| Hispanic/Latino | 1 | 2.3 | 3 | 4.8 |
| Not Hispanic/Latino | 40 | 93.0 | 59 | 95.2 |
| Marital status | | | | |
| Now married | 14 | 32.6 | 35 | 56.5 |
| Widowed | 21 | 48.8 | 19 | 30.6 |
| Divorced | 4 | 9.3 | 5 | 8.1 |
| Never married | 4 | 9.3 | 3 | 4.8 |
| Education | | | | |
| No formal education | 1 | 2.3 | -- | -- |
| Grammar school | 1 | 2.3 | 3 | 4.8 |
| High school or equivalent | 22 | 51.2 | 45 | 72.6 |
| Vocational/technical (2 years) | 10 | 23.3 | 6 | 9.7 |
| Some college | 4 | 9.3 | 3 | 4.8 |
| Bachelor's degree | 3 | 7.0 | 3 | 4.8 |
| Master's degree | -- | -- | 1 | 1.6 |
| Doctoral degree | 1 | 2.3 | -- | -- |
| Professional degree (MD, JD, etc.) | 1 | 2.3 | 1 | 1.6 |
| Total household income | | | | |
| Less than \$10,000 | 6 | 14.0 | 2 | 3.2 |
| \$10,000 to \$19,000 | 9 | 20.9 | 11 | 17.7 |
| \$20,000 to \$29,999 | 10 | 23.3 | 23 | 37.1 |
| \$30,000 to \$39,999 | 8 | 18.6 | 18 | 29.0 |
| \$40,000 to \$49,999 | 2 | 4.7 | 4 | 6.5 |
| \$50,000 to \$59,999 | 1 | 2.3 | 3 | 4.8 |
| \$60,000 to \$69,999 | 1 | 2.3 | -- | -- |
| \$70,000 to \$79,999 | 1 | 2.3 | -- | -- |
| \$150,000 or more | -- | -- | 1 | 1.6 |
| Role in past employment | | | | |
| Administrative staff | 1 | 2.3 | 3 | 4.8 |
| Management | 3 | 7.0 | 4 | 6.5 |
| Support staff | 7 | 16.3 | 7 | 11.3 |
| Trained professional | 6 | 14.0 | 5 | 8.1 |
| Skilled laborer | 12 | 27.9 | 24 | 38.7 |
| Self-employed | 10 | 23.3 | 12 | 19.4 |
| Consultant | -- | -- | 1 | 1.6 |
| Other | 4 | 9.3 | 6 | 9.7 |

A large number of residents had lived at the nursing facility for either 1-2 years (36, 34.3%) or 2-5 years (39, 37.1%). Most (98, 98.3%) had not resided in other nursing facilities.

Frequencies and percentages for nursing care characteristics of residents are presented by group in Table 7.

Table 7

Frequencies and Percentages for Nursing Care Characteristics of Residents by Group

| Nursing care characteristic | Control | | Treatment | |
|--------------------------------|----------|------|-----------|------|
| | <i>n</i> | % | <i>n</i> | % |
| Years lived in this facility | | | | |
| 1-2 years | 15 | 34.9 | 31 | 50.0 |
| 2-5 years | 17 | 39.5 | 22 | 35.5 |
| 5-10 years | 9 | 20.9 | 8 | 12.9 |
| 10-20 years | 2 | 4.7 | 1 | 1.6 |
| Lived in nursing home in past? | | | | |
| Yes | 3 | 7.0 | 4 | 6.5 |
| No | 40 | 93.0 | 58 | 93.5 |

There were no significant differences in resident characteristics in control and treatment groups.

Research Question 1

Is there a relationship between the implementation of an educational seminar on elder abuse as measured by the number of abuse cases reported to the area ombudsman?

Reports to the Area Ombudsman

The number of reports to the area ombudsman was calculated one year prior to the intervention and six weeks after the intervention for all groups. There were five reports prior to the intervention, two for the control and three for the treatment group. There were zero reports after the intervention. The frequencies for the number of

reports are presented in Table 8. Due to the low number of reports, only observed descriptive statistics are provided.

Table 8

Reports to the Area Ombudsman Prior to and After Intervention by Group

| Group | Number of reports | |
|-----------|-----------------------|--------------------|
| | Prior to intervention | After intervention |
| Control | 2 | 0 |
| Treatment | 3 | 0 |
| Total | 5 | 0 |

Research Question 2

RQ2: Will the perception of maltreatment by long term care center residents and nursing staff change after an educational seminar is provided to nursing staff as measured by scores on the Conflict Tactics Two (CTS2)?

CTS2 Scale

The Cognitive tactics scale 2 (CTS2) tool includes a list of behaviors. Subjects are asked if a behavior occurred (prevalence) and the number of times the behavior occurred (frequency). Prevalence falls into three categories which are: *never happened*, *happened during the referent time period*, or *happened before the referent time period*. The referent time period was determined to be one year prior for the pre-test and six weeks prior for the post test. After the data is collected, the prevalence is then dichotomized into two categories: occurring during the referent period or not occurring during the referent period.

The occurrence behaviors are grouped into subscales. These subscales are labeled as negotiation, psychological aggression, physical assault, and injury.

Negotiation is a positive response to the conflict, if it occurs. The subscales of injury, psychological aggression and physical assault are further dichotomized into categories of minor or severe.

The CTS2 scale measures psychological and physical attacks between residents and staff as well as the use of negotiation to deal with these conflicts. In this study, the CTS2 scale included 62 behaviors where staff and residents in long term care centers were asked if the behaviors ever happened, how many times they happened, and the time period when it happened.

The following behaviors were included in data calculated for negotiation. The questions are framed for the nurse, however residents received the same questions in the same order, and just the word *nurse* was replaced with *resident*. Emotional negotiation behaviors included (the number assigned on the survey is included):

1. I showed a resident I cared even though we disagreed.
2. A resident showed he/she cared for me even though we disagreed.
13. I showed respect for a resident's feelings about an issue.
14. A resident showed respect for my feelings about an issue.
35. I said I was sure we could work out a problem.
36. A resident was sure we could work it out.

Cognitive negotiation behaviors included:

3. I explained my side of a disagreement to a resident.
4. A resident explained his or her side of a disagreement to me.
49. I suggested a compromise to a disagreement.
50. A resident suggested a compromise to a disagreement.

61. I agreed to try a solution to a disagreement a resident suggested.
62. A resident agreed to try a solution I suggested.

The following behaviors were included in data calculated for psychological aggression. These behaviors were dichotomized into two groups: severe and minor.

Minor psychological aggression behaviors included:

5. I insulted or swore at a resident.
6. A resident insulted or swore at me.
31. I shouted or yelled at a resident.
32. A resident shouted or yelled at me.
43. I stomped out of the room or yard or facility during a disagreement.

44. A resident stomped out of the room or yard or facility during a disagreement.
53. I did something to spite a resident.

54. A resident did something to spite me.

Severe psychological aggression behaviors included:

21. I called a resident fat or ugly.
22. A resident called me fat or ugly.
25. I destroyed something belonging to a resident.

26. A resident destroyed something belonging to me.
55. I threatened to hit or throw something at a resident.
56. A resident threatened to hit or throw something at me.

The following behaviors were included in data calculated for physical assault. These behaviors were dichotomized into two groups: severe and minor. Minor physical assault behaviors included:

7. I threw something at a resident that could hurt.
8. A resident threw something at me.
9. I twisted a resident's arm or hair.
10. A resident twisted my arm or hair.
15. I pushed or shoved a resident.
16. A resident pushed or shoved me.
41. I grabbed a resident.

42. A resident grabbed me.
45. I slapped a resident.

46. A resident slapped me.

Severe physical assault behaviors included:

17. I used a knife or gun on a resident.
18. A resident used a gun or knife on me.
23. I punched or hit a resident with something that could hurt.

24. A resident punched or hit me with something that could hurt.
29. I choked a resident.

30. A resident choked me.
33. I slammed a resident against a wall.

34. A resident slammed me against a wall.

- 39. I beat up a resident.
- 40. A resident beat up me.
- 51. I burned or scalded a resident on purpose.
- 52. A resident burned or scalded me.
- 59. I kicked a resident.

- 60. A resident kicked me.

The following behaviors were included in data calculated for injury. These behaviors were dichotomized into two groups: severe and minor. Minor injury behaviors included:

- 11. I had a sprain, bruise, or small cut because of a fight with a resident.
- 12. A resident had a sprain, bruise, or small cut because of a fight with me.
- 57. I felt physical pain that still hurt the next day because of a fight with a resident.
- 58. A resident still felt physical pain the next day because of a fight we had.

Severe injury behaviors included:

- 19. I passed out from being hit on the head by a resident in a fight.
- 20. A resident passed out from being hit on the head in a fight with me.
- 27. I went to a doctor because of a fight with a resident.
- 28. A resident went to a doctor because of a fight with me.
- 37. I needed to see a doctor because of a fight with a resident, but I didn't.
- 38. A resident needed to see a doctor because of a fight with me, but didn't.
- 47. I had a broken bone from a fight with a resident.
- 48. A resident had a broken bone from a fight with me.

The CTS2 scale includes a list of behaviors and the participant is asked to indicate the number of times a behavior has occurred. The respondent may indicate that a behavior has occurred in the referent period by choosing a score of 1-6 to indicate the number of times the behavior occurred, or that a behavior has never occurred by choosing 0, or

that the behavior has occurred outside of the referent period by choosing 7. CTS2 scores were dichotomized into two categories (one or more acts vs. no acts) for each individual question. Thus scores of 1, 2, 3, 4, 5, and 6 were coded as 1 (meaning acts committed within the referent period). Scores of 0 or 7 were coded as 0 (meaning no acts within the referent period). Individual questions were then added up to create subscales. The subscales were emotional negotiation, cognitive negotiation, minor psychological aggression, severe psychological aggression, minor physical assault, severe physical assault, minor injury, and severe injury. Kolmogorov Smirnov tests were conducted to assess the assumption of normality. The results of the test were significant indicating a violation of the assumption of normality. This is interpreted to mean that the group populations were skewed and in this case, the population change showed the null hypothesis (H_0) can be rejected. To be sure that a true violation of H_0 was detected, the F statistic was used. The F statistic is robust against violations of normality and in situations where the variance is unequal provided group sizes are similar (Kraemer & Thiemann, 1987; Waltz, Strickland, & Lenz, 2005). The group sizes in this study were similar.

Presentation of Data related to Nurse Groups

To examine research question 2 for nurses, a one-within one-between multivariate analysis of variance (MANOVA) were conducted to assess if there were differences in the CTS2 scores by group (treatment and control) and by time (pretest vs. post test) for the nurses.

The results of the one-within one-between MANOVA for the effect of the interaction between group and time were significant, $F(21, 1582) = 16.17, p = .001$, suggesting simultaneous differences existed in the CTS2 subscales by time and by group.

First, groups were compared to themselves pre and post test. The control group had a significant decrease in emotional negotiation and cognitive negotiation scores from pre to post test; there was a significant increase in minor psychological aggression scores from pretest to post test. This reveals that the control nursing group became worse at negotiation (conflict resolution) and became more aggressive toward their residents. The treatment group had a significant increase in emotional negotiation and cognitive negotiation scores from pretest to post test. A significant decrease was found for treatment group in minor psychological aggression. The treatment group (received education on abuse) became better at negotiation (managing conflict) and showed improvement by a decrease in minor/severe psychological aggression.

When comparing treatment and control groups pretest, no significant differences were found among the groups on the seven subscales. This means the groups acted the same toward residents before intervention was provided. When compared to each other, control had a significantly lower mean than treatment for emotional negotiation and cognitive negotiation at post test only. This indicates that the control group had less negotiation (management of conflict) than the treatment group after the education was provided.

The treatment group had a significantly larger mean than control for emotional negotiation and cognitive negotiation at post test only; treatment had a significantly smaller mean than control for minor psychological aggression at post test only. The treatment group was better at negotiation and had fewer incidents of minor psychological aggression compared to the control group after the education was provided. The treatment group denotes increases in negotiation (management of conflict) and decreases in minor and severe psychological aggression after the treatment was carried out when compared to the control group. Means and standard errors for the eight subscales by time and group are presented in Table 9.

Table 9

Means and Standard Deviations for Subscales by Group and Time (Nurses)

| Subscale | Control | | | | Treatment | | | |
|-------------------------|----------|-----------|----------|-----------|-----------|-----------|----------|-----------|
| | Pretest | | Posttest | | Pretest | | Posttest | |
| | <i>M</i> | <i>SE</i> | <i>M</i> | <i>SE</i> | <i>M</i> | <i>SE</i> | <i>M</i> | <i>SE</i> |
| Emotional negotiation | 2.53 | 0.86 | 1.36 | 1.08 | 2.93 | 0.82 | 7.30 | 1.04* |
| Cognitive negotiation | 1.29 | 0.68 | 0.48 | 0.57 | 1.99 | 0.65 | 2.62 | 0.55* |
| Minor psychological | 1.40 | 0.44 | 2.52 | 0.42 | 1.39 | 0.42 | 0.00 | 0.40* |
| Severe psychological | 0.14 | 0.07 | 0.46 | 0.18 | 0.14 | 0.06 | 0.00 | 0.17* |
| Minor physical assault | 0.05 | 0.05 | 0.10 | 0.04 | 0.08 | 0.04 | 0.00 | 0.04 |
| Severe physical assault | 0.00 | 0.01 | 0.03 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 |
| Minor injury | 0.02 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 |
| Severe injury | 0.01 | 0.03 | 0.01 | 0.01 | 0.04 | 0.03 | 0.00 | 0.01 |

* Significant at the .05 level

Results of the one-within one-between MANOVA are presented in Table 10.

Table 10

One-within one-between MANOVA for CTS2 Subscales by Group and Time (nurses)

| Source | <i>F</i> | <i>p</i> | Partial η^2 |
|------------|----------|----------|------------------|
| Time | 2.21 | .028 | .07 |
| Group | 1.65 | .113 | .06 |
| Time*Group | 6.65 | .001 | .19 |

Presentation of Data related to Resident Groups

To examine research question 2 for residents, a one-within one-between multivariate analysis of variance (MANOVA) were conducted to assess if there were differences in the CTS2 scores by group (treatment and control) and by time (pretest vs. post test) for the residents. The results of the one-within one-between MANOVA for the effect of the interaction between group and time were significant, $F(8, 97) = 4.02, p < .001$, suggesting simultaneous differences existed in the CTS2 subscales by time and by group.

First, groups were compared to themselves pre and post test. The control group had a significant decrease in emotional and cognitive negotiation. This finding indicates that the control resident group perceived less negotiation (conflict resolution) in their nursing homes after the staff received education on hand washing. The treatment group had a significant decrease in minor psychological aggression, severe psychological aggression, and minor physical assault from pretest to post test. This indicates that the treatment group when compared to itself responded positively to the education by lowering the amount of aggression and assault as noticed by the residents.

When comparing the residents at pretest, no significant differences were found among the treatment and control groups on the seven subscales. This means the resident groups were equivalent before the intervention was provided when looking at the subscales. When the treatment and control groups were compared to each other, control had a significantly smaller mean than treatment for emotional negotiation and cognitive negotiation at post test only. This finding shows that the treatment group was better at negotiation than the control group. There was also a significantly lower score for minor psychological aggression and severe psychological aggression for the treatment compared to the control at post test. This indicates that the treatment group had less aggression than the control group after the educational intervention was provided.

Means and standard deviations for the eight subscales by time and group are presented in Table 11.

Table 11

Means and Standard Deviations for Subscales by Group and Time (Resident)

| Subscale | Control | | | | Treatment | | | |
|-------------------------|----------|-----------|----------|-----------|-----------|-----------|----------|-----------|
| | Pretest | | Posttest | | Pretest | | Posttest | |
| | <i>M</i> | <i>SE</i> | <i>M</i> | <i>SE</i> | <i>M</i> | <i>SE</i> | <i>M</i> | <i>SE</i> |
| Emotional negotiation | 6.35 | 1.59 | 0.63 | 0.25 | 3.73 | 1.00 | 6.76 | 1.08* |
| Cognitive negotiation | 5.84 | 1.76 | 0.40 | 0.15 | 2.54 | 0.74 | 1.46 | 0.50* |
| Minor psychological | 10.09 | 2.85 | 6.12 | 1.73 | 12.94 | 2.55 | 0.16 | 0.06* |
| Severe psychological | 2.93 | 0.99 | 1.40 | 0.50 | 1.87 | 0.69 | 0.00 | 0.00* |
| Minor physical assault | 3.37 | 1.55 | 1.49 | 0.84 | 3.03 | 1.25 | 0.16 | 0.13* |
| Severe physical assault | 0.02 | 0.02 | 0.00 | 0.00 | 0.06 | 0.06 | 0.00 | 0.00 |
| Minor injury | 0.05 | 0.05 | 0.00 | 0.00 | 0.06 | 0.04 | 0.00 | 0.00 |
| Severe injury | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

* Significant at the .05 level

Results of the one-within one-between MANOVA are presented in Table 12.

Table 12

One-within one-between MANOVA for CTS2 Subscales by Group and Time (Residents)

| Source | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> | Partial |
|---------------------|-----------|-----------|-----------|----------|----------|---------|
| Subscale*Time*Group | 11.11 | 21 | 0.53 | 4.29 | .001 | 0.11 |
| Error | 86.37 | 700 | 0.12 | | | |
| Subscale*Group | 6.87 | 21 | 0.33 | 1.09 | .354 | 0.03 |
| Error | 210.29 | 700 | 0.30 | | | |

Research Question 3

Do knowledge levels of nursing home staff regarding elder abuse change after the Center for Advocacy for the Rights and Interest of the Elderly (CARIE) education intervention is given as measured by the Knowledge and Management of Abuse scales (KAMA)?

To examine research question 3, a one-within one-between analysis of variance (MANOVA) was conducted to assess if there were simultaneous differences in the KAMA percentage scores by time (pretest vs. post test) and by group (control, treatment). KAMA percentage scores were calculated for pretest by summing up the seven pretest scores and dividing this by the total number of points at post test (56). KAMA percentage scores were calculated for post test by summing up the seven post test scores and dividing this by the total number of points at post test (62).

The results of the main effect of time was significant, $F(1, 230) = 1111.20, p = .001$, suggesting the pretest KAMA scores were significantly less than the post test KAMA scores. The results of the main effect of group was significant, $F(3, 230) =$

328.90, $p = .001$, suggesting there was a difference in KAMA scores by group. The control and treatment groups were the same at pretest scores. Post test, the treatment group scored significantly higher than control.

The results for the interaction of time and group was significant, $F(3, 230) = 442.84$, $p = .001$, suggesting there was a difference in KAMA scores by the interaction of group and time. From pretest to post test, all groups increased in scores. At pretest, the control and treatment group had no significant difference. At post test, the control scored significant less than the treatment. Results from the one-within, one-between MANOVA is presented in Table 13. Means and standard errors are presented in Table 14.

Table 13

One-Within One-Between MANOVA for KAMA Scores by Group and by Time

| Source | SS | df | MS | F | p | Partial |
|------------|------|-----|------|---------|------|---------|
| Time | 2.53 | 1 | 2.53 | 1111.20 | .001 | 0.83 |
| Time*Group | 3.02 | 3 | 1.01 | 442.84 | .001 | 0.85 |
| Error | 0.52 | 230 | 0.00 | | | |
| Group | 2.49 | 3 | 0.63 | 328.90 | .001 | 0.81 |
| Error | 0.58 | 230 | 0.00 | | | |

Table 14

Means and Standard Errors for Kama Scores by Group and Time

| | Pretest | | Posttest | |
|-----------|---------|------|----------|------|
| | M | SE | M | SE |
| Control | 0.57 | 0.01 | 0.59 | 0.01 |
| Treatment | 0.57 | 0.01 | 0.90 | 0.01 |

In order to also test to see if the treatment education had an effect on the group of participants, the control group also went through the treatment education after the study conclusion. Then the KAMA test was given to the control groups. Therefore, a repeated measure MANOVA was conducted to assess if there were differences in the KAMA scores from pretest and post test. The results from the repeated measures MANOVA were significant, $F(2, 222) = 1613.40, p = .001$, suggesting there were differences in the KAMA scores by time. Post hoc tests revealed that the pretest was significantly less than the post test and the post test provided after the CARIE seminar to the control group. It also showed that the post-test was significantly lower than the post-post test. Therefore control participants did have a slight increase in their scores after the hand washing class, but had an even higher increase in their KAMA scores after the abuse education. The control group had a mean score of 57% before any education was provided (pre-test), then went up slightly to a mean score of 59% (post test) and after abuse education the mean score rose to 90% (post-post test). There was a larger difference from post test to post-post test than there was from pretest to post test. Results of the repeated measures MANOVA are presented in Table 15. Means and standard deviations are presented in Table 16.

Table 15

Repeated Measures MANOVA for KAMA Scores by Time for Control Groups

| Source | SS | df | MS | F | p | Partial |
|--------|------|-----|------|---------|------|---------|
| Time | 7.53 | 2 | 3.77 | 1613.40 | .001 | 0.94 |
| Error | 0.52 | 222 | 0.00 | | | |

Table 16

Means and Standard Deviations for KAMA Scores by Time

| Time | <i>M</i> | <i>SD</i> |
|---------------|----------|-----------|
| Pretest | 0.57 | 0.05 |
| Posttest | 0.59 | 0.06 |
| Post-posttest | 0.90 | 0.04 |

Chapter 5: Discussion, Implications, and Recommendations

This chapter will provide an introduction to the study problem, summary of the study and design, discussion of the findings, relate the finding to prior research, identify the significance to nursing, implications and suggest recommendations for future studies.

Introduction

The implementation of an evidence based training seminar was proposed to reduce the incidence of elder abuse in long-term care facilities and contribute to the development of a far more positive environment for nursing home residents and care personnel.

Summary of the Study

The purpose of this study was to determine the impact of an educational intervention on nursing home staff with the aim of preventing abuse of the residents of long-term care facilities. This study was designed to capture changes in perceptions of conflict and abuse by nursing home staff and nursing home residents after the seminar was presented.

The sites for this study were four long-term care facilities located in rural Pennsylvania. All four facilities are for-profit, Medicare certified agencies that employ nursing staff to care for their residents.

This study utilized a quasi-experimental design, with one large (>100 residents) and one small (<100 residents) facility serving as the treatment group and one large and one small facility serving as the control group.

In addition to gathering demographic information, two instruments were used for the study. The Knowledge and Management of Abuse (KAMA) tool was developed by Richardson, Kitchen, and Livingston (2003) in response to the lack of a valid instrument for assessing elder abuse. The 7-item tool contains scenarios of elder abuse and asks the participants how they would respond. KAMA captures the current level of knowledge of nursing home personnel, and is used in a pretest/post test format. It has been psychometrically validated as a valid and reliable instrument for evaluating the extent of new knowledge gained from an educational intervention.

The Conflict Tactics Scale (CTS2), assessing the physical and emotional conflict the respondent has demonstrated and experienced was administered to both the nursing home staff and the elderly residents. Originally, designed to capture family conflict, the items were adapted for the nursing home setting and for the 6-week time frame of the research project. To be eligible for the study, the residents were required to score a minimum of 26 on the Montreal Cognitive Assessment scale (MoCA).

All of the nursing home personnel were required to participate in their respective CE seminars, but participation in the study was entirely voluntary. A total of 224 staff members (predominantly female) completed the survey. This number included 122 participants from the experimental facilities and 102 participants from the control facilities. The majority of the staff members (69.2%) identified themselves as direct care providers, however 100% of the staff members included in the study provided direct care to the residents.

One hundred and five nursing home residents (68 women and 37 men) completed the survey. The mean age of the residents was between 76.24 and 79.38 years. Most of the residents had lived in the nursing home for either 1 to 2 years (34.3%) or 2 to 5 years (37.1%). Very few of the residents had lived in another nursing facility.

The findings of this study add to the growing body of research affirming the effectiveness of the CARIE educational program for preventing elder abuse in the nursing home setting. The results will be described in detail in the following section.

Discussion of Findings

Three research questions grew out of the theoretical framework applying the Roy Adaptation Model to the CARIE educational program. These are:

1. Is there a relationship between the implementation of an educational seminar on elder abuse as measured by the number of abuse cases reported to the area ombudsman?

2. Will the perception of maltreatment by long term care center residents and nursing staff change after an educational seminar is provided to nursing staff as measured by scores on the Conflict Tactics Two (CTS2)?

3. Do knowledge levels of nursing home staff regarding elder abuse change after the Center for Advocacy for the Rights and Interest of the Elderly (CARIE) education intervention is given as measured by the Knowledge and Management of Abuse scales (KAMA)?

Research Question 1

Is there a relationship between the implementation of an educational seminar on elder abuse as measured by the number of abuse cases reported to the area ombudsman?

The number of reports to the area ombudsman was calculated for one year prior to the intervention and six weeks after the intervention. There were five reports prior to the intervention, two for control facilities and three for the experimental facilities. According to the data, there were no cases of elder abuse reported to the area ombudsman for either control or treatment facilities for the post-intervention period. The fact that the positive changes took place in the control facility as well as the experimental facility makes the association between the educational program and the reduction in reports of abuse to the area ombudsman somewhat ambiguous. Nursing home administrators are concerned with the reputations of their facilities and the deficiencies disclosed by Pennsylvania Department of Health (2008) would likely have prompted changes such as awareness of the abuse problem and reporting the state findings to the staff. The simple fact that the staff may have seen the facility as “in trouble with the state” may have been enough to either change behavior or possibly intensify pressure for residents not to disclose abuse. That could account for the initially low incidence of reports, which is far below the figures disclosed by government investigations. State Long Term Care Ombudsman programs investigated 20,673 complaints of abuse of long-term care residents in the United States (GAO, 2002; NCEA, 2005). Based on the lack of reports of abuse to the area ombudsman in this study it is difficult to discern if there is any relationship between the educational

seminar and the reduction in reported cases of abuse to the area ombudsman was related to the CARIE seminar. The findings in this study were similar to the New York State study that found a large gap between the prevalence of elder abuse reported by survey respondents and the number of cases reported to formal authorities such as the area ombudsman (Lachs et al., 2011).

Research Question 2

Will the perception of maltreatment by long term care center residents and nursing staff change after an educational seminar is provided to nursing staff as measured by scores on the Conflict Tactics Two (CTS2)?

Perceptions of nursing home staff. Results of the MANOVA for time demonstrated that there were differences in the eight subscale scores of the nursing home staff after they completed the educational seminar. There was a significant increase in emotional negotiation from pretest to post test and a significant decrease in minor psychological aggression found in the treatment group.

The treatment group improved their ability to resolve conflict after the education, while the control group worsened in their ability to resolve conflict. Pairwise comparisons revealed a statistically larger mean in the treatment group compared to the control group in emotional and cognitive negotiation after the education was provided.

For minor psychological aggression, the experimental group displayed a significantly smaller mean than the control group at post test. The experimental group showed an improvement in the act of minor psychological aggression after they

received the education. The overall analyses indicate differences in the CTS2 subscales according to time and group. The theoretical framework supports these findings. The educational intervention generated an adaptive response from the nursing staff through education, thus providing them with cognitive and regulatory tools, which changed their response (perception), thus affecting their coping strategy as shown in the increase in emotional negotiation and decrease in minor physical aggression scores of the treatment group. The findings are comparable to when Manthorpe et al. (2007) described the 2.6% prevalence of abuse found in their study with neglect (uncaring behaviors similar to emotional and cognitive negotiation) being the most widespread type of abuse, followed by psychological abuse, then physical abuse and finally sexual abuse levels to be very low. They determined their prevalence estimate as “almost certainly a conservative one,” believing that many participants failed to report abuse.

The staff participants from the control facilities reported significant decreases in emotional negotiation and cognitive negotiation from the pretest to post test combined with a significant increase in minor psychological aggression. Given that the facility had a very low and statistically insignificant number of reports of abuse to the area ombudsman found in this study suggests that even an isolated incident of abuse might register as a significant increase in a quantitative analysis. On the other hand, the low (or no) reports of abuse to the ombudsman could be misleading. This finding is supported by Bužgová and Ivanová (2011), where they found more than half of the caregivers (54%) admitted committing at least one of the 26 types of abuse presented in the questionnaire during the last year and two-thirds (65%) said they witnessed abuse

by other staff members. Interestingly, the residents reported far fewer incidents of abuse. Only 11% of the residents mentioned any type of abuse committed by an employee and only 5% reported seeing another resident being abused. There is general consensus that elder abuse is vastly underreported regardless of setting (Cohen et al., 2007; Dyer & Rowe, 1999; Erlingsson et al., 2006; GAO, 2002; Gray-Vickrey, 2004; Kahan & Paris, 2003; Kennedy, 2005; Lachs & Pillemer, 2004; McGarry & Simpson, 2008; McNamee & Murphy, 2006; Neno & Neno, 2005; Richardson et al., 2002; Rothman & Dunlop, 2001; Selwood et al., 2007; Tatara et al., 1998; Wolfe, 2000).

The CTS2 scores of the nursing home staff from the experimental facilities suggest that the educational intervention had a positive impact. The participants from the experimental group reported a significant increase in emotional negotiation and cognitive negotiation from the pretest to the post test. Concurrently, the participants from the experimental facility perceived significant decreases in minor psychological aggression, severe psychological aggression and minor physical assault. There is no research on the effect of education on elder abuse; however it is mentioned throughout the literature as an important measure for prevention. Wigglesworth et al. (2010) utilized the CTS2 scale in their study aimed to identify characteristics of individuals and their caregivers that are linked with abuse and neglect. This study was focusing on the causes of abuse and neglect of the elderly person, however unlike the current study it did not have an intervention associated with it. However, their findings of abuse and neglect were comparable to the current study's findings pre-intervention. Menio and Keller (2000) assessed ten nursing homes; they found nursing staff (including nursing

assistants) reported engaging in abusive behavior in the last month. Half (51%) admitted shouting at a resident in anger, 23% admitted insulting or swearing at a resident, 17% had used excessive restraint in dealing with a resident, and 10% reported pushing, shoving, or grabbing a resident. A compilation of the specific questions answered by nursing staff that attributed to these scale findings are found in Appendix A.

It is noteworthy that the increase in severe physical injury (not significant, but shown in the data as a mean of 0.0 rising to 0.3) reported by the staff of the control nursing home facilities, coincided with significant declines in perceptions of emotional negotiation and cognitive negotiation. This study was not designed to capture changes that might have occurred at the facilities apart from the implementation of the two respective educational interventions. However, this unfortunate pattern signifies a clear need for training and intervention to prevent further abuse and deterioration of interactions between the nursing home staff and residents. This finding is paralleled in the theoretical framework when using a nursing intervention (education) to manage stimuli (conflict) allows for adaptation of the nurse. The positive and significant changes reported by the staff from the experimental facilities suggest that the CARIE educational seminar was successful in promoting effective conflict resolution and reducing conflict between the care staff and residents. It is heartening to see that after the program the staff members perceived significant decreases in psychological aggression and minor physical assault. In this case, the declines in psychological aggression and minor physical assault perceived by the nursing home staff of the

experimental facilities correspond with the absence of reports of abuse to the ombudsman.

Perceptions of nursing home residents. Parallel to the findings for nursing home staff, the analyses revealed simultaneous differences in the eight CTS2 subscales for time. Overall, there were significant decreases in perceptions of emotional negotiation and cognitive negotiation in the control group and increases in the treatment group. Significant decreases were found in minor psychological aggression, severe psychological aggression, and minor physical assault from the onset of the study to the post test of treatment group after the educational intervention.

There were significant decreases in emotional negotiation and cognitive negotiation (ability to settle conflict) according to the residents in control nursing home facilities. In terms of emotional negotiation, these findings signify congruity in the perceptions of the staff and the residents of the control nursing homes. On cognitive negotiation, however, there is some divergence in the perceptions of the residents and the staff on cognitive negotiation, which were not seen as significantly lower over time by the nursing home staff.

Findings in this study are congruent with prior research. The goal of the intervention (CARIE) curriculum is to help participants (nursing staff) become more capable of managing and avoiding conflict and dealing with stress through the use of practical intervention techniques (Menio & Keller, 2000) The residents of the experimental facilities reported significant decreases in minor psychological aggression and severe psychological aggression. The decreases in minor and severe psychological

aggression in the experimental facilities suggest that the CARIE seminar was effective in addressing this issue and reducing incidents of psychological aggression. These outcomes were predicted in the theoretical framework. The positive response to education by nursing staff had residual effects on resident perceptions. The implementation of nursing knowledge created a residual adaptive response from the residents.

As the nursing staff learned how to better care for residents, a side effect was improved resident perception of care. According to the RAM, the nurse will continue with the goal of nursing being to create an adaptive response and use a systematic approach to patient care based upon the educational intervention, and ultimately prevent resident abuse. Differences in the perceptions of the residents and staff of the experimental facilities with respect to increases in cognitive and emotional negotiations may imply differences in magnitude only. The results of the quantitative analysis show that on some indicators the differences between the pretest and post test did not reach statistical significance. That does not negate the possibility that some improvements did occur but fell short of statistical significance. A compilation of the specific questions answered by residents that attributed to these scale findings are found in Appendix B.

An intriguing discrepancy is that the staff of the control nursing home reported a significant increase in psychological aggression for nurses during the study period which was not matched by the perceptions of the nursing home residents. The declines in emotional and cognitive negotiations would suggest a heightened risk of

psychological abuse. This is supported through research by Wiglesworth et al. (2010), they found a negative correlation between lowered scores in emotional and cognitive negotiation on the CTS2 with higher (88% of the caregivers) psychological aggression scores. Understanding of elder abuse has historically been impeded by differing conception of abuse by older adults, professionals, and informal caregivers (Erlingsson et al., 2006; Selwood et al., 2007). Moon (2000) studied how race, ethnicity, and culture influence how older adults perceive abuse as well as their willingness to disclose it. They found the Hispanic population to be the highest among non-reporters of elder abuse (Moon, 2000). However, the participants of this study were relatively homogenous in ethnicity and there were few participants of Hispanic heritage, the group most reluctant to disclose abuse (and again, their reluctance may be limited to family caregivers).

A limitation of this study is the exclusive reliance on statistical quantitative analysis for examining the results of the CTS2 responses. Thus nuances in the perceptions of nursing home residents and staff regarding emotional and cognitive negotiations, psychological aggression, and even physical injury have probably escaped detection. However, the overall findings imply that the CARIE educational seminar had a positive impact on improving the emotional and cognitive negotiations that are essential for successful conflict resolution and reducing the risk of both psychological and physical aggression. Changes from pretest to post test in the control group facilities also suggest that without education and training in conflict resolution the potential for conflict and abuse may escalate over time.

Research Question 3

Do knowledge levels of nursing home staff regarding elder abuse change after the Center for Advocacy for the Rights and Interest of the Elderly (CARIE) education intervention is given as measured by the Knowledge and Management of Abuse scales (KAMA)?

Significant differences and sizable main effects for time and group emerged in the analyses conducted to answer this question. All groups improved in knowledge from the inception of the study to the post test. However, the analyses demonstrated that the participants in the experimental facilities displayed significantly greater gains in knowledge related to elder abuse after participating in the CARIE educational seminar. Of all groups, the lowest knowledge scores were observed in the staff members of the control nursing homes, which is not surprising in view of the negative changes reported during the study period.

In order to gain additional insight into the effectiveness of the CARIE program in boosting knowledge of elder abuse among nursing home personnel the control group staff were given the educational seminar after they took the post test assessment. The differences in the nurses' KAMA scores were significant; indicating a substantial increase in knowledge of elder abuse after the control group completed the educational program. Although the first analysis showed increases in the knowledge of elder abuse by the control group participants from pretest to post test without the CARIE educational program, these differences were eclipsed by the sizable and significant difference in knowledge that arose from the end of the formal study period, when the

participants were re-evaluated with the KAMA post test, after they were exposed to the CARIE educational program.

This is congruent with the findings of Menio and Keller (2000). Data gathered in 1997 and 1998 from 72 Philadelphia trainees demonstrated that participation in the program was associated with a significant drop in conflict between staff members and residents. All participants said they felt comfortable during the training program, nearly all (98%) found the material easy to understand, 90% said the material was relevant to their daily work experiences, 94% rated the overall program as either excellent or good, and only one participant would not recommend the program to other staff members (Menio & Keller, 2000).

Limitations

Limitations to the study were in the survey design, time and sample. There was a chance of both non respondent and respondent bias. The proposed study may have involved bias due to participant's withdrawal or unwillingness to remain in the study. A meaningful impact may have occurred in the study if participants withdrew from the study because they have no perceived change from the intervention or because they actually have had a change. In both cases, a meaningful impact may have occurred causing an over or underestimation of the impact of education on survey items. There was also the potential for recall bias, as well as inaccurate responses due to misunderstanding survey questions.

A nonequivalent referent period was used in the study which included one year prior to the first CTS2 scale compared to six weeks prior to the second CTS2 scale. A

previous referent period of only six weeks was not used for the initial CTS2 and may have yielded different results. The previous year was used as a referent period based upon the reporting time frames for the area ombudsman. The six week follow-up may not have provided adequate time for determining behavior change; however it was selected because of high turnover in long term care centers, the possibility of deteriorating health status of residents and reporting timeframes for the area ombudsman. There remains a need to study outcomes in the longer term.

This study did examine differences in nursing roles in the long term care center. Registered nurses, licensed practical nurses and nursing assistants comprise the nursing staff. Long term care facilities nursing staff are grouped together and the hours are not separated out in provision of care. Different results may have occurred if only one type of nursing license were researched.

The demographic surveys for both the resident and the staff surveys had overlapping values. “How many years have you worked/lived in this nursing home”, and “how many years did you work/live in the previous nursing home” had overlapping values of 2, 5, 10 and 20 years. Although the numbers were provided in a range, the overlapping creates issues with statistical significance and clarity on how long the person was at a long term care facility. However, each individual was asked the specific number of years living in or working in the nursing home with a fill in the blank.

This study was conducted in long term care centers located in a rural county in Pennsylvania and the results may not be the same in other populations, therefore

generalization beyond the state of Pennsylvania and demographics of the county may be restricted. Finally, the potentially sensitive nature of perception of maltreatment may alter some responses, thus having an impact on the study. This impact was attempted to be reduced through strict confidentiality and anonymity associated with responses. Also, the survey asks questions in the form of conflict and does not use harsh terms like abuse and this may have limited the impact of the sensitive nature of the information collected.

Significance to Nursing

Future prevention of elder abuse must be managed by educating nursing professionals regarding how to safeguard one of our most vulnerable populations (Draucker, 2002; Dunlop et al., 2001; Gebbie, Wakefield, & Kerfoot, 2000; WHO/INPEA, 2002). The role of nursing is crucial in understanding the different types of abuse, and how and when to report concerns. Nurses can make a difference in rates of abuse reporting and effect outcomes for the elderly they serve (WHO/INPEA, 2002).

Nurses are in a unique position to detect and prevent actual abuse because of the personal nature of the nurse patient relationship. First, nurses have access to otherwise discreet subjective and objective information such as patient body exposure during nursing care procedures, knowledge of medical history, current physical and mental health status and access to visiting family members. This position provides nurses a holistic view of the patient to effectively observe for possible or potential abuse. Secondly, by the nature of the relationship, nurses have a higher potential to cause harm. Education may prevent both occurrence of and/or the concealment of inadvertent

abusive situations. Education of nurses for these reasons is imperative (Draucker, 2002; Dyer, Heisler, Hill, & Kim, 2005). Nursing staff have a responsibility to advocate for their patients. The growing elderly population commands nursing studies that give rise to protective and preventative measures with regard to abuse (WHO/INPEA, 2002). Educating nurses to identify and respond to abuse victims so they can better care for them is the first step (WHO/INPEA, 2002).

This study provides an important springboard for future studies to establish curriculum guidelines that will enable nurses to understand and prevent elder abuse. The results of this study have provided some answers to the effectiveness of teaching as an intervention in the reduction of elder abuse risk and provided valuable nursing practice interventions. Nurses can use the information from this study to determine if continuing education on elder abuse is an effective tool in the identification, intervention and prevention of elder mistreatment. As the leaders in patient advocacy, nursing should further analyze the use of education in detecting, intervening and preventing elder abuse.

Implications

Overall, the findings from this study support the existing body of research documenting the positive impact of the CARIE educational program on the knowledge, attitudes, and behavior of nursing home care staff. The first nationwide effort to improve care quality and reduce abuse and aggression against nursing home residents was the passage of the Omnibus Budget Reconciliation Act (OBRA) in 1987 (Aylward et al., 2003). OBRA delineated stricter regulations for nursing homes with emphases

on resident care, the reduction and elimination of physical and chemical restraints, and customized care plans designed to maximize the functional capability of every resident. In conjunction with these changes, OBRA also mandated an increase in training hours for nursing assistants and regular performance evaluations of skill competency.

Rather than creating their own programs, nursing homes typically turn to vendors to find educational programs that address the needs of their care providers and their facility (Enyeart, 2008). The CARIE educational program grew out of CARIE's sponsorship of research into elder abuse in nursing homes in the Philadelphia area conducted by Dr. Pillemer and his colleagues (Menio & Keller, 2000). The researchers reported that in particular, nursing assistants require specialized training if nursing homes were to be successful in creating an atmosphere in which there was no abuse. Dr. Pillemer declared that "No matter how closely nursing homes follow regulations, no matter what new products they buy, no matter how much money they spend—none of it makes any difference without the nursing assistant" (Pillemer, cited in Menio & Keller, 2000, p. 29). Nursing assistants comprised the largest group of staff participants in this study.

Tested, refined, and improved over more than 10 years, the CARIE program has several features contributing to its effectiveness including a learner-centered approach, a structured interactive format designed to foster open and honest dialogue and discussion, sharing of knowledge, ideas and experience (brainstorming), role play and hands-on learning activities, multimedia materials, and probably most important for all, opportunities for participants to apply their new knowledge to real world situations in

their nursing home settings. The comprehensive curriculum touches on all facets of nursing home care from legal requirements to respect for cultural diversity and dignified end of life care.

The CARIE program is not the only educational intervention that has demonstrated positive results and there is no one-size-fits-all approach to providing nursing home staff with education and training with the goal of preventing elder abuse. The CARIE seminar was deemed the most effective and appropriate program for this research study. The results of the study demonstrate that the program was effective in improving the knowledge of the participants, as shown by increases in their scores on the KAMA, promoting effective conflict resolution and reducing incidents of psychological and physical aggression against the nursing home residents. The additional administration of the seminar to the staff members of the control facilities provides additional evidence of the effectiveness of the program.

The first national study of elder abuse in the U.K., the U.K. National Study of Abuse and Neglect Among Older People, was carried out in 2006-2007 and the results reported by Manthorpe et al. (2007). It is noteworthy that Manthorpe et al. deliberately published their work in a nursing journal with the aim of the raising awareness of nurses to elder abuse. The researchers called on nurses to act as advocates for older adults. Although the main focus of Manthorpe et al. was the abuse of frail older adults residing in the community, nurses have the capacity to act a powerful force against elder abuse in all settings. Indeed, there is abundant agreement that nurses are ideally positioned to serve as advocates for the prevention and intervention of elder abuse

(Harrison & Bell, 2007; Manthorpe et al., 2007; McGarry 2007; McGarry & Simpson, 2008; Neno & Neno, 2005; Sayles-Croft, 1988). When family violence first emerged as a serious social issue in the 1970s, social workers were in the vanguard of calling attention to elder abuse (Anetzberger, 2000). Sayle-Croft (1988) envisioned nurses in the advocate role against elder abuse more than two decades ago. Nurses have the advantage of knowledge in caring for the physiological and psychosocial dimensions of human health as the Roy Adaptation Model illustrates (Roy, 2008).

Certain findings from this study, combined with the existing research, highlight the vital importance of equipping nursing home staff with the knowledge and competencies for preventing elder abuse. Nursing homes serve the most vulnerable members of the elderly population. Individuals over the age of 80 represent the highest risk group for abuse (Tatara et al., 1988). Furthermore, the greater degree of functional limitations experienced by elderly persons, the higher the risk for abuse (Pillemer & Bachman-Prehn, 1991; Burgess et al., 2000; Dyer, Pavlik, Murphy, & Hyman, 2000). Nursing home caregivers need to recognize the specific limitations in their elderly residents and adjust their care to accommodate physical frailty and cognitive impairment. The stress experienced by nursing home staff in response to the residents' behavioral or cognitive abnormalities creates the potential for psychological aggression leading to abuse (Straus, 2013; Lachs & Pillmer, 1995; Pilemer & Finkelhor, 1998; Burgess et al., 2000; Dyer et al., 2000; Pillemer & Bachman-Prehn, 1991). The results of this study demonstrated that perceptions of psychological aggression declined following the completion of the educational program.

A troubling finding was the discordance between the psychological aggression and even physical assault and injury perceived by the nursing home staff and residents and the reports of abuse to the area ombudsman. Even before the educational program, there were very few cases of abuse recorded for any of the nursing homes. Yet although reports of decreases by the nursing home staff and residents are positive, the fact that there was a decrease at all implies that incidents of psychological and/or physical aggression had been taking place. There is universal consensus that elder abuse is vastly underreported and a myriad of reasons have been implicated ranging from differences in conceptions of abuse to fear of retaliation. Nursing home residents are extremely dependent on staff for their care and well-being and the possibility that residents might be afraid to report incidents of aggression, psychological or physical, is cause for alarm.

In this study, discrepancies in the perceptions of the nursing home staff and residents regarding emotional and cognitive negotiation and psychological aggression might have been due to differences in magnitude that were not captured by the quantitative analysis. That is, there might have been changes in perceptions from the pretest to the post test that fell short of statistical significance but still occurred and were in the expected direction. The CTS2 scores of the nursing home staff and the residents in the experimental facilities suggest there were positive changes in conflict resolution as a result of the educational program. At the same time, the scores of the control group participants suggest that without education and training, emotional and cognitive negotiations may decline over time, raising the risk of psychological and

physical aggression. These observed patterns support the argument that nursing home personnel require specific training in knowledge and strategies for reducing elder abuse.

It is interesting to note that in all nursing homes, including the control facilities, knowledge of elder abuse increased from the pretest to the post test. It is probable that there were factors outside of the scope of this study that contributed to the increase in knowledge. The administration might have taken steps to address the deficits or violations the facilities were cited for in the past. The fact that the administrators agreed to participate in the study shows they are making efforts to prevent elder abuse in their facilities. The administration of the CARIE program to the staff at the two control facilities after the post test provided compelling evidence that the program successfully improves the knowledge of nursing home staff on elder abuse beyond what they might discover informally or indirectly through other types of educational interventions. The knowledge gains of the control group participants after they completed the educational program were significantly greater than the knowledge gains they experiences from the onset of the study to the original post test.

The use of the Roy Adaptation Model as a framework for this study helped to place the elements of the CARIE program firmly within the dimensions of optimum nursing practice. The model designed for this study outlines precisely how the educational program is aligned with the RAM. The model can serve as a tool for nurse educators and long-term care nurses interested in administering the CARIE program to long-term care staff and residents. Three nursing studies based on the RAM were

viewed as especially relevant to this research project. These three studies focused on applying the model to helping elderly long-term care residents adapt to hearing loss (Tolson & McIntosh, 1996), guiding community health promotion efforts (Dixon, 1999), and helping abused women by identifying and focusing on their specific needs (Limandri, 1986). Respectively, these studies covered the issues of helping older adults adapt to their infirmities and their environment, raising awareness of public health issues, and helping abuse victims by understanding their needs and their interactions with others and preventing future abuse.

Nurses have the capacity to address all three of the issues covered by the three applications of the RAM in the context of elder abuse. That is, nurses are ideally suited to supporting the positive adaptation of infirm elderly nursing home residents by enhancing the surrounding environment, raising awareness of elder abuse as a serious public health issue, and understanding the complex underpinnings of elder abuse with the goal of prevention. The results of this study affirm the effectiveness of the CARIE program in improving the knowledge of nursing home care staff regarding elder abuse and promoting the use of effective conflict resolution techniques to reduce the risk of elder abuse by nursing home personnel.

Recommendations for Future Research

Despite the research conducted on the CARIE program as well as other studies of programs designed to reduce elder abuse, there is still a limited body of research evaluating the effectiveness of elder abuse education and training. One notable but understandable limitation of research is that most studies exclude elderly adults with

dementia, who represent the most vulnerable population for abuse. Dr. Pillemer and his colleagues have also developed educational programs for reducing conflict between nursing home staff and the relatives of residents who come to visit them. The family members of residents with dementia, who have observed interactions between the staff members and their relative, might serve as proxy for the resident in assessing the effectiveness of the CARIE seminar or other educational interventions. Other functional limitations might prevent some nursing home residents who are cognitively intact from participating in a survey. Alternate ways of administering the survey could be devised in order to allow them to participate. As long as impairments interfere with the ability of nursing home residents to express their opinions, research into both the incidence of elder abuse and the effectiveness of educational programs will exclude input from those residents who are most impaired and dependent and therefore at highest risk for abuse.

The original research conducted by Pillemer and Hudson under the sponsorship of CARIE consisted of intensive case studies (Menio & Keller, 2000). Both quantitative and qualitative analyses, and ideally mixed methods studies, are needed to understand the full scope of elder abuse in long-term care facilities. It would have been useful to have the questionnaire responses of the participants in this study augmented by qualitative accounts of their perceptions of the nursing home environment before and after the intervention. It is true that during the training program the nursing home staff members shared their observations, experiences, ideas, and opinions; this sharing

of information is built into the CARIE model. However, this information was not included as part of the study.

Subsequent research on the CARIE program could synthesize the quantitative information obtained using the KAMA and the CTS2 with more detailed accounts provided by a small number of staff members and residents. For even fuller understanding of the nursing home environment and the impact of an educational intervention, additional information could be obtained from the nursing home administrators and the residents' relatives who come for visits. Social workers, physicians, nurse practitioners, recreational therapists, and other professionals who work with nursing home residents would also be valuable sources of information. The inclusion of professionals from various disciplines as well as the nonprofessional opinions of the family members would provide a variety of perspectives on the nursing home environment. In addition, the opinions of professionals who are not involved in direct resident care on a daily basis should make them relatively objective in addition to gaining insight from their respective areas of professional expertise.

In an extensive review of research on training programs for long-term care staff, Aylward et al. (2003) found few studies that included a long-term follow-up. Even the research on the CARIE program did not necessarily include long-term follow-ups and findings were mixed as to whether the results were sustained over time (Menio & Keller, 2000). One impediment to assessing the enduring effects of elder abuse training is the high rates of turnover among nursing home personnel. The implementation of a program like the CARIE seminar may work to reduce turnover, or at least turnover

related to conflict and burnout. However, factors such as inadequate pay and benefits are also responsible for high turnover rates. The turnover in the four nursing homes participating in this study ranged from 45% to 55%. Although these figures may seem unduly high they actually fall below the average of 60% for staff turnover in Pennsylvania nursing homes (Pennsylvania Department of Health, 2008). An implication of this phenomenon is that nursing homes have to consistently provide education and training on elder abuse for new staff members.

There is a dearth of research comparing the effectiveness of different educational programs for reducing conflict and preventing elder abuse in long-term care facilities. Such comparisons would be a fruitful channel for future research. Comparison studies would be able to target specific areas of strength and weakness in individual programs that could be used for program improvement. In addition, one program may not be superior to another per se, but rather a specific program might be more appropriate for a particular setting. The discussions that arise during the CARIE seminar allow the participants to share their experiences and express their opinions and observations. While this does not preclude sharing experiences from other facilities, the main focus is on the conditions at that specific setting and how they can be improved. Nursing homes differ in their respective resident populations on a variety of characteristics, including sociodemographic profiles and the degree and nature of their impairment. Comparison would work to illuminate the features that make a program more or less successful in a particular setting.

Additional research on the CARIE program could also include comparisons of how the program is implemented in long-term care facilities with different features and with different resident populations. Most of the research on elder abuse has been conducted on infirm older adults being cared for in the community by informal caregivers. This predilection generated an immense body of research on caregiver burden and often focused on the characteristics of the elderly person that prompted the abuse. Accounts of abuse arising from frustration with the behavior of individuals with dementia are ubiquitous. The specific features of the nursing home environment are an important consideration for understanding the conditions that facilitate or prevent elder abuse. Understanding the relationship between the person and the environment is intrinsic to the Roy Adaptation Model (Roy, 2008).

Certain characteristics of nursing home care providers that place them at higher risk for being perpetrators of elder abuse have been identified. A Taiwanese study reported that among nurses and care attendants, those who were younger, less educated, and had less specialized training in geriatric care were more likely to exhibit abusive behavior (Wang, 2005). At the same time they found that nurses tended to be more abusive than direct care attendants. In the research sponsored by CARIE, nursing assistants were often the perpetrators of abuse (Menio & Keller, 2000). As an offshoot of an educational program, more experienced and specially trained staff members might be paired with newer or younger staff members to further assist them in developing effective conflict resolution skills. As previously stated, the high turnover rates necessitate consistently administering the training program and experienced staff

members who completed the training program would advise the newer personnel who are taking the program.

The overarching finding of this study is that there is a serious need for elder abuse training for nursing home personnel and that staff education is effective for inducing positive changes in knowledge and promoting the use of effective conflict resolution techniques.

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Appendix A

Table 21
Specific Questions on CTS2 Answered by Nursing Staff Before and After Intervention

| Scales | Emotional Negotiation | Cognitive Negotiation | Minor Psychological Aggression | Emotional Negotiation | Severe Psychological Aggression | Minor Psychological Aggression | Emotional Negotiation | Minor Physical Assault | Minor Psychological Aggression | Cognitive Negotiation | Cognitive Negotiation |
|------------------------------------------------|------------------------------------------------------|-----------------------------------------------------|-----------------------------------|-----------------------------------------------------|---------------------------------|-----------------------------------|-----------------------------------------------|------------------------|----------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------|
| specific question asked to repondents | I showed a resident I cared even though we disagreed | I explained my side of a disagreement to a resident | I insulted or swore at a resident | I showed respect for a resident's feelings about an | I called a resident fat or ugly | I shouted or yelled at a resident | I said I was sure we could work out a problem | I grabbed a resident. | I stomped out of the room or yard or facility during a disagreement. | I suggested a compromise to a disagreement | I agreed to try a solution to a disagreement a resident suggested |
| Nurses treatment pre-intervention | | | | | | | | | | | |
| N: Nurses | 122 | 122 | 121 | 122 | 122 | 122 | 122 | 122 | 122 | 122 | 122 |
| Number of Yes | 38 | 21 | 21 | 7 | 5 | 20 | 5 | 2 | 4 | 11 | 2 |
| Percent of Yes | 31% | 17% | 17% | 6% | 4% | 16% | 4% | 2% | 3% | 9% | 2% |
| Nurse treatment group post-intervention | | | | | | | | | | | |
| N: Nurses | 122 | 122 | 122 | 122 | 122 | 122 | 122 | 122 | 122 | 121 | 122 |
| Number of Yes | 59 | 24 | 0 | 52 | 0 | 0 | 6 | 0 | 0 | 14 | 12 |
| Percent of Yes | 48% | 20% | 0% | 43% | 0% | 0% | 5% | 0% | 0% | 12% | 10% |
| Nurses control pre-intervention | | | | | | | | | | | |
| N: Nurses | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 |
| Number of Yes | 17 | 6 | 15 | 7 | 6 | 21 | 4 | 4 | 4 | 6 | 3 |
| Percent of Yes | 15% | 5% | 13% | 6% | 5% | 19% | 4% | 4% | 4% | 5% | 3% |
| Nurses Control post intervention | | | | | | | | | | | |
| N: Nurses | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 |
| Number of Yes | 9 | 2 | 26 | 4 | 8 | 25 | 1 | 3 | 4 | 1 | 0 |
| Percent of Yes | 8% | 2% | 23% | 4% | 7% | 22% | 1% | 3% | 4% | 1% | 0% |

Appendix B

Table 22
Specific Questions on CTS2 Answered by Resident Staff Before and After Intervention

| Scales | Emotional Negotiation | Cognitive Negotiation | Minor Psychological Aggression | Severe Psychological Aggression | Minor Injury | Emotional Negotiation | Minor Physical Assault | Severe Psychological Aggression | Severe Psychological Aggression | Cognitive Negotiation | Severe Physical Assault | Emotional Negotiation | Minor Physical Assault | Minor Psychological Aggression | Minor Physical Assault | Cognitive Negotiation | Minor Psychological Aggression | Severe Psychological Aggression | Severe Physical Assault | Cognitive Negotiation |
|----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------|----------------------------------------------------|---------------------------------|---------------------------------------|------------------------|---------------------------------------------------------------------------|------------------------|--------------------------------------------------|-----------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------|
| specific question asked to respondents | A nurse showed care for me even though we disagreed | A nurse explained his or her side of a disagreement to me | A nurse insulted or swore at me | A nurse twisted my arm or hair | I had a sprain, bruise or small cut because of a fight with a nurse | A nurse showed respect for my feelings about an issue | A nurse pushed or shoved me | A nurse called me fat or ugly | A nurse destroyed something belonging to me | I went to a doctor because of a fight with a nurse | A nurse shouted or yelled at me | A nurse was sure we could work it out | A nurse grabbed me. | A nurse stomped out of the room or yard or facility during a disagreement | A nurse slapped me | A nurse suggested a compromise to a disagreement | A nurse did something to spite me | A nurse threatened to hit or throw something at me | I felt physical pain that still hurt the next day because of a fight with a nurse | A nurse agreed to try a solution I suggested |
| Residents treatment pre-intervention | | | | | | | | | | | | | | | | | | | | |
| N: residents | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 |
| Number of Yes responses | 18 | 15 | 29 | 5 | 2 | 14 | 5 | 10 | 13 | 1 | 17 | 10 | 17 | 16 | 1 | 13 | 18 | 1 | 1 | 6 |
| Percent of Yes responses | 29% | 24% | 46% | 8% | 3% | 22% | 8% | 16% | 21% | 2% | 27% | 16% | 27% | 25% | 2% | 21% | 29% | 2% | 2% | 10% |
| Residents treatment group post-intervention | | | | | | | | | | | | | | | | | | | | |
| N: residents | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 |
| Number of Yes responses | 27 | 18 | 1 | 1 | 0 | 43 | 0 | 0 | 0 | 0 | 1 | 5 | 1 | 0 | 0 | 8 | 2 | 0 | 0 | 10 |
| Percent of Yes responses | 43% | 29% | 2% | 2% | 0% | 68% | 0% | 0% | 0% | 0% | 2% | 8% | 2% | 0% | 0% | 13% | 3% | 0% | 0% | 16% |
| Residents control pre-intervention | | | | | | | | | | | | | | | | | | | | |
| N: residents | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| Number of Yes responses | 19 | 16 | 20 | 3 | 0 | 17 | 2 | 11 | 10 | 0 | 11 | 9 | 10 | 10 | 1 | 8 | 12 | 0 | 0 | 5 |
| Percent of Yes responses | 44% | 37% | 47% | 7% | 0% | 40% | 5% | 26% | 23% | 0% | 26% | 21% | 23% | 23% | 2% | 19% | 28% | 0% | 0% | 12% |
| Residents Control post intervention | | | | | | | | | | | | | | | | | | | | |
| N: residents | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| Number of Yes responses | 8 | 6 | 25 | 0 | 0 | 5 | 2 | 11 | 4 | 0 | 11 | 1 | 7 | 2 | 1 | 1 | 3 | 0 | 0 | 1 |
| Percent of Yes responses | 19% | 14% | 58% | 0% | 0% | 12% | 5% | 26% | 9% | 0% | 26% | 2% | 16% | 5% | 2% | 2% | 7% | 0% | 0% | 2% |