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**Elder Abuse Screening Education for Emergency Department Nurses:**

**An education intervention**

Kathleen Thimsen

Regis University

DNP Capstone

Mary Jo Coast PHD, MPH, RN

July 18, 2017

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## **Executive Summary**

### **Elder Abuse Screening and Identification for Emergency Department Nurses**

The Elder Abuse Screening and Identification for Emergency Department Nurses was an educational intervention. The education and training module was intended to improve the skills and attitudes of emergency department nurses. The goal was to improve future screening and identification of elder patients presenting to the department for a healthcare encounter who may be victims of elder abuse.

#### **Problem**

The problem being addressed is a clinical practice issue that has multi-faceted contributing factors. Clinical practitioners receive little to no education and training on the topic of elder abuse, with exception of the fact that as licensed professionals mandated reporting is a known requirement. A knowledge deficit of emergency room nurses' knowledge on elder abuse identification, screening, reporting and referral had been identified as an area for advancing education. Elder abuse is identified in one out of fourteen cases annually. The nursing and clinical literature is severely lacking in information of the clinical manifestations of elder abuse that can clearly be differentiated from age related changes and co-morbidities. The underreporting of elder abuse cases identified in healthcare settings, can be improved with by advancing knowledge, skills and attitudes of healthcare professionals. Emergency department nurses are key to improving identification and improved care and discharge planning as they are first responders, first line triage and are instrumental to establishing the care plan and process for patients presenting for a care encounter.

#### **Purpose**

The purpose of this evidence-based practice project was to improve the clinical identification by emergency department nurses in elder abuse identification by increasing the knowledge, skills and attitudes through the completion of an educational program authored by this forensic nurse specialist, DNP candidate. This project was a quality improvement initiative.

#### **Goal**

The goal was to design an educational intervention that focused and emphasized the clinical manifestations of elder abuse to improve the care of seniors presenting to the emergency department. The construct of the curriculum presented in the intervention addressed the three themes critical to understanding the scope, physiologic manifestations and the procedural aspects of care for a victim of elder abuse. increasing the knowledge and skill of the nurses in the identification and screening for elder abuse that may present as a symptom of a medical diagnosis, a co-morbid condition or as symptoms commonly associated with the aging process.

### **Objectives**

The objectives of this project included: 1) Identify the demographics and descriptive profile of the emergency department nurses participating in the study. 2) Identify the emergency department nurses' knowledge on clinical identification of elder abuse and associated response, referral, reporting and documentation and 3) Evaluate the effectiveness of the elder abuse educational module used in the project.

### **Plan**

Identifying the change in knowledge of emergency department nurses on the topic of clinical identification of elder abuse prior to and immediately following completion of an educational intervention was planned. The content development and delivery of the education was disseminated via the on-line learning technology platform used by the hospital where the intervention took place. The project consisted of collecting demographic (descriptive of the project participants), followed by a pre-test on knowledge of elder abuse. The one-hour educational program to emergency department nurses aimed at increasing their knowledge on clinical identification of elder abuse was given and followed by a post-test survey. The effectiveness of the educational intervention was measured by using a pre-and post-test survey score difference analysis.

### **Outcomes and Results**

The objectives of the project were met. Objective one achieved a descriptive profile of the nurses that participated in the intervention. Objective two and three were met and showed at the pretest that the knowledge level to be below the benchmark of 80% or 12 correct responses. The aggregate mean score of the pretest ( $M= 9.11$ ,  $SD= 2.21$ ) were below the 80% benchmark. The post- test aggregate mean scores met and slightly exceeded the benchmark ( $M= 12.53$ ,  $SD 1.59$ ). The mean scores on the post-test showed improved knowledge of the content as the result of the intervention. A statistically significant improvement in mean knowledge scores was noted in the post-intervention assessment, suggesting that the educational intervention was successful in increasing nurses' knowledge on the topic.

Keywords: Elder abuse; elder neglect; elder maltreatment; educational interventions; clinical identification of elder abuse; nurses' knowledge of elder abuse symptoms; differential diagnosis.

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## **Introduction**

### **Background**

#### **Elder Abuse Screening in the Emergency Department**

Vulnerable populations do not routinely receive screening for abuse (Administration on Aging, 1998; Jackson & Haefmeister, 2013; Dong & Simon, 2013a). The actual prevalence of elder abuse cases is an unknown for a variety of reasons (Aciermo et al, 2010). Cases of elder abuse are reported one out of every fourteen cases annually (Cannell, Manini, Spence-Almager, Maldonado-Molina & Andersen, 2014; Cooper, Selwood & Livingston, 2008). The nursing and clinical literature is severely lacking in information on the clinical indicators of elder abuse that can be differentiated from manifestations of comorbidities and age related physiologic changes. Brozowski & Hall, 2010; Cronholm, Ismailji & Mettner, 2013; Dong & Simon, 2014; Policastro & Payne, 2014; Shugarman, Fries, Wolf & Morris, 2012). Self-reported cases of elder abuse are almost never the manner that a victim is identified and removed from the violent environment. Discussion of what occurs in the privacy of one's home and any report of historic and persistent maltreatment are usually not shared due to embarrassment, fear of punishment or loss of freedom and independence. Healthcare professionals are among the disciplines that play a role in the under-reporting. Lack of knowledge and inadequate training of health care providers through professional education potentiates the under-identification of abuse. This predisposes a victim to being identified in situations that signs of abuse and violence are obvious and severe in nature. (Laumann, Leitschand & Waite, 2008) The need to advance clinical education that increases the knowledge, skills and attitudes of the emergency department nurses who serve at the front line of patient care encounters can be viewed as an important starting point for an elder abuse training program.

**Purpose**

The purpose of this paper was to examine the problem of the lack of screening for elder abuse and under reporting of elder abuse in the senior population. Specifically, the problem of elder abuse signs, symptoms and complaints that require examination and evaluation to be accurately differentiated from age related changes and co-morbidities common in the population. The educational intervention was designed to guide emergency department nurses to critically identify and differentiate the presenting complaints and conditions from symptoms of age related changes, co morbid diagnosis or as signs of elder abuse. The education was delivered as an online voice-over power point intervention. The theoretical component of the intervention provided the emergency department (ED) nurse participants with information on the leading types of elder maltreatment and associated clinical findings specific to that type of abuse. Abuse often involves more than one of the specific types of maltreatment. Clinical indicators include medical conditions, symptoms, and observed behaviors that are important aspects of the assessment and triage process to incorporate into the development of an evidence based, safe and effective care plan and management protocol for treatment. The critical importance of differentiating symptoms commonly associated with elder abuse is that many of the same symptoms are also considered to be related to the aging process or to co-morbid conditions experienced by the senior population. These factors pointed to the need for a training program for elder abuse screening and identification that described clinical indicators that provided differentiation from co-morbidities and age-related changes in the senior population would improve reporting would address a practice gap for ED nurses.

### **Problem Statement**

The Doctorate of Nursing Practice (DNP) change project is intended to identify gaps in clinical practice with a corresponding intervention that creates a practice improvement through the application and implementation of evidence based practice guidelines or knowledge. The process framework that is used in DNP research addresses the population being studied. The practice change intervention is described and defined with a stated comparison against the current standard of practice. A projected or anticipated outcome that was specific and measurable was stated. This DNP change project was aimed at achieving a long-term practice change involving a shift in clinical practice which would enable the nurse provider to better identify abuse of the elderly. This intervention has potential to improve elder abuse recognition by other health care providers as well and to advance systems integration that safeguard and advocate for the vulnerable senior population. An immediate change in practice was anticipated upon completion of the educational intervention. A DNP change project was developed using the population, intervention, comparison and outcome (PICO) format. (Melnyk & Fineout-Overholt, 2005, p. 8) The application of the PICO was described as it related to this study of the intervention and impact on practice.

### **PICO Question**

Emergency department nurses are first line in triage and assessment of persons presenting for a clinical encounter. ED nurses are critical in evaluating presenting complaints, signs and symptoms of conditions requiring emergent/urgent care. In the case of elders presenting for care, the presenting complaint may appear to be consistent with a chronic or co-morbidity associated with the physiology of aging, which hinders the accurate identification of the cause of the

condition, which may in fact be abuse. The complexity of the various types of elder abuse creates the need for ED nurses to have heightened knowledge and expertise in differentiation of the symptoms and complaints of the elder patient.

A suburban hospital emergency department (ED), that serves a primarily Medicare (over the age of 65 years) patient population provided the site for investigating how an educational intervention of ED nurses could improve elder abuse identification.

Population: Emergency department nursing staff of a suburban hospital in the St. Louis metropolitan region.

Intervention: Implementation of a training and educational module on elder abuse that included content on prevalence, identification, clinical symptoms and findings, documentation, referral and reporting.

Comparison: Comparison of current nursing knowledge of elder abuse screening against practice change resulting from the application of knowledge and assessment skills gained from the educational intervention.

Outcome: An increase in knowledge related to elder abuse identification and reporting will be measured by using a pre-and post-educational intervention knowledge inventory with improvement in the score on the post-test survey.

## **Significance and Scope**

The significance of this project had several aims. Data from the last five years indicated significance in the under-identification and reporting of elder abuse. It has been estimated that the incidence of elder abuse has a variance and wide range of reported findings. The Department of Justice Report on Elder Abuse (2010) stated the incidence rate to be from 1- 7% of all cases of abuse that are reported. Studies looking at epidemiologic aspects of elder abuse project the prevalence rate to be more realistically 25-29 % (Armstadter et al., 2011), of vulnerable adults over the age of 65 years of age. Vulnerability was the single most predicative indicator of potential for abuse. Vulnerability commonly results from a life-history of physical or emotional/psychological, domestic abuse, long term dysfunctional relationships, immobility and increased dependence on others for activities of daily living and support (Dong & Simon, 2014).

Quality of life is severely impacted according to Friedman, Avila, Shah, Tanouye & Joseph, 2014), in the form of the actual type of abuse that was being perpetrated. Emotional and psychological abuse further jeopardize the independence of the elder by diminishing or de-humanizing the elder. Psychological re-traumatization causes additional injury to the self-image and self-esteem of the elders which increased the depth of dependency that created a vicious cycle of abuse. Often, the emotional/psychological abuse is the catalyst and the ongoing irritant that facilitates continuation of the cycle of abuse. (Baker et al, 2009).

Physical, sexual and financial abuse increase in intensity over the time the abuse is perpetrated. As the abuse escalates so do needs and use of health care increase. Dong et al (2013a; Dong, et al, 2013b) discuss the use of health care access through emergency departments

and hospitalization of abused elders. The utilization rate for victims of elder abuse poses four times greater incidence than health care access and encounters for non-abused elders.

Difficulties arise in accurate identification of elder abuse victims because of age related physiologic changes and co-morbid conditions found in any person over the age of 65 who presents with when seeking health or medical care. The symptoms related to abuse are often not considered as being abuse related. Instead they are considered to be a sign, symptom or complication of aging. The need for differential diagnosis related to elder abuse, aging and co-morbidities is critical to the identification of potential, suspected or actual abuse.

An issue that potentiates the issue of identifying elder abuse is a knowledge deficit related to elder abuse. Published education and training programs listed in Table A1 (Appendix A) on elder abuse identified in the review of literature discussed the five types of elder abuse and behaviors of perpetrators that may be seen during a health care encounter in Table 2 (Appendix B). The types of elder abuse described in the published training programs include emotional/psychological, physical, sexual, financial and self-neglect. The literature lists common signs and symptoms identified in victims of elder abuse. The existing clinical gaps in the published education and training relate to the need for recognition and improvement into the differentiation of the signs, symptoms and behavioral indicators to the possible etiology of abuse. The need for advanced and in-depth understanding of the process of aging and its physiologically associated changes as well as the presence of comorbidities and chronic conditions that need deeper inquiry. The deficit of the physiology of aging increases the vulnerabilities of the elder victims as well providing a cover for the perpetrator who often is a trusted caregiver. Additional gaps exist in care, treatment and planning related to a suspected victim as well as safe-guarding the patient at the time of discharge. Elder abuse can exist in the privacy of a person's home or in



assisted living and in nursing homes (American College of Emergency Physicians, 2013; Fulmer, Paveza, Abraham, & Fairchild, 2000; Fulmer et al., 2003).

Healthcare related costs among the abused elderly have been identified to exceed usual and customary costs by 75 percent. This relates to the increased frequency of emergency department and related hospitalizations that a victim of elder abuse experiences. Victims of elder abuse utilize the healthcare system at a rate of four time more than a senior who is not a victim of abuse. (Hospital Cost Utilization Project, (n.d.); Ward, 2000; US GAO Key Issues: Elder Abuse, 2014)

### **Methodology & Model for Change**

Adopting a conceptual model supported the overall development of the research plan and strategies that were implemented. A step in the DNP change project utilized the Kellogg Logic Model (Kellogg Foundation Logic Model, n.d.) (See Appendix C) as an introductory step in formulating a clear understanding of the objectives, resources, activities, outcomes and impact of the change plan.

### **Conceptual Framework**

The change project addressed an elder abuse screening process in the ED that increased awareness of clinical symptoms commonly associated with elder abuse which are often discounted as age-related changes or conditions associated with aging. Using the framework of crafting the educating and training on elder abuse on the various types of abuse commonly perpetrated. Emotional, psychological, physical, neglect, abandonment sexual abuse are the various forms of abuse. Each category had a correlated set of signs and symptoms associated

with the specific form of abuse. The clinical focused education included signs, symptoms, complaints and conditions associated with each type of abuse. The on-line educational program was referred to as, Elder Abuse Screening Training: Differential Diagnosis (EAST: DD). The EAST:DD was authored specifically for this DNP project. The basis for the pursuit of the issue was focused on prevention of elder abuse by way of early identification of risk and mitigation of potential harm. When examining the logic model and the overall objectives of the project the use of the social ecological model seemed to fit most appropriately. The framework of the ecological model (McLeroy, Steckler, & Bibeau, 1988) addressed four domains: individual, relationships, community and society. The application of this model to the project created a multi-directional approach to the issue. First, this project addressed the patient through assessments, screenings and triage in the emergency department. Second, educating mandated reporters about differential diagnosis served the patient population by improving identification, enhancing screening and increased the potential for reporting abuse. Early in the process the decision was made to pursue the option of providing an intervention that would increase the knowledge regarding elder abuse identification and screening for the staff in the ED at a St. Louis suburban hospital. This approach seemed most feasible as the first step in decreasing the risk of elders who are considered vulnerable to abuse.

The content of the EAST: DD educational program was designed and developed from a systematic review of the literature, including a review of available training programs and retrospective, clinical, case reviews. The program was then written and designed to expand the content from overt signs and symptoms of abuse to include associated signs, symptoms, conditions and laboratory findings that have clinical relevance to conducting an in-depth evaluation of patient needs. The program was formatted into a power point presentation. The

presentation was reviewed by a panel of forensic nurse experts and emergency room nurses. A pilot study was conducted on the content to assure clarity and literacy as well as reliability and validation of content. A pilot study was conducted by administering the education to a group of 42 first term registered nurses in a Masters of Nurse Practitioner program. The pilot population was selected as it included nurse generalists with a minimum of 2 years medical-surgical nursing experience. The content and formatting of the program was amended as the result of evaluation data.

### **Review of the Literature**

Ageism as defined by Maddox, (1987, p. 284) “is the discrimination or prejudice against a sector of the population that refers to adults over the age of 65 years of age”. Ageism contributes to better understanding general attitudes and decisions related to reporting elder abuse especially in healthcare decisions and management of care. The first Deputy Director of the National Institute of Aging in Washington, DC, Robert Butler, MD, introduced the concept of age bias in the early 1970’s, the healthcare industry and the attitudes of the aging population have not changed significantly (Butler, 2008). There is little literature on ageism in healthcare. Phelan (2008) discussed the importance of acknowledging the impact that ageism has related to human rights and social justice that has long been associated with healthcare ethics. Aging is a natural process experienced by all human beings. Attitudes of the general population and among healthcare providers show that older people encounter varying degrees of ageist attitudes or healthcare practices, that include: delay in work-up exams for specific complaints that would have been more aggressively addressed in a younger person; increases in palliative care approaches, when standardized protocols would have been implemented for cure, discounting of

physical ailments; inadequate pain management; and lack of regard and importance of basic care related to hygiene, nutrition and hydration (Ward, 2000; Chism, 2013).

Recent efforts by multi-professional organizations have increased awareness and the advancement of policy development on elder abuse prevention and management. The most successful campaign against abuse and interpersonal violence is the advocacy for victims of domestic violence and prevention both in the US and globally. (Jackson & Haefmeister, 2013)

Consistent and routine screening for domestic violence has become universally accepted in the private and public sectors in healthcare. Today, there are numerous types of screenings that have become a standard component of all healthcare encounters. (Sugarman, Fries, Wolf, & Morris, 2003; Cronholm, Ismailji, & Mettner, 2013) Despite the acceptance of the theory, the practice has not shown evidence of the actual use of many of the tools. This may be due in part to the need for validity and reliability testing of the tools in specific settings, such as the ED.

The basis for this is rooted in population differences in presenting symptomology, urgency and prioritization of care, as well as timeliness of medically necessary interventions. While screening is important, the battery of screening tools that protocol dictates be performed on an individual at risk for elder abuse may not be commiserate with the limitations of time and resources in the delivery of care.

Elder abuse is perpetrated in several ways. Some forms of abuse, neglect or maltreatment have no visible signs that cue an alert of the potential abuse. The most common types of abuse and the definitions as prescribed by the US Government Accounting Office (US GAO) are listed in Table 2.

**Table 2 Common Types of Elder Abuse**

Type of Abuse	Description	Examples
<b>Physical Abuse</b>	Use of physical force against an older person that results in injury, harm, physical or psychological pain or short and long- term impairment or disability	Hitting, slapping, pushing, shoving, striking, shocking and rough treatment Physical restraint and imprisonment, isolation from family and friends
<b>Sexual Abuse</b>	Sexual contact of any type that is non-consensual, forced or coerced	Sodomy, rape, coerced nudity or photography, inappropriate touching or penetration with foreign objects
<b>Psychological Abuse</b>	Verbal or non-verbal behaviors that inflict fear, anguish, punishment, threats, pain, or distress (includes posturing and threats)	Threats, verbal insults and taunting, humiliation, harassment, brain-washing, coercion, intimidation May include disrespectful name calling and derogatory mannerisms
<b>Financial Exploitation</b>	Misappropriation, improper or exploitation of an older adult's property, assets or finances	Forgery, misuse of signatory privileges, cashing checks without permission with or without intent to divert funds, stealing money or valuables and possessions
<b>Neglect (includes self-neglect)</b>	Refusal or failure to provide access to food, water, care or medical attention (may include not attending to hygiene needs, oral care, appropriate clothing or apparel)	Willful refusal to provide basic needs of the older adult, failure to provide for basic needs, medications and access to care and medical attention as needed, Failure to act according to procedure or practices related to routine or specialized care

(source: US GAO\_ (<http://www.centeronelderabuse.org/InformationByProfessionalDiscipline.asp>)

(US GAO-Key Issues: Elder Abuse, 2014; Aciermo, Hernandez-Tejada, Muzzy, & Steve, 2009; Cooper, Selwood, & Livingston, 2008)

The common types of abuse that relate to the clinical presentation of victims of abuse include: emotional and psychological, physical, sexual, abandonment and neglect. Financial abuse was not noted to be linked to any specific clinical findings.

In the past, caregiver stress and burnout was the most discussed reason that abuse occurred. (Nerenberg, 2002) Despite the true and palpable strain that caregivers experience, it has been suggested that there are even deeper roots to the motives of abuse. Often the existence of abusive behavior has been in place for a lifetime and displayed as familial dysfunction or personal survival. (Angelo, Egan, & Reid, 2013) Life cycles of abusive or violent behaviors are not only repeated but in the case of elder abuse, the act of abuse is viewed as retribution.

Contributing factors beyond the social context of familial relationships, beliefs and life-long behaviors may be of interest to the healthcare providers during an encounter. Additional factors to consider that often take priority in a healthcare encounter are: comorbid conditions, disability, mental health issues, functional deficits and loss of independence. Assessment and evaluation of the comorbidities and presenting health status should be considered as having a possible psycho-somatic etiology. An interesting note on risk factors is the finding that lower socio-economic status does not predict an increase in the risk of elder abuse. This may be due in part to the fact that the impoverished population segment has endured the tribulations of being vulnerable for a lifetime. Thus, no increase in vulnerability has been noted. (Dong, Simon, Rajan, & Evans, 2011) There are three significant themes related to predictors of vulnerability and subsequent abuse potential. These include: self-neglect, altered cognition/mental status, and functional decline. (Hoogerduijin, Duijnstee, DeRoosij, & Grypdonck, 2006)

Self-neglect as reported by Lachs et al, 1998, found that in their cohort study, self-neglect as a finding on examination, increased the potential for mortality from any cause. The impact of the decline in social function and social support associated with self-neglect was further studied in 2003 by a community based study of 701 older persons. The study found that self-neglect played a significant role in vulnerability and the potential for abuse. (Shugarman et al., 2003) Self-neglect, involves an individual who is vulnerable due to social isolation and depression. (Lachs et al., 1997) This cohort study revealed that race played a role in increasing risk for vulnerability and abuse. The work of Lachs, et al (1998) was advanced by Dong et al, (2011), in which the population of self-neglecting black older adults had a significantly higher prevalence of death over white older adults. Psychosocial distress was exhibited by depression, anxiety and posttraumatic disorder. There is a higher rate of abuse and violence in the lives of persons diagnosed with mood disorders. (Baker et al., 2009)

Vulnerability increases in persons with altered mental status. Regardless of the condition, delirium, depression, anxiety, drug-induced lethargy, alcohol consumption or dementia, risk is high. Screening for mental status changes using the Mini Mental Screening Exam (MMSE) listed in Appendix D. has served as the standard for many years. During the last 10 years, more validity was placed on several other screening instruments. A list of mental status screening tools used with the geriatric population can be found in Appendix D. Identification of older persons at risk for abuse that were identified by screening in a study by Shugarman, Fries, Wolf and Morris (2003). Significance was attached in their findings related to social support and functioning that included: depression, familial conflict that was complicated by alcohol abuse, mental illness, social anxiety and short-term memory loss. Similar findings were reported in early studies by Murray, et al (1993), Covinsky, et al (1997), Dong et al., 2011 and Hoorgerduijin et al., (2006).

Numerous studies have validated a consistent risk factor for abuse as changes and decline in functional status. The inability of a person to perform personal activities of daily living (ADLs) is an essential benchmark of increased risk of abuse. Functional deficits pose a loss of independence and dramatically change the quality of life in the elderly. It is reported that the change to dependency impacts approximately 30-60% of older people who have been hospitalized. (Hoorgerdijin et al., 2006) Regardless of how a person loses their independence, that change manifests in mind, body and spirit. The impact of the loss comes with a price to the individual, family, friends and the healthcare system.

Access to healthcare for many older persons occurs as an emergent matter or may involve a visit to a primary health provider in the office. Screenings for abuse in other care delivery sites is not mandatory, but would be helpful in identifying abuse of any kind before severe or catastrophic injuries occur. Screening for elder abuse is not a standard practice performed by healthcare providers. Carpenter, Bond, Eulitt et al. report that in the emergency department the priority of care of the institution and of the clinicians, is to evaluate and treat the medical emergency requiring intervention and mitigation of symptoms or conditions. (C. Carpenter MD, personal communication, January 2014; M. Bond, personal communication, January 28, 2014; Eulitt, Tomberg, Cunningham, Counselman, & Palmer, 2016). The need for prioritizing care by resuscitation and stabilization is the primary goal of ED care. Screening for non-emergent related factors and conditions tend to take a back seat in driving care.

The ED is an integral point of care, based on the findings of Dong & Simon, (2013b) for the high risk and abused older persons. Consideration must be given to the older adult who presents frequently to the ED for services. Dong, et al (2013b) showed significance in the frequency of ED encounters with older adult abuse and neglect cases. Elder abuse victim health



care encounters have been shown to be four times greater than those of a non-abused peer of the same age. Additional importance should be afforded to the research of ED utilization, and associated costs for the abused older adult. ED utilization along with costs related to hospitalization or necessary institutionalization due to the increase in the acuity of care needed. As abuse escalates, so does the overall cost in human life, to the healthcare system and to society at large.

Research reports have indicated that there is a void in knowledge related to identification, screening and reporting of elder abuse across all of healthcare. (Policastro & Payne, 2014) The issue and discussion of elder abuse in healthcare education curriculum is included with actual content being limited to topics of types of abuse, perpetrators, behaviors, some visual cues and the fact that as a health care provider, one is a mandated reporter. Training for health care providers tends to predispose clinical evaluations toward etiologies other than being abuse. It has been suggested that reframing the definition of elder abuse as a social issue rather than a criminal issue (Policastro & Payne, 2014) might increase awareness and acceptance of its existence. Policastro and Payne also suggested improving collaborations between all disciplines in the medico-legal, law enforcement, and social work professions, with a call to improve the system and processes supporting the prevention and interventions related to elder abuse.

The construct of this conceptual model for increasing the knowledge of elder abuse is dependent upon the introduction of training and education for the nursing staff of a suburban, hospital emergency department nursing staff. Education on the topic has been shown to increase knowledge and understanding of the complexity of the problem of abuse. (Policastro & Payne, 2014) The Emergency Nurses Association (ENA) has created a course aimed at improving education and knowledge on the geriatric aspect of care. Desy and Prohaska reported in 2008 on

the impact of dissemination of education on geriatrics in the ED relating to best practice intervention and implementation. (Desy & Prohaska, 2008) Results showed an increased: a) knowledge of geriatric concepts ( $p < .000$ ,  $\alpha = 0.01$ ); and b) increased ability to feel competent in providing care to a geriatric patient in areas that relate to elder abuse risk assessments: functional status, mood disorders, poly-pharmacy as well as improved confidence in referral and reporting of the abuse case. Impact on daily practice was mentioned by participants in the N=102 subject study. The net impact of the educational offering was an increase in the number of emergency departments that implemented geriatric care protocols for the elderly utilizing the ED. (Desy & Prohaska, 2008) Existing elder abuse educational programs found by the review of the literature shared the themes of information on elder abuse, including epidemiologic data on elder abuse, the types of abuse and prevalence, specific risk factors, and various tools for identifying categories of risk. Table 1 (see Appendix A) that lists the educational programs that have been offered on the topic of elder abuse. The tools noted to be validated and reliable for abuse screening as they were not specific to the ED.

Experts in the field of elder abuse represent a variety of professionals who are all purposed in the prevention, early identification and elimination of maltreatment. Research agendas should be inter-professional in scope, as elder abuse is not limited to any one discipline. Providing sound and relevant education to front line providers is a first step in early identification and reporting of elder abuse. Implementing the education of screening and identification of elder abuse with nurses in the ED is intended to be a strategic starting point for advancing the education and training on this growing population of potential victims.

## **Market /Risk Analyses**

### **Description of the Emergency Department Industry**

Emergency medicine is nationally under the same scrutiny and pressure as the rest of the health care industry to improve patient outcomes, experiences and reduce adverse events and time spent in the ED. Prioritization of care for life-threatening or urgent-need conditions is crucial in the ED providers being able to achieve optimal, safe patient care while ensuring financial viability and patient satisfaction.

Time in caring for an ED patient is limited and does not afford clinicians the opportunity to accomplish the many screenings and in-depth examination of multiple, non-urgent conditions. Understanding that prioritization can help explain, in part, the under-identification and reporting of elder abuse that exists globally.

The opportunity to address the complexity of needs that the geriatric population presents to an ED provider is acknowledged and being addressed by professional organizations. The American College of Emergency Physicians and Emergency Nurses is actively involved in promoting care and practice guidelines for ED management of the geriatric patient. Early in 2014, general geriatric care and practice guidelines for ED care were released by the American College of Emergency Physicians and Emergency Nurses. The authors of the ED guidelines readily acknowledge the deficit in the guidelines related to elder abuse identification and reporting. The challenges that have been acknowledged in addressing the abuse issue include the time-restricted encounter and the complexity of differentiating symptoms of aging or co-morbid conditions commonly associated with an encounter. Communication and collaboration with the

authors of the ED practice guidelines have aided and enhanced the development of the EAST:DD educational intervention implementation and dissemination.

The market analysis conducted for the study used the SWOT format in evaluating feasibility of the project issue and plan for intervention.

### **Trends Impacting Administration and Clinician Interest and Acceptance of the Project**

An ever-present trend in healthcare that drives interest and motivation in evaluating improvements or advancing education is that of the reimbursement climate. Two such drivers have garnered some of the interest in this project. The two specific trends are related to the Center for Medicare and Medicaid's reduction of compensation for recurrent admissions as well as for outcomes that are considered never events. Elder abuse victims have four times the rate of admissions when compared to a non-abused senior over the age of 65 years of age according to Dong et al (2013). As never events have been identified in acute care settings, so have conditions that occur in nursing homes and in patients under the care of home care agencies. These never events include urinary tract infections, pressure ulcers (and skin ulcerations related to incontinence), falls and medication errors. While the events in settings outside of an acute care setting have not had the same level of regulatory impact that hospitals have experienced in direct reimbursements, the increase in false claims and fines to nursing homes and home care have seen an increase.

The aging of society is well documented and is highly discussed in the media. Commercialization of services and products specific to the aging baby-boomers also creates the ground swell of improving care for those over the age of 65 as never realized. The rate of Baby

Boomers turning 64 years old averages 10,000 people every day. Chism (2013) states that the face of aging will never be the same due to the Boomer generation which has lead the way for improving the quality of life in all of society.

A social conversation that has become increasingly loud and concerning is that of the issue of interpersonal violence. Many victims of elder abuse have histories of child or domestic abuse. There is an increase in victims of historical abuse who become victims of elder abuse. Multi-generational living conditions resulting from the loss of jobs, low wages, mental illness and extreme dependency within a family unit are some of the contributors to creating an abusive environment. This environment is further compromised in situations that demand care for a sick, immobile or dependent person. Multi-generational stressors and the lack of resources or knowledge of resources is becoming a better understood phenomenon that will require a multifaceted approach to effectively address and remedy. One constant and enduring solution is the dissemination of evidence-based education and training programs that serve to advance the knowledge and understanding of the aging process and of the needs of the elderly.

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### **Elder Abuse Education in the Emergency Department DNP Project**

An acute care hospital located in the St. Louis metropolitan area was utilized as the study location due to the high volume of Medicare aged patient population and the hospital's willingness to participate in the project. Registered nurses assigned to the emergency department were invited to participate in the research project. The acute care hospital and ED provided care to the adult population that represents approximately 74% Medicare recipients annually (Missouri Baptist.org). The Medicare population presents for care from the surrounding suburban residents living independently, or in one of the twenty-seven geriatric assisted living or

care centers within the hospital catchment area. In addition, the hospital service area included three large community centers that are exclusive to the senior population.

### **Strengths**

The EAST: DD program is uniquely positioned as the content is clinically focused for ease in understanding and in the application of knowledge to the practice of patient care.

The learning platform used to deliver the educational content is conducive for sustainable and capacity building content dissemination. The need for discussion on the topic of elder abuse is well documented in the literature based in medical, legal, law enforcement, financial and social practice applications. Elder abuse is an identified public health issue as the impact of the crime affects public services, the welfare of society, and costs to healthcare, along with the personal injury, harm and lives lost by victims of abuse. An important aspect to include in the discussion of elder abuse relates to the ethical underpinnings of the individual victims of elder abuse.

Through the education of nurses in elder abuse, the future care of elders is enhanced to meet ethical principles through the delivery of clinical care that is evidence-based and considered to be the standard of care for all persons over the age of 65.

### **Weaknesses**

The EAST: DD program had an allotted one-hour time frame for delivery. A concise, yet comprehensive curriculum was designed for the delivery of the content. The topic of abuse is multi-faceted and complicated in the clinical differentiation of symptoms of abuse being mistaken for changes due to aging or co-morbid conditions. The time limitation is a weakness of the intervention. The EAST: DD program content had been reviewed by a panel of experts as well as by emergency department nurses. Feedback received post program conveyed the fact that this program presented abuse symptoms as a differential diagnosis to consider. The nurses'

comments acknowledged this aspect being important, not to a nurse, but rather to a physician or advanced practice nurse. To link the critical nature of symptoms with the triage and ED nurse assessments critical to inter-professional communication of findings, the material in the program was amended to address and point out that this is a feature of the program.

### **Opportunities**

Late in 2014, a presentation on elder abuse screening was offered at the International Association of Forensic Nurses Scientific Assembly. The feedback of the audience and interest that resulted validated the need and importance of the subject matter being designed and disseminated.

The program set the framework for increasing symptom-based consideration of medical conditions that include not only elder abuse but also other forms of inter-personal violence.

One key success factor in the EAST: DD program that has already been realized is that of inter-professional collaboration using an expert panel to review information and improve validity to enhance reliability. This collaboration has created an increase in awareness, importance and appeal for advancing dissemination within multiple professional audiences.

### **Threats**

Further examination of the EAST: DD program revealed that the learning platform- while being novel for the presentation of the elder abuse topic- was also a threat due to study participants being uncomfortable with on-line learning platforms.

The prevalence of ageism in healthcare was also a threat. Age bias limits engagement in the education process due to the very nature of the content. To address age bias, a set of facts on aging were included within the content. Participants who completed the program contributed

comments that prior elder abuse training was limited to listing the types of abuse, suggesting additional knowledge on how to differentiate signs and symptoms was helpful and that additional modules should address each type in even more detail. Suggestions on how to interact with the victim and or potential perpetrator were also included as considerations for improving the education.

### **General Barriers to Education in the Emergency Department**

Educational programs offered to emergency department staff have been heavily scrutinized in deference to topics considered aligned with department priorities. Elder abuse had not historically been viewed as a priority, unless the victim presented in a life-threatening situation. Social aspects of elder abuse and real or perceived consequences of reporting (public relations) were potential barriers to acceptance of the education. Quantifying the impact that elder abuse has on a hospital's fiscal operation provided support for the education on the topic for this project. Market perceptions of the education being a costly offering were addressed in presentations to administrators with references demonstrating projections of the hospital's cost savings. Financial analysis showed the costs that under-identification of elder abuse cases theoretically posed to the hospital's bottom line. Financial projections were included to show the fiscal savings if elder abuse cases were identified at an earlier point in patient care. This projection demonstrated the reduction of 1.5 hospital admissions with earlier identification that yielded significant and compelling revenue implications which led to strong administrative buy in and approval for advancing the project to the IRB.



## **Stakeholders and Project Team**

The development of the project involved establishing relationships and planning meetings with local, regional and national stakeholders. These stakeholders included community advocacy agencies, governmental agencies, professional organizations, and the project team members.

### **Community Based Organizations**

The Adult Protective Services (APS), operating under the guidance of the Missouri Department of Health & Senior Services collaborated in this project by providing materials and training manuals that were used by surveyors responding to an in-patient facility or institution with a report of adult abuse. The APS services are routinely provided on behalf of eligible adults who are unable to: manage their own affairs; carry out the activities of daily living; or protect themselves from abuse, neglect, or exploitation which may result in harm or a hazard to themselves or others.

American College of Emergency Physicians (ACEP), is a professional organization of emergency medicine physicians in the United States. ACEP has more than 31,000 physician members. The authors of the Geriatric care guidelines for the ED served as consultants to the DNP project and made available manuscripts and published guidelines on elder care in the ED. The ACEP authors of the geriatric guidelines also served as content reviewers on the EAST: DD program.

International Association of Forensic Nurses (IAFN), is the recognized authority on forensic nursing. The Association was the catalyst for universal access to forensic nursing care for patients impacted by violence and trauma. The IAFN supported this project through the approval for use of the curriculum available for members to offer as

continuing education programs. Additionally, the IAFN approved the podium presentation of the pilot program and outcome data.

#### **EAST: DD Project Team**

- Kathleen Thimsen, DNPc, MSN, WCOCN, FNS, RN has 41 years of nursing experience in a variety of settings. She has developed specialized expertise in acute care, home health services, hospice, and the development and marketing of medical devices. She has been known as a pioneer in wound and ostomy management since 1980. She was a charter recipient of board certification in enterostomal therapy. She has been recognized for her contribution to advancing validation methodologies in surgical wound debridement and wound/skin care product ingredient formulations. Ms. Thimsen holds four medical device patents.  
She has served on numerous boards locally, regionally and nationally. She has numerous publications and presented over 40 posters at scientific assemblies. Both her BSN and MSN were awarded by Webster University, St Louis, MO. Ms. Thimsen received her Forensic Certificate from Johns Hopkins School of Nursing. She is currently a student at Regis University, Denver, CO completing her Doctorate in Nursing Practice degree program. She serves on the International Association of Forensic Nurses Elder Abuse Task Force.
- Mary Jo Coast, PHD, MPH, RN, has experience leading DNP projects as well as public health expertise, been an RN for over 35 years. Chair and Professor, Regis University serves as the Chair of the Elder Abuse Screening and Reporting DNP project for Ms. Thimsen. Dr. Coast has experience leading DNP projects as well as public health expertise, and has been an RN for over 35 years.

- Shirley Thorn, PHD, RN, MA, MSN, Mentor and former Associate Dean for Practice Engagement, Goldfarb School of Nursing, has over 35 years of emergency department clinical and administrative experience.
- Dan Sheridan, PHD, MSN, FNS, SANE, FAAN, Consultant; Retired, Johns Hopkins School of Nursing; Professor, Texas A & M University, provides on-going content review and validation of the pre/post education tool development. Dr. Sheridan was instrumental in advancing the formation of the elder abuse task force for the IAFN.
- Chris Carpenter, MD, is an ED Director for Barnes Jewish Hospital and Lead Author of the Geriatric ED Guidelines; AGS Liaison for Emergency Medicine; Professor of Emergency medicine at Washington University School of Medicine. Dr Carpenter has guided the project and content development by his work on the Geriatric Emergency Department Guidelines.
- Jean Davis, PHD, RN, FAAN, Associate Dean for Research, Goldfarb School of Nursing provided direction and support of this project by facilitating the IRB process and submissions to Missouri Baptist Hospital. Dr. Davis was responsible for the award for providing statistical support of this project.
- Susan Jaber, BSN, RN, CEN, SANE, Emergency Department of Missouri Baptist Medical Center, has provided expert review of content in addition to serving as the study liaison with the emergency department at Missouri Baptist.

#### **Cost-Benefit Analysis**

Identifying the impact of the elder abuse educational intervention involved using hospital utilization data from the hCUP website. This data source provides cost data for hospitals in the United States. The information is available within the public domain, so an IRB was not needed

to extrapolate the information. Data points that were available and useful included Medicare population information for admissions, average Medicare stay, rates and costs. The specific hospital data on emergency department visits and admission rates was obtained by a search of the hospital's website. Data obtained from the websites are available in the public domain and do not require an IRB approval to access the information. The data and literature (Hospital Cost and Utilization Project, n.d.) report that the average Medicare patient admission cost is \$24, 800. The average rate of admission for a Medicare patient is 1.4 times in a year. Elder abuse victim rates of admission are 4.8 admissions per year which yields a total cost of \$119,040 according to Hospital Cost and Utilization Project, n.d.

The potential financial implications of the study's impact were formulated using hospital utilization data from the hCUP website. Medicare is identified as the primary payer source for the majority of the patient population over the age of 65 years. Data showed that if ten percent of the Medicare population (96.3 persons at Missouri Baptist Hospital) were released after 1.2 admissions, (total reduction of 2 admissions due to early identification), the projected cost saving would be respectively \$6,687,072. The projections do not include financial considerations related to the penalty for readmissions. In applying the cost of sponsoring the education for the hospital based on the standardized formula used in the St. Louis metropolitan area wage and compensation formula for determining educational investments, (wage + 30% benefits x 2 hours), the cost of the intervention is projected as \$100 per participant or \$6,400 for the hospital. The potential net savings may represent \$6,677,672. These data represent a compelling case for savings as well as implications for improving the quality and safety of patient care.

**Vision**

To be a leader in improving the recognition and assessment of elder abuse in clinical setting, by using the latest educational technology to widely and affordably deploy the most current evidence-based instruction.

**Mission**

Serve healthcare providers who seek to improve their knowledge and skills in the recognition, identification, screening, and referral of victims of elder abuse. The dissemination of this knowledge will be achieved using on-line clinical education training.

**Goals**

Provide evidence-based content to the emergency department nursing staff at Missouri Baptist Medical Center, St. Louis, MO by agreement and IRB approval.

Design and developed an on-line clinical education program platform and methodology for dissemination of information to the ED nursing staff.

Create awareness of elder abuse as a differential diagnosis to be considered in persons over the age of 65 who present with symptoms that may be caused by elder abuse.

**Project Method and Design**

This was a quasi-experimental intervention study using quantitative, one-group, convenience sample with pre-post test design. The method supported studying the expected learning effects as well as practice change that occurred related to the intervention education. Analysis of data included descriptive statistics as well as appropriate tests of significance for pre and post-test difference. Analysis of co-variants was used to identify practice patterns among the nurses

participating in the study. This data was used to develop additional education and training programs for the ED nurse population.

Once collected by survey, general participant demographic data (see Appendix E); pre and post-test survey (see Appendix F) data were downloaded into the SPSS Statistical software program for analysis. The data collection tools that were used included demographic profile survey and the pre and post-test survey (see Appendices E and F). The data collection profile and pre and post-test surveys (see Appendix F) were authored by this writer and based in clinical evidence from the literature. All content was reviewed by content experts as well as by emergency department nurse generalists.

### **Procedures**

After IRB approval (see Appendix G) was obtained, the investigator provided information to the emergency department staff by presenting informational sessions on the study, accessibility protocol (date, times and hospital specific guidelines for staff participating in the study). The study was a quantitative design. A convenience sample methodology was constructed using one group of participants who completed an on-line pre- and post-test survey during the study and actual educational intervention.

### **Study Variables**

Study variables were identified during interviews with stakeholders, target audience, key personnel, emergency room expert physicians and two nurse specialists. Additional interviews were obtained from Missouri Department of Health & Human Services, Division of Aging Management and field investigators.

The project development process and plan also aided in the identification of a variety of variables as listed here.

### **Independent Variable**

The Elder Abuse Training & Education program was designed, developed and implemented to adults with informed consent. All project participants were registered nurses who were assigned to work in the emergency department of Missouri Baptist Hospital in St. Louis Missouri. The use of clinically focused educational intervention was selected as the first step in addressing the issue of elder abuse identification, care and reporting. The general topic of abuse is a threaded theme throughout the entire course of nursing and medical education. The issue is most often covered in general training on the role of mandated reporters. Clinically focused trainings are limited in scope and availability. After interviews and discussions with the ED experts, the consistent need emerged for education and methodologies for screening for at-risk individuals during an ED encounter. Clinical conversations with ED staff nurses and physicians revealed that while clinicians are mandated reporters, specific responsibilities other than referral to a social worker, were not understood or actualized in practice. Comparing the informal interview responses with the literature findings reveals that there is a need for advancing clinically based, objective measures that can be relied on to identify a victim of abuse. Clinicians that were interviewed indicated that elder abuse victims who had been identified were cases that involved severity and late-staged presentations. Cases of elder abuse are known to show escalation of signs, symptoms and conditions because of prolonged exposure to violence. (Jackson & Haefmeister, 2013; Dong & Simon, 2013a)

**Antecedents**

Interviewing the intended nursing audience and ED experts identified the need for understanding the knowledge and skills of nurses practicing in the ED who participated in the project.

Differences in nursing practice necessitated understanding the knowledge, skills and experiences that were associated with: educational preparedness, level of professional experience, previous abuse training, and knowledge of the role of the mandated reporter and institutional policies and protocols. Nurses did acknowledge themselves as being mandated reporters, but lacked knowledge about the process and procedures of reporting. Documenting findings was also noted to be problematic, especially within the confines of an electronic health record (EHR) with limited free text capacities. Understanding the target audience's knowledge and experiences with the topic and mandated reporting responsibilities in general aided the development of the educational content. The DNP project served as the platform for disseminating clinical information on elder abuse and the role of the mandated reporter.

**Dependent Variable**

The ED nurses' need for knowledge related to elder abuse included: comprehensive screening parameters especially in the elderly who suffer age-related changes, chronic conditions and co-morbidities are overlooked as possible abuse issues. The elderly often present with conditions that require specific risk identification and specialty screenings that commonly are not performed, or that are overlooked during an emergent encounter. Specific parameters and documentation of findings and observations are often limited in scope or content due to healthcare documentation platforms (EHR), resulting in missed opportunities for further



investigation. The importance of referral and reporting are often dependent upon institutional protocols for care and may be compromised by time, bias, staffing, priority of care or a deficit in knowledge of an existing policy. To address the variables, the educational intervention focused on these areas, as well as the pre- and post- intervention measures which are recognized for bringing improvement in knowledge. The effectiveness of the training was quantified by an analysis of the aggregate mean test scores.

### **Extraneous Variables**

The nursing staff's familiarity with and knowledge of Missouri Baptist Hospital policy and procedures, experience with previous abuse cases, and ageism (age bias) were important extraneous variables. These factors were selected based on input from ED department managers, who indicated the existence of policies and procedures for identifying and addressing elder abuse cases. Upon examination of these policies it became apparent that the actual process was vague and would benefit from having specific procedures detailed in the body of the document. The policies of the hospital had limitation in the guidance of care related to the defining characteristics or signs and symptoms for identifying risk. Despite discussions of the findings with the readiness of the managers it became clear that addressing the deficits was not viewed as a priority for the ED management. The opportunity to impact the policy change was addressed as a post-DNP discussion.

### **Moderator**

An important consideration impacting the project was the nurse participants' level of experience in healthcare, any prior training in elder abuse, the length of time of their experience in the ED, and any personal experience in elder abuse victim care. These variables and the depth of the

specific experiences were assumed to influence the participants' interest and engagement in the subject matter, expertise in the identification of patients at risk in as well as knowledge of follow up procedures and the provision of safety for and mitigation of further trauma to the victim.

### **Outcome Measurements**

The outcome measure of the DNP project was the increased knowledge of ED nurses on the topic of elder abuse identification care and reporting that shown by the improved mean score of a pre- and post-test tool. Long term patient outcomes were not measured in this project, nor was the associated increase in victim identification, documentation, referral and reporting of elder abuse cases. It was assumed that identifying the knowledge enhancement achieved by the ED nurses who completed the project would correlate to an increased confidence in referrals, reporting and patient safety. Long term monitoring and surveillance will be necessary to evaluate long term impact and outcome of the intervention.

### **Measures**

The method of measuring the participant achievement of learning was accomplished by using a newly designed pre- and post- test survey tool. The tool used in the DNP project was developed by this author for use with the educational intervention. The need for developing this tool was recognized as the result of the review of literature and the lack of an educational program that was clinically focused on signs, symptoms, and medical conditions. Effective and appropriate evaluation of presented clinical content required the development of a pre-post-test tools aligned to measure increased knowledge of the three themes that were identified as important constructs to the identification and care of a possible victim of elder abuse.

**Pre-and Post-Test**

A pre- and post-test were administered to identify the increased knowledge achieved by ED nurse participants completing the education module on elder abuse. (Appendix F)

The pre-and post-test tool newly developed and trialed in a pilot project of 42 nurse generalists prior to being used in this DNP project. The tool consisted of 15 items that included five questions related to one of the three constructs deemed germane to understanding clinical indicators and nursing response to a positive identification of an elder abuse victim. The three constructs included: epidemiological aspects of elder abuse; clinical signs and symptoms that indicated abuse and warranted further examination; and reporting, referral and documentation policies and protocols specific to the hospital where the project was carried out.

**Logic Model**

During the initial phase of the change project's development it became apparent that to address practice change, a strategic plan would be required to identify and validate the need for changing practice to include routine screening for elder abuse. The DNP project plan included the development and use of a Logic Model. (Appendix C). Using the Logic Model as a map for understanding the complexities and inter-related aspects of the entire project enabled collaboration and enhanced the potential of a reliable, viable project. Considerations that were factored into the plan included the development of relationships and a network of stakeholders within the hospital, the ED and the community. During the developmental phase of the project, conversations and discussions took place with the ED geriatric physician specialist and the ED clinical nurse specialist who agreed that routine screening for elder abuse was not being performed and that many cases were undetected and under-reported. Additional conversations

with other ED providers across the US and in Canada revealed the same findings. All agreed that elder abuse screening, identification and referral are important to the health and safety of the older population. All were equally in agreement that the ED “critical time factor” is the major roadblock in accomplishing routine screening. Discussions with social workers and the forensic advocate for the hospital responsible for investigating cases of suspected elder abuse indicated that subjective assessments drive the identification of the referred abuse cases. Objective measures were difficult to identify due in part to the absence of an ED specific screening tool, or reference point. Cases that had been reported were obvious due to the severity of injury or physical condition of the patient. Reporting by the ED nurses in the project was delegated to the social worker as they were the identified investigators of the reported cases and responsible for notifying APS, documenting findings and follow up. According to the literature and specialty organizations (ACEP and ENA), first person reporting and documenting is most consistent with legal obligation and professional responsibilities despite the institutional policies and procedures guiding actual practices at a local level.

Over a period of months, collaboration and consensus was achieved. The initial phase of the project was jointly decided to be an educational intervention designed for the nursing staff of the ED. This approach was selected based on the feedback from experts and clinicians in the field.

### **Conceptual Model**

Adopting a conceptual model supported the overall development of the research plan and strategies that were to be implemented. This step in the DNP change project utilized the Kellogg Logic Model (Kellogg Foundation Logic Model, n.d.) (see Appendix C), in planning the program and formulating a clear understanding of the objectives, resources, activities, outcomes and impact of the change plan. Additional consideration was given to the adoption of a theoretical framework.

### **Watson's Theory of Caring**

This DNP project draws on the nursing theory of Jean Watson. The Watson Theory of Caring advanced the approach to enhancing the humanistic, altruistic connection for fostering value, faith, hope, sensitivity to self and others in a helping and trusting health care encounter. Watson emphasized human care relationships that create effective problem solving delivered through the caring process. The Caring theory emphasizes the importance and impact of transpersonal teaching to learning through providing support in a protective manner. It has been shown that the Caring theory relationships depend on moral commitment and ethical considerations in understanding a patient's need for physical, social, environmental and basic human needs. The work of Watson and the application of the theory of Caring to the elder abuse project provided a platform for study validity and increased the potential for achieving the study purpose by enhancing knowledge and subsequent early identification of victims of elder abuse. Applying caritive factors put forth in Watson's theory increased the participants' ability and desire to make changes to their practice of elder abuse identification.

As elder abuse affects a vulnerable population, known to be silent victims in the face of potential of reprisal in the form of neglect, abandonment or institutionalization, the moral commitment and ethical considerations related to providing comprehensive assessments, care planning and safety are paramount to meeting the basic needs for quality of life in physical and psycho- social environments.

The purpose and intent of the DNP project was to impact a practice gap and create an opportunity to influence change. To effectively and efficiently address the gap and improve practice, the first step was to identify and validate the need for changing established practice to include routine screening for elder abuse. Considerations that factored into the plan were the development of relationships and a network of stakeholders within the hospital, the ED and in the community. During the developmental phase of the project, conversations and discussion took place with the ED geriatric physician specialist and the ED clinical nurse specialist, who agreed that routine screening for elder abuse was not being performed and that many cases went undetected and under-reported. Additional conversations with other ED providers across the US and in Canada revealed the same findings. All agreed that elder abuse screening, identification and referral are important to the health and safety of the older population. All were equally in agreement that the ED operates with the need to address the “critical time factor” for all patients presenting for care. This factor was thought to be the major roadblock in accomplishing administration of the recommended routine geriatric screenings. Discussions with social workers and the forensic advocate for the hospital, who are first line for investigating potential abuse case, indicated that subjective assessments drive the identification of the possible abuse cases. Objective measures are difficult to identify due in part to the absence of an ED specific, screening tool, or reference point.

Over a period of months, collaboration and consensus was achieved. The initial phase of the project was jointly decided to be an educational intervention designed for the inter-professional staff of the ED. This approach was decided upon based on the lack of an ED validated tool for assessing risk or actual abuse.

A search of the literature identified several educational programs that have been developed relating to elder abuse. All the programs included epidemiologic data on elder abuse, the types of abuse and prevalence. Some included specific risk factors and various tools for identifying actual levels of risk, but none were specifically designed to be used in the triage and assessment of a patient presenting to an ED setting. Appendix D lists the educational programs that have been offered on the topic of elder abuse.

### **Methodology**

The plan and methodology for the DNP intervention involved development of an inter-professional elder abuse educational training program. Rationale for the population approach came from the interdependent functions of the healthcare team involved in the ED patient management system. (Ash & Miller, 2014, p. 223) The program consisted of content related to epidemiologic data, a self-assessment on ageism, types of abuse, neglect and mistreatment and concluded with hospital and state mandated reporting and referral policies. The program then progressed ED focused content that crosswalks abuse indicators with medical-health conditions with which a patient commonly presents to the ED for assessment, triage and management.

The DNP project was submitted to the Regis University Institutional Review Board (IRB) and the Missouri Baptist Hospital IRB. Both submissions received exempt review status. Upon approval from both IRB's the study was marketed to the ED nursing staff using internal email

distribution of the project and study flyer. This email was managed by the ED nurse educator per hospital protocol. The email included a disclaimer of voluntary participation and confidentiality.

The ED nurse coordinator also personally invited the nurses to participate by distributing the program marketing brochure three weeks prior to the implementation dates. The nurses' participation was voluntary. The Principal Investigator also attended staff huddles at change of shift to increase awareness, answer questions and review the informed consent. Nurses who elected to participate were instructed to use a computer in the Center for Clinical Learning located on the hospital campus. Each participant accessed the educational program using their personal Cornerstone account. Cornerstone is the on-line learning system used by the hospital system to manage all education and compliance programs required of employees. The nurse participants, once signed into their account, the participant selected the Elder Abuse: DD education program that was pre-listed in all ED nurse accounts to facilitate access. After selecting the East: DD program the education module opened to the introduction page. The study overview included: the purpose, objectives and general instructions to complete the program. The next section of the program displayed the informed consent that had been approved by the IRB's of both the hospital and Regis University. Disclosures included in the body of the consent addressed the voluntary status of participation, confidentiality and protection of information that each participant was provided. Information on the hospital's mandatory compensation procedure was included. The compensation followed the wage and compensation policy of the Missouri Baptist Medical Center.

Each participant indicated consent by clicking on the acknowledgment of understanding the informed consent to participate which served as assent to participate. A demographic data collection survey (Appendix E) followed the consent. There was no individually-identifiable



information that was requested or that had the potential to be related back to any participant. This survey aided in the collection of generic demographic data related to age, gender, highest level of nursing education, experience in nursing, experience in the ED, previous training in elder abuse, any clinical experience in working with elder abuse cases. Participants completed a pre-test consisting of a fifteen-question knowledge survey (Appendix F) of epidemiologic parameters of the types of elder abuse, risk factors, physical signs and symptoms and items regarding documentation, reporting and referral policies and procedures of the hospital and ED. The training program required forty minutes of the participant's time. The educational content was delivered using Power Point with voice over audio. Once the educational program had been completed the same fifteen question survey (see Appendix F) was re-administered. Upon completing the post-test, the participant was guided to a screen with acknowledgement of completion, follow-up information on receiving compensation and a note of appreciation for their participation. Upon signing out of the account the program was closed, with automated submission of consent, demographics, pre-and post-test surveys being sent to the administrator of Cornerstone. Compensation was processed through the notification of the payroll clerk by the administrator of the Cornerstone documentation staff. All identifying information on scores and demographics was maintained as confidential by the PI of the DNP project.

Using a quazi-experimental design that involved the administration of a pre-test and post-test created threats that were considered into the project implementation plan that included:

- History – the possibility that an event outside of the study had influence over the outcome
- Maturation – the outcome was potentially influenced by the subjects who had more experience in clinical or ED practice

- Testing – study participants became familiar with the testing as pre- and post-tests were the same survey for both queries
- Instrumentation – because participants would have gained experience with pre- and post-test it could create the appearance of a data-gathering floor-ceiling effect
- Statistical Regression – scores for participants at extremes (high or low) would show regression toward the mean with repeated testing
- Selection – participants' experiences and preparedness variation would occur in the project group
- Mortality/Attrition – the potential for loss of participants during the study related to engagement, interest, and time investment (Kane & Radosevich, 2011)

To decrease internal threats to validity and reliability two strategies were used. Selection of the appropriate method for analysis decreased the likelihood of a type 1 error that would have created an effect when there was no effect, as well as a decreased likelihood that a type 2 error that would have indicated no effect, when in fact, effect was achieved. Given the potential for the internal threats, the project design and methods used a co-variant analysis of the participant demographics in an effort to explain their significance and meaning. The demographic variables included: age, gender, educational preparedness by discipline, experience (time) in clinical practice and time in ED setting, prior experience with elder abuse training, patient care, and knowledge of hospital policies for referral, and reporting.

Discussion with experts in the field of statistical and epidemiologic science provided concurrence that the conceived analytical plan enhanced the potential of achieving appropriate sample size, significance criterion, population effect and statistical power. (Kane & Radosevich, 2011, p. 305), (Cohen, 1992)

Significance criterion was used to prevent a type one error and set an acceptable standard variance of less than 0.05. Statistical power indicates the probability of achieving a significant result with the standard specification of 0.80 (Cohen, 1992) Sample size for the study was determined to be ideal with 64 participants. (Cohen, 1992, p. 158) (Suresh & Chandrasekhar, 2012)

Mortality/Attrition and missing data are realities of research, this project being no exception. The plan addressed and managed the occurrences by followed standard practice of adopting a standardized approach. The design and delivery of the consent and the completion of the survey items was designed to limit advancing to the next section or survey item if a data point was not completed. This is referred to as prompted completion and served as a visual cue reminder about an omitted item which increased compliance. The cueing strategy was successful as all participants, once they consented, fully completed all survey items in both the pre- and post-tests. No statistical interventions were needed to address missing data.

Initial recruitment was reinforced by routine reminders given by the ED nurse educator and the PI during shift change huddles. Email reminders were sent on a twice a week basis to the ED staff over a period of six- week study duration.

The tool that was used as the pre-test and post-test survey was self-authored by this writer. The survey had been previously used in a pilot study of forty-two BSN prepared nurses. The pilot study results prompted amendments to the tool. (see Appendix F)

The data dictionary and database were developed in an Excel workbook. Data included participant demographics, pre-and post-test responses from the Cornerstone based program created for this project and loaded into the hospital's learning platform. Data was then entered manually into SPSS® for further statistical analysis.

### **Intended Outcomes**

A clinical problem related to a lack of knowledge among nursing staff of the ED in a suburban hospital was analyzed for the change in knowledge that was achieved from an education intervention on clinical identification of elder abuse. Mean pre-test scores were to be measured to identify any increase in individuals' knowledge level as determined by the mean post-test scores. A benchmark of a score 80% or better on the pretest was used. A change in the mean of the score achieved on the post-test was established as an indicator of increased knowledge of elder abuse.

A review of the literature revealed no previous benchmarks with which to measure knowledge gain for studies involving elder abuse education. Eighty percent is generally considered a passing score on most basic testing. As indicated, all post-test mean scores would be achieved would be equal to or greater than the benchmark of 80%.

Data analysis included comparison of pre-test and post-test elder abuse scores and practice interventions, using a paired samples *t* test. The *t* test is an inferential statistical test commonly reported in nursing research to determine if there is a statistical difference between two groups. In this case, the paired samples *t* test was used to determine the significance of the difference of each group's change in knowledge related to elder abuse. (Polit, 2010)

Threats to reliability included the antecedent and extraneous variables of prior knowledge or experiences with elder abuse cases. The antecedents included: level of educational preparedness, level of professional experience, time of emergency department experience, previous abuse training, age, discipline and knowledge of mandated reporter responsibilities and duties. Extraneous variables that might have had an impact on reliability included: familiarity

and knowledge of hospital policies and procedures, experiences in the ED and personal experience in elder abuse victim care. Reliability was used as a measure of reproducibility of the outcome in subsequent studies (Kane & Radosevich, 2011).

The impact of the same antecedent and extraneous variables potentially could have had effect on validity. Validity is the measure of the knowledge gained from the practice change intervention. The antecedent and extraneous variables were viewed as threats to validity, as they were considered to represent bias. The bias would spring from the prior knowledge or experience base of content that would directly inflate pre/post-test survey results, thus providing false positive effect.

### **Project Findings and Results**

Objective One: Identify the demographics and descriptive profile of the emergency department nurses participating in the study.

The analysis of co-variables related to the participant demographics showed that gender, age or educational preparedness influenced pre-test knowledge. These parameters though provide a description of the projects participants. Just over half (53 percent) of the emergency department registered nurses participating in the study were male. (Figure 1)

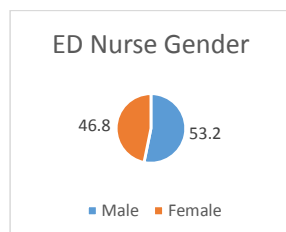


Figure 1 Gender of Project Participants

The ED nurses reported their age which ranged from 20 to 63 years of age. The mean age was 29 years. Despite age being considered as potentially important in knowledge of elder abuse and in identifying the gaps in practice, the data showed no significance in knowledge, skills or attitudes in scoring on the pre -or post- test based in the age of the nurse participant.

Experience in nursing practice was thought to be a strongly influencing variable. The sample consisted of nurses who had been in nursing from one to fifteen years three years (36.2 %). Despite pre-project assumptions of influence that nursing experience might have had, there was no significant difference in mean scores reflecting the years of nursing experience (see Figure 2).

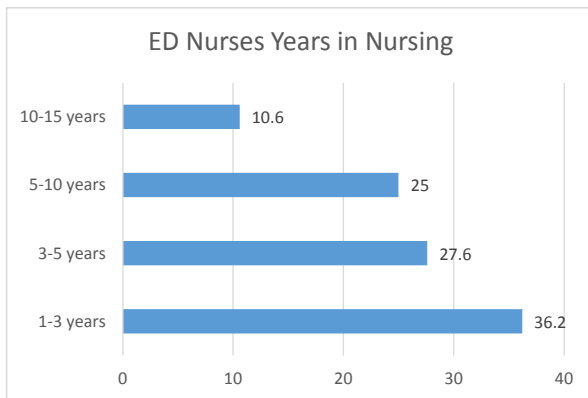


Figure 2 Age of Project Participants

The educational preparedness of the nurses in the project included all program types. Most participants (63.8%) identified themselves as being baccalaureate prepared. It was interesting to identify that 8.5% were Associate degree nurses and 12.8% were diploma-prepared nurses.

As the hospital was in the process of achieving Magnet status, it was not surprising to find that the ED nurses who had achieved a Master's in Nursing represented 14.9% of the staff positions.

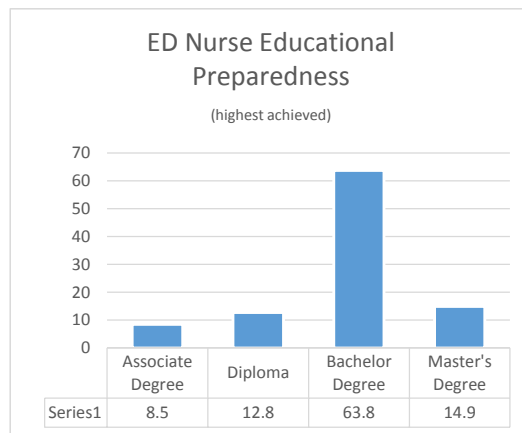


Figure 3 Educational Preparedness of Participants

Information collected on the nurse participant's experiences with prior training in elder abuse, mandated reporting and in previous patient care encounters with elder abuse victims showed in the pretest to be consistent with the pre-test score mean. (see Figure 4)

Variables related to the prior experience that the nurse participants had with elder abuse victims and care showed that the majority (70.2%) had no prior training in elder abuse. The remaining nurses that indicated they had received previous training in elder abuse (27.7%). Two percent indicated that they did not know if they had previous training. In contrasting the no prior training responses (70.2%) with the pre-test mean, the need for additional training was validated. (See Figure 4)

The question that specifically addressed any prior training related to being a mandated reporter was complicated in analyzing responses. Nurses indicated no prior training in mandated reporting at 53.2%, with 44.7% indicated previous training while 2.1% reported being unsure. (see Figure 4) Previous mandated reporter training and prior abuse training had a variance in positive responses that was difficult

to interpret but also supports the literature findings of a deficit in knowledge. This aspect bears additional study on content delivered and application to clinical practice.

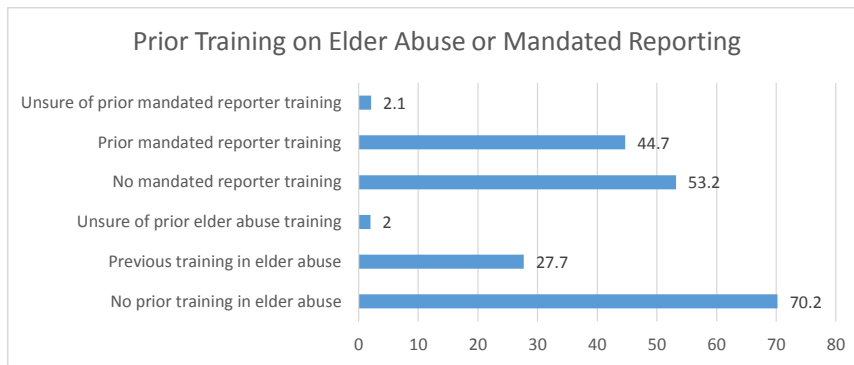


Figure 4 Prior Training in Elder Abuse or Mandated Reporting

Objective Two: Identify the emergency department nurses' knowledge on clinical identification of elder abuse and associated response, referral, reporting and documentation.

The participants were asked prior to the education about their knowledge of previously knowing if they had cared for a victim of elder abuse. This question served as the basis of the subjects' current clinical knowledge of patient signs, symptoms and or diagnosis of elder abuse. The majority (78.7%) of nurses' participants reported no familiarity with the hospital's policies and procedures related to the care of a victim of elder abuse. Most nurses responded as not being sure about policies and procedures. Only 8.5% of the participants (4 nurses) reported being familiar with hospitals policies and procedures for patients identified as elder abuse victims (see Figure 5).



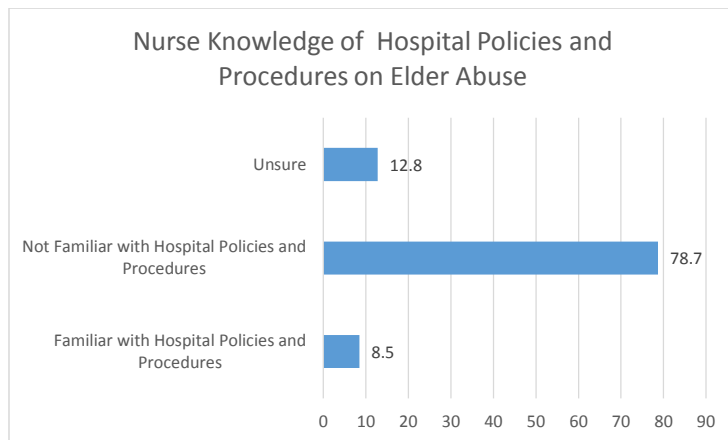


Figure 5 Nurse Familiarity with Hospital Policies and Procedures on Elder Abuse

Nurse participants scored below the mean for benchmarking adequate knowledge on the pre-test regarding their familiarity with hospital policies and procedures. The gap in knowledge that was demonstrated aligned with the deficit in previous trainings that had been offered. The policy and procedure questions on the pre and post test tool were questions related to how to report, document and refer the suspected abuse victim when identified during a health care encounter. Responses on the pre test showed that the primary practice of the nurses was only to refer a patient to social work if elder abuse was identified. Post test scores showed an increase in knowledge on the nurses responsibility to assess the patient situation more in depth, document their findings, refer to social work and to report suspected or identified victims to the Adult Protective Services hotline. Based on the increased knowledge that was shown on the post test scores, the hospital has the opportunity to advance internal policy and procedures to improve the care and ultimate outcomes of the elder patient population.

The last item that was ED nurse participants responded to was a question regarding their prior clinical care experiences with a victim of elder abuse. The question was asked to identify if

prior direct nursing care of a victim of elder abuse would impact the pre-test scores and show increased knowledge that would be demonstrated in at a minimum of meeting the 80% benchmark for adequate knowledge on the topic. As the pre-test scores showed, previous care of a patient who was a victim of abuse did not impact the baseline knowledge level of the participants.

The nurses' previous experiences of caring for a victim of elder abuse (Figure 6) showed that the majority of nurses self-reported no experience of caring for a patient suspected or actually being abused. A surprising finding was that almost 30% of the participants reported that they did not know if they had cared for a victim of abuse while 19.1% responded that they had a prior experience of caring for a patient suspected of or who had been abused (see Figure 6). The nurses' 30% response of not knowing if they had provided care for a victim of abuse, while not being analysed specifically to identify the root cause of their not knowing, is aligned with the previously described responses to little or no training on clinical identification, mandated reporting and the lack of familiarity with hospital policy.

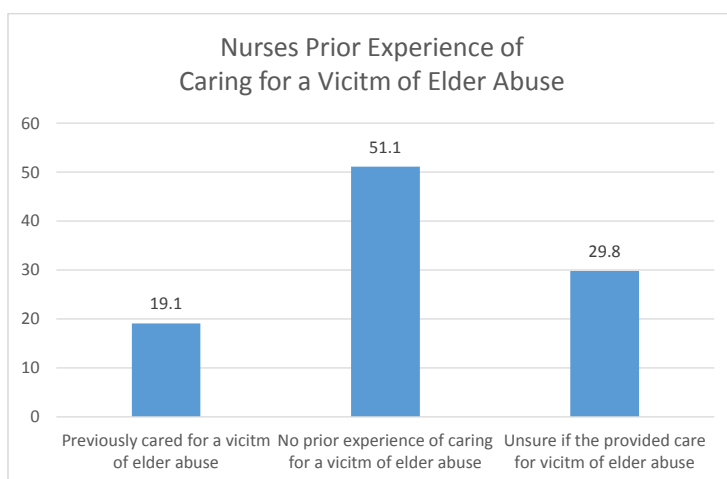


Figure 6 Previous Experience Caring for an Elder Abuse Victim

Objective Three: Evaluate the effectiveness of the elder abuse educational module used in the project.

Mean scores of the pre -post-test surveys were analyzed in several ways. The range of correct responses to the pre-test survey showed participants responding correctly to a minimum of five questions and a maximum correct response to 14 of the 15 survey items. The mean of the pre-test scores was calculated to be 9.1 correct responses. A score of 80% was set prior to the study that served as the benchmark of knowledge on the subject. For the purposes of the pre-and post-test survey that contained fifteen items, the 80% bench mark was a target of twelve correct responses. The pre-test group achieved a mean of 9.1 correct answers which was below the expected 80% benchmark of knowledge (see Figure 7).

The post-test responses were analyzed using the same benchmark of 12 correct answers (80%) to be considered as an acceptable level of knowledge. It was expected that the participants would achieve the pre-test minimum of 9 correct responses, and that the potential of meeting the benchmark of 12 correct responses would be attained. Post test scores indicated that the level of knowledge did improve based on the post test scores ranging from 8-15 correct responses with a mean of 12.5 right answers. Figure 7 represents the mean scores for the pre-and post-test surveys.

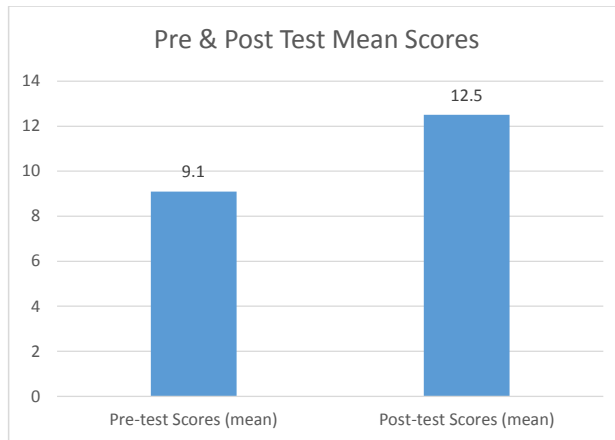


Figure 7 Pre-Post Test Mean Scores

### Descriptive Statistics

The statistical analysis of the pre -post-test responses lists the total number of 47 participants that completed the educational intervention. As discussed previously the range of correct responses submitted in the pre-test was at the lowest correct response as five questions with the high end of 14 correct answers. The standard deviation of the responses was 2.20901. (see Table )

	N	Minimum	Maximum	Mean	Std. Deviation
TotalCorrect Pre- test	47	5.00	14.00	9.1064	2.20901
Total Correct Post-test	47	8.00	15.00	12.5319	1.59961

Table 3 Pre-Post Test Scores

Score analysis indicted that the level of knowledge about clinical identification was improved by the educational intervention. Further analysis resulted in correlating the pre-post test scores that are noted to not be significant using a 2-tailed test. The 2-tailed test revealed no statistical

significance in the improvement of the elder abuse knowledge. This was calculated at a 95% confidence interval (CI). (see Table 4)

Total Correct Pre-Test	9		
Pearson Correlation	.353	Sig. (2-tailed)	.015
Total Correct Post-Test	12.5		
Pearson Correlation	.353	Sig. (2-tailed)	.015
Correlation is significant at the 0.05 level (2-tailed)			

Table 4 Pre-Post Test Score Correlations

A common mistake in research is to confuse statistical significance with substantive meaningfulness (Ingelfinger et al, 1994; Pedhazur & Schmelkin, 1991). While a null hypothesis may be true, the observed results would be very unusual. If the sample size is large ( $n \geq 100$ ), even a small relationship might be statistically significant. Statistical significant results tell you nothing about the clinical relevance or meaningful results of the data (Knapp, 1998; Piantadosi, 1997). The results of the observed data from the pre and post-test surveys may not have shown statistical significance, the knowledge gained by the nurses may have impact on the clinical practice of each nurse. To evaluate the clinical impact, a repeated measure study will be under discussion with the study hospital.

This clinical education intervention had target sample size of 64 participants. Recruitment yielded only 47 ED nurses who completed the study intervention. If the sample size of 64 had been achieved, significance in the intervention may have been statistically significant. Additional considerations that may have impacted this study were coding or data errors made during the data entry process. The ED nurse participants may have also selected an unintended response, yielding inaccuracy in actual interpretation of the level of knowledge on elder abuse.

During the pilot phase of the project, one aspect that the investigator attempted to address was the comfort and experience level of the nurses with the Cornerstone learning platform. The hospital has used the platform for many years, however, the on-line power point with voiceover and testing procedure was only in use six months before the study was conducted. The ability and skill of the nurses in adapting to an exclusive on-line learning platform may have caused discomfort, stress and the selection of incorrect responses.

The attitude of nurses may have also played a part in knowledge on the topic of elder abuse. As stated earlier in this paper, ageism is prevalent in healthcare and impacts knowledge, skills of identification as well as attitudes toward the elderly and also in the planning and implementation of care. Nurses participating in the study may have responded to questions on the pre-post- test with a degree of bias that impacts motivation to learn and change practice. Increasing awareness of the bias may have also played a role in improving the attitude and motivation for learning the content to change nursing practice. The attitude and level of fatigue may have also impacted responses. Nurses who participated in the project were instructed to complete the study either before or after working their 12-hour shift or they could come in on their day off to do the study. The ED nurses were not allowed to complete the study during their work shift. Being fatigued or rushing through the intervention may have also had influence on responses to the test items.

## **Discussion**

Data collected in this study demonstrated that the education intervention increased the knowledge of the nurse on the content area of elder abuse victim care. The findings of the study propose that such a program could significantly impact the care of the elderly when used as an

inter-professional educational opportunity. Using technology based educational interventions may depend on the level mastery of the participant in technology. Findings in this study are consistent with findings using the same educational module offered as an in-person lecture to a group of nurses enrolled in a Master's of Nursing education program in spring 2015. Findings in this study are consistent with findings using the same educational module offered as an in-person lecture to a group of pharmacy students, (6<sup>th</sup> term), in the spring of 2016.

#### Limitations

The principle investigator did not have the ability or capability to measure actual impact to clinical practice based on no actual hospital data pre -education to use a benchmark. There was a limit on the amount of time available to administer the educational module. The hospital requested that the entire education program be limited to a one-hour time frame. This hour had to include the informed consent, demographic survey, pre- and post-test and the actual education module.

#### **Impact and Dissemination**

There was an increase in knowledge of one hospital's ED department nursing staff. The EAST: DD program has also been deployed on four occasions in a six-month period to IPE audiences. The program garnered the interest of curriculum developers that resulted in an invitation to design and implement a web-based program on elder abuse for the on-line The International Association of Forensic Nurses also sought permission to use content of the EAST:DD with the Elder Abuse work group.

#### Translational Application

During the conduct of a review of the literature on the topic of human trafficking, a pattern emerged related to a similar gap in practice related to the aspect of clinical identification

and differential diagnosis. Additional reviews of the literature on interpersonal violence showed consistent need for clinical based identification and follow up care education.

### **Recommendations**

Developing and delivering a cloud- based educational module on elder abuse made an impact on the ED nurses knowledge and skills immediately upon completion of the EAST: DD program. A repeated measures study will be advanced to the hospital's administration. Continued and on-going opportunities to provide the education to inter-professional audiences have been planned. Further research is needed to better understand and define specific clinical markers (laboratory studies, toxicity studies, and other biologic indicators. Having defined and specified parameters to use as benchmarks for differentiating age related changes and co-morbidities from elder abuse indicators will clearly improve elder outcomes and improve their quality of life.

Breaking down the ageism that exists within society and in health care will evolve as the awareness and prevalence of elder abuse is enhanced. The voices of the baby-boomer generation will also increase awareness and consciousness that will likely increase society's regard for the elderly.



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## Appendix A

**Table 1 Published Elder Abuse Training and Educational Programs**

<b>Program</b>	<b>Author</b>	<b>Availability</b>
Hartford Institute for Geriatric Nursing	Terry Fulmer PhD RN	Public
Office of Victim of Crimes	Department of Justice (Price, 2013)	Public
Geriatric Emergency Nurses Education	Emergency Nurses Association	Public
An Introduction to Elder Abuse for Nursing Students	University of California- Irvine Center of Excellence on Elder Abuse and Neglect	Public
Your Patients Are Dying for You to Ask	Daniel Sheridan PhD RN SANE FNS	Private Collection
Elder Abuse: Increasing Your Knowledge	International Association of Forensic Nurses	Public
Elder Abuse and the Forensic Nurse	Sheila Early RN BSc SANE FNS	Private Collection

## Appendix B

**Table 2: Type and Examples of Elder Abuse**

Type	Description	Examples
Physical Abuse	Use of physical force against an older person that results in injury, harm, physical or psychological pain or short and long-term impairment or disability	Hitting, slapping, pushing, shoving, striking, shocking and rough treatment Physical restraint and imprisonment, isolation from family and friends
Sexual Abuse	Sexual contact of any type that is non-consensual, forced or coerced	Sodomy, rape, coerced nudity or photography, inappropriate touching or penetration with foreign objects
Psychological Abuse	Verbal or non-verbal behaviors that inflict fear, anguish, punishment, threats, pain, or distress (includes posturing and threats)	Threats, verbal insults and taunting, humiliation, harassment, brain-washing, coercion, intimidation May include disrespectful name calling and derogatory mannerisms
Financial Exploitation	Misappropriation, improper or exploitation of an older adult's property, assets or finances	Forgery, misuse of signatory privileges, cashing checks without permission with or without intent to divert funds, stealing money or valuables and possessions
Neglect (includes self-neglect which is self-induced)	Refusal or failure to provide access to food, water, care or medical attention (may include not attending to hygiene needs, oral care, appropriate clothing or apparel)	Willful refusal to provide basic needs of the older adult, failure to provide for basic needs, medications and access to care and medical attention as needed, Failure to act according to procedure for routine care



## Appendix C

### DNP Project Plan and Logic Model

<p><b>HUMAN</b> Viable and active relationship with key leaders in the Emergency Department at BJC (Main campus)</p>	<p>Attend bi-monthly ED management meetings at BJC</p>	<p>Establish relationships with key informants, key decision makers and “resulting network” Within the BJH system</p>	<p>Enhanced information exchange  Trust  Increased ease in navigating a complex system</p>	<p>Investment for the future</p>
<p>ED Staff</p> <p>Understanding and agreement with key administrators (Goldfarb School of Nursing GSON) to provide statistician and data-miner to support DNP project</p>	<p>Shadow triage and staff in ED</p> <p>Meet q 2 months with Dr. Davis in Research (GSON) to keep informed as to process, progress and anticipated timeline for IRB, etc....Move to monthly and PRN once in full IRB submission period Complete IRB application in timely manner and in acceptable format</p>	<p>Establish relationships, be first hand observer of barriers, obstacles and drivers of ED care</p> <p>Have timely access and use of statistician and data miner (if needed)</p>	<p>Have information to relate to real time learning experience in educational models IRB approval</p>	<p>Impact learner engagement and buy-in</p>
<p>IRB contacts within BJC/Washington University established. Support from the Director of Nursing Research at BJC to assist and facilitate IRB submission and follow thru process monitoring</p>	<p>Work with DR Davis to maintain the relationship(s)</p>	<p>Successful submission and early (timely) approval at BJH</p>	<p>IRB approval</p>	<p>Facilitate progression of data collection and intervention/evaluation Facilitate progression of data collection and intervention/evaluation</p>
<p>Dr. Coast @ Regis</p>	<p>Develop and submit IRB to Regis Fall '14</p>	<p>Obtain timely approval of Regis IRB</p>	<p>Achieve an educational product that is acceptable and meaningful to ED providers (all levels)</p>	<p>Increases provider engagement and learning potential Synchronizes educational modules with ED standards and practice</p>
<p>Dr. Melady (Toronto), Dr. Bond (U Maryland), Dr. Carpenter (Wash U and Principal author for geriatric guidelines for ED management and physicians are supportive, providing feedback, suggestions and venue for ED staff and professional education and training.</p>	<p>Drs. Melady and Bond-stay in communication with them with periodic updates on findings (their request of me)</p> <p>Send educational modules for vetting once in “final” draft</p>	<p>Stay connected and on inside track of new research, publications and changes about Gero ED management</p>	<p>Achieve an educational product that is acceptable and meaningful to ED providers (all levels)</p>	<p>Increases provider engagement and learning potential Synchronizes educational modules with ED standards and practice</p>
<p>Social work contacts at BJC, Wash U established and supportive</p>	<p>Maintain relationships Shadow on rounds in ED</p>	<p>Identify scope of SW investigations</p>	<p>Identify aspects of physical function that might be an observation or simple command induced performance leading to increased identification of risk</p>	<p>Increases awareness when</p>
<p>Physical Therapy Faculty at Washington University</p>	<p>Meet to discussion functional status evaluation and “performance level” grading</p>	<p>Functional status evaluation grading system is unknown to me, thus, increase my understanding of the degree of functional alteration evaluations by PT</p>	<p>Identify aspects of physical function that might be an observation or simple command induced performance leading to increased identification of risk</p>	<p>Increases awareness when</p>

<p>MO APS and HHS-MO supportive of project</p> <p>Connection and relationship with Forensic Team for Advocacy established</p> <p>Contacts and networking to date has provided a variety of “consultants” willing and available to support project as it proceeds.</p> <p>Dan Sheridan PhD RN agreeable, available and actively involved (PRN) as forensic expert (my former professor at Johns Hopkins in Abuse and Injury)</p> <p>Risk Management and Legal department at BJC and BJH</p>	<p>Meeting held to understand mandated reporting and how they train APS investigators</p> <p>Maintain contact and shadow on rounds</p> <p>Access and utilize network contacts in their areas of expertise</p> <p>Meetings held, phone calls and email</p> <p>Communicate with Dan PRN</p> <p>Attended legal seminar required by GSON Met with legal team from BJC</p>	<p>Understand APS training Understand mandated reporting and process Understand documentation and reporting “critical aspects” needed to expedite investigations</p> <p>Use subject matter experts in efficient and timely manner</p> <p>Obtained ICD9 10) DX codes for abuse, neglect and maltreatment</p> <p>Discussed areas of importance to educate healthcare providers on R/T abuse</p> <p>Shared injury slides for potential use in education</p> <p>Explored potential of virtual world teaching of abuse modules</p> <p>Discussed approaches within the realm of legal points to consider for project implications</p>	<p>Gap Analysis performed on regulatory/hospital policy &amp; procedures/actual practice reports (anecdotal)/literature review</p> <p>Introduces Interprofessional Education/training approaches that will need to be incorporated</p> <p>Data mining “map” to increase efficiency of process (this is on hold for now 5.22.14)</p> <p>Identified issues for healthcare providers that are emerging in litigation against providers’ R/T abuse (lack) reporting</p> <p>Provided resources for investigation R/T time and cost considerations</p> <p>Agreed upon collaborative approaches and critical aspects to consider and incorporate in education and data</p>	<p>incorporated into training of functional alterations that can be observed and referred appropriately to reduce risk and mitigate injury</p> <p>Identified areas that can be improved to a) identify abuse, b) appropriately document, c) appropriately and efficiently report and d) secure timely intervention and follow up to risk and injury</p> <p>Searchable data points for efficacy and efficiency in mining (on hold)</p> <p>Points of potential education in modules to be included</p> <p>Risk management perspectives and considerations Creates plan that is realistic and financially feasible Reduces liability and risk for BJC system R/T proprietary information, compliance</p>
<p><b>FINANCIAL</b></p> <p>Funding of statistician and data miner provided as a faculty benefit thru employer</p> <p>Incentives for training volunteers who agree to participate in training and pre/post-test (Projected N= 50 persons)</p> <p>Costs to be determined related to vehicle of disseminating or administering education</p>	<p>Keep Dr. Davis in loop R/T need and timeline</p> <p>Research IRB/BJH and BJC regulations R/T study participant incentive guidelines</p> <p>Mobilize finances to support need</p> <p>As above</p>	<p>Obtain ease in getting on statistician’s schedule for project work and follow through process</p> <p>Confirm what is allowed and identify what will be the subjects’ scope of participation</p>	<p>Plan and timeline agreed upon</p> <p>Protocols for project are aligned with BJC institutional and Wash U requirements</p> <p>Provides adequate planning for financial investment</p>	<p>Streamlined process and mitigation of delays in project progression</p> <p>Eliminates surprises and delays</p>

<p><b>Organizational</b> Contract between Regis and BJC in place</p> <p>Venue (BJC ED) available, agreeable and supportive of issue being addressed, staff education and long-term goals on work plan by this DNP student</p> <p>BJC policies and procedures provided to student</p> <p>Employer provides flexible work environment to meet DNP course work needs</p>	<p>Follow up with Regis on final disposition of contract (April was in cue to be signed at Regis. Already signed by BJC)</p> <p>Obtain and review</p> <p>Maintain GroupWise schedule and update accordingly</p>	<p>Have fully executed contract in place prior to first meeting with ED at Management meeting</p> <p>Know abuse policies and procedures to incorporate into education</p> <p>Be efficient in time management</p>	<p>Increased ability to stay on timeline and in compliance</p> <p>Achieved compliance in training with institutional policies</p> <p>Efficient time management</p>	<p>Compliance</p> <p>Compliance as well as identification of areas for enhancement for BJC</p> <p>Reduces my anxiety</p>
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### Elder Abuse Screening Training Logic Model

<p><b>COMMUNITY RESOURCES</b></p> <p>APS staff MO and STL willing and available to support project</p> <p>International Association of Forensic Nurses (IAFN) in US and Canada (list-serve colleagues) have provided educational materials, power points, shared experiences and protocols</p> <p>IAFN special interest group will meet in Oct '14 at Assembly to discuss elder abuse as an area for committee work to advance education at the organizational level</p>	<p>Meeting conducted with APS...await documents (training manuals from State) Incorporate into modules</p> <p>Consider suggestions and practices from Canadian models</p> <p>Meeting scheduled Present poster on DNP project accepted as Part 1 of Elder Abuse series</p>	<p>Obtain state training to understand how investigators become competent Use information in training as applicable</p> <p>Appreciate and incorporate viable and valid (outcome oriented) education</p> <p>Collaborate on prior work, identify future organizational opportunities, achieve consensus of forensic nurse specialists</p>	<p>Synchronicity with regulations Training consistencies</p> <p>Practice guidelines Creates awareness of need and aligns nursing specialists to collaboratively address population problems</p>	<p>Clinical and evidence based practice is introduced to regulators to expand and improve methodologies and objectivity related to current state regulations.</p> <p>Introduces evidence based Practice and metrics for determining life altering decisions about victim care</p>
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**Appendix D**  
**Screening Tools Used in the Elderly**

<b>Geriatric Assessment Instruments</b>	<b>Author</b>	<b>Availability</b>
Confusion Assessment Measure	Inouye SK, Van Dyck CH, Alessi CA; Balkin S, Siegel AP, Horowitz RI (1990)	Public
Neecham	Neelson VJ, Champagne MT, Carlson JR, (1996)	Public
Get Up and Go	Podsiadlo L, Richardson S (1991)	Public
Fear of Falling	Lachs H, (1994)	Public
Braden Risk Assessment	Braden B, Bergstrom N (1987)	Copyright- Barbara Braden
Geriatric Depression Scale	Yesavage JA, Brink TL, Rose TL, Lum O, Huang V, Adey M, Leirer VO (1983)	Copyright- American Society of Geriatric Medicine
Mini-Mental State Exam (MMSE)	Folstein MF, Folstein SE, and McHugh PR (1975)	Public

This listing is not representative of all geriatric instruments for screening or evaluation

sources: Miller, D. K., Morley, J. E., Rubenstein, L. Z., Pietruszka, F. M., & Strome, L. S. (1990); Van Rompaey, B., Schuurmans, M. J., Shortridge-Baggett, L. M., Truijten, S., Elseviers, M., & Bossaert, L. (2008); Vermeersch, P.E.; Podsiadlo, D., & Richardson, S. (1991); Lachs, H. W. (2005); Bergstrom, N., Braden, B., Laguzza, A., Holman, V. (1987)

**Appendix E**  
**Elder Abuse Screening Training Demographic Survey**

**Kathleen Thimsen DNPc MSN RN-WOCN**  
**Principal Investigator- Kthimsen@Regis.edu**  
**618-210-6484**

Please take a few minutes to fill out this questionnaire so that the study information is consistent with the nurses' background and experience and can be measured for impact on the study outcomes. The study investigator appreciates your feedback. All information that you provide and the pre- and post-test answers will be kept confidential. Thank you for your participation.

Gender  Male  Female

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Age

18-30 Years  31-45 Years  46-65 Years  
 >65 Years

---

Highest Degree Attained

ASN/ADN  Diploma  BSN  
 MSN  DNP  PHD

Other (specify)

---

Years of Experience in Nursing

1-5 years  5-10 years  10-20 years  >20 Years

---

Years of Experience in the Emergency Department

1 years  5-10 years  10-20 years  > 20 years

Previous Training in Elder Abuse

Yes |  No

---

Have you been trained in mandated reporting?

Yes |  No

---

Are you familiar with Missouri Baptist Policy and Procedures on Elder Abuse Patient Care?

Yes  No

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Have you ever reported a case of elder abuse?

Yes  No  Not sure

Have you ever been involved in providing care to a victim of elder abuse?

Yes  No  Not sure

## Appendix F

### Elder Abuse Screening Training: Differential Diagnosis Pre/Post Survey

#### Pre-and Post-Education Survey Instructions

Read each question carefully and select the best answer. Enter the correct answer on the answer section.

- 1) **Elder abuse is reported in**
  - a. 1 out of 10 cases
  - b. 5 out of 10 cases
  - c. 1 out of 11 times
  - d. 1 out of 14 times
  
- 2) \_\_\_\_\_ **abuse is the gateway to other forms of abuse**
  - a. Physical
  - b. Emotional/Psychological
  - c. Sexual
  - d. Financial
  
- 3) **Age related changes can be differentiated from elder abuse in which of the conditions**
  - a. Bruising
  - b. Anxiety
  - c. Breast tenderness
  - d. Urinary incontinence
  
- 4) **Elder abuse perpetrators commonly exhibit**
  - a. Aggressive, protective and touching behaviors
  - b. Protective, stressed and calm demeanors
  - c. Defensive, assertive and outspoken behaviors
  - d. All the above
  - e. A and B only



- 5) **Complaints from demented patients should be**
- Believed and acted upon
  - Explored and examined
  - Documented and CT/MRIs ordered.
  - A and B
- 6) **As a mandated reporter, nurses are required to**
- Refer and report all cases of suspected and actual abuse
  - Report abuse that is diagnosed
  - Report suspected cases of abuse
  - Refer, document and report all cases of suspected or actual abuse of all patients
- 7) \_\_\_\_\_ **abuse is the most common form of elder abuse**
- Physical
  - Emotional/Psychological
  - Sexual
  - Financial
  - Neglect
- 8) **Late stage presentation of \_\_\_\_\_ are signs of possible abuse**
- Depression
  - Cardiac complaints
  - Pressure ulcers
  - All the above
- 9) **Assessing \_\_\_\_\_ is critical to differentiating abuse from medication or age related changes**
- Delirium
  - Fall risk
  - Pressure ulcer risk
  - A and C
  - All the above
- 10) **The \_\_\_\_\_ is the primary staff person responsible for documenting the findings of elder abuse examination in the ED**
- Social worker
  - Triage nurse
  - Primary Nurse
  - All the above

11.) **Discharge to the nursing home is appropriate when**

- a. APS has been notified
- b. No other bed is available
- c. Family cannot be notified
- d. A safe environment is secured
- e. A and B

12) **Steps in the care process of identifying elder abuse includes**

- a. Sexual assault exam
- b. Inspection of patterned bruise
- c. Standard triage parameters
- d. All the above
- e. B and C only

13) **The percentage of weight loss (unintentional) that is malnutrition/starvation in 3 months**

- a. 5 %
- b. 10%
- c. 15%
- d. Any

14) **Typical presentation of a person who is a victim of elder abuse includes**

- a. Elevated troponins and anemia
- b. Patterned bruising and weight loss
- c. Weight and hair loss
- d. Contractures and verruca
- e. Weight loss and low platelet count

15) **If you suspect abuse you should**

- a. Reassure, reinforce, refer and document
- b. Document your assessment and observations
- c. Refer to the advocate or social worker
- d. Document your assessment, observations and opinion

## Appendix G

### Institutional Review Board

DATE: April 4, 2016  
TO: Kathleen Thomsen, P (c)  
FROM: Regis University Human Subjects IRB  
PROJECT TITLE: [891586-1] Elder Abuse Screening Education for ED nurses: An educational intervention  
SUBMISSION TYPE: Amendment/Modification  
ACTION: APPROVE  
EFFECTIVE DATE: April 4, 2016  
EXPIRATION DATE: April 3, 2017  
REVIEW TYPE: Exempt Review

Thank you for your submission of Amendment/Modification materials for this project. The Regis University Human Subjects IRB has APPROVED your submission. This approval is based on an appropriate risk/ benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This amendment to the protocol is approved with the condition that an approval letter from the new site needs to be uploaded into IRBNet.

This submission has received Exempt Review based on applicable federal regulations.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to the Institutional Review Board. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the Institutional Review Board.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of April 3, 2017.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact the Institutional Review Board at [irb@regis.edu](mailto:irb@regis.edu). Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Regis University Human Subjects IRB's records.

