UNDERSTANDING FAMILY VIOLENCE ASSESSMENT PRACTICES OF
PEDIATRIC EMERGENCY DEPARTMENT NURSES AND PHYSICIANS

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DOCTOR OF PHILOSOPHY

by
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UNDERSTANDING FAMILY VIOLENCE ASSESSMENT PRACTICES OF PEDIATRIC EMERGENCY DEPARTMENT NURSES AND PHYSICIANS

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ABSTRACT

Despite recommendations from professional nursing and other health organizations, including the Institute of Medicine the frequency of routine assessment for intimate partner violence and other forms of family violence remains low among emergency department healthcare providers. The aim of this study was to use a theory-driven approach to understand the reasons why pediatric emergency department providers do not routinely assess for family violence, both child abuse and intimate partner violence. This is the first study to use the Theory of Planned Behavior (TPB) to explore family violence assessment behaviors.

This study used a cross-sectional design and a convenience sample of emergency and urgent care nurses and physicians (n = 132) from a large Midwestern pediatric emergency department and two urgent care centers. TPB constructs of attitude, subjective norm, perceived behavioral control, and intention to perform routine family violence assessment were explored, as well as self-reported assessment behaviors.

Multiple regression analyses were performed to explore the predictive power of TPB constructs and family violence assessment intentions and assessment behaviors. Independent t-tests were performed to compare nurse/physician groups. Frequency
analyses were performed to evaluate two additional yes/no questions related to participants personal experience with family violence.

The predictor variables of attitude, subjective norm, and perceived behavioral control made a significant contribution to the prediction of intentions to assess for child abuse; with subjective norm being the most significant ($\beta = .52, p < .00$). Only subjective norms and perceived behavioral control contributed significantly to the prediction of intention to assess for IPV; again, subjective norms was the most significant ($\beta = .54, p < .00$). Only the predictor variable of intention to assess was significant for both child abuse and IPV self-report assessment behaviors ($\beta = .43, p < .00; \beta = .44, p < .00$). No significant differences between nurses and physicians were found. Personal experience with family violence was reported by 26.2% of participants and 63.1% reported knowing someone personally who has experienced family violence. Thus, exposure to family violence is a common experience in this population of healthcare providers.
The faculty listed below, appointed by the Dean of the College of Arts and Sciences have examined a thesis titled “Understanding Family Violence Assessment Practices of Pediatric Emergency Department Nurses and Physicians,” presented by Donna Marie O’Malley, candidate for the Doctor of Philosophy degree, and certify that in their opinion it is worthy of acceptance.

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This endeavor would not have been possible without the support of all those mentioned above. It is with a humble heart that I acknowledge the generosity of time and talent of so many who helped my on this journey. I am forever grateful.
DEDICATION

To Kathleen Mary O’Malley, SL

Kathleen’s view of the world and values of justice and human compassion have had a significant influence in the experience and completion of my doctoral education. Kathleen has been a friend, a beloved sister, sister-in-law, aunt, and great aunt to our growing family. Over the years Kathleen provided great comfort in difficult times and joined with us often to celebrate blessings and good times. Kathleen passed away on Easter Sunday at sunrise, 2011; she continues to have a profound influence on our family and on my desire to make a contribution to the science of family violence prevention.

“She encouraged us not to conform, and moved us all forward in the same direction but differently” (Father Marty Lally at Kathleen’s Memorial Service, May, 2011).
CHAPTER 1
INTRODUCTION

Emergency department (ED) healthcare providers often find themselves on the frontline of America’s violence epidemic when caring for victims of family violence, both child abuse and intimate partner violence (IPV). Victims have often intersected with the healthcare community prior to a fatal event (King, Kiesel & Simon, 2006). This places healthcare professionals collectively in a role of responsibility for identification and prevention of family violence. Nurses and other healthcare professionals are in an excellent position to play a major role in identifying women and children at risk. While many illnesses and conditions defy prevention at the present time, preventing or reducing intentional injury caused by family violence is an attainable goal. The traditional medical models of screening for exposure to risk factors for a disease or condition are not easily transferred to complex bio psychosocial issues such as family violence. Each patient encounter presents an opportunity for identification and intervention, yet sadly, routine family violence assessment has not been widely adopted. This chapter provides an overview of the significant impact child abuse and IPV have on health, introduces a life course framework for prevention, suggests possible implications for nurses, and provides a detailed description of the purpose, specific aims, and research questions used for this study.

Background of the Problem

Intimate partner violence and child abuse are major public health problems. The co-occurrence of IPV and child abuse is common with estimates as high as 60% (Appel, A., & Holden, G. 1998; Hamby et. al, 2010). Approximately 30% of American women
experience physical or sexual abuse by an intimate partner at some point in their lifetime (Tjaden & Thoennes, 2000). IPV accounts for 4.8 million physical assaults and rapes each year at a cost of 8.3 billion dollars and resulted in 2,340 fatalities in 2007 (CDC, 2010). Over three million children witness these violent events each year, placing them at high risk of becoming victims and perpetrators in the intergenerational cycle of violence (Tjaden & Thoennes, 2000; Ehrensaft, Cohen, Brown, Smailes, Chen & Johnson, 2003). In 2009, child protective agencies across the United States received 3.6 million reports of child abuse and neglect. Of those, 702,000 cases were substantiated and 1,770 children died as a result of abuse and neglect (National Child Abuse and Neglect Data System [NCANDS], 2009). The majority of substantiated cases, 78.3%, were victims of neglect, 17.8% were victims of physical abuse, and 9.5% were victims of sexual abuse (NCANDS, 2009). For fatal child abuse events the majority, 80.8%, occurred in children under the age of four. Neglect was the most frequent cause of death, 35.8%, followed by multiple types of maltreatments at 36.7%. Parents were the perpetrators in 80.9% of these fatal child abuse events (NCANDS, 2009).

Most (84%) child fatality victims and their families had no prior involvement with state or local child protection agencies (United States Department of Health and Human Services [USDHHS], 2008). Unlike child protection and law enforcement agencies that are involved only after a violent event has occurred, healthcare providers have an opportunity to identify those at risk and intervene prior to a violent event. Missed opportunities are evident when reviewing child fatality cases. One study found that among 44 cases reviewed, 20% of victims had been seen by a healthcare provider in the month prior to the fatal event (King, Kiesel, & Simon (2006). Jenny et al. (1999) in a
retrospective chart review reported that 54 of 173 children (31.2%) found to be victims of abusive head trauma had been seen by physicians after the event but not diagnosed. The evidence appears to be similar for IPV victims. In the year prior to a fatal event many women were found to have intersected with the healthcare community. Female family members, who served as proxy informants, indicated 41% of IPV victims had sought healthcare services for physical or mental health reasons as well as treatment for injury prior to their deaths (Sharps et al., 2001).

Impact on Health

Leading causes of mortality and morbidity in the United States include heart disease, cancer and diabetes (National Center for Health Statistics, 2009). The connection between exposure to family violence and serious health conditions has been firmly established. Exposure to violence in childhood was found to be predictive of health and well-being in adulthood (Anda et al. 2006; Felitti et al., 1998). Child abuse victims not only had an increased risk of psychological illness but also had greater risk of ischemic heart disease, diabetes, and liver disease in adulthood. The adoption of health risk behaviors such as smoking, drug and alcohol use, and other negative lifestyle choices often serve as coping strategies, but also place individuals on a trajectory for poor health and early death (Felitti et al., 1998). Witnessing or experiencing violence in early life has also been found to change the molecular structures in the brain (Perry, 2002). Many of the negative behavioral and developmental problems experienced by some child victims of family violence are now known to be related to subtle yet profound neurobiological effects of exposure to violence on the developing brain (Anda et al., 2006; Perry et al., 1995).
Campbell et al. (2002) found IPV exposed women reported 50% to 70% more gynecological, central nervous system, and stress related health problems when compared to never exposed women. Statistically significant differences between IPV exposed women and never exposed women also demonstrated that exposed women were more likely to rate their health as poor (12% versus 6%) and less likely to rate their health as excellent (26% versus 35%). Many of the health problems reported by the IPV exposed group were common complaints with readily available treatment options; however, when symptoms are not identified and recognized within the context of current or past IPV exposure women may receive inadequate or incomplete care.

The undeniable relationship between exposure to violence and health prompted the American Nurses Association (ANA), the Emergency Nurses Association (ENA), the International Association of Forensic Nurses (IAFN), the American Academy of Pediatrics (AAP), and the Institute of Medicine (IOM) to recommend routine screening and assessment for IPV during patient encounters (ANA, 1991; AAP, 2004; ENA, 2006; IAFN, 2008; IOM, 2011). Recognizing the serious nature of health consequences related to family violence, the ENA position statement includes all forms of family violence and proposes that “healthcare professionals are ethically bound to engage in routine screening, patient assessment, and referral to help ameliorate subsequent harm to victims” (ENA, 2006). The ENA statement also views the emergency department (ED) as a “window of opportunity” for both healthcare providers to identify those at risk, and for victims of violence to seek help. Emergency department healthcare providers are in a unique and advantageous position to identify, assess, and intervene because victims are
often brought to the ED or may seek care for themselves or their children in this healthcare setting.

Despite these recommendations, IPV and child abuse screening or routine assessment remains low across a variety of clinical settings. Studies indicate many women are not routinely assessed for IPV. In one study, only 7% percent of women surveyed had been asked about IPV, another found only 25% of women in an emergency department setting reported being asked about IPV (Klap, Tang, Wells, Starks, & Rodriguez 2007; Glass, Dearwater, & Campbell 2001). A survey of pediatric healthcare providers reported 64% were unaware of the American Academy of Pediatrics (AAP) recommendation to screen for IPV and only 7.5% reported screening routinely (Erickson, Hill & Seigel, 2001; Borowsky & Ireland, 2002). Since the burden of suffering caused by IPV and child abuse is disproportionately shouldered by women and children, routine assessment is particularly important in pediatric and women’s health care settings. The Bureau of Justice Statistics (2007) estimates children are present in 35% to 50% of homes in which IPV occurs. Half to two-thirds of occupants living in domestic violence shelters are children (National Network to End Domestic Violence, 2007). Thus, child abuse and IPV are often shared experiences within the family.

**Family Violence Assessment versus Medical Screening**

Family violence, if viewed as a chronic condition or disease with remissions and exacerbations occurring over time, begs for screening, routine assessment and intervention from the healthcare community. However, the complexity of issues related to identifying those exposed or at risk of exposure to family violence does not easily fit traditional healthcare screening models. Healthcare screening originated to identify a
disease or condition in its preclinical state, hopefully while still curable. The availability of simple and reliable laboratory tests, effective treatments, adoption of screening practices, and population access to healthcare has led to significant advances in the diagnosis and treatment of syphilis, cervical cancer, breast cancer and diabetes in recent years (Morabia & Zhang, 2004).

The biomedical model of screening, while widely accepted and implemented for many organic diseases such as those described above, has not been proven to be as effective or been embraced by the medical community in identifying complex bio-psychosocial conditions such as child abuse and IPV. The term screening implies that a quick and reliable test exists to identify a condition or ailment when individuals or populations present with certain symptoms, complaints, or risk factors. Child abuse has many presentations; which are often subtle, have multiple interpretations, or are confused with accidental injury or disease of organic origins. This variability of presentation, combined with a lack of quick and reliable methods to identify victims or those at risk of child abuse has proven to be challenging for the healthcare community. Currently there are no validated quick screening instruments for child abuse and neglect. Screening instruments for IPV exist, some with fairly good reliability and validity; however screening remains controversial and has not been widely adopted (Rabin et al. 2009). Universal assessment at every healthcare encounter would allow women and children at risk of family violence to be identified and linked to needed resources. Routine assessment offers a more appropriate response to the problem of family violence than the limited screening currently being done. For the purpose of this study, the term routine assessment is used rather than the term screening to describe the behavior of interest.
A Life Course Approach

Violence occurring within families is difficult to identify and address. Root causes and contributing factors that lead to family violence are daunting and multifaceted. Family violence occurs across the life span, with those who are very young or very old being particularly vulnerable. Family violence includes child abuse, intimate partner violence, and elder abuse with multiple types of violence co-occurring in families. Despite this, each type of family violence is generally viewed as a single event and is studied and responded to separately. This approach often results in a fragmented and incomplete response to family violence events from the healthcare community.

Like other chronic diseases, family violence often exacerbates when individuals and families experience critical stressors in their lives. While child abuse and intimate partner violence events are treated as single acute events by healthcare providers, in actuality these events are often embedded within a larger pattern of abuse. Failure to recognize these patterns of abuse and link individual family violence exposure events to others results in missed opportunities to prevent further abuse and fatalities.

A life course approach that explores both risk and protective factors related to the pathology of family violence offers a logical and comprehensive framework to view individual events within the larger context of the family. Understanding the pathology and potential prevention of family violence across the lifespan in context to individuals, families, and communities offers the potential for discovery of effective interventions to decrease harm and increase resilience. Factors leading to resilience against the deleterious effects of family violence are equally important to understand in order to prevent or arrest its occurrence. The life course framework embraces a positive view of
human capacity to cope and adapt when exposed to adversity. The “ordinary magic” of normative experiences has been recognized as a powerful phenomenon leading to resilience in children (Masten, 2001). Thus, targeting needed resources to at risk families has the potential to nurture and develop resilience. Assessing for family strengths as well as circumstances of violence risk, exposure, onset, co-morbidities, exacerbations, and remissions offers healthcare providers the opportunity to accurately view each situation within the context of a multidimensional and time-specific bio psychosocial event.

**Purpose**

The purpose of this study was to use a theory-driven approach to understand pediatric emergency department healthcare providers’ family violence assessment practices for both child abuse and intimate partner violence.

**Specific Aims**

Aim 1: To identify factors that influence *intentions to assess for family violence* (both child abuse and intimate partner violence) among pediatric emergency department (ED) nurses and physicians.

Aim 2: To identify factors that influence *family violence assessment behaviors* (both abuse and intimate partner violence) among pediatric ED nurses and physicians.

Aim 3: To understand how attitudes, subjective norms, behavioral control, intentions to assess, and assessment behaviors related to family violence assessment differ between pediatric ED nurses and physicians.

**Research Questions**

The overall goal of this study was to understand factors related to routine family violence assessment intentions and behaviors among pediatric emergency and urgent care
nurses and physicians. With a greater understanding of the antecedents to healthcare provider family violence assessment intentions and behaviors, possible interventions to support these practices can be designed to provide a more complete healthcare response to women and children at the pediatric emergency and urgent care patient encounter.

**Research Question 1**

What is the relationship between attitudes, subjective norms, perceived behavioral control and intention to screen for family violence (both child abuse and intimate partner violence) among a population of pediatric ED nurses and physicians?

**Research Question 2**

What is the relationship between perceived behavioral control and intention to assess for family violence and assessment behaviors (both child abuse and intimate partner violence) among a population of pediatric ED nurses and physicians?

**Research Question 3**

How do attitudes, subjective norms, behavioral control, intention to screen and screening behaviors differ between nurses and physicians?

**Definition of Terms**

*Family violence* is defined for purposes of this study to include both child abuse and intimate partner violence.

*Attitude* is defined as a person’s favorable or unfavorable evaluation of being able to perform the behavior in question.

*A subjective norm* refers to the perception a person had about whether important others approved or disapproved of the behavior.
Behavioral control is the amount of influence that an individual perceived he/she had over their actions.

Behavioral intention is how likely or unlikely an individual is to actually perform the behavior in question.

Routine assessment of family violence refers to the behavior of interest.

Assumptions

Assumptions for this study include the following:

1. Participant responses to the study questionnaire were an honest representation of their attitudes and beliefs about family violence.

2. The questionnaire accurately measured the constructs of the Theory of Planned Behavior (TPB).

3. The principle assumptions of the TPB apply to family violence assessment.

4. Responses expose patterns of behavior related to family violence assessment among nurses and physicians.

Limitations

Potential limitations for this study included threats to internal validity, external validity, and construct validity. Known limitations include the following:

1. Ability to generalize from this study was limited because all participants were from the same institution.

2. Participation bias may have been present among participants with strong feelings for or against family violence screening.

3. Responses were self-reported; thus, participants may have over or underestimated their actual screening behaviors.
Efforts made to minimize potential threats to validity and study limitations included the following:

1. The TPB questionnaire was pilot tested prior to data collection.
2. An appropriate study design was used.
3. Rigorous research methods were applied.
4. Appropriate statistical analyses were used to analyze the data.

**Significance**

This research, guided by TPB, provides critical information about how provider behaviors are determined by the complex interplay of attitudes, subjective norms, behavioral control and intention. It is important to understand the precursors or antecedents to family violence assessment practices to be able to focus efforts in areas most likely to increase the adoption of routine assessment practices as the standard of care. Findings from this study will inform a future intervention aimed at increasing assessment for family violence as a routine clinical practice. Violence assessment in the pediatric ED setting could significantly impact the health and well-being of women and children at risk of family violence.

Leading national and professional organizations have recognized the significant impact child abuse and IPV have on the health and well-being of women and children. Position statements by the ANA, ENA, IAFN, and the AAP have urged health care providers to screen for IPV in their practices. However, the U.S. Preventive Services Task Force (USPSTF) found no published studies or trials of the effectiveness of screening for child abuse or IPV in clinical settings so neither supported nor rejected screening (Nygren, Nelson, & Klein, 2004).
Using the TPB as a framework, this dissertation explored the relationships between attitudes, subjective norms, perceived behavioral control, intentions and self-reported family violence assessment practices among pediatric emergency department and urgent care nurses and physicians. The use of a behavioral theory as a framework for understanding healthcare provider behaviors related to family violence assessment is a unique approach for inquiry that was not found in the published literature. Findings from this study may lead to opportunities to address discipline specific educational needs as well as individual and departmental supportive measures aimed at increasing routine family violence assessment as a standard of practice.

The consequences of family violence are well known to ED healthcare providers. Without effective routine family violence assessment, each patient encounter is a missed opportunity for early identification and intervention. The pediatric emergency department and urgent care setting appear to be an appropriate place to obtain data about the incidence and risk of family violence. Unfortunately, many pediatric healthcare providers, who are in an excellent position to assess for family violence, fail to do so.

**Implications for Nurses**

Opportunities for nurses to impact the health and well-being of families exposed to violence exist at all levels of prevention. Routine inquiry about family violence would be considered a secondary prevention activity. However, if universal assessment was widely adopted and included education on healthy lifestyle choices related to contraception, positive parenting, and positive relationships; assessment could also be recognized as primary prevention. The inclusion of family violence inquiry to routine healthcare encounters could increase awareness and decrease the stigma often associated
with family violence. Secondary prevention includes routine inquiry to identify those experiencing family violence in hopes of limiting the duration and harmful effects of such exposure. Secondary prevention also includes working with other professionals, community agencies, and legal authorities in efforts to link family members to resources aimed at limiting or preventing future exposure to violence. Tertiary prevention includes providing culturally sensitive and state of the art medical and mental health care to family members experiencing short-term as well as long-term negative health effects as a result of exposure to family violence.

Nursing as a profession has a unique opportunity to take the lead in violence prevention at a local, state, and national level. As healthcare reform is implemented, health protection and promotion, both areas in which nurses excel, will take on greater significance. A public health model addressing family violence from a life course framework offers many opportunities at the individual, family, and community level to advance a national agenda to prevent or limit the harmful effects of family violence. Health care initiatives aimed at violence prevention might provide the impetus for a proactive rather than reactive healthcare model.

Recognizing child abuse and IPV as important safety and health issues allows nurses to initiate a dialogue aimed at helping women and children stay healthy and safe. Nurses have an opportunity to change the health trajectory of families experiencing family violence by establishing appropriate and acceptable assessment interventions and providing resources and referrals when indicated. Pediatric nurses are in an excellent position to pilot interventions aimed at identification and support of families needing help in creating peaceful homes. Developing assessment interventions will not end child abuse
or IPV but many families could benefit from resources designed to enhance positive parenting and interpersonal safety, thus decreasing the need for a medical response to family violence in the emergency room.

The physical, emotional, and financial burden of injury associated with family violence is an important public health problem (CDC, 2006; USDHHS, 2003; Campbell et al., 2002). Pediatric ED nurses are in an ideal position to identify patients and families at risk of family violence because they have opportunities to interact with women who bring their children to the emergency department for treatment. Without effective family violence assessment, pediatric emergency nurses miss an important opportunity for early identification and intervention.

While there is debate among some scholars and government agencies over whether there is sufficient evidence to recommend routine family violence assessment, most of these arguments are based on lack of experimental or randomized control trial (RCT) studies, long considered the gold standard in research. Just as a traditional medical model of screening fails to adequately address the complexity of symptoms and presentations related to family violence, the same is true for scientific measurement related to violence research. It is often difficult to accurately measure the results of violence prevention efforts. However, published studies demonstrating the negative health consequences of exposure to violence are abundant; providing a strong basis on which to recommend to nurses the importance and value of incorporating routine family violence assessment into their professional practice.

Recognizing family violence as a public health problem described by some as pandemic, is an important ethical obligation for nurses individually and collectively
Family violence assessment is a necessary nursing intervention if the health of women and children is to be protected and promoted. Routine family violence assessment can play a critical role in the identification of women and children in need of physical, psychosocial or parenting support during the prenatal, postpartum and early childhood years.

**Conclusion**

The ENA, ANA, IAFN, AAP, and the IOM have called for increased vigilance to identify and offer intervention to families at risk of IPV and other forms of family violence. Family violence prevention is the shared responsibility of all healthcare providers. This research study, based on the principles of TPB, focused on healthcare providers’ attitudes, subjective norms, perceived behavioral control, intentions, and family violence assessment behaviors in an effort to identify areas where emergency department nurses and physicians can have an important impact. Emergency nurses and other healthcare providers in community and pediatric settings are in an excellent position to play a major role in identifying women and children at risk of exposure to violence. Nurses are encouraged to take an active role in developing and implementing programs and practices designed to increase family violence assessment. These efforts have the potential to interrupt the cycle of violence and prevent family violence before it occurs in families.
CHAPTER 2
REVIEW OF THE LITERATURE
FAMILY VIOLENCE SCREENING/ASSESSMENT IN PEDIATRIC AMBULATORY SETTINGS

Introduction

The purpose of this review was to examine the existing literature related to family violence screening and assessment in pediatric ambulatory settings. Family violence includes both child abuse and intimate partner violence (IPV). The co-occurrence of IPV and child abuse is common with estimates as high as 60% (Appel, A., & Holden, G. 1998; Hamby et al., 2010). Scholars and professionals working in the field understand childhood exposure to witnessing or hearing IPV events are traumatic experiences for children (Humphreys & Campbell, 2004; Myers, 2004; Myers, Berliner et al., 2002). This exposure is viewed as a form of child abuse by some individuals and professionals. Most family violence screening and assessment research has focused on identifying barriers to screening women at risk for IPV in adult healthcare settings.

Primary care physicians have described asking women about IPV as the equivalent of “opening Pandora’s box” (Sugg & Inui, 1992). Overall, studies examining IPV screening and assessment practices among healthcare providers have found barriers include lack of knowledge, training, resources and time, language barriers, lack of effective interventions, and fear of offending the patient (Anderst & Dowd, 2010; Dowd, Kennedy, Knapp, & Stallbaumer-Royer, 2002; Erickson, Hill, & Siegel, 2001; Furniss, McCaffrey, Parnell, & Rovi, 2007; Klap et al., 2007; Knapp, Dowd, Kennedy, Stallbaumer-Royer & Henderson, 2006; Sugg & Inui, 1992; Waalen, Goodwin, Sotiz,
Peterson, & Saltzman, 2000; Yonaka, Yoder, Darrow, & Sherck, 2007). The few studies found in the literature examining IPV screening in pediatric ED or clinic settings reported challenges to screening in the presence of a child (Dowd et al., 2002; Knapp et al., 2006; Zink, 2000). Two intervention studies identified in this review included a screening question for child abuse within the context of screening for IPV. For purposes of this review, screening and assessment for child abuse was explored within the context of IPV screening and assessment in pediatric ambulatory healthcare settings.

None of the studies reviewed specifically identified the use of a behavioral theory or framework for their inquiry. However, a brief review of the Theory of Planned Behavior (TPB) and its implications for understanding clinician behaviors is included and considered necessary for this dissertation study.

Methods

Data bases searched for this inquiry included Ovid Medline, CINAHL, PsycINFO, and Pubmed. This review occurred from October 2009 to March 2010. Each data base was queried using the same search terms in the same order. A total of 42 articles were located using the key words and phrases: child abuse prevention, child abuse screening, domestic violence/intimate partner violence/partner violence prevention, domestic violence/intimate partner violence/partner violence screening, physicians practice patterns, attitudes of health personnel, family violence prevention, family violence screening, and pediatric ambulatory setting. Search terms were combined narrowing the scope of inquiry to 29 articles with the word screening in the title. Nine articles represented applications in the pediatric ambulatory setting. References from these articles were explored in an effort to locate additional pilot or intervention studies.
No additional studies were found. Articles reporting child abuse incidence, studies conducted outside the United States, studies focused on identifying adults for past child abuse, and studies in inpatient settings were excluded leaving a total of 21 articles for review. Each article chosen contributed to the overall description of published IPV and/or child abuse screening practices, barriers to routine screening, utilization of screening interventions in healthcare ambulatory settings, and ten articles were specific to pediatric ambulatory care settings.

**Key Words and Phrases**

Key words and phrases used for this review of the literature included the following terms: child abuse prevention, child abuse screening, domestic violence/intimate partner violence/partner violence prevention, domestic violence/intimate partner violence/partner violence screening, physician’s practice patterns, attitudes of health personnel, family violence prevention, family violence screening, and pediatric ambulatory setting.

**Findings**

There were no published studies found related to universal screening for child abuse in pediatric ambulatory settings but four studies were found on universal screening for IPV in pediatric ambulatory settings (Bair-Merritt, Feudtnew, Mollen, Winters, Blackstone, & Fein, 2006; Holtrop, Fischer, Gray, Barry, Bryant, & Wei, 2004; Parkinson, Adams, & Emerling, 2001; Siegel, Hill, Henderson, Ernst, & Boat, 1999). Two of these studies included a question about child abuse in the screening tool.

Of the 21 articles, one was a randomized control trial (RCT) comparing two IPV screening methods in a pediatric ED (Bair-Merritt et al., 2006). Three pilot or
intervention studies were found on screening for IPV in pediatric ambulatory settings (Holtrop et al., 2004; Parkinson et al., 2001; Siegel et al., 1999). One article described a protocol for identifying families at risk of child abuse and neglect (Murry, Baker, & Lewin, 2000). Two studies were found related to asking screening questions in front of children (Zink, 2000; Zink, & Jacobson, 2003). Eleven articles focused on healthcare provider attitudes, knowledge, opinions and barriers to screening. Three articles related to education of healthcare providers on intimate partner violence and routine assessment or screening were also included as pertinent to this review (Borowsky & Ireland, 2002; Dowd, M., Kennedy, C., Knapp, J., & Stallbaumer-Royer, J. (2002); Knapp, Dowd, Kennedy, Stallbaumer-Rouyer, & Henderson, 2006). Eight of the articles reviewed acknowledged a link between domestic violence and child abuse and viewed the report of either domestic violence or child abuse to be an indicator to further screen for the other (Borowsky, & Ireland 2002; Dowd, M., Kennedy, C., Knapp, J., & Stallbaumer-Royer, J. (2002); Knapp, Dowd, Kennedy, Stallbaumer-Rouyer, & Henderson, 2006; Murry, & Lewin, 2000; Parkinson, Adams, Emerling, 2001; Siegel, Hill, Henderson, Ernst, & Boat, 1999; Zink, 2000; Zink, & Jacobson, 2003).

Four categories of inquiry are represented; four studies were intervention/pilot/protocol reports, one study was a randomized control trial (RCT), three articles evaluated and made recommendations for health care provider education and implementation of screening for IPV in ambulatory settings, and two studies focused on the implications of screening for IPV in the presence of young children.
Randomized Control Trial Studies

The only RCT study found compared women’s satisfaction to an audiotape questionnaire to that of a written questionnaire (Bair-Merritt et al., 2006). The safety and ease of use for each method was also assessed. The study took place in an urban, academic pediatric ED that had more than 70,000 annual patient visits. Four questions related to IPV were contained in safety questionnaire that first asked six general safety questions which included, having a working smoke alarm, a family escape route in case of a fire, appropriate storage of cleaning supplies, and the phone number for the poison control center. The patient population was primarily African American and more than half were insured by Medicaid. Inclusion criteria included both English and Spanish speaking mothers, caregivers who were not accompanied by another adult, the child was not being resuscitated, and mother/caregiver was at least 18 years of age or an emancipated minor.

A total of 499 participants were randomized to an audiotape questionnaire group (268) or a written questionnaire group (231). The groups were comparable with most having completed high school, and identifying themselves as African American. Overall, 10% of women reported IPV; 11% of the audiotape questionnaire group and 9% of the written questionnaire group. Both groups approved of their specific screening method and preferred the audiotape or written method over ED provider screening. When asked about the risk and privacy of the screening method, the audiotape group reported significantly higher approval than the written questionnaire group; M = 4.2 (0.7) versus M = 3.8 (0.9); p < .001, and M = 1.6 (0.7) versus M = 1.9 (0.9); p = .001, respectively. The results of
this study suggest that an audiotape IPV questionnaire may be an acceptable, safe, and confidential method and may be preferred by women over direct ED provider inquiry.

Two additional RCT studies were recommended by dissertation committee experts and are included in this review. Both Thompson et al. (2000) and Campbell et al. (2001) explored provider focused interventions aimed at increasing provider’s skill sets to respond to victims of IPV, and each also included environmental components aimed at awareness and education of resources for providers and patients.

Thompson et al. (2000) randomized five primary care clinics from a health maintenance organization (HMO) to explore the effects of an intensive one year intervention aimed at increasing provider IPV screening in the adult primary care setting. Two clinics served as experimental sites and three served as controls. The intervention group received training sessions, a bimonthly newsletter, four rounds of education related to IPV screening, as well as system support that included posters, cue cards, and questionnaires. Clinic champions were identified in the experimental group and received three additional training sessions. Documentation of IPV inquiry increased by 14.3% in the intervention group. However, this change was not the result of provider initiated IPV inquiry documented in the patient record but rather the result of patient responses to physical exam questionnaires. Provider self-efficacy increased and provider fear of offending decreased in the intervention group and was sustained at 9 and 21 month follow up. Six victims of IPV self-disclosed after viewing posters in the clinics and IPV brochures strategically placed in restrooms were routinely taken; demonstrating the importance of environmental cues and resources in the identification and treatment of exposure to IPV.
Campbell et al. (2001) used an experimental design to explore the attitudes and knowledge of adult emergency department nurses and physicians about IPV. The study used a system-change model aimed at improving the healthcare response to victims of IPV in the adult emergency department. This study included 12 hospital emergency departments, six from Pennsylvania and six from California, each with 20,000 to 40,000 annual visits that were randomized to intervention and control hospitals. The intervention consisted of a two day IPV training aimed at increasing knowledge and building skills. The intervention required EDs to identify a multidisciplinary team consisting of a physician, nurse, social worker and hospital administrator to participate in the training. Teams created written action plans for their departments aimed at adoption of system changes aimed at improving the healthcare response to IPV. The following four hypotheses were proposed and tested:

1. There is a difference in the ED culture about IPV in experimental EDs compared with control EDs.

2. There is a difference in ED personnel knowledge of IPV and Attitudes toward battered women in experimental EDs compared with control EDs.

3. There is a difference in the proportion of women identified as battered in experimental EDs compared with control EDs.

4. There is a difference in female patients’ satisfaction with ED care in experimental EDs compared with control Eds.

Outcomes were identified to test the above hypotheses and measured at baseline, 9 to 12 months, and 18 to 24 months post intervention. Study results indicated that experimental EDs had significantly higher scores on ED culture ($F = 5.72, p = 0.04$).
Culture included the following observable outcomes; appropriate policy and protocols that met regulatory standards, materials such as posters, brochures, and intake forms that included IPV screening questions or chart prompts, and documented provider trainings. The Staff Attitudinal Survey (SAS) was used to measure healthcare personnel attitudes and knowledge. The SAS consisted of 23 self-report Likert items and has published reliability and validity with Cronbach’s alpha of 0.73. This measure was administered at baseline and at final 18 to 24 month post intervention. Those in the experimental hospitals reported significantly higher scores ($F = 5.57, p = 0.019$) on the SAS post intervention. The ratio of number of women documented as positive for IPV in the medical record to those who self-reported IPV on an anonymous survey was not significantly effected by the intervention ($F = 0.411, p = 0.52$). Patient satisfaction was found to be significantly higher in the experimental EDs post intervention ($F = 15.43, p < 0.001$). While an increase in identification of women experiencing IPV did not result from this intervention the results of this study suggest that a systems change model may be helpful in creating a supportive ED culture toward IPV assessment; chart prompts may facilitate provider assessment, and knowledgeable and skillful nurses and physicians may increase patient satisfaction related to IPV assessment.

**Pilot/Intervention/Protocol Studies**

The three question *Partner Violence Screen* (PVS) was used to assess for IPV among 5,445 women presenting with their children to a primary care clinic (PCC) associated with Children’s Hospital of Michigan beginning March 1, 2002 through February 28, 2003 (Holtrop et al., 2004). The children of women in the study were identified as 85% black and 80% received Medicaid. Exclusion criteria included women
who did not speak English and women who were accompanied by other adults.

Screening was not done if children age 3 years or older were present unless the woman could be asked privately or handed the form to fill out herself and return it to the nurse.

PCC medical assistants, nurses, and resident physicians had received training on the PVS questionnaire prior to data collection. Prior to the study signs were placed in the waiting room and in examination rooms stating that asking about IPV was a policy in the clinic.

The PVS asked the following yes/no questions:

1. Have you been, hit, punched, threatened or otherwise hurt by someone within the past year?
2. Do you feel safe in your current relationship?
3. Is there a partner from a previous relationship who is making you feel unsafe now?

A total of 164 positive IPV screens received social work referrals during the study period compared with only nine referrals to social work for positive screens during the 12 months preceding the study. The authors reported the positive predictive value of the PVS as 91.5%. Implementing a formal program of IPV screening using the PVS appeared to be successful in identifying a significantly higher number of women needing IPV resources in a busy PCC when compared to IPV referrals before program implementation.

A study of IPV screening in a private pediatric practice was conducted by Parkinson et al (2001) using an 11 item survey. The survey was given to 553 mothers bringing their child/children to a well-child visit in a three physician private practice in Cape Cod, Massachusetts. The population was predominately white. Participants were
given the survey when placed in an exam room with their child. Participants could choose to fill out the questionnaire anonymously and leave it in a locked box in the exam room or could leave it out for the physician to review. The authors found the rate of disclosure of domestic violence in the group who chose to be anonymous was higher than the group who chose to have the physician review the survey (OR: 1.7, 95% CI: 1.0 – 2.9). Almost fifteen percent (14.7%) of participants reported experiencing abuse in a past relationship and 2.5% reported being in a current abusive relationship.

Siegel et al. (1999) conducted a pilot study in a suburban pediatric practice in Northern Kentucky and found a domestic violence incident rate of 31% for abuse in a past relationship and 16% for abuse within the past two years. This study included 154 women. Ninety-nine participants received Medicaid and 51 participants had private insurance. Siegel found no significant difference in the incidence of domestic violence in Medicaid versus private insurance participants. Twenty-five participants reported domestic violence within the past 24 months and five cases of child abuse were disclosed by participants. All abusive events reported in the past 24 months were reported to the Kentucky Domestic Violence Team (KDVT). Two of the five child abuse cases had not been reported previously so reports were made to the proper authorities. The five cases of child abuse disclosed in this study occurred in families in which the mother reported being afraid of her partner.

Study protocols were in place that followed all mandated reporting laws involving child abuse and domestic violence; women were informed after disclosure of abuse of the need to report these events to state and local authorities. Women were referred to battered women’s shelters and offered other supportive services. The researchers
conclude that women if asked will disclose domestic violence in community practice settings and deem the activity of screening in the pediatric clinic setting an important health care intervention in pediatric practice. This pediatric practice had reported only one event of domestic violence in the previous four years.

The *Parenting Maltreatment Risk and Intervention Protocol* was developed to aid in the identification of a family’s potential risk for child abuse or neglect (Murry, Baker, & Lewin, 2000). The protocol was based on published research of risk factors associated with child abuse and neglect such as the age of the mother, socioeconomic status, unplanned pregnancy, and lack of social support. The protocol used an interview format and consisted of 19 questions in 5 risk domains. Risk domains included:

1. Parental age, education, marital status.
3. Family function and social support
4. Health issues
5. Congenital issues

The protocol was piloted in a primary care office and as part of an early home visitation program for new parents. The protocol interview was included in the initial health history assessment. A small number of healthcare providers, 6 nurses, 3 early intervention specialists, and 1 nurse practitioner piloted the tool in both settings. This group found the protocol could be completed in 5 minutes. The protocol was accompanied by the *Parenting Maltreatment Risk Intervention Algorithm* which served as a guide to matching risks to available resources and referral services. The number of families included in the pilot was not included. The authors recommend the protocol be
used in primary care settings so validity and reliability of the instrument can be established. Further studies to verify validity and reliability of the protocol were not found at the time of this inquiry.

A dissertation study on preferred methods of screening in pediatric ambulatory settings, while not identified in this literature search, is considered significant and is included in this review of the literature (Lewis-O’Conner, A., 2007). This study explored preferences for types of screening; a self-administered computer IPV screen, paper and pencil IPV screen, and a face to face IPV screen. The majority (80%) of women preferred to be screened via a computer screen. Women with a history of IPV (94%) as well as those without a history of IPV (75%) felt asking about IPV was appropriate in the pediatric clinical setting.

Implications of Screening when a Child is Present

An issue of particular importance when screening for domestic violence in pediatric clinic settings is asking screening questions with children present. This issue is explored in two articles identified in this search. The two studies agreed screening questions fashioned from the American Medical Associations (AMA) recommendations could be asked in front of children under the age of three years (Murray, & Lewin, 2000; Zink, 2000; Zink, & Jacobson, 2003). For older children, there was more debate on whether it was advisable to ask questions when they were present. Concerns and recommendations to address these issues were presented by Zink (2000) and Zink and Jacobson (2003). The primary concern was safety of the mother and her children. If a child reported to an abusing partner that their mother disclosed domestic violence or abuse to a health care provider, a dangerous situation could place the mother and her
children at risk (Zink, & Jacobson, 2003). Hearing a disclosure of abuse or hearing their mother deny abuse occurred when in actuality it had occurred was another concern identified by Zink and Jacobson. The authors suggest a child could be confused as to why their mother is protecting and sustaining the family secret, compromising the child’s view of what is and what is not acceptable in families. Both studies recommended screening in the presence of children under the age of three years but suggest permission from the mother should be asked when older children are present. If a positive screen is obtained, further questioning should be done privately with the mother.

**Education of Healthcare Providers on Screening for IPV**

A qualitative study on the attitudes and feelings of both mothers and healthcare providers related to IPV screening in the pediatric emergency department (ED) provided important insight into the barriers and facilitators associated with IPV screening. This qualitative study included six mothers’ focus groups and four provider focus groups. Groups were ethnically homogeneous with two groups held with white mothers, two groups held with African American mothers, and two groups held with Latina mothers. The provider groups included two female nurse groups, one male physician group, and one female physician group. Mothers and healthcare providers believed IPV was a common problem.

Provider barriers to IPV screening included time constraints, fear of offending, and lack of immediate resources for a positive screen. Mothers approved of IPV screening in the pediatric ED but wanted their child’s health concern to be taken care of first. The women also clearly defined the importance of provider empathy and warmth when performing IPV screening. Mothers also expressed fear of being reported to child
protective services (CPS) if they disclosed IPV. Providers indicated they would feel obligated to report to CPS if a woman disclosed IPV. Four main themes emerged from this important study; providers need to demonstrate empathy and a helpful attitude, the child’s health needs to be the first priority, a positive IPV screen should not automatically result in a report to CPC, and resources must be available immediately for positive IPV screens.

Current domestic violence screening practices and the role of health care providers was the topic of two studies concerned with provider education, attitudes, and behaviors (Borowsky & Ireland, 2002; Knapp, Dowd, Kennedy, Stallbaumer-Rouyer, & Henderson, 2006). Borowsky and Ireland (2002) randomly selected 1350 pediatricians and 650 family physicians to participate in a survey to assess provider knowledge, practices, and training among senior residents and practitioners. A response rate of 41% was achieved for pediatricians and 30% for family practice physicians.

Results showed only 8% of family practice physicians and 5% of pediatricians routinely screen for domestic violence. Family practice residents were more likely to screen for domestic violence (18%) during routine well-child or teen visits than pediatric residents (7%). All participant groups lacked fundamental knowledge of important aspects of care related to domestic violence, demonstrated by > 60% of family medicine and > 75% of pediatric residents thinking a woman in an abusive relationship should be encouraged to leave the relationship immediately. Clearly, a need for education is realized by both family medicine and pediatric health care providers with 40% of family medicine and 72% of pediatric practitioners requesting more education related to domestic violence.
Knapp et al. (2006) demonstrated that educational interventions could make a difference in attitudes, self-efficacy and behaviors in pediatric emergency department staff related to domestic violence. A 22 item Likert scale was used to measure knowledge, beliefs and behaviors of 79 pediatric emergency department staff before a domestic violence educational intervention, immediately following the intervention, and at six months after the intervention. Participants showed a significant positive change in attitudes and beliefs related to screening for domestic violence in five of nine questions immediately post intervention and at six months follow up. Self-efficacy scores also showed significant positive change in five of seven questions immediately post intervention and at six month follow up. Two self-reported items on clinical behaviors also showed significant improvement at the six-month evaluation.

1. “In the past year I have seen a parent/caregiver with an injury and have asked about IPV” (baseline: 3.4; 6 month follow up: 2.7 [p < .05]).

2. “In the past year, I have seen an abused child and asked about IPV” (baseline 2.6; 6 month follow up: 1.8 [p < .01]).

This research study demonstrated that barriers to routine assessment of IPV in the pediatric emergency department can be addressed and overcome. Providing a brief educational program as well as a supportive environment for continued positive change can sustain these gains over time.

**Theory of Planned Behavior**

The use of a behavioral theory or framework for understanding healthcare provider behaviors related to family violence assessment practices was not found in the published literature. Understanding the behavioral choices of healthcare providers
related to family violence assessment would be useful information to have when striving to develop supportive measures to increase assessment practices. Using a theoretical framework to investigate family violence assessment would provide a systematic approach that could help identify where energy and resources could be directed when targeting interventions that are most appropriate, acceptable, and effective to healthcare providers (Fraze, Rivera-Trudeau, & McElroy, 2007).

Understanding how individuals, groups and communities adopt certain health promoting or health damaging behaviors is the underlying concept of the Theory of Planned Behavior (TPB). TPB, while widely used as a framework for exploring patient behaviors, has not been widely used to explore healthcare provider behaviors. The constructs of TPB include an individual’s attitudes, subjective norms, behavioral control, and intentions related to a specific behavior. While a behavioral theory was not explicitly identified in previous studies Sugg et al. (1999) explored three TPB constructs, attitudes, beliefs, and behaviors related to IPV screening. This study included 240 primary care providers; 71 physicians, 13 physician assistants, 6 nurse practitioners, 58 registered nurses, 25 licensed practical nurses, and 33 medical assistants. A response rate of 86% was achieved. Results indicated that the majority of physicians (50%) and nurses/nurse assistants (70%) underestimated the prevalence of IPV in their practices, lacked knowledge of the health consequences of exposure to IPV, and 50% indicated they were not at all confident in their ability to ask about IPV (Sugg et al. 1999).

A recent review exploring the use of TPB and its precursor the Theory of Reasoned Action (TRA) and healthcare provider behaviors found only 20 published studies (Perkins et al., 2007). Professions represented included medicine, nursing,
pharmacy, and other health workers. Clinical behaviors explored included the use of clinical guidelines for prescribing antibiotics, intentions to educate adolescents about sexually transmitted diseases (STD), physician intentions to order autopsies, nurse delivery of smoking cessation information, nurse management of pain using narcotics, and referral of mental health patients to self-help groups. TPB and TRA constructs of attitude, subjective norm, and perceived behavioral control were found to be predictive of intentions and behaviors but were different dependent on the particular behavior and specific clinical group. Attitude was the strongest predictor for adopting clinical guidelines for antibiotic use, subjective norm was the strongest predictor of intentions to order an autopsy, and perceived behavioral control was the strongest predictor for intentions to educate adolescents on STD (Perkins et al., 2007).

Additional support for the predictive power of TRA was found in a study of physician intention to prescribe emergency contraception (EC) to adolescent patients. Even though adolescence is known to be a time of sexual exploration that often includes risk taking behaviors, physicians were more likely to prescribe EC to women, 77%, than to teenage girls, 42%. High intention to prescribe EC was predicted by a positive attitude toward emergency contraception and the belief that peers and important professional groups were supportive of the practice (Sable et al., 2006). A subsequent study revealed that 1 in 5 providers were hesitant to provide information and education about EC to teenage girls (Kelly et al., 2008). Differences between high intention and low intention EC physicians was not related to knowledge about EC or participant demographics; but rather to the attitude and belief that EC provided additional options to adolescent girls, enabling them to avoid unintended pregnancy and abortion (Kelly et al., 2008). Lack of
consistent and complete healthcare resources, including access to EC, places sexually active teenage girls’ health in jeopardy. These two studies demonstrate the importance of considering clinician attitudes and beliefs when designing and implementing educational as well as clinical programs and practices.

Despite increasing availability and easy access to the most current research, there continues to be a significant delay between knowledge discovery and the adoption and dissemination of science among healthcare providers. Even once published and widely disseminated some evidence-based interventions don’t always result in front line clinician behavior changes (Perkins et al., 2007). Research using behavioral theories to better understand how and why clinician behaviors are adopted is needed to increase family violence assessment. Family violence is considered a public health problem of enormous scale. A public health approach to family violence prevention dwells in the concepts of health promotion and health protection; thus, includes interventions that increase routine assessment behaviors.

**Limitations**

There are limitations to this review of the literature. The four pilot/intervention/protocol studies were conducted with 553 mothers, primarily Caucasian, using a private practice in Cape Cod; 154 mothers, 64% Medicaid, using a suburban pediatric practice in Kentucky; and 5,445 mothers, primarily African American and 80% Medicaid, in an urban academic pediatric clinic affiliated with a children’s hospital in Michigan. The protocol study did not identify the setting other than as a primary care clinic and a home visitation program, and did not state the number of mothers interviewed. These groups of mothers may not be representative of other
populations and practices. Research in progress is not included and some research studies may not be published. With only three intervention studies and one RCT identified, many questions related to the generalizability of findings remain unanswered. Every effort was made to interpret each article objectively but the chance for interpreter bias though unintended exists.

**Discussion**

No studies were identified when reviewing the literature on screening for child abuse in pediatric ambulatory settings. This is unfortunate considering child abuse is a major public health problem in the United States (The National Child Abuse and Neglect Data System, 2005). The paucity of published literature related to screening for IPV and child abuse in pediatric ambulatory settings speaks loudly to the complexity of legal, safety, personal and professional issues involved when conducting violence research. With few empirically based studies many questions remain unanswered.

The impact of IPV and child abuse on health and well-being was fully recognized in all articles reviewed. The impact disclosure of abuse has on the immediate and future safety of mothers and children was acknowledged and presents complex ethical questions for healthcare providers when deciding to screen or not to screen for IPV and child abuse in ambulatory care settings. Moral and ethical questions related to fully informed consent for participants must be considered when evaluating the results of the Siegel et al. study. Caution is urged when interpreting the results of this study, had participants known of the need to report events of IPV and child abuse to authorities before consenting to participate in the study; results likely would be different from those reported. Studies show women are at an increased risk of danger when attempting to leave an abusive
relationship and that women choose the time to leave an abusive relationship after carefully weighing the risks and benefits for themselves and their children (Humphreys, & Campbell, 2004).

None of the articles reviewed documented the use of a known or emerging health promotion theory as a foundation for the design or implementation of the screening intervention used. The use of theory could assist scholars and clinicians doing family violence research. The use of an empirically based behavior theory such as the Theory of Planned Behavior (TPB) coupled with emerging public health promotion theories of diffusion of innovations, and social marketing frameworks could launch important and sustainable campaigns when attempting to address the IPV and child abuse as a public health issue. A gap in the literature exists as evidenced by the paucity of published research found on screening for IPV and child abuse in pediatric ambulatory settings. The three identified pilot studies were conducted in 1999, 2001, and 2004. The RCT comparing screening methods was published in 2006. The lack of more recent published literature suggests a need for renewed efforts by healthcare providers to develop and test practical and reliable screening interventions to identify women and children who are victims, or are at risk of becoming victims of family violence.

Recommendations

Future research should take into consideration the complex ethical, legal, and psychosocial aspect of routine assessment for IPV and child abuse. The intersection of healthcare, legal, and social support systems needs further exploration to form comprehensive and coordinated responses to IPV and child abuse events. Policy makers and healthcare leaders must partner to actively seek optimal practices aimed at protecting
women and children from violence. Current mandated reporting laws, while well intentioned, remain controversial and need further research as to their benefit and effectiveness. Disparities exist due to the uneven application of these laws when socioeconomic status, race and ethnicity, and gender of victims are considered. These inequities contribute to the hesitation of victims to disclose and seek help. All healthcare providers are mandated reporters for child abuse but many lack adequate knowledge and training in addressing children exposed to IPV. The potential consequence of not routinely assessing for IPV and child abuse at every patient encounter includes missing opportunities to connect those most at risk to needed resources.

Healthcare providers have an opportunity to change the health trajectory of families experiencing IPV and child abuse by finding appropriate and acceptable assessment interventions and providing resources and referrals when indicated. Options should be considered which allow women to self assess and gain insight and information related to their family situation. Encouraging women to talk to healthcare providers when needing resources to provide safety for themselves and their children seems a plausible and positive intervention. If both mothers and healthcare providers recognize IPV and child abuse as important safety and health issues then a dialogue aimed at helping women and children stay healthy and safe could begin. Developing new assessment interventions will not end IPV or child abuse but many families could benefit from resources designed to enhance positive parenting and interpersonal safety thus decreasing the need for a medical response to IPV and child abuse. The nursing profession should play an important role in addressing the public health problem of IPV and child abuse by educating future nurses, using emerging or existing public health
promotion theories and frameworks when designing and conducting violence research, and by caring for and empowering women and children at risk of becoming victims of family violence.
CHAPTER 3
LIFE COURSE THEORY
FRAMEWORK FOR FAMILY VIOLENCE PREVENTION

Introduction

Violence occurring within the family is difficult to identify and address. Root causes and contributing factors that lead to family violence are often daunting and multifaceted. Family violence is known to occur across the life span with those who are very young or very old being particularly vulnerable. Family violence includes child abuse, intimate partner violence, and elder abuse with multiple types of violence co-occurring in some families. Despite this, each type of family violence is generally viewed as a single event and is studied and responded to separately.

Family violence can be considered as a chronic condition or disease with remissions and exacerbations occurring over time. As with other disease processes some individuals fare better than others. Factors leading to resilience against the deleterious effects of family violence are equally important to understand in order to prevent or arrest its occurrence.

A logical framework for exploring the pathology and potential prevention of family violence is through a life course theoretical approach. Assessing for family circumstances of violence risk, exposure, onset, co-morbidities, exacerbations and remissions offers practitioners a way to accurately view each situation; thus, providing an opportunity for intervention. This paper will provide a brief overview of the background and significance of child abuse, IPV, and elder abuse, describe core life course constructs and principles, and introduce a new conceptual framework for prevention and treatment.
of family violence. Examples of primary, secondary, and tertiary prevention will be discussed as well as implications for health policy and nursing practice.

**Background and Significance**

**Child Abuse**

The case of Mary Ellen Wilson in 1874 is often recognized as the beginning of the child protection movement in the United States (Myers, 2004). At that time in history there were no child protection laws. Neighbors became aware of the severe physical abuse Mary Ellen was enduring at the hands of her mother and sought help from Henry Bergh, a prominent New Yorker and founder of the American Society for the Prevention of Cruelty to Animals. Bergh hired a lawyer and the case was eventually taken to the New York State Supreme Court. As a result, Mary Ellen was placed in a safe home; her mother was sentenced to one year in prison, and in 1874 the New York Society for the Prevention of Cruelty to Children was formed. The same law enforcement principles that were used by the newly formed Society in its efforts to pass and enforce child protection laws are still widely used today.

Decades passed and 88 years later, in 1962, American physicians Kempe, Silverman, Steele, Droegemueller, and Silver published the landmark article *The Battered-Child Syndrome* in the Journal of the American Medical Association (JAMA), thus naming and exposing this previously silent syndrome as a “significant cause of disability and death” among children (p.105). Much literature has been written since then about risk factors and indicators of child abuse. Child protection and reporting laws are now mandated in every state. Regardless of these advances, progress towards preventing
child abuse or limiting its negative health consequences continues to be an outstanding societal need (Klevens & Whitaker, 2007).

Child abuse does not happen in isolation, but within households. Adult abusers that society loves to hate were often the abused children that society strived to save. Child abuse can occur as a single impulsive event such as with shaking a baby but it is more likely that abusers do not have a sudden onset of violent behavior, but rather repeatedly demonstrate patterns of abusive or concerning behaviors. In 2008, there were 3.3 million reports of child abuse and neglect resulting in 772,000 substantiated cases, and 1,740 child fatalities (Centers for Disease Control and Prevention, 2010). A general profile describing the characteristics of a child abuse perpetrator does not exists but mothers are more often associated with child neglect while fathers and mothers’ boyfriends are most often associated with fatal child abuse events (Child Welfare Information Gateway, 2010).

**Intimate Partner Violence**

Approximately 30 percent of American women experience physical or sexual abuse by an intimate partner in their lifetime (Tjaden & Thoennes, 2000). Intimate partner violence (IPV) results in 4.8 million physical assaults and rapes against women each year as well as 2.9 million assaults against men each year at a cost of 8.3 billion dollars (Centers for Disease Control and Prevention (CDC), 2009). Of the 1,510 fatal IPV assaults reported in 2005, 78 percent were female and 22 percent were male (CDC, 2009). Children witness many of these violent events placing them at high risk of becoming victims and perpetrators in the intergenerational cycle of violence (Tjaden & Thoennes 2000). Estimates of the co-occurrence of child abuse and IPV are reported to
be as high as 60 percent (Appel & Holden, 1998). More recent data are not yet published; however, the Bureau of Justice Statistics (2007) estimates children are present in between 35 to 50 percent of homes in which IPV occurs. Half to two-thirds of occupants living in domestic violence shelters are children (National Network to End Domestic Violence, 2007). Thus, child abuse and IPV are often shared experiences within the family.

**Elder Abuse**

Elder abuse includes physical neglect, physical abuse, sexual abuse, emotional and psychological abuse and neglect, financial exploitation, and self-neglect. Women and those over 80 years of age are at greatest risk (National Center on Elder Abuse (NCEA), 2005). As with other forms of violence, perpetrators are often a trusted family member (NCEA, 2005). The physical and cognitive challenges many frail elderly experience make them particularly vulnerable to abuse. Stressed family caregivers who may be dealing with their own physical and mental health challenges and/or financial strain are placed in situations that could lead to perpetration of violence. Mental health issues, lack of social support, emotional or financial dependency on the elder, history of abuse, social isolation, and alcohol abuse are strong caregiver predictors for elder abuse and neglect (Goodman, 2006). Literature was not found on the co-occurrence of elder abuse with other forms of family violence. However, it presents an additional circumstance in which children are likely exposed to abusive behaviors, and is included here as an important and evolving public health issue.

Violence is a significant public health problem at all ages in the life course with multiple types of violence overlapping in some families and households. Generally,
professionals respond to child abuse and IPV separately despite the co-occurrence of the
two types of abuse. Likewise, both groups of professionals work independently from
professionals addressing batterers. This approach leads to a fractured and uncoordinated
response to family violence (Little & Kantor, 2002). In contrast, a life course framework
approaches exposure, risk, and onset of family violence at all ages with a more
comprehensive lens. Science has identified many psychosocial and behavioral factors
that sustain and perpetuate family violence for perpetrators and victims. A life course
approach offers the possibility of identifying times in life when these factors are
amenable to alteration; thus, leading to more successful prevention strategies.

**Life Course Theoretical Constructs, Definitions, and Terms**

Life course theory provides a comprehensive, time-continuous framework that
embraces the interconnectedness of diverse antecedents to human health and conditions
at critical or sensitive time periods across the lifespan (Elder, 1994; Ben-Shlomo & Kuh
2002; Kuh et al., 2003). Four theoretical constructs are posited by a life course approach
and they have a strong potential for application to the prevention of family violence.
These four constructs include: (1) linked lives, (2) historical time and place, (3) timing of
significant events and milestones, and (4) individual agency to make choices across the
life span.

The construct of *linked lives* is the central belief and fundamental theme of life
course theory. Lives are by design linked to others. Stages of human development and
the idea of linked lives are apparent in both Maslow’s hierarchy of needs theory and
Erikson’s stages of man theory (Maslow, 1943; Erikson, 1950; Ventegodt, Merrick et al.,
2003).
In addition to the basic physiological needs of individuals, Maslow (1943) included safety, belonging, and self-esteem as fundamental to human development. Erickson (1950) theorized that individuals move through eight developmental stages related to trust, autonomy, initiative, industry, identity, intimacy, generativity, and ego integrity. Both Erikson and Maslow recognized the fundamental principle that human beings are intrinsically bonded to and dependent upon relationships with each other. Human beings are immediately engaged in reciprocal relationships at birth. These early parental relationships can influence both positive and negative trajectories.

**Historical time and place** refers to the social and historical context of an individual. Socioeconomic status, gender, cultural norms, occupations, wars, politics, laws, technology and innovations influence the way people adapt, change, or navigate across the lifespan. Historical **time and place** also refers to the collective experience of generational cohorts by age such as the deprivations experienced by those born or growing up during the Great Depression or the expansion of career options and personal opportunity experienced by women born after the Women’s Movement of the 1960’s (Elder, 1994).

**Timing of significant events** refers to the chronological sequence of life events such as graduating from school, becoming independent from parents; then, marriage, pregnancy, birth, parenthood, divorce, and death of significant loved ones. Cultural attitudes, beliefs and norms related to the timing of life events such as the birth of a baby contribute to the meaning of these events. Childbirth can be seen as a joyful event placing a young couple on a trajectory for a positive parenting experience or if ill-timed and experienced in young adolescence can place a young woman on a trajectory for
school failure, isolation from peers and dependence on welfare (Elder, 1994). *Timing* also refers to the fact that while individuals have similar experiences, each will react differently based on the timing of particular events or milestones and each individual’s unique capacity to respond and adapt to new or changing situations and roles.

*Individual agency* suggests that individuals throughout the life span are active participants in decision-making anchored in time, place and experience. That is, an individual’s capacity to determine his or her life trajectory is influenced by past experiences, current existing opportunities and challenges, future goals, and the constraints of each unique setting and situation. Thus, from a life course viewpoint, human development extends beyond the childhood years and is a lifelong endeavor that is dynamic, interpersonal, intercultural, and unique for each individual (Elder, 1994).

The life course framework acknowledges that *trajectories, transitions, and turning points* occur across the life span. *Trajectories* refer to social, psychological, or physiological pathways in an individual’s life span (Kuh et al., 2003). A career path is an example of a social *trajectory* within which, timing and individual agency influence current as well as future goals and obligations (Elder, Johnson, & Crosnoe 2003). Examples of psychological and physiological *trajectories* are the experiences of having depression or a chronic disease such as asthma or diabetes. *Trajectories* have a definite beginning and end. *Trajectories* represent a long-view of the life course.

*Transitions* occur within trajectories and involve changes that are generally a short-term experience related to an individual’s social, psychological, or physiological state. A first pregnancy and the birth of a baby would be examples of *transitions* occurring within the trajectory of marriage (Copher & MacMillan, 2005). Transitions
can also be the beginning of trajectories, as childbirth is the beginning of parenthood. Transitions have social rules attached to them such as the appropriate age and circumstance at which to marry or have a child.

*Turning points* refer to abrupt changes at particular times in the life course. Resilience in survivors of child sexual abuse may be related to specific turning points at critical times in the life course. Barnyard & Williams (2007) used a life course framework to study resiliency and recovery in women survivors of childhood sexual abuse. Recovery from past sexual abuse and substance abuse seemed to co-occur in some women suggesting that they made a conscious choice to stop using drugs or alcohol to cope with the pain of past abusive experiences.

**Family Violence: A Framework for Prevention**

Exploring family violence on a continuum from birth to death within the context of the family and the larger social community allows both risk and protective factors to be assessed, and allows significant events, transitions, and turning points to be considered in relation to potential intervention. Identification of proximal and distal antecedents and critical or sensitive time periods that contribute to both risk and protective factors may offer a rich exploration based on the context of individual and collective experiences of family members. The proposed framework, *Family Violence Prevention: a Framework for Prevention* (Figure 1) includes collective parental, child and family capacity based on risks and protective factors across the lifespan and respects the individual strengths and challenges of all family members. The framework also depicts the “linked lives” and “timing” principles embedded in life course theory.
Figure 1. Family Violence: A Framework for Prevention.

Collective Capacity = Risk + Protective factors.

Critical Time Period = Time window in which potential for negative or positive consequence exists due to adaptation of organism or system to stressor.


Maladaptive response = Family violence (Child Abuse, Intimate Partner Violence, Elder Abuse).
Primary Prevention Equals Routine Assessment at all Healthcare Encounters

The framework provides for primary, secondary, and tertiary prevention at every age and stage across the life span. The framework depicts that individuals and families navigate challenges and opportunities in relationship to their individual and collective capacity. Collective capacity refers to the sum of both risk and protective factors. These risk and protective factors include both parental and child domains. Child abuse and IPV are more likely to occur at specific periods, and patterns exist related to the social and environmental conditions in which families live relative to race, poverty and parenting experience (Wulczyn, 2009). Not all adults and children exposed to abuse and neglect experience major negative health consequences, indicating that some individuals have resilience to exposure. It is possible that protective factors might effectively serve as an inoculation or antibody to violence if identified and successfully transferred to specific individuals or populations at an optimal time in the life course.

Known risk factors related to child abuse and IPV (Table 1) fail to identify many children and families at risk. Many of the risk factors associated with family violence may be amenable to intervention. The life course framework presents an opportunity to explore relationships between risks and protective factors (Table 2) in the child and parental domains.
Table 1

*Parental and Child Risk Factors*

<table>
<thead>
<tr>
<th>Child Factors</th>
<th>Parental Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficult temperament</td>
<td>Young parenting age</td>
</tr>
<tr>
<td>Special needs</td>
<td>History of abuse</td>
</tr>
<tr>
<td>Multiple birth</td>
<td>Lack of School success/education</td>
</tr>
<tr>
<td>Lack of bonding/attachment</td>
<td>Drug and alcohol use</td>
</tr>
<tr>
<td>Poverty/SES</td>
<td>Poverty/SES/unemployment</td>
</tr>
<tr>
<td>Race</td>
<td>Delinquency</td>
</tr>
<tr>
<td>Lack of supervision</td>
<td>Lack of social support</td>
</tr>
<tr>
<td>Harsh discipline/authoritarian discipline</td>
<td>Lack of parenting skills</td>
</tr>
<tr>
<td>Non related male living in home</td>
<td>Marital status/single parenthood</td>
</tr>
<tr>
<td>Exposure to violence</td>
<td>Exposure to violence</td>
</tr>
</tbody>
</table>
Table 2

*Parental and Child Protective Factors*

<table>
<thead>
<tr>
<th>Child Factors</th>
<th>Parental Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasant temperament</td>
<td>Appropriate parenting age</td>
</tr>
<tr>
<td>Positive fetal environment/prenatal care</td>
<td>Prenatal care/access to health care</td>
</tr>
<tr>
<td>Positive bonding/attachment</td>
<td>School success/education</td>
</tr>
<tr>
<td>Adequate nutrition/breast feeding</td>
<td>Employment</td>
</tr>
<tr>
<td>Adequate housing</td>
<td>Positive lifestyle choices</td>
</tr>
<tr>
<td>Safe home and neighborhood environment</td>
<td>Stable home and neighborhood</td>
</tr>
<tr>
<td>Adequate Supervision</td>
<td>Adequate social support</td>
</tr>
<tr>
<td>Intact family</td>
<td>Mutually satisfying intimate relationship</td>
</tr>
<tr>
<td>Positive parenting/authoritative discipline</td>
<td>Adequate parenting skills</td>
</tr>
</tbody>
</table>
The relatedness, interconnectivity and reciprocal nature of parent and child relationships seems particularly important in the neonatal period when bonding and attachment are critical. Pregnancy, birth, and the postpartum period are considered stressful events and transitions for many families when using the life course framework. This critical time period in the lives of parents and infants demands special support and increased primary prevention efforts to achieve optimal relationships. The life course framework also indicates that individual and collective capacity is not stagnant and allows that capacity changes dependent upon circumstance and timing; thus, exacerbations and remissions occur related to family violence much like other diseases.

A life course approach to family violence prevention demands that diverse professions and institutions work together to respond to the needs of all family members including perpetrators. Ideally professionals form partnerships to provide a focused and well integrated response to all family members. While seemingly broad in scope the life course approach views individuals as unique with specific needs for their particular situation and capacity. A “one size fits all” approach simply does not provide the contextualized response needed for optimal outcomes.

**Prevention**

Primary prevention means stopping a disease or condition before it occurs. Routine assessment for family violence risk factors is a primary prevention activity. When families are identified as high risk it is critical to link them to resources that can help prevent exposure to violence before it occurs. Poverty and teen pregnancy are known risk factors for child abuse. Dr. David Olds combined principles of human ecological theory, self-efficacy theory, and human attachment theory to design the Nurse
Family Partnership (NFP) program aimed at decreasing the negative health and psychosocial consequences of teen pregnancy for mothers and their infants (Olds et al., 2004).

The Nurse Family Partnership (NFP) is a series of protocol driven home visits provided by registered nurses to low income mothers during their first pregnancy. The program begins before 29 weeks gestation and continues with frequent home visits during pregnancy and the child’s first two years of life. Nurses provide support in the following domains; promotion of health related behaviors in pregnancy, promotion of supportive relationships with family and friends, and linkage of women and their family members to other health and human services if needed. The goal of the NFP is to promote optimal maternal and child health by influencing modifiable risks factors (Olds, 2007). By targeting specific areas such as planning future pregnancies, attaining an education, developing parenting skills, and finding a job, nurses engage mothers in decision making and goal setting. Mothers and nurses work together during pregnancy, childbirth and early childhood allowing mothers to develop a competency in many areas.

Nurse-visited mothers are reported to have fewer subsequent pregnancies, a longer time period between first and second births, longer relationships with their partners, less use of welfare, and fewer reports to child protective services (Olds et al., 2004). When viewed within a life course framework the timing of a first pregnancy and consistent nurse support during this critical time period appears to be pivotal to maternal confidence and self-mastery; thus, demonstrating life course constructs of linked lives, timing, and individual agency.
Secondary prevention involves early identification and treatment of a disease or condition. Linking families to community resources such as shelters or mental health services are examples of secondary prevention. Routine assessment for exposure to violence at all health care encounters should be considered another important secondary prevention strategy due to the short and long term physical and mental health consequences of exposure. Women exposed to IPV have a 50% to 70% increase in gynecological, central nervous system, and stress related illnesses (Campbell et al., 2002). However, routine assessment during health care encounters for exposure to violence is not widely practiced.

A recent nurse case management intervention and a brief nurse directed IPV assessment and referral card intervention reported increased safety behaviors and a decrease in violence for both groups of women at 12 and 24 months post intervention (McFarlane et al., 2006). These findings suggest that the nursing practice of routine IPV assessment alone may be a simple and effective way to decrease violence exposure. Replication of this study would provide further evidence supporting the adoption of routine IPV assessment at all health care encounters. Secondary prevention also includes linking family members to community resources such as shelters and mental health services.

Tertiary prevention involves providing care, services, and rehabilitation to family members who have been injured physically or psychologically by exposure to violence. Certified forensic nurses can play an important role in the care of victims. Sexual assault nurse examiners (SANE) provide culturally appropriate state-of-the-art care to victims of sexual assault. Nursing skill and expertise are combined with advanced education related
to evidence collection techniques and legal procedures required to ensure strict chain of
custody. The SANE may also be required to provide testimony in a court of law; thus,
participating in the legal process charged with rendering justice and protecting victims
from further injury or death. Rehabilitation efforts should not only include support and
services for victims of violence but also for perpetrators. Since males are more often
involved with fatal family violence events, interventions specific to boys, young men,
and fathers may be essential to preventing serious injury and fatalities.

**Health Policy Implications**

Viewing individuals over the course of the life span and acknowledging that
individual as well as family health and well-being are embedded within a larger social
context forces proximal and distal determinants of health to be viewed and researched
simultaneously. The prenatal period and early years of life being linked to health in later
life gain greater importance in the life course framework. Linking the professional
inquiry of the social sciences to traditional nursing and medical models creates a new
paradigm for inquiry that invites inclusion of the social determinants of health and
collaboration among professional disciplines.

Damage to an individual’s health may occur due to the cumulative effects of
exposure to violence over time or by adverse experiences during critical or sensitive
developmental time periods. Efforts aimed at creating better access to health care or
encouraging individuals to adopt healthy lifestyles may prove inadequate if the origins of
disease and disparity are not addressed. Recent advances in the neuroscience and
molecular biology fields point to the hopeful possibility of preventing many of the
negative health effects of exposure to violence by limiting or eliminating toxic stress in
childhood (Shonkoff, Boyce, & McEwen, 2009). The authors suggest inclusion of health promotion and disease prevention is critical to efforts aimed at identifying and addressing the biomarkers of toxic stress so that prevention can be fully integrated into health policy agendas.

Halfon & Hochstein (2002) describe childhood as a long term investment for health in midlife and late life. Taking a life course approach on health policy would include targeting funding and resources to the prenatal and early childhood years in efforts to create healthier populations; thus, decreasing cost and optimizing health outcomes for future generations (Halfon, Russ, & Regalado, 2005).

Implications for Nurses

Opportunities for nurses to impact the health and well-being of families exposed to violence exist at all levels of prevention. Primary prevention includes routine inquiry about family violence as well as education on healthy lifestyle choices related to, contraception, positive parenting, and positive relationships in hopes of protecting individuals from initial exposure to family violence. Secondary prevention also includes routine inquiry to identify those experiencing family violence in hopes of limiting the duration and harmful effects of such exposure. Secondary prevention also includes working with other professionals, community agencies, and legal authorities in efforts to link family members to resources aimed at limiting or preventing future exposure to violence. Finally, tertiary prevention includes providing culturally sensitive and state of the art medical and mental health care to family members experiencing short-term as well as long-term negative health effects as a result of exposure to family violence (Campbell et.al, 2002).
The American Association of Colleges of Nursing (AACN) position statement published in 1999 called for all baccalaureate and advance degree nursing programs to educate students on the scope of family violence as a public health problem and prepare students to identify, assess, and treat victims of violence. However, a survey of baccalaureate nurse educators found that violence related program content was generally limited to less than two to four hours in most programs with no clinical component (Woodtli & Breslin, 2002). Nurse faculties have an obligation to include family violence content as an important public health issue of enormous importance to the health of future generations.

Nursing as a profession has a unique opportunity to take the lead in violence prevention on a national level. As health care reform is implemented health protection and promotion, both areas in which nurses excel, will take on greater significance. Nurses are in an excellent position to identify those at risk of family violence. A public health model addressing family violence from a life course framework offers many opportunities at the individual, family, and community level to advance a national agenda to prevent or limit the harmful effects of family violence.

**Conclusion**

Exposure to violence results in a human stress response that changes the biology of physiological systems within the body producing a cascade of events that ultimately affects every organ system (McEwen, 1998). The link between adverse events in childhood and health in adulthood is clear and well documented (Feletti et al., 1998; Anda, & Brown, 2007). The health of an individual is determined as a consequence of
many contributing factors on a continuum that is both social and biological in nature (Halfon, & Hochstein, 2002).

The risks and protective factors depicted in the *Family Violence: a Framework for Prevention*, while not exhaustive offers many opportunities for interprofessional collaboration in clinical, professional and scholarly activities aimed at understanding and preventing risks factors as well as identifying and supporting protective factors across the life span. Given limited health care resources a life course framework seems the most logical approach to addressing the daunting problem of family violence. The *Family Violence: a Framework for Prevention* attempts to depict the biological and social determinants of health associated with all forms of family violence in hopes of advancing the science of violence prevention to improve the health of families everywhere and promote peaceful homes in which families not only survive but thrive.
CHAPTER 4

METHODS

Introduction

In order to identify healthcare provider facilitators and barriers to family violence assessment, both child abuse and intimate partner violence (IPV) among pediatric emergency department (ED) nurses and physicians, the TPB was used as the framework for this study. An elicitation study is recommended by Aizen as a first step in TPB questionnaire development and served as Phase One of this study (Aizen, 1991; Francis et al., 2004). The elicitation study for this dissertation was exploratory in and nature and sought to identify the normative, behavioral, and control beliefs specific to the study population.

Phase Two, the development of the Child Abuse and Intimate Partner Violence (CA-IPV) TPB questionnaire was informed by the results obtained in the Phase One elicitation study and included pilot testing the CA-IPV. Phase Three of the study included data collection and analyses. Dr. Icek Aizen served as a consultant on during all phases of the study.

Background: Theory of Planned Behavior

There is a need to understand the family violence assessment intentions and behaviors of emergency department (ED) nurses and physicians in order to increase assessment practices. The TPB postulates that attitudes are determined by an individuals perceived behavioral, normative, and control beliefs related to a particular behavior. The construct of subjective norms considers the social influence of important others such as peers and leadership figures as well as the overall social milieu in which the behavior
occurs. The social influence associated with an individual’s subjective norm includes to what degree an individual is motivated to comply with the behavior of interest (Figure 2).


Framework for the Study

The Theory of Planned Behavior (TPB) served as the framework for this Study (Aizen, 1991). The TPB has four main constructs: (a) attitudes, (b) subjective norms, and (c) perceived behavioral control, all of which determine (d) intentions to perform a certain behavior. The intention to perform the behavior predicts the actual behavior and is thought to be the immediate antecedent to adopting a particular behavior. The direct measures of attitude, subjective norms, perceived behavioral control, and intentions related to family violence assessment were the focus of this study.
In addition to these direct measures, the TPB includes indirect measures that influence each of these main constructs. The constructs of outcome evaluations and behavioral beliefs influence the direct measure of attitude; constructs of motivation to comply and normative belief strengths influence the direct measure of subjective norms; and power of control and control belief strengths influence the direct measure of perceived behavioral control. By examining these indirect measures which function as the root or foundation for attitude, subjective norms, and perceived behavioral control a picture begins to emerge that distinguishes between those who have high intentions to perform a certain behavior from those that have low intentions to perform a behavior, in this case the intention to adopt routine family violence assessment as a clinical best practice at the pediatric emergency and urgent care visit. Indirect measures were collected but were not considered part of this dissertation study.

The behavior of interest, that is, the outcome variable for the study, is routine assessment of child abuse family violence and IPV family violence at pediatric ED and UC visits. For this study, attitudes are conceptualized to be the attitudes of nurses and physicians related to performing routine family violence assessment. Subjective norms are conceptualized to be the social referents that nurses and physicians apply to performing routine family violence assessment. Perceived behavioral control is conceptualized as the perceptions of ease or difficulty that nurses and physicians assign to routine family violence assessment. Intentions are conceptualized as nurses and physicians motivation to carry out routine family violence assessment. For this study, the application of the TPB is illustrated in Figure 3.
Figure 3. TPB Framework as Conceptualized by Donna O’Malley, for the Study of Healthcare Providers Family Violence Assessment Practices.

Note. Indirect measures in blue boxes were not analyzed for this study.
Definitions

Direct measure constructs of attitudes, subjective norms and perceived behavioral control are listed with their respective correlated indirect measure constructs.

- **Attitude** (direct measure) is defined as a person’s favorable or unfavorable evaluation of being able to perform routine family violence assessment.

- **Subjective norm** (direct measure) refers to the perception a person has about whether important others approve or disapprove of routine family violence assessment and whether important others themselves perform routine family violence assessment.

- **Perceived behavioral control** (direct measure) are the perceptions an individual has as to how easy or difficult it is to perform routine family violence assessment.

- **Intention** (direct measure) defines how likely or unlikely an individual is to actually perform routine family violence assessment.

- **Self-report assessment behavior** (direct measure) is defined as participants’ estimate of actual family violence assessment behaviors performed in the 3 month period prior to completing the questionnaire.

Phase One: The Elicitation Study

The elicitation process is a critical initial step to the main study in determining the salient normative, behavioral, and control beliefs as well as the social referents underlying the overall belief structure in this population’s intentions to perform family violence assessment. The elicitation questionnaire consisted of eight open-ended questions (Table 3), modeled and recommended by Aizen and previous TPB studies (Aizen, 1991; Fishbein, & Aizen, 2010; Francis, 2004)
<table>
<thead>
<tr>
<th>Construct</th>
<th>Open Ended Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>1. What do you believe are the <em>advantages</em> of routinely assessing for family during the pediatric emergency department or urgent care visit?</td>
</tr>
<tr>
<td></td>
<td>2. What do you believe are the <em>disadvantages</em> of routinely assessing for family violence during the pediatric emergency department or urgent care visit?</td>
</tr>
<tr>
<td>Subjective Norms</td>
<td>3. Are there individuals or groups who would <em>approve</em> of you routinely assessing for family violence during the pediatric emergency department or urgent care visit?</td>
</tr>
<tr>
<td></td>
<td>4. Are there individuals or groups who would disapprove of you routinely assessing for family violence during the pediatric emergency department or urgent care visit?</td>
</tr>
<tr>
<td>Behavioral Control</td>
<td>5. What factors or circumstances would enable you to routinely assess for family violence during the pediatric emergency department or urgent care visit?</td>
</tr>
<tr>
<td></td>
<td>6. What factors or circumstances would make it difficult or impossible for you to routinely assess for family violence during the pediatric emergency department or urgent care visit?</td>
</tr>
<tr>
<td>Construct</td>
<td>Open Ended Question</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Social Referents</td>
<td>7. Sometimes, when we are not sure what to do, we look to see what others are doing. Please list the individuals or groups who, in your experience, are most likely to routinely assess for family violence.</td>
</tr>
<tr>
<td></td>
<td>8. Please list the individuals or groups who, in your experience, are most unlikely to routinely assess for family violence.</td>
</tr>
</tbody>
</table>
Phase Two: The Main Study

Theory of Planned Behavior Family Violence Questionnaire

Study Design

This study used a cross-sectional design with a convenience sample of emergency department (ED) and urgent care (UC) nurses and physicians from Children’s Mercy Hospitals and Clinics (CMH). This is a large regional Midwestern children’s hospital and has over 100,000 annual ED and Urgent Care visits. The main emergency department, as well as the two urgent care centers, served as study sites.

Development of the CA-IPV Questionnaire

Elicitation interviews and surveys with ED and UC nurses and physicians were conducted as the initial phase of the study to develop the main questionnaire applying the specific recommendations of Aizen (2002). The elicitation interviews and surveys used open-ended questions to develop the indirect belief-based measures related to family violence assessment that correlate with the predictor measures of attitude, subjective norm, and perceived behavioral control. The results of the elicitation study were used to develop of the Child Abuse and IPV (CA-IPV) TPB questionnaire.

Following the development of the CA-IPV TPB questionnaire, a small sample of ED and UC nurses and physicians (n=6) piloted the CA-IPV questionnaire for item content, readability, wording, length, and annoying features. Only minor changes to word order or phrasing were suggested. The average length of time needed to complete the questionnaire was 20 minutes.

The CA-IPV Instrument. Dr. Icek Aizen, an original author of the TPB, served as a consultant for this study and reviewed the final questionnaire for fidelity to the TPB
model and principles prior to data collection. In addition to demographics (gender, age, discipline, and year in practice), the questionnaire inquires about direct measures of attitudes, subjective norms, perceived behavioral control, intentions to assess, and assessment behaviors as well as the indirect measures of behavioral, normative, and control beliefs related to both child abuse and IPV. The questionnaire uses a seven-point scale. Two additional yes/no questions asked about personal experience with family violence. A copy of the Child Abuse and Intimate Partner Violence TPB Questionnaire is included as Appendix E. Examples of questions for each of the ten variable constructs is provided in Table 4.
Table 4

*Examples of Questions by TPB Construct*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Abuse Attitude</td>
<td>By assessing children for child abuse at ED or UC visits I can identify children at risk; disagree/agree.</td>
</tr>
<tr>
<td>Child Abuse Subjective Norm</td>
<td>Most people who are important to me think I should assess pediatric patients for child abuse at ED and UC visits; false/true.</td>
</tr>
<tr>
<td>Child Abuse Behavioral Control</td>
<td>For me to assess children for child abuse at ED and UC visits is difficult/easy.</td>
</tr>
<tr>
<td>Child Abuse Intention</td>
<td>I plan to assess pediatric patients for child abuse at ED or UC visits; improbable/probable.</td>
</tr>
<tr>
<td>Child Abuse Behavior</td>
<td>I have assessed all my pediatric patients for child abuse in the past 3 months; true/false.</td>
</tr>
<tr>
<td>IPV Attitude</td>
<td>By assessing women for IPV at pediatric ED or UC visits I can provide opportunities for intervention; disagree/agree.</td>
</tr>
<tr>
<td>IPV Subjective Norm</td>
<td>Most people whose opinion I value would approve of me assessing women for IPV at pediatric ED or UC visits; disagree/agree.</td>
</tr>
<tr>
<td>IPV Behavioral Control</td>
<td>For me to assess women for IPV at pediatric ED or UC visits is difficult/easy.</td>
</tr>
<tr>
<td>IPV Intention</td>
<td>I have made up my mind to assess women for IPV at pediatric ED or UC visits; false/true.</td>
</tr>
<tr>
<td>IPV Behavior</td>
<td>In the past 3 months, how often have you assessed women for IPV at the pediatric ED or UC visit? never/almost always.</td>
</tr>
</tbody>
</table>
The predictor variables of interest in this study were attitudes, subjective norms and perceived behavioral control about assessing for family violence (both child abuse and intimate partner violence). The outcome variables for this study were intention to assess and self-reported assessment/screening behaviors. The CA-IPV questionnaire assessed participants attitude toward family violence assessment, subjective norms associated with family violence assessment, perceived behavioral control to perform family violence assessment, behavioral intentions to perform family violence assessment, and self-reported family violence assessment behaviors. Direct TPB measures as well as the corresponding indirect TPB measures were collected for each TPB construct. The TPB direct measures were used to address the proposed dissertation research questions.

Participants were asked to rate items on a seven-point scale. Value labels, appropriate to the content of the item were used throughout the questionnaire and included the range: strongly disagree (scored as 1) to strongly agree (scored as 7). Strongly agree represents positive attitudes while strongly disagree represents negative attitudes. Other scale anchoring labels for items included: undesirable/desirable; worthless/valueable; false/true; impossible/possible; unlikely/likely; bad/good; definitely not/definitely yes; unpleasant/pleasant; boring/interesting; difficult/easy; improbable/probable; not at all/very much; rarely/always and never/always. Higher numbers always represented positive responses and lower numbers represented negative responses toward family violence assessment both child abuse and IPV.

*Attitude* was evaluated by the sum of 4 items for child abuse assessment and 3 items for IPV assessment with one reverse scored item in each scale. *Subjective norm* was evaluated by the sum of 4 items for child abuse assessment and 3 items for
assessments. Perceived behavioral control was evaluated by the sum of 3 items for child abuse assessment and 2 items for IPV assessment. Intention was evaluated by the sum of 4 items for child abuse assessment and 3 items for IPV assessment. Behavior was evaluated by the sum of 2 items for child abuse assessment and 2 items for IPV assessment with one reverse scored item in each scale.

Phase Three: Data Collection and Analyses

Sample

A total of 272 questionnaires were distributed and 132 returned for an overall return rate of 48.5%. The sample was representative of the total population of ED and UC nurses and physicians at CMH with 72 (54.5%) representing participants from the main ED, 36 (27.3%) representing the south UC and 24 (18.2%) representing the north UC site (Table 5). A total of 83 out of 193 nurses (43%) and 49 out of 79 physicians (62%) completed the questionnaire. Data collection occurred in February and March 2011. Females were more represented in this sample with 111 (84.7%) participants being female and 20 (15.3%) being male. Age distribution of participants included 43 (32.6%) in the 21 to 34 age group, 50 (37.9%) in the 35 to 44 age group, 29 (22%) in the 45 to 54 age group and 10 (7.6%) in the over 55 age group. Years in practice for this sample included 34 (26%) participants who had been in practice less than 5 years, 31 (23.7%) who had been in practice greater than 5 years but less than 10 years, 37 (28.2%) who had been in practice greater than 10 years but less than 20 years and 29 who had been in practice greater than 20 years.
Table 5

Demographics of Participant Sample

<table>
<thead>
<tr>
<th></th>
<th>Sample f (%)</th>
<th>Population of All ED/UC Providers f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( N )</td>
<td>132</td>
<td>272</td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main ED</td>
<td>72 (54.5%)</td>
<td>131 (48.2%)</td>
</tr>
<tr>
<td>South UC</td>
<td>36 (27.3%)</td>
<td>95 (34.9%)</td>
</tr>
<tr>
<td>North UC</td>
<td>24 (18.2%)</td>
<td>46 (16.9%)</td>
</tr>
<tr>
<td>Discipline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>83 (62.9%)</td>
<td>193 (71%)</td>
</tr>
<tr>
<td>Physician</td>
<td>49 (37.1%)</td>
<td>79 (29%)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>20 (15.3%)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>111 (84.7%)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 to 34 yrs</td>
<td>43 (32.6%)</td>
<td></td>
</tr>
<tr>
<td>35 to 44 yrs</td>
<td>50 (37.9%)</td>
<td></td>
</tr>
<tr>
<td>45 to 54 yrs</td>
<td>29 (22%)</td>
<td></td>
</tr>
<tr>
<td>Over 55 yrs</td>
<td>10 (7.6%)</td>
<td></td>
</tr>
<tr>
<td>Year in Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 yrs</td>
<td>34 (26%)</td>
<td></td>
</tr>
<tr>
<td>5 &lt; 10 yrs</td>
<td>31 (23.7%)</td>
<td></td>
</tr>
<tr>
<td>10 &lt; 20 yrs</td>
<td>37 (28.2%)</td>
<td></td>
</tr>
<tr>
<td>&gt;20 yrs</td>
<td>29 (22.1%)</td>
<td></td>
</tr>
</tbody>
</table>
Prior to distribution of the questionnaire, a power analysis was conducted to target the necessary number of participants to achieve adequate power for the study. For this study a minimum of 102 participants was needed to achieve a power of 0.8 using a medium effect size (Cohen, 1988).

**Procedures**

The study was introduced by the principle investigator (PI) at department level staff meetings. In addition participants received a one page letter describing the study protocol that including the PI’s contact information. The PI placed letters and the questionnaires in each staff member’s department mailbox in a return envelope addressed to the PI. Emergency Department and Urgent Care nurses and physicians were asked to participate by completing the questionnaire and returning it to the PI via interoffice mail. Participants implied their consent by their voluntary completion and return of the questionnaire to the PI. Approval was obtained from the participating study site’s Institutional Review Board (IRB) prior to initiation of the study.

**Data Preparation**

Questionnaires were coded with ID numbers from 001 to 00132 and entered into an SPSS (version 18) database. Research assistants performed a manual check of 10 percent of completed questionnaires. In addition the PI manually checked an additional 10 percent of completed questionnaires. No errors were found. Reverse scored items Q4, Q10, Q13, Q48 and Q52 for child abuse and P5, P12, P15, P48 and P58 for IPV were recoded into the same variables in preparation for the analysis. Reliability analyses identified item Q19 and P21 did not have adequate correlation with other items to be
included in the analyses. Items for each TPB construct were then summed and transformed into new variables.

**Analysis**

Descriptive statistics were calculated for each outcome variable including means, standard deviations and potential and actual ranges of responses. Bivariate correlations between the TPB variables of attitude, subjective norm, perceived behavioral control, intention and behavior to assess for family violence were performed using Pearson’s correlation.

**Analysis for Research Question 1.** What is the relationship between attitudes, subjective norms, perceived behavioral control and intention to screen for family violence (both child abuse and intimate partner violence) among a population of pediatric ED and UC nurses and physicians? To answer study question 1, standard multiple regression analyses were performed between intentions as the dependent variable and attitude, subjective norms, and perceived behavioral control as independent variables for both child abuse and intimate partner violence assessment.

**Analysis for Research Question 2.** What is the relationship between attitudes, subjective norms, perceived behavioral control and family violence screening behaviors (both child abuse and intimate partner violence) among a population of pediatric ED and UC nurses and physicians? To address research question 2, standard multiple regression analyses were performed between self-reported assessment behaviors as the dependent variable and perceived behavioral control, and intentions as independent variables for both child abuse and intimate partner violence.
Analysis for Research Question 3. How do attitudes, subjective norms, perceived behavioral control, intention to screen and screening behaviors differ between nurses and physicians? To address research question 3, independent sample t-test was used to compare the difference between means of the two professional groups for both child abuse and IPV.

In addition to the TPB items two additional yes/no questions were included at the end of the questionnaire:

Have you experienced family violence in your personal life?

Do you know someone personally who has experienced family violence?

To address the two personal experiences with family violence questions a frequency analysis was performed to determine numbers and percentages of exposure to family violence in the sample.
Chapter 5

Results

Phase One

A purposive sampling method was used to recruit participants (Francis, 2004). Nurse Managers and Site Coordinators from the ED and 2 urgent care centers asked nurses and physicians who were interested in this topic to complete the survey. In addition, two in depth interviews with nurse leaders known for expertise in family violence assessment from outside of the study hospital were conducted and included in the analysis. The open-ended elicitation questions guided the interviews. Interviews were taped with verbal permission from the participants and transcribed. The responses to the elicitation surveys and interviews were transcribed into word documents and entered into HyperResearch, a qualitative software data analysis package, and analyzed for content, themes, and patterns of shared meaning (Table 6).

A total of 30 questionnaires were distributed and 24 were completed and returned via interoffice mail to the PI for a response rate of 80%. The sample for the elicitation surveys and interviews consisted of 10 nurses, 14 physicians, and 2 surveys that did not identify as nurse or physician (n = 26). A sample size of 25 is recommended and considered ideal for TPB elicitation studies (Francis et al., 2004).

Results of the elicitation interviews and surveys indicated that 53% of participants valued early identification and the health benefits associated with keeping pediatric patients safe and linking at risk families to community resources. Opportunity for intervention to prevent or decrease child abuse and IPV was reported as an advantage of family violence assessment by 31% of participants and was valued as part of providing
more complete health care to children by 16% of participants. Examples of responses associated with the advantages of routine family violence assessment are listed below:

- “Assessing for violence may open the door for treatment.”
- “Assessing allows the potential to intervene and offer support services.”
- “Assessment would improve detection of those who need help.”
- “Recognition of the family’s situation may assist with earlier recognition and protection for abused kids.”
- “Offers more complete care and saves lives and health.”

The possibility of increasing risk to women and children by inappropriate or an incomplete response to family violence assessment was reported as an important concern. Responses related to increasing risk for family violence included the following examples:

- “If we ask about abuse but then are not able to do much when the answer is yes, things could get worse at home.”
- “You could inadvertently trigger violence if the abuser finds out about the disclosure.”
- “Women may be hesitant to bring kids in for accidental injury for fear of ED staff not believing them.”
- “We could alienate some families who really need help.”

Participants also believed victims, health care organizations, and some providers approve of routine family violence assessment but also feel some providers and families who value privacy disapprove. Lack of time, knowledge, privacy, staff, and resources as well as the acuity of the patient and high census in the department were reported as
barriers to family violence assessment. Adequate time, easy assessment tools, a team approach, and onsite legal and social work resources were seen as facilitators.

**Table 6**

*Identified salient behavioral, normative, and control beliefs*

<table>
<thead>
<tr>
<th>Frequency (n=26) (%)</th>
<th>Behavioral Beliefs (Attitude)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Advantages</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Early identification</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Opportunity for intervention</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Provides more complete care</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>Disadvantages</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Could increase risk if not done well</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Takes too much time</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Requires many resources</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Could take focus off the medical condition</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Normative Beliefs (Subjective norms) Approve</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED staff, social work, SCAN</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Victims</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Hospital leadership</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Professional organizations</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Disapprove</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED providers</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Families</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Perpetrators</td>
<td>6</td>
</tr>
</tbody>
</table>

Table continues
<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>$f^*$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=26)</td>
<td>(%)</td>
</tr>
<tr>
<td>Control Beliefs (Perceived behavioral control) Facilitators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy assessment/tools/process</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>On-site resources (SW/Legal)</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>Time</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Team approach</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Reasonable patient load</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Barriers:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of time, knowledge, and staff</td>
<td>25</td>
<td>48</td>
</tr>
<tr>
<td>Acuity of patient</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>Lack of privacy, multiple family members</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Personally painful for some staff</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

*Participants listed multiple items on many questions; therefore totals are sometimes greater than 26.
Phase Two

Psychometric Properties of the TPB Study Variables

Descriptive analysis of the psychometric properties for the TPB study variables included the number of respondents, the mean, standard deviations, the range of potential and actual scores, and the Cronbach’s alpha for each study construct (Table 7).

Table 7

Psychometric Properties of the Major Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Potential</td>
<td>Actual</td>
</tr>
<tr>
<td>CA ATT</td>
<td>127</td>
<td>5.25</td>
<td>0.93</td>
<td>1-7</td>
<td>2.5-7.0</td>
</tr>
<tr>
<td>CA SN</td>
<td>125</td>
<td>5.70</td>
<td>1.04</td>
<td>1-7</td>
<td>2.0-7.0</td>
</tr>
<tr>
<td>CA PBC</td>
<td>128</td>
<td>5.05</td>
<td>1.19</td>
<td>1-7</td>
<td>1.7-7.0</td>
</tr>
<tr>
<td>CA INT</td>
<td>129</td>
<td>5.95</td>
<td>1.12</td>
<td>1-7</td>
<td>2.8-7.0</td>
</tr>
<tr>
<td>CA BEH</td>
<td>130</td>
<td>4.01</td>
<td>1.64</td>
<td>1-7</td>
<td>1.0-7.0</td>
</tr>
<tr>
<td>IPV ATT</td>
<td>128</td>
<td>4.81</td>
<td>1.07</td>
<td>1-7</td>
<td>2.0-7.0</td>
</tr>
<tr>
<td>IPV SN</td>
<td>129</td>
<td>5.34</td>
<td>1.22</td>
<td>1-7</td>
<td>2.0-7.0</td>
</tr>
<tr>
<td>IPV PBC</td>
<td>131</td>
<td>4.60</td>
<td>1.32</td>
<td>1-7</td>
<td>1.5-7.0</td>
</tr>
<tr>
<td>IPV INT</td>
<td>131</td>
<td>3.72</td>
<td>1.71</td>
<td>1-7</td>
<td>1.0-7.0</td>
</tr>
<tr>
<td>IPV BEH</td>
<td>131</td>
<td>3.72</td>
<td>1.71</td>
<td>1-7</td>
<td>1.0-7.0</td>
</tr>
</tbody>
</table>
Internal consistency co-efficients were considered acceptable if greater than .6 (Francis et al., 2004). Co-efficients for summed study constructs ranged from .54 to .93; seven of the 10 constructs were in the acceptable range. Child abuse attitude ($\alpha = .59$), IPV attitude ($\alpha = .54$) and child abuse behavior ($\alpha = .57$) constructs were below .6; however, child abuse attitude and child abuse assessment behavior approached .6 and while not ideal, given the overall internal consistency of the CA-IPV was considered satisfactory to proceed with the analyses as planned.

Bivariate correlations among TPB constructs were positive and significant (Table 8). Subjective norms had the strongest correlation to both child abuse assessment intentions ($r = 0.79, p < 0.01$) and IPV assessment intentions ($r = 0.78, p < 0.01$). Intentions had the strongest correlation to both child abuse assessment behaviors ($r = 0.57, p < 0.01$) and IPV assessment behaviors ($r = 0.60, p < 0.01$).

Descriptive analysis of the psychometric properties for the TPB study variables included the number of respondents, the mean, standard deviations, the range of potential and actual scores, and the Cronbach’s alpha for each study construct (Table 7). Internal consistency co-efficients were considered acceptable if greater than 0.6 (Francis et al., 2004). Co-efficients for summed study constructs ranged from 0.54 to 0.93; seven of the 10 constructs were in the acceptable range. Child abuse attitude ($\alpha = 0.59$), IPV attitude ($\alpha = 0.54$) and child abuse behavior ($\alpha = 0.57$) constructs were below 0.6; however, child abuse attitude and child abuse assessment behavior approached 0.6 and while not ideal, given the overall internal consistency of the CA-IPV was considered satisfactory by Aizen to proceed with the analyses as planned.
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**Table 8**

*Correlations of the Theory of Planned Behavior Variables*

<table>
<thead>
<tr>
<th>Construct</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CA ATT</td>
<td>1</td>
<td>.483**</td>
<td>.513**</td>
<td>.575**</td>
<td>.349**</td>
<td>.385**</td>
<td>.279**</td>
<td>.330**</td>
<td>.331**</td>
<td>.113</td>
</tr>
<tr>
<td>2. CA SN</td>
<td>1</td>
<td>.580**</td>
<td>.793**</td>
<td>.388**</td>
<td>.537**</td>
<td>.628**</td>
<td>.473**</td>
<td>.585**</td>
<td>.268**</td>
<td></td>
</tr>
<tr>
<td>3. CA PBC</td>
<td>1</td>
<td>.726**</td>
<td>.507**</td>
<td>.415**</td>
<td>.346**</td>
<td>.425**</td>
<td>.491**</td>
<td>.316**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CA INT</td>
<td>1</td>
<td>.565**</td>
<td>.468**</td>
<td>.482**</td>
<td>.468**</td>
<td>.607**</td>
<td>.335**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. CA BEH</td>
<td>1</td>
<td>.275**</td>
<td>.260**</td>
<td>.330**</td>
<td>.417**</td>
<td>.304**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. IPV ATT</td>
<td>1</td>
<td>.783**</td>
<td>.761**</td>
<td>.706**</td>
<td>.447**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. IPV SN</td>
<td>1</td>
<td>.651**</td>
<td>.783**</td>
<td>.497**</td>
<td></td>
<td></td>
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<tr>
<td>8. IPV PBC</td>
<td>1</td>
<td>.776**</td>
<td>.549**</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. IPV INT</td>
<td>1</td>
<td>.600**</td>
<td></td>
<td></td>
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<td></td>
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<td>10. IPV BEH</td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

** $p < 0.01$
Phase Three

The study setting was a large regional Midwestern children’s hospital with over 100,000 annual emergency department (ED) and urgent care (UC) patient visits. A cross-sectional design with a convenience sample of emergency department (ED) and urgent care (UC) nurses and physicians from Children’s Mercy Hospitals and Clinics (CMH) was used. A total of 272 CA-IPV questionnaires were distributed and 132 were completed and returned via interoffice mail to the PI representing a 48.5% return rate. Descriptive statistics related to the demographics of the sample is provided in Table 9.

Table 9

Demographics of Participant Sample

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
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<td>272</td>
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<tr>
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<td>24 (18.2%)</td>
<td>46 (16.9%)</td>
</tr>
<tr>
<td>Discipline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>83 (62.9%)</td>
<td>193 (71%)</td>
</tr>
<tr>
<td>Physician</td>
<td>49 (37.1%)</td>
<td>79 (29%)</td>
</tr>
</tbody>
</table>

Table continues
<table>
<thead>
<tr>
<th>Sample ( f ) (%)</th>
<th>Population of All ED/UC Providers ( f ) (%)</th>
</tr>
</thead>
</table>

**Gender**

|        | Male       | 20 (15.3%) | Female    | 111 (84.7%) |

**Age**

|         | 21 to 34 yrs | 43 (32.6%) | 35 to 44 yrs | 50 (37.9%) | 45 to 54 yrs | 29 (22%) | Over 55 yrs | 10 (7.6%) |

**Year in Practice**

|         | Less than 5 yrs | 34 (26%) | 5 < 10 yrs | 31 (23.7%) | 10 < 20 yrs | 37 (28.2%) | 20 yrs | 29 (22.1) |

**Results for Research Question 1**

What is the relationship between attitudes, subjective norms, perceived behavioral control and intention to screen for family violence (both child abuse and intimate partner violence) among a population of pediatric ED and UC nurses and physicians?

The model summary for child abuse assessment indicates a strong relationship between intentions to assess and the set of predictor variables \( r = .86 \). Together the predictor variables of attitude, subjective norms, and behavioral control explained 74 percent of the variance in child abuse assessment intentions. All three independent variables contributed significantly to the prediction of intention to perform child abuse
assessment but interestingly, subjective norms were more important than attitude or perceived behavioral control (Table 9). The more positive subjective norms held by participants the greater the intention to assess patients for child abuse ($\beta = .52, p < .00$).

Similar results were found for IPV assessment with the model summary indicating a strong relationship between intention to assess and the predictor variable set ($r = .86$). Together the predictor variables of attitude, subjective norms, and behavioral control explained 75 percent of the variance in intimate partner violence assessment intentions. Only subjective norms and perceived behavioral control significantly contributed to the prediction; and like the results for child abuse assessment intentions, subjective norms were found to be more important than attitudes or perceived behavioral control (Table 10). Similar to results regarding intention to assess for child abuse, the more positive subjective norms held by participants the greater the intention to assess for IPV ($\beta = .54, p < .00$),
Table 10

Results of Multiple Regression Analyses: Prediction of Child Abuse and IPV Assessment

Intentions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Child Abuse</th>
<th></th>
<th>IPV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$p$</td>
<td>$\beta$</td>
<td>$p$</td>
</tr>
<tr>
<td>Attitude</td>
<td>.15</td>
<td>.00</td>
<td>-.09</td>
<td>.30</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.52</td>
<td>.00</td>
<td>.54</td>
<td>.00</td>
</tr>
<tr>
<td>Behavioral Control</td>
<td>.34</td>
<td>.00</td>
<td>.49</td>
<td>.00</td>
</tr>
<tr>
<td>$r$</td>
<td>.86</td>
<td></td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>$r^2$</td>
<td>.74</td>
<td></td>
<td>.75</td>
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</tbody>
</table>

$p < .05$

Results for Research Question 2

What is the relationship between attitudes, subjective norms, perceived behavioral control and family violence assessment behaviors (both child abuse and intimate partner violence) among a population of pediatric ED and UC nurses and physicians?

The model summary for child abuse assessment behavior indicated a moderate relationship between assessment behaviors and the predictor variables of perceived behavioral control and intentions ($R = .59$). Together the predictor variables of perceived behavioral control and intention explained 34% of the variance in child abuse assessment behaviors. Only intentions made a significant contribution to the prediction of child abuse
assessment behaviors (Table 11). The more positive the intention to assess for child abuse the greater the likelihood of self report child abuse assessment behaviors ($\beta = .43, p < .00$).

The model summary for IPV assessment behaviors indicated a moderate relationship between IPV assessment behaviors and perceived behavioral control and intentions ($R = .61$). Perceived behavioral control and intention accounted for 38 percent of the variance in reported IPV assessment behaviors. Only intentions made a significant contribution to the prediction of IPV assessment behaviors (Table 10). The more positive the intention to assess for IPV the greater likelihood of self report IPV assessment behaviors ($\beta = .44, p < .00$).
**Table 11**

*Results of Multiple Regression Analyses: Prediction of Child Abuse and IPV Assessment Behaviors*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Child Abuse</th>
<th></th>
<th>IPV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>p</td>
<td>β</td>
<td>p</td>
</tr>
<tr>
<td>Behavioral Control</td>
<td>.20</td>
<td>.07</td>
<td>.21</td>
<td>.06</td>
</tr>
<tr>
<td>Intentions</td>
<td>.43</td>
<td>.00</td>
<td>.44</td>
<td>.00</td>
</tr>
<tr>
<td>( r )</td>
<td>.59</td>
<td></td>
<td>.61</td>
<td></td>
</tr>
<tr>
<td>( r^2 )</td>
<td>.34</td>
<td></td>
<td>.38</td>
<td></td>
</tr>
</tbody>
</table>

\( p < .05 \)

**Results for Research Question 3**

How do attitudes, subjective norms, perceived behavioral control, intention to screen and screening behaviors differ between nurses and physicians? To address research question 3, independent sample \( t \)-test were used to compare the difference between means of the two professional groups on all TPB direct measure constructs, both child abuse and IPV. Results from the independent samples \( t \)-test indicate no statistically significant differences in mean scores between nurses and physicians on any of the theoretical variables (Table 12).
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>M</th>
<th>p</th>
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<tbody>
<tr>
<td><strong>Child Abuse Attitude</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>78</td>
<td>5.36</td>
<td>NS</td>
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<tr>
<td>Physician</td>
<td>49</td>
<td>5.07</td>
<td>NS</td>
</tr>
<tr>
<td><strong>Child Abuse Subjective Norm</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Nurse</td>
<td>77</td>
<td>5.76</td>
<td>NS</td>
</tr>
<tr>
<td>Physician</td>
<td>48</td>
<td>5.59</td>
<td>NS</td>
</tr>
<tr>
<td><strong>Child Abuse Behavioral Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>80</td>
<td>5.00</td>
<td>NS</td>
</tr>
<tr>
<td>Physician</td>
<td>48</td>
<td>5.15</td>
<td>NS</td>
</tr>
<tr>
<td><strong>Child Abuse Intention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>80</td>
<td>5.93</td>
<td>NS</td>
</tr>
<tr>
<td>Physician</td>
<td>49</td>
<td>5.97</td>
<td>NS</td>
</tr>
<tr>
<td><strong>Child Abuse Behavior</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>83</td>
<td>4.11</td>
<td>NS</td>
</tr>
<tr>
<td>Physician</td>
<td>47</td>
<td>3.83</td>
<td>NS</td>
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<tr>
<td><strong>IPV Attitude</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>80</td>
<td>4.88</td>
<td>NS</td>
</tr>
<tr>
<td>Physician</td>
<td>48</td>
<td>4.66</td>
<td>NS</td>
</tr>
<tr>
<td><strong>IPV Subjective Norm</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>81</td>
<td>5.40</td>
<td>NS</td>
</tr>
<tr>
<td>Physician</td>
<td>48</td>
<td>5.23</td>
<td>NS</td>
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<tbody>
<tr>
<td><strong>IPV Behavioral Control</strong></td>
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<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>83</td>
<td>4.60</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td>48</td>
<td>4.59</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td><strong>IPV Intention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>83</td>
<td>5.15</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td>48</td>
<td>5.26</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td><strong>IPV Behavior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td>82</td>
<td>3.59</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td>49</td>
<td>3.94</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>
Results for Personal Experience with Family Violence Questions

Have you experienced family violence in your personal life?

Do you know someone personally who has experienced family violence?

The results of the frequency analysis indicated that 26.2% of participants have personally experienced family violence in their life and 63.1% know someone personally who has experienced family violence. Family violence was defined to include child abuse and/or intimate partner violence. Cross tabulations post hoc analyses of both questions were performed for gender and discipline. The analyses revealed that 21.1% of male respondents and 27.3% of female respondents had personally experienced family violence. Looking at discipline, 30.5% of nurse respondents and 18.8% of physician respondents reported personally experiencing family violence. Results also revealed that 47.4% of male respondents and 65.5% of female respondents knew someone personally who had experienced family violence. Looking at discipline, 72% of nurses and 47.9% of physicians reported knowing someone personally who had experienced family violence.

Post Hoc Analyses

Frequency analyses of child abuse and IPV study variables of intentions to assess for family violence and self-report family violence assessment behaviors were of interest given the theoretical foundation of the CA-IPV study. Results indicated that intentions to perform family violence assessment, both child abuse and IPV, were greater than self-reported family violence assessment behaviors. When dichotomized using the mean, child abuse intentions were between 6.0 and 6.25 on the study scale of 1 to 7; while self-report assessment behaviors were between 3.5 and 4.0 on the study scale of 1 to 7.
Results for IPV assessment were similar with IPV intentions between 5.0 and 5.3 on the study scale of 1 to 7; and self-report IPV assessment behaviors between 3.5 and 4.0 on the study scale of 1 to 7. Bar charts (Figures 4, 5, 6, and 7) were also used to provide a visual reference of frequencies for family violence assessment intentions and self-reported family violence assessment behaviors. The results indicated participants’ self-reported family violence assessment behaviors, both child abuse and IPV, were lower than expected given the TPB premise that intentions to perform family violence assessment would predict self-reported family violence assessment behaviors.
**Figure 4.** IPV Intentions Frequency Chart.

**Figure 5.** IPV Behaviors Frequency Chart.
Figure 6. Child Abuse Intentions Frequency Chart.

Figure 7. Child Abuse Behaviors.
CHAPTER 6
DISCUSSION

In this study attitude, subjective norms, and perceived behavioral control were found to be strongly predictive of family violence assessment intentions and family violence assessment intentions strongly predicted family violence assessment behaviors. The findings of this study support the predictive power of the Theory of Planned Behavior (TPB).

Research questions in this study focused on testing the TPB in order to better understand pediatric healthcare providers’ family violence assessment intentions and behaviors. The ultimate goal of this study was to learn how to support family violence assessment practice behaviors in the pediatric emergency and urgent care setting. Three research questions were formulated for this study. The first two questions sought to understand how healthcare providers’ attitudes, subjective norms, and perceived behavioral control contributed to intentions to perform family violence assessment and whether intentions resulted in the adoption of routine family violence assessment behaviors. The third sought to understand differences between nurses and physicians regarding family violence assessment intentions and behaviors.

Research Question One

What is the relationship between attitudes, subjective norms, perceived behavioral control and intention to screen for family violence (both child abuse and intimate partner violence) among a population of pediatric ED nurses and physicians? In this study all three variables made significant contributions to intention to assess for both child abuse and intimate partner violence (IPV). Interestingly, subjective norms were
more important than attitudes or perceived behavioral control for both child abuse and IPV. Reasons for this may include recent experiences with regulatory agencies in this institution that may have contributed to a heightened awareness about the responsibilities of healthcare providers to perform family violence assessment. In addition, the general nature of pediatrics should also be considered when reviewing the results of this study. Pediatric healthcare providers often must work with and include parents and caregivers when providing care to a child. Placing the child’s health and well-being in context with a parent’s health and well-being, such as in the case of IPV, may not represent a major change for these providers. Pediatric emergency and urgent care nurses and physicians often see the results of violence when caring for pediatric trauma victims so many may already have high intentions to assess.

**Research Question Two**

What is the relationship between perceived behavioral control and intention to assess for family violence and assessment behaviors (both child abuse and intimate partner violence) among a population of pediatric ED nurses and physicians? As predicted by the TPB, intentions to perform family violence assessment made a significant contribution to family violence assessment behaviors for both child abuse and IPV. However, perceived behavioral control did not make a significant contribution to either child abuse or IPV assessment behaviors. This result can be considered consistent with the TPB. Perceived behavioral control while positively correlated with intention to perform family violence assessment, both child abuse and IPV, should be considered a moderator of family violence assessment behavior while not making a significant contribution to the explanation of variance (Fishbein & Aizen, 2010).
Research Question Three

How do attitudes, subjective norms, behavioral control, intention to screen and screening behaviors differ between nurses and physicians? There were no statistically significant differences between nurses and physicians. Nurses’ attitudes, subjective norms, perceived behavioral control, intentions and behaviors mirror those of the physicians. In this setting the current protocol delegates child abuse and IPV assessment to physicians. However, study results indicate that nurses do indeed have intentions to assess for family violence and self-report assessment behaviors for both child abuse and IPV. While departmental family violence assessment processes may assign one discipline to document family violence assessment, practical applications allow that family violence assessment is most likely a shared responsibility among this group of nurses and physicians. Nurses’ skills and expertise to perform family violence assessment may be underestimated and somewhat underutilized in this setting. However, current departmental methods of documentation may simply not fully capture emergency department nurses’ contribution to family violence assessment.

Personal Experience with Family Violence Questions

Have you experienced family violence in your personal life?

Do you know someone personally who has experienced family violence?

With greater than 1 in 4 participants indicating that they have personally experienced family violence and almost two-thirds indicating they know someone personally who has experienced family violence, indicates that that exposure to violence is not uncommon within the healthcare professions of nursing and medicine. In this
particular sample it should also be noted that 21.1 percent males reported personally experiencing family violence.

**Recommendations**

Previous studies examining family violence assessment practices among healthcare providers found that barriers to adopting family violence assessment practices included lack of knowledge, training, resources and time, language barriers, and a personal history of abuse. Most violence assessment research has focused on identifying barriers to screening women at risk for intimate partner violence in adult health care settings. The results of this study confirm previous research findings of healthcare providers’ perceptions of facilitators and barriers to family violence assessment. Specific to this study, the concept of providing more complete care to children and taking a team approach to family violence assessment were found to be important. Additionally, concerns related to increasing risks to women and children by inadequate assessment or inadequate response to a positive disclosure were found to be important to participants.

Individual healthcare provider’s perceptions of barriers and facilitators to adopting routine family violence assessment, while important, does not provide a complete explanation for lack of assessment. The results of this study suggest that while some individuals have high intentions to perform routine family violence assessment, these intentions do not necessarily translate to increased family violence assessment behaviors. The importance of this study is the realization that individual healthcare providers operationalize intentions to perform family violence assessment within the context of their departmental and institutional environments. The importance of subjective norms to both child abuse and IPV assessment was significant in this group of
nurses and physicians. The important influence that departmental and institutional leadership can provide for routine family violence assessment practices appears to be substantial. Realizing this allows those in leadership roles to have a direct and significant impact on the adoption of assessment practices. The potential to strengthen and support family violence assessment clinical practices through departmental and institutional leadership involvement appear promising in this group.

**Limitations**

Every effort was made to minimize potential threats to validity and study limitations. Efforts included ensuring the TPB questionnaire was reviewed by Dr. Icek Aizen for fidelity to the theoretical constructs, the questionnaire was piloted prior to data collection, an appropriate study design was used, and rigorous methods and statistical analyses were used. However, the study results must be interpreted within the context of the following limitations. Ability to generalize from this study was limited as all participants were from the same institution. Participation bias may have been present among participants with strong feelings for or against routine family violence assessment. Responses were self-reported; thus, participants may have over or under-estimated their actual family violence assessment behaviors. A recent regulatory agency survey prior to data collection placed emphasis on family violence assessment and may have confounded study results. Participant fatigue should also be taken into consideration due to the length of the final survey. In addition, participant’s personal experiences of family violence should have been more clearly defined by separating child abuse and IPV experiences rather than using the term family violence.
Future Research

Future studies should include the continued use of this data set to explore the indirect behavioral, normative, and control beliefs that contributed to the direct measures of attitude, subjective norms, perceived behavioral control, intentions, and family violence assessment behaviors in the present study. Determining differences between high intenders and low intenders will allow efforts to be targeted to specific areas aimed at increasing and supporting positive family violence assessment practices.

Future studies should also include additional exploratory work with emergency department nurses and physicians through focus groups or qualitative surveys to elicit improved attitude scales for both child abuse ($\alpha = .57$) and IPV ($\alpha = .54$) assessment scales. Once improved scales are tested the CA-IPV should be shortened to include only the most reliable items. A multiple site study would allow comparison in other settings; thus, determine if the CA-IPV could be a clinically relevant tool for other institutions in understanding family violence behavior practices. In addition, prospective studies related to actual documented family assessment behaviors, before and after providing both individual and departmental supportive infrastructure, would provide a much more accurate account of provider behaviors.

This study confirmed many already known barriers to family violence assessment. Future studies should consider exploring not only individual perceptions of barriers but also the departmental and institutional infrastructure that individual healthcare providers are embedded within. Viewing family violence assessment practices within the organizational structure of a whole institution could offer valuable information needed to support family violence clinical practices.
Finally, future research should also consider exploring healthcare providers’ personal exposure to family violence in more specific terms. Additional research is also needed related to how such exposure translates to clinical practices of performing family violence assessment when caring for patients and families.

**Implications for Nursing**

This study identified that attitudes, subjective norms, perceived behavioral control, intentions and behaviors are positively correlated and that intentions to perform routine family violence assessment are predictive of assessment behaviors. Nurses can have a significant influence on the health and safety of women and children by encouraging and supporting routine family violence assessment in their clinical settings. Understanding that child abuse and IPV often co-occur and that both types of family violence can increase or decrease dependent on life stressors and resources allows nurses to fit single events into the larger context of health and well-being. Family violence assessment can be part of primary, secondary and tertiary violence prevention efforts across the life span. Nurses must also be aware of the commonality of experience that is shared among them in regard to exposure to family violence.

Recognizing child abuse and intimate partner violence as important safety and health issues allows nurses to initiate a dialogue aimed at helping women and children stay healthy and safe. Nurses have an opportunity to change the health trajectory of families experiencing family violence by establishing appropriate and acceptable assessment interventions and providing resources and referrals when indicated. Child abuse and domestic violence in all forms negatively impact the health and well-being of children. Routine family violence assessment will not end child abuse and IPV but early
intervention may place some families on a trajectory for successful parenting and appropriate partner relationships thus decreasing the potential for child abuse and IPV.

Nurses should consider and test options which allow women to self screen and gain insight and information related to their family situation. Encouraging women to talk to nurses and other healthcare providers when needing resources to provide safety for themselves and their children seems a plausible and positive intervention that would involve little or no risk. Pediatric nurses are in an excellent position to pilot interventions aimed at identification and support of families needing help in creating peaceful homes.

**Conclusion**

This study was a starting place for exploring the use of the TPB and the family violence assessment practices of pediatric emergency department and urgent care nurses and physicians. When viewing family violence as a threat to the health and safety of women and children greater importance is placed on health promotion, health protection, and violence prevention. Family violence when approached as a significant public health problem has many of the same characteristics as other daunting issues such as smoking, child passenger safety, and sudden infant death syndrome. Each of these issues demanded enormous change from the population at large.

It was not that long ago that smoking was part of the general social fabric, few cars were equipped with seat belts, and most babies were put to sleep on their tummies. All of these issues involved behavior change and as a result of the combined efforts of the healthcare community, policy makers, engineering innovations, and social marketing, great improvements toward health and safety were realized; the same can happen with family violence.
A similar public health approach to family violence prevention would provide layers of opportunity within the healthcare system to identify and provide important resources to those at risk. This approach would involve creating new partnerships among key healthcare, policy, and legal stakeholders and/or refining current collaborations among existing partners for better coordination when responding to family violence events.

Healthcare providers have a unique advantage over other community partners such as law enforcement or the justice system when responding to family violence. Each healthcare encounter presents the opportunity to intervene before a violence event occurs where as other key stakeholders are only aware of family violence after it occurs. The facts speak loudly, those who die as the result of child abuse or IPV have often had multiple recent encounters with the healthcare community prior to the fatal event. Nurses and other pediatric healthcare providers are collectively in a position to change the health trajectory for many women and children at risk of exposure to family violence by including routine inquiry about family violence exposure at each patient visit. Previous research indicates that women approve of IPV assessment at healthcare encounters.

Identification and treatment of infants, children and families experiencing child abuse and IPV presents challenges for all healthcare providers at primary, secondary and tertiary levels of care. If both mothers and healthcare providers begin to recognize family violence as an important safety and health issue then a dialogue aimed at helping families and children stay healthy and safe could begin. This study hopes to contribute to that dialogue by providing insight into the family violence assessment practices of pediatric emergency and urgent care nurses and physicians.
Poverty and deprivation wreak havoc on the health trajectory of women and little children in the United States (Tough, 2011). Feletti and Anda’s (1998) research has provided ample evidence of the importance of addressing violence exposure in families. Freud, Maslow, and Erikson recognized the connection of exposure to adverse negative events in childhood to health and well-being in adulthood. While billions of dollars are spent in the hard sciences related to the origin and trajectory of organic causes of disease, little attention has harbored the energy to connect the root causes of organic disease to the less tangible causes of exposure to adverse events in childhood. There is a direct connection to exposure to violence and the activation of the human stress response in childhood to poor health in adulthood. The biology of adversity that toxic stress sets in motion leads to molecular changes in the architecture of the brain (Shonkoff, 2010). This discovery is no less significant to the future of disease and health in our population at large than the discovery of penicillin and immunization science to the health of our current population. Born poor and living in an unsafe neighborhood or a violent family now predicts dismal health in adulthood.

Science also provides evidence that this dismal health trajectory can often be interrupted and reversed (Masten, 2001; Shonkoff & Burke, 2009). The biopsychosocial determinants of disease must become a priority for scientists, policy makers, and funders or there will continue to be an exhausting deficit in resources to address the ultimate root cause of many of the major causes of morbidity and mortality in the United States. Thus, supporting an unsustainable healthcare system that seems determined to react to disease and injury rather than taking action to prevent disease and disability caused by exposure to violence and adversity.
APPENDIX A

FUNDING AWARD FROM ENAF-STTI
June 12, 2009

Donna O'Malley, RN, MSN
6050 West 66th Street
Overland Park, Kansas

Dear Ms. O'Malley:

On behalf of the ENA Foundation, I am pleased to announce that you have been chosen to receive the 2009 ENA Foundation/Sigma Theta Tau International Joint Research Grant.

Your study, "Understanding Why Emergency Department Healthcare Providers Do Not Screen for Family Violence", was evaluated by the Research Review Panel who would like to commend you for your contribution to research and your commitment to advancing the future development of emergency nursing.

It is a pleasure to share a commitment to our profession with Sigma Theta Tau International, Inc., and enthusiastic researchers! A check in the amount of $6000, payable to Children's Mercy Hospital is enclosed.

Grant recipients are required to submit annual progress reports until the study has been completed (Form B attached). In addition, a final report must be submitted no later than two years after the grant is awarded (Form B attached).

You are asked to give priority of first publication to the Journal of Emergency Nursing and to oral/poster presentations at the ENA Annual Meeting. Please forward a copy of any articles, presentations and published information regarding the study to the ENA National Office. Mention of the funding source "ENA Foundation and Sigma Theta Tau International" is required in all publications and presentations. A copy of any publications based on this work must be submitted to the Foundation.

There is an additional Sigma Theta Tau International (STTI) requirement for the final grant disbursement of $500. In addition to sending a final report to the honor society, grant recipients must register their study abstract data online in the Virginia Henderson International Nursing Library located at www.nursinglibrary.org. Instructions are available on the library site to help grant recipients enter the required data about their study for posting in the honor society's Registry of Nursing Research database. For additional information, please contact Margie Wilson, Library Services Coordinator, at 888-634-7575, or e-mail at librarymanager@nursinglibrary.org. The Registry of Nursing Research is a searchable and free resource containing more than 28,000 studies. The goal of the honor society's library is to provide nurses worldwide with one of the most comprehensive resources for nursing information.

The Board would like to share your enthusiasm with the ENA Foundation contributors who supported your grant by posting a testimonial letter from you, with the other letters received from grant and scholarship recipients. Your letter can include a few brief words on how this grant will assist you in achieving your goals. By submitting this information we will assume that we have your permission to use excerpts from your testimonial in Foundation publications as well. Please send your testimonial to the attention of Terri Bruce, Foundation Coordinator at ENA Foundation, 915 Lee Street, Des Plaines, IL 60016.

If you have any questions or need assistance, please feel free to contact Terri Bruce at 847-660-4103. Again, congratulations on being selected to receive this grant.

Sincerely,

Patricia K. Howard

Patricia K. Howard, RN, PhD, CEN, FAEN
ENA Foundation Board of Trustees Chair

cc: Sigma Theta Tau International
APPENDIX B

INSTITUTIONAL REVIEW BOARD LETTERS
May 29, 2009

Donna O'Malley
Care Team
Children's Mercy Hospital


Dear Ms. O'Malley,

Thank you for submitting the above referenced research project to The Children's Mercy Hospital Pediatric Institutional Review Board. The project has been determined as exempt from convened IRB review based on 45 CFR 46.101(b). The study involves an adult survey and information will be recorded in such a manner that human subjects cannot be identified directly or through identifiers.

The exemption is valid for one year and will expire on May 17, 2010. A progress report should be submitted prior to that date if the project will continue longer than one year. The report will be reviewed to determine if the project still qualifies for exemption. A final report is required upon completion of the study.

Approval for this study is granted under the assumption that no data has been collected prior to the receipt of this approval letter. Any data which has been collected prior to approval is not covered by this letter and can not be included in the study data.

You may proceed with the project. If the study changes in any way, the IRB should be notified prior to implementation.

Sincerely,

Robert White, PhD, Co-Chair
The Children's Mercy Hospital
Pediatric Institutional Review Board

Robert White, PhD, Co-Chair
The Children's Mercy Hospital
Pediatric Institutional Review Board

In Academic Affiliation with the University of Missouri • Kansas City School of Medicine
An Equal Opportunity/Affirmative Action Employer - Services provided on a non-discriminatory basis
Dear Investigator,

Per our correspondence on April 29, 2009 we have withdrawn your study from consideration. Please work with Children's Mercy Hospital's IRB on securing IRB approval for your research.

Please let me know if you have questions or need additional information.

Thanks,

Ms. Germaine L. Hughes
Compliance Specialist - IRB
Research Protections Program
Office of Research Services
University of Missouri - Kansas City
5319 Rockhill Road
Kansas City, MO 64110
816-235-5669
816-235-5602 - fax
hughesge@umkc.edu

This e-mail is an official notification intended only for the use of the recipient(s). This letter indicates the status of the UMKC Social Sciences IRB review of the referenced research project. When appropriate, a member of the UMKC Social Sciences IRB staff will be contacting the recipient(s) informing them of other IRB documents related to this project that are available to either 1) be picked up at the IRB office - 5319 Rockhill Road or 2) be mailed via campus mail or postal service - i.e.: revisions to consent forms, advertisements, etc. If a signed copy of this letter is needed, please contact a member of the IRB staff. If you have received this communication in error, please return it to the sender immediately and delete any copy of it from your computer system.
APPENDIX C

DR. AIZEN CONSULTANT LETTER OF AGREEMENT
February 24, 2009

Donna O’Malley, RN, MSN
Business and Academic Manager
Emergency Medicine Division
Kansas City School of Nursing
University of Missouri
2464 Charlotte
Kansas City, MO 64108

Dear Ms. O’Malley,

I am pleased that you plan to use the Theory of Planned Behavior to address an important aim of your proposed research — to identify why healthcare providers do not screen for family violence. I agree that this model would provide a useful theoretical framework and methodological tools for answering this interesting research question.

As you know, there are quite a few important subtleties in applying the theory to studying various behaviors. I would be pleased to consult with you and your team to ensure that your elicitation interview and questionnaires are designed appropriately and to assist you in the data analysis and interpretation.

Thank you for the invitation to collaborate with you on this important research.

Sincerely yours,

Icek Aizen
Professor and Head
Division of Social Psychology
APPENDIX D

THEORY OF PLANNED BEHAVIOR ELICITATION QUESTIONNAIRE
Routine Assessment for Family Violence in the Pediatric Emergency Department

We are conducting a study of nurses and physicians in the Emergency Department at Children’s Mercy Hospitals and Clinics. We are interested in your opinions regarding routine assessment for family violence, both child abuse and intimate partner violence, during the pediatric emergency department visit. We would appreciate your responses to some questions about this. There are no right or wrong answers. We ask that you not put your name on this form to assure your anonymity and confidentiality. Please tell us what you really think. Please take a few minutes to list your thoughts about the following questions.

Please circle: Nurse  Physician  

Location: Main  North  South

- What do you believe are the **advantages** of routinely assessing for family violence during the pediatric emergency department visit?

- What do you believe are the **disadvantages** of routinely assessing for family violence during the pediatric emergency department visit?

- Are there any individuals or groups who would **approve** of you routinely assessing for family violence during the pediatric emergency department visit?

- Are there any individuals or groups who would **disapprove** of you routinely assessing for family violence during the pediatric emergency department visit?

---

*Over*
• What factors or circumstances would enable you to routinely assess for family violence during the pediatric emergency department visit?

• What factors or circumstances would make it difficult or impossible for you to routinely assess for family violence during the pediatric emergency department visit?

• Sometimes, when we are not sure what to do, we look to see what others are doing. Please list the individuals or groups who, in your experience, are most likely to routinely assess for family violence.

• Please list the individuals or groups who, in your experience, are most unlikely to routinely assess for family violence.

***Feel free to use this space for additional comments***

Thank you for taking time to share your thoughts on routine assessment for family violence during the pediatric emergency department visit.
APPENDIX E

CHILD ABUSE – INTIMATE PARTNER VIOLENCE QUESTIONNAIRE

CA-IPV CONSTRUCT KEY
Child Abuse and Intimate Partner Violence Questionnaire

Healthcare professionals differ in their opinions regarding universal screening/assessment for child abuse and intimate partner violence (IPV). This study investigates CMH Emergency Department and Urgent Care nurses’ and physicians’ points of view on screening/assessment for child abuse and IPV during pediatric emergency department (ED) and urgent care (UC) visits. There are no correct or incorrect responses; we are merely interested in your personal opinions. Your answers are completely confidential; only summary statistics are of interest to the investigators. Please read each question carefully and answer it to the best of your ability.

The following questions ask you to express your opinions with respect to assessment for child abuse and IPV at pediatric ED or UC visits.

Many of the questions in this survey make use of rating scales with 7 places; please circle the number that best describes your opinion. In marking your ratings, remember to answer all items – do not omit any – and never circle more than one number on a single scale.

Thank you for your cooperation.

Demographic Information

<table>
<thead>
<tr>
<th>Discipline (check one)</th>
<th>Nurse</th>
<th>Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
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<tr>
<td>Age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of years in practice:</td>
<td></td>
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</table>

113
Section One - Child Abuse

1. Early identification of children at risk for child abuse is undesirable: 

2. Providing opportunities for early intervention in cases of child abuse is undesirable: 

3. Helping children and their families’ link to available resources is undesirable: 

4. Increasing risk to children by inadequate assessment is undesirable: 

5. Offering more complete health care to children is undesirable: 

6. Helping to address the public health problem of child abuse is undesirable: 

7. By assessing children for child abuse at ED or UC visits I can identify children at risk

8. By assessing children for child abuse at ED or UC visits I can provide opportunities for early intervention

9. By assessing children for child abuse at ED or UC visits I can help pediatric patients and their families’ link to available resources

10. By assessing children for child abuse at ED or UC visits I may increase risk to children by inadequate assessment
11. By assessing children for child abuse at pediatric ED or UC visits I am helping to address an important public health problem

12. By assessing children for child abuse at ED or UC visits I can offer more complete health care

13. My assessing children for child abuse at ED or UC visits is

14. Most people who are important to me think that I should assess pediatric patients for child abuse at ED or UC visits

15. For me to assess children for child abuse at ED or UC visits is

16. I intend to assess children for child abuse at ED or UC visits

17. My assessing children for child abuse at ED or UC visits is

18. Most people whose opinions I value would approve of my assessing children for child abuse at ED or UC visits

19. It is completely up to me whether I assess children for child abuse at ED or UC visits

20. I have made up my mind to assess children for child abuse at ED or UC visits
21. For me to assess children for child abuse at ED or UC visits is

22. Most people in my position assess children for child abuse at ED or UC visits

23. If I want to, I can assess children for child abuse at ED or UC visits

24. In the future, I will assess children for child abuse at ED or UC visits

25. For me to assess children for child abuse at ED or UC visits is

26. It is expected of me that I assess children for child abuse at ED or UC visits

27. For me to assess children for child abuse at ED or UC visits is

28. I plan to assess pediatric patients for child abuse at ED or UC visits

29. Generally speaking, how much do you care what your coworkers think you should do?
not at all: 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

30. Generally speaking, how much do you care what families of children think you should do?
not at all: 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

31. Generally speaking, how much do you care what your supervisors think you should do?
not at all: 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much
32. Generally speaking, how much do you care what hospital leaders and administrators think you should do?
not at all: 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

33. Generally speaking, how much do you care what your professional organizations such as the American Academy of Pediatrics (AAP) or the Emergency Nurses Association (ENA) think you should do?
not at all: 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

34. My coworkers think that I should assess children for child abuse at ED or UC visits

35. Families think that I should assess children for child abuse at ED or UC visits

36. Hospital leaders and administrators think that I should assess children for child abuse at ED or UC visits

37. My supervisors think that I should assess children for child abuse at ED or UC visits

38. Professional organizations such as the America Academy of Pediatrics (AAP) and the Emergency Nurses Association (ENA) think that I should assess children for child abuse at ED or UC visits

39. It takes a great deal of time to assess children for child abuse at ED or UC visits

40. I need easy assessment tools to assess children for child abuse at ED or UC visits
41. A team approach can facilitate assessment of children for child abuse at ED or UC visits


42. Knowledge and skills are required to assess children for child abuse at ED or UC visits


43. The presence of multiple family members can interfere with assessment of children for child abuse at ED or UC visits


44. A reasonable patient load can facilitate assessment of children for child abuse at ED or UC visits


45. I have the time needed to assess children for child abuse at ED or UC visits


46. I have assessment tools available to me to assess children for child abuse at ED or UC visits


47. In our hospital, we take a team approach to the assessment of children for child abuse at ED or UC visits


48. I have the knowledge and skills required to assess children for child abuse at ED or UC visits


49. How often are multiple family members present when you assess children for child abuse at ED or UC visits?


50. I have a reasonable patient load
51. In the past 3 months, how often have you assessed your patients for child abuse?


52. I have assessed all my pediatric patients for child abuse in the past 3 months.


Section 2 - Intimate Partner Violence (IPV)

P1. Identification of women at risk for IPV is


P2. Providing opportunities for intervention in the case of IPV is


P3. Helping to provide safety to women at risk of IPV is


P4. Helping women link to available resources is


P5. Increasing risk to women by inadequate IPV assessment is


P6. Offering more complete health care to women and children is


P7. Helping to address IPV as an important public health problem is


P8. By assessing women for IPV at pediatric ED or UC visits I can identify women at risk

P9. By assessing women for IPV at pediatric ED or UC visits I can provide opportunities for intervention


P10. By assessing women for IPV at pediatric ED or UC visits I can help provide safety to women and children


P11. By assessing women for IPV at pediatric ED or UC visits I can help women and their children link to available resources


P12. By assessing women for IPV at pediatric ED or UC visits I may increase risk to women and their children by inadequate assessment


P13. By assessing women for IPV at pediatric ED or UC visits I can offer more complete health care to children


P14. By assessing women for IPV at pediatric ED or UC visits I am helping to address an important public health problem.


P15. My assessing women for intimate partner violence at pediatric ED and UC visits is


P16. Most people who are important to me think that I should assess women for IPV at pediatric ED or UC visits


P17. For me to assess women for IPV at pediatric ED or UC visits is


P18. I intend to assess women for IPV at pediatric ED or UC visits

P19. My assessing women for IPV at pediatric ED or UC visits is

P20. Most people whose opinions I value would approve of me assessing women for IPV at pediatric ED or UC visits

P21. It is completely up to me whether I assess women for IPV at pediatric ED or UC visits

P22. I have made up my mind to assess women for IPV at pediatric ED or UC visits

P23. For me to assess women for IPV at pediatric ED or UC visits is

P24. It is expected of me that I assess women for IPV at pediatric ED and UC visits

P25. For me to assess women for IPV at pediatric ED and UC visits is

P26. I am planning to assess women for IPV at pediatric ED and UC visits

P27. Generally speaking, how much do you care what your coworkers think you should do?
   not at all : 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

P28. Generally speaking, how much do you care what your supervisors think you should do?
   not at all : 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much
P29. Generally speaking, how much do you care what hospital leaders and administrators think you should do?

not at all : 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

P30. Generally speaking, how much do you care what professional organizations like the American Academy of Pediatrics (AAP) or the Emergency Nurses Association (ENA) think you should do?

not at all : 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

P31. Generally speaking, how much do you care what families think you should do?

not at all : 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

P32. My coworkers think that I should assess women for IPV at pediatric ED and UC visits


P33. My supervisors think that I should assess women for IPV at pediatric ED and UC visits


P34. Hospital leaders and administrators think that I should assess women for IPV at pediatric ED or UC visits


P35. Professional organizations such as the AAP and ENA think that I should assess women for IPV at pediatric ED or UC visits


P36. Families think I should assess women for IPV at pediatric ED or UC visits


P37. It takes extra time to assess women for IPV at pediatric ED or UC visits

P38. I need easy assessment tools to assess women for IPV at pediatric ED or UC visits


P39. A team approach can facilitate assessment of women for IPV at pediatric ED or UC visits


P40. Knowledge and skills are required to assess women for IPV at pediatric ED or UC visits


P41. It takes additional resources to assess women for IPV at pediatric ED or UC visits


P42. The presence of multiple family members can interfere with assessment of women for IPV at ED or UC visits


P43. A reasonable patient load can facilitate assessment of women for IPV at pediatric ED or UC visits


P44. A “treat and street” mindset can interfere with assessment of women for IPV at pediatric ED or UC visits


P45. I have the time needed to assess women for IPV at pediatric ED and UC visits


P46. Easy assessment tools are available for me to assess women for IPV at pediatric ED or UC visits


P47. In our hospital, we take a team approach when assessing women for IPV at pediatric ED or UC visits

P48. I have the knowledge and skills required to assess women for IPV at pediatric ED or UC visits


P49. How often do multiple family members being present interfere with you assessing women for IPV at pediatric ED or UC visits?


P50. How often does a “treat and street” mindset interfere with you assessing women for IPV at pediatric ED or UC visits?


P51. I have a reasonable patient load


P52. I have the resources needed to assess women for IPV at pediatric ED and UC visits


P53. The high acuity of the child can interfere with assessment of women for IPV at pediatric ED or UC visits


P54. How often does the acuity of the patient interfere with assessment for IPV at pediatric ED or UC visits?


P55. Lack of privacy can interfere with assessment of women for IPV at pediatric ED or UC visits


P56. How often does lack of privacy interfere when assessing for IPV at pediatric ED or UC visits?

P57. In the past 3 months, how often have you assessed women for IPV at the pediatric ED or UC visit?


P58. I have assessed women for IPV at all pediatric ED or UC visits in the past 3 months.


Child abuse and IPV are types of family violence.

1. Have you experienced family violence in your personal life? Yes No

2. Do you know someone personally who has experienced family violence? Yes No

Thank you for completing the Child Abuse and IPV Provider Questionnaire.
Child Abuse and Intimate Partner Violence Questionnaire
Scoring Key

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Response Format</th>
<th>Reverse Scoring</th>
<th>Construct Measured</th>
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<td>Outcome Evaluation</td>
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<td>Motivation to Comply</td>
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<td>Construct Measured</td>
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<td>Perceived Behavioral Control direct measure</td>
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<td>Self-report assessment behavior</td>
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References


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VITA

Donna Marie O’Malley was born on October 26, 1948, in Richmond, Virginia. She was educated in local parochial schools and graduated from St. Teresa Academy in Kansas City, Missouri in 1966. She received an Associate Degree in Nursing from Johnson County Community College in 1994.

After working as a trauma nurse at Children’s Mercy Hospitals and Clinics in Kansas City, Missouri for several years Ms. O’Malley pursued a Bachelors of Science in Nursing from the University of Missouri – Kansas City which was awarded in 2003, and a Masters of Science in Nursing Administration from the University of Missouri – Kansas City which was awarded in 2005.

After working as the Clinical Operations Manager for the Section of Child Abuse and Neglect at Children’s Mercy Hospitals and Clinics in Kansas City, Missouri for five years Ms. O’Malley began work toward her Ph.D. in Nursing in the summer of 2006. Ms. O’Malley’s research interest is family violence prevention, both child abuse and intimate partner violence.

In 2007, Ms. O’Malley assumed the role of Business and Academic Manager for the Division of Emergency and Urgent Care Services at Children’s Mercy Hospitals and Clinics in Kansas City, Missouri. She has served as the co-chair of the Children’s Mercy Council on Violence Prevention and co-chairs the Division of Emergency and Urgent Care Services research committee. Upon completion of her degree requirements, Ms. O’Malley plans to continue her career in pediatric emergency nursing and build a program of research focused on reducing children’s’ exposure to family violence.
Ms. O’Malley is a member of the American Nurses Association, the Emergency Nurses Association, and Sigma Theta Tau International. Ms. O’Malley was awarded the Sigma Theta Tau International/Emergency Nurses' Association Foundation research grant in 2009.