

THE EFFECTS OF EDUCATION ON HEALTH CARE PROFESSIONALS'
ASSESSMENT OF INTIMATE PARTNER VIOLENCE
IN PRIMARY CARE SETTINGS

by

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ABSTRACT

THE EFFECTS OF EDUCATION ON HEALTHCARE PROFESSIONALS' ASSESSMENT OF INTIMATE PARTNER VIOLENCE IN PRIMARY CARE SETTINGS

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This study was designed to explore what factors influence healthcare professionals' intimate partner violence (IPV) assessment and to examine the effects of education on healthcare professionals' IPV knowledge, opinions, and assessment behaviors. A quasi-experimental, pretest-post-test non-equivalent comparison group design was utilized to collect data. One hundred forty-nine (N = 149) healthcare professionals from three outpatient healthcare settings participated in this study. Participants completed a survey questionnaire (PREMIS) designed to measure

healthcare professionals' IPV knowledge, attitudes, and practices and to assess training effectiveness. Participants' responses on PREMIS scales were evaluated to determine the relationship between sample demographics, previous training, preparation, knowledge, and opinions with IPV assessment in practice. Responses on IPV knowledge scales, opinion subscales, and practice scales were evaluated to assess the effectiveness of the education intervention.

Study findings revealed that 32% of the study sample had no previous IPV training and 60% of those who had training of some kind reported two or less hours. Knowledge scores were significantly lower than a normed data set at pretest for the experimental group, however, post-test knowledge scores improved significantly ($p = .00$) following participation in the education intervention and effect size analysis revealed that 41% of the variability in knowledge scores was explained by membership in the experimental group. The experimental group's knowledge and opinion scores were also significantly improved when compared to the comparison/control groups. Bivariate and multivariate analysis was utilized to explore what factors influence assessment behaviors in practice. Findings suggest that self-efficacy was the strongest predictor of variability in practice issues for participants in this study.

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CHAPTER 1

INTIMATE PARTNER VIOLENCE

1.1 Introduction

Violence within families is not a new phenomenon. The biblical accounts of Cain killing his brother Abel (Genesis 4:8) and Amnon raping his sister Tamar (2 Samuel 13:14) suggest that physical and sexual violence is deeply ingrained in human interaction and continues to be an ever present threat to the health, safety, and well being of individuals, families, and society. Social and cultural concepts of gender role socialization, dominance, as well as overt and covert forms of violence, maltreatment, oppression, and manipulation are woven throughout the fabric of human relationships. Victims of violence are conditioned to remain silent by social norms and thus silence perpetuates the violence. Moreover, a prevailing institutional model of intimate partner violence (IPV) as a private matter promotes social and cultural beliefs that the victim is responsible for ending the abuse. Little or no focus is placed on institutional, cultural, and social customs that view IPV as a personal problem to be dealt with in secret. Thus society fails to confront IPV or formulate solutions to the problems of physical and sexual violence or abuse and coercion within intimate and family relationships.

The landmark study by Straus, Gelles, and Steinmetz (1980) brought to public attention the frequency in which violence is occurring within the American family and prompted researchers to study the phenomenon of family violence with greater objectivity using social science techniques. These researchers found that family violence crosses all racial, cultural, ethnic, socioeconomic, gender, age, and class boundaries. Nevertheless, societal views continue to support stereotypical ideas about who is a victim and who is a perpetrator that results in unidentified victims of family violence who include children, teens, the elderly, the disabled, gays, lesbians, and men. Furthermore, stereotypical views of sexual violence propagate the myth that sexual assault is an act of passion for which the victim bears responsibility. Popular culture normalizes violence as a solution to conflict yet fosters a public view of physical and sexual violence between intimates as an individual problem to be addressed on an individual level. Physical and sexual violence have been sensationalized in music, videos, and movies, thus relationship violence has become a vehicle to sell a product.

1.2 Prevalence of IPV

Campbell and Wasco (2005) argue that current prevalence studies of IPV yield the same results as studies completed twenty years ago. Department of Justice statistics indicate 1 in 4 women will be subjected to IPV in her lifetime and women are 8 times more likely to be victimized by an intimate partner than men (Lamberg, 2000). Based upon data from the 1992-1998 National Crime Victimization Survey (NCVS) administered by the Bureau of Justice Statistics, approximately one million individuals reported being victims of violence by an intimate partner. IPV undermines the cohesion

and stability of families and thus affects society on many fronts, including social, cultural, political and economic.

IPV is not exclusively an issue for women. Findings from the National Violence Against Women (NVAW) Survey reveal that violence is pervasive in American society and is considered to be a serious criminal justice and public health concern (Tjaden & Thoennes, 2000b). Twenty-five percent of women surveyed and nearly eight percent of men said they had been raped and/or physically assaulted by a current or former intimate partner or dating acquaintance at some point in their lifetime. Although men are also victims of IPV, the NVAW Survey reveals that IPV is primarily perpetrated by men against both male and female intimates. Findings also indicate that women are significantly more likely than men to report IPV. Furthermore, the violence women experience is often accompanied by emotional abuse and controlling behaviors and women experience more injurious physical assaults by an intimate partner when compared to men.

Studies have shown that unmarried, cohabitating couples have higher rates of intimate violence than do their married counterparts (Yllo & Straus, 1981). Furthermore, couples with status disparities of income, occupation, and education have higher rates of violence than couples with no disparities (Hornung, McCullough, & Sugimoto, 1981). More recent studies indicate that lower income, less educated women have higher rates of intimate violence than their higher income, educated counterparts and IPV is predominant among women living in poverty with dependent children and who have limited social supports (Bachman, 1994; Browne & Bassuk, 1997).

Numerous articles discuss the prevalence of intimate violence among women on welfare (Bassuk, 1993; Lyon, 2000; Stover, 2005; Tolman & Raphael, 2000). Browne and Bassuk (1997) discuss the occurrence of intimate violence in the lives of homeless woman compared to women who are impoverished and housed. Their findings indicate that low in-come housed mothers were virtually in the same risk category for intimate partner assault and injury as homeless mothers.

Lyon (2000) argues that poor women are more likely to experience violence from their partners because they have fewer options and violence in the lives of poor women impedes their access to resources, thus these women have a higher degree of need than those with more resources. Tolman and Raphael (2000) conclude that abusive partners often interfere with female TANF recipients' ability to work, thus prohibiting them from complying with federal welfare to work mandates and infringing upon benefit time limits thereby jeopardizing their lifetime eligibility. Furthermore, welfare-to-work providers reported an increase in IPV incidents when recipients sought work, education, or training (Tolman & Raphael, 2000). Honeycutt, Marshall and Weston (as cited in Tolman & Raphael, 2000) conducted a longitudinal study of low income women who were in an intimate relationship that lasted at least one year. Using the Severity of Violence Against Women Scale, these authors found that the severity of violence women sustained from their current partner was associated with their receiving public assistance. Moreover, a substantial number of welfare recipients experience higher prevalence of IPV in their lifetime when compared to samples of low-income women (Tolman & Raphael, 2000).

Kilpatrick (2004) identifies the importance of changes in public policy to improve the way victims of violence are treated. Kilpatrick maintains that violence is extremely costly to society and the criminal justice system must have the cooperation of victims. Furthermore, American values of fairness, equity, and justice necessitate improving the response to victims of IPV. Empirical evidence linking childhood victimization to experiencing and/or perpetrating IPV in adulthood provides incentive to address violence through policy. Nevertheless, current policies do not address the issue of IPV on the institutional level. Tjaden and Thoennes (2000b) report that the majority of victims they surveyed did not contact law enforcement agencies because they believed law enforcement would not or could not do anything on their behalf.

1.3 Cost of IPV

The Center for Disease Control (2003) estimates the cost of IPV exceeds \$5.8 billion each year with \$4.1 billion expended for direct medical and mental healthcare services. Another study estimated annual costs of IPV to be \$8 billion of which approximately \$5.6 billion is directly related to physical violence (Max, Rice, Finkelstein, Bardwell, & Leadbetter, 2004). Yodanis, Godenzi, and Stanko (2000) point out that intimate violence negatively impacts government expenditures due to the rise in utilization of criminal justice, legal, medical, housing, and public assistance. Other financial consequences of intimate violence include poor job attendance, high job turnover rates, and decreased productivity. These researchers also argue that using a cost/benefit perspective to evaluate the economic impact of violence may influence

policy makers to enhance efforts to address family and intimate violence through legislation.

Wisner, Gilmer, Saltzman, and Zink (1999) found that expenditures for women experiencing IPV are approximately 92% more in healthcare insurance costs per year than non-battered women. Another study of healthcare costs indicates that adjusted annual expenses for women experiencing IPV was 19% greater compared to women who had not experienced IPV (Rivara, Anderson, Fishman, Bonomi, Reid, Carroll et al., 2007). Furthermore, utilization costs were 20% higher for battered women five years after IPV had ceased compared to expenditures for non-battered women. Research from the 1995 National Center for Injury Prevention & Control indicated that IPV, rape, physical assault, and stalking cost \$4.1 billion U. S. dollars in direct medical and mental healthcare services in that year alone (Zink & Putnam, 2005).

Ulrich, Cain, Sugg, Rivara, Rubanowice, and Thompson (2003) found that health costs for abused women were 1.6 times greater than those of non-abused women. Resnick and Acierno (1997) cite research that indicates the expense of treatment of female assault victims was 2.5 times greater than that of non-victims. No studies were found that determine the increased healthcare cost for men as either victims or perpetrators of intimate violence. However, violence perpetrated by males against female intimate partners resulted in increased utilization of mental health, medical, and justice system services as well as loss of productivity (Tjaden & Thoennes, 2000a). Also, the National Center for Injury Prevention and Control (2003) evaluated the loss of productivity from both paid work and household chores for injured victims of IPV.

Findings indicate that the estimated total value of days missed from employment and household productivity was \$858.6 million with nearly three quarters (71.6%) of lost productivity due to physical assault and 22.6% due to stalking.

1.4 Health Consequences of IPV

Violence and abuse contribute to numerous health problems including depression, substance abuse, STDs, and chronic illness (Coker, Smith, Bethea, King, & McKeown, 2000). Also, physical, sexual, and psychological abuse are linked to numerous adverse health problems that include chronic neck and back pain, frequent headaches, migraines, visual impairments, arthritis, STDs, chronic pelvic pain, and ulcers (CDC). In 1997 alone, thirty-seven percent of all women who sought treatment for violence related injuries in hospital emergency departments were injured as the result of an assault by a current or former spouse or intimate partner (Rand, 1997). Another study estimates that in 1998 between 152,000 and 324,000 pregnant women were battered by their intimate partners suggesting that abuse may be more common than gestational diabetes or pre-eclampsia, conditions for which pregnant women are routinely screened by their healthcare provider (Gazmararian, Petersen, Spitz, Goodwin, Saltzman, & Marks., 2000). Furthermore, a study of data from the Pregnancy Mortality Surveillance System at the CDC revealed homicide to be the second leading cause of pregnancy-associated injury deaths, that is deaths that were determined to be causally related to pregnancy, for pregnant and postpartum women and accounted for thirty-one percent of maternal injury deaths in the United States from 1991 to 1999 (Chang, Bert, Saltzman, & Herndon, 2005).

1.5 Healthcare Response

Over the past twenty years, healthcare professionals have advanced toward a more sensitive approach in addressing the needs of individuals who experience IPV. This advancement is due in part to the recognition of the impact of IPV on health. Abbott and Williamson (1999) argue that women living in violent relationships have poorer health and a higher incidence of depression and somatic complaints than those who do not. The American College of Obstetricians and Gynecologists has emphasized the existence of violence within familial relationships and the need to routinely screen for violence when assessing all female patients (Chez & Jones 1995). Furthermore, the ethical principles of beneficence and non-maleficence require that physicians intervene in cases of violence and abuse (Council on Ethical and Judicial Affairs, 1992). However, only ten percent of primary care physicians routinely assess any of their patients for violence or abuse (Punukollu, 2003).

Barriers to physicians' inquiry about violence and abuse have been identified as negative emotive responses of the patient, lack of time, fear of offending, powerlessness to help, loss of control, lack of continuity, lack of education, and difficulty in detection (Pihlgren, 2002; McCauley, et al. 1998; Sugg & Inui, 1992). Zink, Elder, Jacobson, and Klostermann (2004) identify children accompanying their mothers during medical examinations as another barrier to screening. Yet, screening for violence and abuse is crucial for healthcare providers to comprehensively treat patients who may be experiencing violence (Goff, Byrd, Shelton, & Parcel, 2001).

Males who perpetrate violence present to healthcare settings with complaints that include musculoskeletal, cardiovascular, gastrointestinal, nervous system, dermatological and pulmonary symptoms (Gerlock, as cited in Cronholm, 2006). However, assessing for violence perpetration or victimization with male patients in medical settings is virtually non-existent. Exposure to violence and victimization for both women and men is associated with a wide range of negative health outcomes including physical disability, psychological distress, mental illness, and substance abuse (Carbone-Lopez, Kruttschnitt, & Macmillan, 2006).

Healthcare organizations have identified the problems of physical and sexual violence and developed protocols for assessing patients who present to hospitals for evaluation and treatment of injuries. Nevertheless, one study found that patients are not routinely assessed in hospital emergency departments (Heinzer & Krimm, 2002). Moreover, patients are not routinely assessed for any type of violence or abuse when they present in primary care or outpatient healthcare settings (Zink et al., 2004). Therefore, healthcare professionals are overlooking a vital component to thorough and comprehensive evaluation of patients (Wilson et al., 2001). Research suggests that individual practitioners' attitudes about the seriousness of the violence the patient experienced determined whether or not the practitioner used violence protocols, thus undermining the purpose of protocols (Parnis & Dumont, 2002). Healthcare providers who used standardized protocols identified a higher percentage of patients experiencing violence (Shepard, Elliott, Falk & Regal, 1999). Also, healthcare providers'

preparedness, beliefs, and realistic outcome expectations increased the percentage of patients assessed for violence and abuse (Goff et al., 2001).

Although healthcare professionals are generally sympathetic and supportive of patients' experiencing relationship violence, many demonstrate a lack of knowledge and identify fewer IPV cases when compared to police reports or anonymous surveys of violence (Cann, Withnell, Shakespeare, Doll & Thomas, 2001). Some healthcare professionals argue that they are not adequately trained to assess for violence and have little knowledge of available services (Abbott & Williamson, 1999). Another study found that providers' professional interest in IPV and professional experience with IPV was associated with the accuracy in which violence or abuse was identified (Gagan, 1998).

Healthcare professionals have acknowledged fear of offending the patient as a barrier to inquiry when violence or abuse is suspected (Sugg & Inui, 1992). However, research suggests that patients were in favor of healthcare professionals inquiring about IPV (Pihlgren, 2002; Sethi, Watts, Zwi, Watson, & McCarthy, 2004). Nevertheless, studies revealed that patients who had experienced violence had been treated by a healthcare provider within twelve months of a violent incident yet only a small percentage of these patients were assessed for violence (Johnson & Elliott 1997; McCauley, et al., 1995; McCauley, et al., 1998; Richardson, Coid, Petruckevitch, Chung, Moorey, Feder, et al., 2002; Walch & Broadhead, 1992; Wilson, Cesario, Fredland, Walsh, McFarlane, Gist et al., 2001). Other studies indicate that patients experiencing IPV obtained healthcare at least episodically if not routinely and IPV was

associated with specific psychological and physical symptoms for which the patients sought treatment, yet these patients were not assessed for violence (Johnson & Elliott, 1997; McCauley et al., 1995).

Some patients who experience violence or abuse, seek assistance from healthcare professionals indirectly, thus making the need for direct inquiry even more crucial (Lutenbacher, Cohen, & Mitzel, 2003; Wasson, Jette, Anderson, Johnson, Nelson, & Kilo 2000). Both men and women tend to experience depression and psychosomatic symptoms in response to relational violence (Hines & Malley-Morrison, 2001). However, few patients are actually being assessed for any type of abuse or violence unless they are seeking treatment for injuries (Shepard, et al., 1999). Furthermore, sexual abuse and coercion within the context of marital or intimate relationships is often overlooked and has been associated with increased health risks for victims (Wingood & DiClemente, 1997). Campbell and Soeken (1999) discussed the sexual abuse aspect of IPV as having seldom been considered as a separate phenomenon that seriously affects health and safety.

Lamberg (2000) argues that women in abusive situations may visit healthcare professionals for isolated injuries, multiple somatic complaints, chemical dependency, depression, and other problems. When healthcare professionals neglect to explore the underlying causes for these complaints, patients experiencing violence may suffer increased feelings of despair and isolation. Women experiencing abuse report that validation of their worth is important, especially from a healthcare provider (Gerbert, Caspers, Milliken, Berlin, Bronstone, & Moe, 2000). Women in the Gerbert et al. study

reported that validation, or being told that they did not deserve to be mistreated, provided relief and comfort and “started the wheels turning” toward realizing the seriousness of the situation. Furthermore, these women identified listening with a non-judgmental attitude as a highly desirable trait of a healthcare provider.

Rhodes and Levinson (2003) posit that sensitive screening and intervention for violence and abuse will impact the provider’s evaluation of presenting complaints as well as the outcomes for care. Physicians who maintain a concerned and non-judgmental attitude can help to change the way abused patients view their situations, even if they do not disclose abuse (Gerbert & Abercrombie, 1999; Rodrigues, Szkupinski, & Bauer, 1996). Women reported that discussion with a physician who acknowledged the abuse and validated their self-worth was a pivotal point in the process of extricating themselves from an abusive relationship (Gerbert & Abercrombie, 1999). These findings suggest that there is a positive effect for patients when healthcare professionals’ acknowledge that abuse is wrong and affirm the patient’s worth.

Smith, Danis, and Helmick (1998) maintain that healthcare professionals’ screening behaviors are strongly associated with perceived preparedness for assessment and intervention with patients experiencing IPV. These researchers found that the one predisposing factor significantly related to healthcare professionals’ screening all women at least once was the providers’ belief that routine screening is an appropriate role behavior for healthcare professionals. Also, the likelihood of healthcare professionals assessing was primarily the result of the providers’ perception of

preparedness to screen. Furthermore, identified barriers to screening did not inhibit healthcare professionals' screening behaviors if they felt they were prepared to screen and manage expectations that result from identifying victims of relationship violence. Smith and colleagues maintain that training should be skill based more so than knowledge based. These authors posit that it would be more prudent to assess healthcare providers' attitudes, beliefs, and skills prior to developing training programs and that training should assist providers to develop, and gain confidence in, their skills to effectively intervene. Changes in professionals' attitudes and beliefs could enhance routine assessment, reduce uncertainty, improve case identification, and increase the likelihood that providers will uncover intimate violence before it reaches dangerous levels (Smith et al.)

Healthcare professionals are in a unique position to assess, identify and refer patients experiencing IPV. The nature of the patient/provider relationship is often based on the trust and esteem the patient has for the healthcare provider. Patients will discuss circumstances and situations with their healthcare provider that they will not discuss with friends or family. Patients will disclose intimate details of their lives and relationships with a trusted provider because of the value they place on the provider's opinion. Thus, healthcare professionals have a distinct opportunity to identify violence and abuse, validate the worth of the individual, discuss the patient's circumstances in a supportive manner and make recommendations that point the patient toward solutions that promote safety, health, and well being. Nevertheless, healthcare professionals may need to adopt realistic expectations of themselves, their role as a provider, and patient

outcomes; expectations that are consistent with the best standard of care as well as the patient's right to choose a course of action.

1.6 Implications for Study

Research indicates that knowledge about IPV, available resources, and professional competence increase the likelihood that healthcare professionals will assess patients for violence and abuse. Also, beliefs that IPV assessment is part of the healthcare professional's role, that violence and abuse are health risks, and that violence is associated with poor health outcomes serves to facilitate assessment (Chamberlain & Perham-Hester, 2002; Gerbert, Gansky, Tang, McPhee, Carlton, Herzig, et al., 2002; Sitterding, Adera, & Shield-Fobbs, 2003; Smith et al., 1998). Moreover, attitudes that are sympathetic and empathetic toward victims of violence and concerns for children living in violent homes are associated with assessment (McKie, Fennell, & Mildorf, 2002).

Healthcare professionals were found to intervene at equal or greater frequency for violence than for other health risk behaviors when they routinely assessed for violence at their initial contact with patients (Gerbert, Gansky, et al., 2002). Education and training were found to be associated with an increase in healthcare providers' assessment behaviors, knowledge, and changes in beliefs and attitudes (Goff et al., 2001). Therefore, researchers have provided cogent lines of reasoning to support universal assessment of all patients for IPV, yet studies indicate that IPV assessment is not happening in practice. This phenomenon begs the question, what is the basis for healthcare professionals' missed opportunities to assess patients for physical and sexual

violence? Lack of knowledge about IPV as well as what to do when violence is disclosed have been identified as inhibiting factors to assessment. Thus a study to explore the effects of education to increase the likelihood of assessment could shed light on current knowledge, preparedness, opinions, and practice issues. Such a study could open the door for future research to explore semantics and conceptual meanings of violence, abuse, assault, and maltreatment from a healthcare perspective. Furthermore, a study of this nature could support education as an effective means to increase assessment behaviors and provide impetus to reframe violence as a serious health issue thus advancing assessment for violence within healthcare settings. Finally, if the likelihood of increased assessment for violence is associated with education, education and training could empower both healthcare professionals and patients to bring IPV and other forms of abuse into the open to be addressed on the individual, community, societal, institutional, and cultural level.

1.7 Purpose of this Study

This research study was designed to examine the effects of education on assessment for IPV in primary healthcare settings and to investigate the knowledge, attitudes, and beliefs of participating healthcare professionals with regards to IPV. This study was also designed to explore the extent to which education is associated with increased assessment, as well as changed attitudes and beliefs about assessment and to explore the level to which change occurred following education. Findings that empirically substantiate the benefit of education to increase knowledge, foster positive beliefs, and sustain supportive attitudes regarding IPV assessment were anticipated and

such findings were desired to promote change in the way violence assessment is viewed by the medical community. Furthermore, if findings indicate a positive correlation between education and assessment these findings could be added to a growing body of knowledge that suggests that medical education institutions include violence assessment training within the curricula.

1.8 Hypothesis

1.8.1 Preliminary Hypothesis

Education will increase healthcare professionals' knowledge, foster positive opinions, and increase IPV assessment behaviors in practice.

1.8.2 Preliminary Research Questions

1. To what extent are healthcare professionals knowledgeable about intimate partner violence?
2. To what extent do healthcare professionals possess opinions that facilitate assessment for intimate partner violence in primary care settings?
3. To what extent do healthcare professionals perform intimate partner violence assessment behaviors in practice?
4. What factors influence increased knowledge, positive opinions, and practice behaviors?

Underlying assumptions of these questions were that healthcare professionals are not knowledgeable about IPV or the negative health consequences of living with violence, most healthcare professionals are not adequately trained to assess for violence, and most do not routinely assess in practice. Moreover, healthcare professionals are not

knowledgeable about what to do if violence or abuse is identified (Sugg & Inui, 1992; Tilden, Schmidt, Limandri, Chiodo, Garland & Loveless, 1994; Parsons, Zaccaro, Wells & Stovall, 1995; Goff, et al., 2001). Another underlying assumption was that healthcare professionals are overwhelmed by institutional demands and thus may circumvent processes that place responsibility for ending abuse on healthcare professionals (Gerbert, Moe, et al., 2002). A final assumption was that healthcare professionals maintain negative opinions about IPV victims and perpetrators that bias their approach and negate assessment with patients experiencing abuse. The overarching assumption of the study was that education will increase knowledge, influence positive opinions, and increase assessment behaviors in practice.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In 1985, the U.S. Surgeon General C. Everett Koop convened a workshop on family violence in which a panel of experts addressed the problems of child, elder and spousal abuse declaring family violence a leading public health issue (Koop et al., as cited in Cohen et al., 1997). Incidents of IPV continue to be prevalent in the United States and around the world (WHO, 2002). NVAW results indicate that approximately 4.8 million intimate partner rapes and physical assaults are perpetrated against women annually and men experience 2.9 million intimate partner assaults each year (Tjaden & Thoennes, 2000b). Researchers maintain that sexual abuse and psychological maltreatment are co-occurring forms of IPV that have not been thoroughly studied (Coker, Smith, McKeown, & King, 2000). This chapter will provide an overview of the current research, assessment practices in healthcare settings, theoretical perspectives on assessment, and implications for practice.

2.2 IPV Assessment in Healthcare Settings

Major healthcare professional associations have recognized IPV as posing serious risks to patients' physical and psychological health and recommend routine IPV assessment (AAFP, 1994; AANP, 2000; AAP, 1998; ACOG, 1995; AMA, 1992; ANA,

1992; APA, 1999; APHA, 1992). Hospital accreditation and safety standards stipulate that hospitals develop and maintain violence protocols for assessing all patients who present for evaluation of injuries (Joint Commission on the Accreditation of Healthcare Organizations [JCAHO], as cited in Gremillion & Kanof, 1996). The AMA Council on Scientific Affairs (2005) recommends that family violence risk assessment be included within the context of the routine history or the review of systems that are standard in emergency, diagnostic, preventive and chronic care management. The Council also recommends funding for research to explore healthcare interventions; to identify potential adverse effects of assessment on documentation and reporting; to determine the cost effectiveness of healthcare responses to family violence; and to promote prevention through identification and intervention across the life span.

Cole (2000) participated in a dialogue with a group of leading healthcare providers who pondered the question, “Is violence screening helpful?” In other words, does IPV assessment by healthcare professionals make a difference in health outcomes for patients? Screening implies that there is a standardized instrument such as those used to screen for cancer or diabetes. The U.S. Preventive Services Task Force criteria for screening instruments state that a screening tool must be an accurate test for the condition and there must be scientific evidence that screening will prevent adverse health outcomes (as cited in Cole). However, diagnostic assessment is the fundamental focus of every healthcare visit and is not to be confused with screening. While an accurate, evidence based screening tool would be beneficial, healthcare professionals often assess and make recommendations based on their clinical judgment and diagnostic

skills. Therefore, the rationale for routinely asking patients about violence can be considered screening and should be based on the prevalence of violence within intimate relationships, the potential value of this information in formulating a treatment plan, and the potentially low risk of harm in asking (Cole).

2.2.1 Underlying Reasons for Medical Visits

Eisenstat and Bancroft (1999) report that women with a history of abuse have been found to present in healthcare settings with confusing, evasive, or anxious behavior and/or an inability to remember events. These findings suggest that female patients may come in for frequent healthcare visits without clear reasons thus healthcare professionals should assess all patients for violence and watch for other abuse indicators. These authors found that most participants in their study hoped that healthcare professionals would ask about abuse and if asked in a caring manner, respondents stated they would discuss their abuse experience. Participants who had experienced violence identified positive interactions with healthcare professionals as one of the important elements in their recovery (Eisenstat & Bancroft).

Women living in abusive relationships have poorer health and a higher incidence of chronic illness, chronic pain, cardiac symptoms, and gastro-intestinal problems, as well as mental health and substance abuse issues (Abbott & Williamson, 1999; Campbell, 2002; Campbell & Wasco, 2005). Reproductive and gynecologic problems have been identified as the longest lasting and most consistent physical health disparity between battered and non-battered women. Furthermore, the odds of having a

gynecologic problem are three times greater for women experiencing abuse compared to women who are not experiencing abuse.

Campbell (2002) conducted an extensive review of the literature and cites findings that suggest that women are frequently treated in healthcare settings for IPV but they generally do not present with obvious trauma. Campbell identified a component of sexually abusive and controlling behaviors that include verbal sexual degradation and refusal to use condoms or contraception. These controlling behaviors are not likely to result in visible injury but may explain links between IPV and sexual abuse, STDs, HIV, and unintended pregnancies. Therefore, this author recommends assessment for intimate partner and sexual violence in all healthcare settings as an underpinning of the concept of best practice.

Campbell also suggests that women experiencing intimate partner violence may present to healthcare settings before they present to criminal justice or social service agencies. Consequently, healthcare professionals are in a unique position to intervene in detrimental and perilous circumstances. Assessment and identification of violence enables healthcare professionals to make recommendations that increase safety and improve health outcomes. Furthermore, there is a growing body of research that identifies the therapeutic value of healthcare professionals' assessing for IPV even when a patient does not disclose abuse (Chamberlain & Perham-Hester, 2002).

2.2.2. Risk during Pregnancy

Campbell (2002) identifies relationship violence during pregnancy as a threat to health and risk of death for both mother and child. Elective termination of pregnancy

was also found to be related to IPV in large uncontrolled studies. Domestic and sexual violence during pregnancy is associated with STDs, urinary tract infections, as well as substance abuse, depression and other mental health symptoms. Furthermore, neglecting to obtain prenatal care may in reality be an indication of IPV and supports the practice of screening all pregnant women to assess for violence and safety (Eisenstat & Bancroft, 1999). Violence during pregnancy is also associated with negative health outcomes for infants that include preterm delivery, fetal distress, low birth weight, and hemorrhage however evidence is inconsistent across these studies.

2.2.3 Unidentified Victims

Rhodes and Levinson (2003) acknowledge IPV as a highly prevalent condition with significant morbidity, mortality, and potential for the intergenerational transmission of violence. Any member of a family, male or female, can become a victim of IPV. Family members who have less social, physical and/or economic power, such as children, the elderly, women, and the disabled are most vulnerable. Du Plat-Jones (2006) argues that men are also victims of IPV yet little research has been done to determine the number of men who are abused by their partners or within familial relationships. Furthermore, assessing for violence perpetration or victimization with male patients in healthcare settings is virtually non-existent (Goff et al., 2001).

Exposure to IPV for both women and men is associated with a wide range of negative health outcomes including physical disability, psychological distress, mental illness, and substance abuse (Carbone-Lopez, Kruttschnitt, & Macmillan, 2006). Failure to assess patients for IPV in healthcare settings increases the likelihood that

underlying causes of poor health and negative health outcomes are overlooked and thus effective intervention and treatment options are disregarded. Assessing for IPV is crucial for healthcare professionals to properly treat patients experiencing violence and to impact the lives of unidentified victims (Goff et al., 2001).

Depression, anxiety, suicide, eating disorders, alcoholism, and substance abuse are highly associated with family violence and the increased use of medical services and resources by adults (Eisenstat & Bancroft, 1999). Moreover, IPV is associated with poorer health and a variety of mental health problems for children exposed to violence within the family (Zink & Putnam, 2005). One study found that children exposed to abuse and household dysfunction had increased health risks for alcoholism, drug abuse, depression, suicide, smoking, high risk sexual behaviors, STDs, physical inactivity, and obesity (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, et al., 1998). Furthermore, children exposed to IPV are not only at risk of injury themselves, either deliberately or incidentally, but they have increased emotional and behavioral problems, higher than average rates of violent/aggressive behavior, sleep disorders, and chronic somatic complaints (Eisenstat & Bancroft).

Children are identified as victims of family violence and sexual abuse; however, the perception of children is often that of young children, thus adolescents exposed to or experiencing IPV may be overlooked in healthcare settings. Adolescents in abusive homes are at greater risk of running away, substance abuse, truancy, and antisocial behavior (Du Plat-Jones, 2006). Teenagers may also be perpetrators of violence within the family and, like violence between partners, teen abuse of family members may be

physical, psychological, sexual, emotional and financial (Cottrell, as cited in Du Plat-Jones, 2006).

The National Resource Center on Intimate Partner Violence (NRC, 2002) identified several negative effects of IPV on children that are worth noting. One negative effect is the isolation created by the violence that often results in children being limited in their social interaction with others and thus limited feedback outside the family dysfunction. This isolation results in children being unable to observe or practice appropriate social skills, internalizing negative messages, experiencing feelings of low self-esteem, worthlessness, and feeling responsible for the violence. Children in violent homes have difficulty setting healthy boundaries or respecting the boundaries of others and may have difficulty making or keeping friends. Another key issue is the decreased parental availability of the abused parent due to injury, exhaustion, or depression. Older children may assume the role of a parent and take responsibility for the care and protection of younger siblings while still children themselves. The elevated level of tension and stress in the home is considered another negative effect forcing children to live in constant fear, hyper-vigilance, and develop maladaptive coping skills. Finally, the key issue of violence as the norm is not to be diminished. Children living in violent homes may come to understand violence and aggression as a way to meet emotional needs and participate by victimizing other family members, siblings, peers, and pets. Also, children may become withdrawn, passive, and adopt a mindset of learned helplessness to circumvent life stressors (NRC).

Dube, Felitti, Dong, Giles, and Anda (2003) conducted an extensive cohort study to determine the impact of children experiencing household dysfunction (i.e., substance abuse, mental illness, incarcerated household member and mother being treated violently) on health problems in adulthood. Their conclusions reveal that growing up with household dysfunction increased the risk of poor health outcomes and high risk health behaviors. Thus, these findings bring to attention the long term effects of household dysfunction, including exposure to IPV, to health problems, and to poor health outcomes for adults subjected to violence and other dysfunction as children. In another study, researchers found a strong relationship between exposure to household dysfunction in childhood and illicit drug use in adulthood (Dube, Felitti, Dong, Chapman, Giles, & Anda, 2003). These results again emphasize the need for assessment of violence in healthcare settings as a means to curtail the long term effects of exposure to violence on children.

2.3 Screening Practices in Healthcare Settings

Despite the prevalence of IPV, recommendations for assessment from major health professional associations, and the risks to unidentified victims, healthcare professionals are not routinely assessing patients for violence or abuse. Sugg and Inui (1992) conducted one of the first studies to explore healthcare professionals' attitudes about screening for violence and abuse in healthcare settings. These authors conducted a qualitative study that examined primary care physicians' response to IPV during medical visits. They used ethnographic methods to analyze semi-structured interviews conducted with thirty-eight primary care physicians. The expression "Pandora's box"

was a term the respondents used to describe their reaction to discussing IPV with their patients, a “metaphor [that] suggests the fear of unleashing a myriad of evils” (Sugg & Inui, p. 3158). Researchers identified the “evils” that prohibited assessment and screening to be discomfort (i.e., close identification with the patient), fear of offending, feelings of powerlessness or inadequacy, a loss of control of the outcome, and time constraints. Although validity and reliability are difficult to establish in ethnographic research, this qualitative study was well designed and continues to be cited in research articles exploring barriers to assessment.

2.3.1 Inhibiting Factors for IPV Assessment

Several studies identified the healthcare professionals’ lack of knowledge, training, and skills as the primary reason for missed opportunities to assess for IPV in primary care settings. A group of researchers developed a self-administered questionnaire using the barriers identified by Sugg and Inui to collect information on physicians’ practices and attitudes related to IPV (Parsons et al., 1995). Lack of education was identified as the most common inhibitor to screening and assessment. Other barriers were the belief that violence was not a problem, lack of time to focus on abuse, and feelings of frustration about the inability to help patients in abusive situations. Response rates in this study were extremely low (14.6%) making it difficult to infer these findings beyond the study sample. Furthermore, healthcare professionals who were more interested in abuse may have been more likely to respond to the survey which raises the question of self-selection bias.

Tilden et al. (1994) looked specifically at the role of gender and education in a cross sectional, self-administered survey of clinicians in six disciplines. Respondents with education and training were significantly more likely to suspect abuse in their patients compared to respondents with no education. Education significantly predicted the choice of intervention and was predictive of reporting. However, participants in this study indicated holding beliefs that abuse was infrequent among patients and violence assessment is not the clinicians' responsibility. Also, skepticism about a positive outcome from mandatory reporting and loss of control were identified as reasons participants would forego assessment.

Goff et al. (2001) conducted a study of healthcare professionals in a Texas border community. These researchers found that education had a positive association with preparedness, i.e. beliefs about when and how to assess, and outcome expectations. Preparedness and realistic outcome expectations had a positive association with the percentage of female patients screened. However, this study had methodological weaknesses that include samples drawn from unique geographic locations, low response rates, and questions about the validity and reliability of the survey instruments.

Another study explored provider behavior, knowledge, and training to screen for IPV in three emergency department settings (McGrath, Bettacchi, Duffy, Peipert, Becker, and St. Angelo, 1997). An anonymous, self-administered survey was distributed to physicians, nurses, and social work staff on all shifts for a period of ten days to ascertain provider screening behavior, prior training, knowledge of available protocols, and perceived barriers to IPV intervention. Physicians (68%) and nurses

(80%) in this study reported never or rarely screening patients for IPV. Respondents who had received little or no IPV training reported rarely screening patients. Institutional processes identified as inhibitors to assessment included lack of police response, reluctance to become involved in the justice system, and restricted social work support within the facility.

Cohen et al. (1997) conducted a qualitative, exploratory study to determine healthcare systems' responses to family violence through five community case studies. Researchers used snowball sampling to identify healthcare and other professionals (N = 484) who were willing to participate. These authors found that family violence was thought to have a serious impact on the health of individuals in all five communities. Semi-structured interviews with healthcare, mental health, and social service professionals (n = 292) who worked consistently with victims reported being marginalized by colleagues and institutions. Physicians, nurses, and other healthcare professionals defined "being marginalized" as a lack of respect from peers and being told that treating family violence is not the way to "get ahead" nor was it a source of prestigious grants or other research supports. Respondents mentioned having to decrease their caseloads to accommodate the needs of victims and paying out of pocket for tests for which they often did not receive compensation. Respondents reported that marginalization resulted in serious economic, social, and psychological disincentives to complete IPV assessment.

Cohen and colleagues also found that some respondents had prejudicial attitudes toward IPV victims and perpetrators. These attitudes were described as class elitism,

racial prejudice, and sexism. Also, respondents admitted that they frequently did not comply with mandatory reporting policies believing that nothing would be done and suggesting an unwillingness to be involved in time-consuming court hearings. Another study suggested that victim blaming is frequently occurring in healthcare settings thus impeding patients' willingness to disclose abuse (Lutenbacher et al., 2003).

Cann et al. (2001) completed a study of community and hospital based healthcare workers in primary care, obstetrics/gynecology, mental health, and emergency medicine. Findings indicate that respondents who were nurses, females, and community healthcare workers had significantly more knowledge and positive attitudes about IPV screening. Attitudes and knowledge were strongly associated with specialty. However, when professional role, gender, specialty, and knowledge were analyzed within the same model, specialty was no longer independently related to screening. These results imply that the difference in attitudes between specialties is partly a consequence of differences in knowledge. Lack of knowledge about IPV was thought to be the reason for undetected cases. Also, a moderate number of respondents (44%) were uncomfortable discussing IPV.

In Smith and associates' (1998) study of pre-disposing, enabling, and reinforcing behaviors, researchers identified clinicians' perceived competency, i.e. preparedness to screen, as an enabling factor to assessment. However, these researchers also identified inhibiting factors which included feelings of frustration about patients' unwillingness to disclose abuse and the patient's perceived lack of initiative to change. These factors were significantly related to clinicians' neglect in assessing for abuse.

Furthermore, these findings suggest attitudes that view patients as responsible for their abuse, indicate bias that presumes the patient needs to change, and negate the possibility of institutional, societal, or community change.

Healthcare professionals' discomfort with screening and assessment was identified in a number of articles exploring screening practices in healthcare settings (Gagan, 1998; Häggblom et al, 2005; McGrath et al., 1997; Smith et al., 1998; Sugg and Inui, 1992; Williamson, Coonrod, Bay, Brady, Partap, & Wolf et al., 2004). However, Heinzer and Krimm (2002) revealed unexpected findings that suggested discomfort may be more of a deterrent to assessment than researchers had realized.

Researchers originally hoped to determine the prevalence of IPV in patients presenting to an urban emergency department (Heinzer & Krimm). Case reviews had indicated inconsistent IPV assessment practices and the need to incorporate screening protocols. The study design called for staff to use a validated assessment tool to screen all patients, male and female, over the age of 18 who were conscious, understood English, and presented to the ED within a 10 day period. However, researchers found that of the 891 patients seen in the ED during the study dates, only 106 were asked to participate in the study. Researchers stated that "discomfort with questioning and uneasiness with the potential answers" may have negatively influenced some of the clinicians (p. 30). Follow up interviews with staff revealed that role disparity, time constraints, and lack of knowledge were the primary inhibitors to assessment. Although the study was not carried out as designed, unexpected results suggest that the complexity of clinicians' discomfort should be an area of focus in future research.

Another study used a survey questionnaire to determine IPV screening practices, attitudes, and behaviors among all physicians in Arizona (Williamson et al., 2004). Although findings indicate that more than half of the respondents (56%) reported prior education and training on IPV screening, 50.5% reported rarely or never screening patients and 52% reported their competence to provide treatment was poor to fair. Furthermore, a majority of respondents (86.8%) thought that IPV was more a social issue than a medical issue.

Essentially every research article cited thus far discussed time constraints as a deterrent to assessment and screening for violence and abuse. Brevity of the medical visit and the demand for productivity in private outpatient settings were identified as seriously hindering IPV assessment. Gagan (1998) used a mixed method design to study barriers to performance accuracy of nurse practitioners for IPV. A self-administered survey was mailed to a random sample of nurse practitioners registered in the American Academy of Nurse Practitioners database. Barriers to assessment were identified through follow up telephone interviews. Respondents reported the primary barrier to assessment was lack of time to deal with a positive identification of abuse. Other barriers included clients' reluctance to discuss abuse, insufficient referral sources, lack of peer support, no continuity of care, and fear of upsetting a client.

Professional and institutional factors that lessen the likelihood of IPV assessment were also noted in the research and include lack of clinical guidelines for screening, reimbursement schedules that do not compensate for treatment of family violence, and systems that provide no incentives for innovative practice (Cohen et al.,

1997; Eisenstat & Bancroft, 1999). Although domestic and sexual violence protocols are in place in hospitals, policies are not reflected in daily practice, reporting, or referral (Cohen et al., 1997; Heinzer & Krimm, 2002). Gremillion and Kanof (1996) cite institutional and legal factors preventing assessment to include lack of personnel, space, and administrative pressures for productivity. If IPV is disclosed, there are no clear, clinical guidelines for providers to follow such as with a diagnosis of diabetes or hypertension. The scrutiny of all hospital admissions by third party payer sources prevents the use of admissions as a safety measure to protect patients. Furthermore, insurance companies may deny coverage to patients deemed as high risk or may consider IPV victimization a pre-existing condition.

Mandatory reporting laws are considered to be more of an inhibiting factor to assessment for healthcare professionals (Gerbert, Moe et al., 2002). Mandatory reporting can jeopardize the safety of patients, conflict with patients' desires, violate standards of care, threaten the doctor-patient relationship, and run contrary to informed consent and patient autonomy. Therefore, healthcare professionals may adopt a "don't ask, don't tell" stance to avoid the potential ethical dilemma associated with failure to comply with the law.

2.3.2 Facilitating Factors for Assessment

One study was conducted in the San Francisco Bay area to determine how physicians with experience in working with abuse victims overcame barriers to assessment (Gerbert, Caspers, et al., 2000). Using focus group methods, researchers were able to identify common themes across specialties and specific behaviors

associated with screening. Facilitating factors identified in this study include the reward of seeing patients change their lives and subtle shifts in the way patients viewed themselves and their relationships. Physicians in this sample expressed beliefs that helping victims was part of their job and they viewed “validation” (i.e., providing messages that validate the worth of the individual) as the foundation of intervention in abusive situations. However, the use of purposive sample methods in this study assumes characteristics of the population, raises questions about bias, and makes it impossible to generalize these findings.

Researchers conducted a pilot study to evaluate general practitioners experience and perception of women disclosing domestic abuse in a primary care setting (McKie et al., 2002). These researchers suggest time constraints are often suspended if healthcare professionals possess attitudes that are sympathetic towards patients in abusive relationships. An unexpected finding of this study identified the presence of children in the home as a facilitating factor to screening and increased the likelihood that practitioners would pursue their suspicions and suspend the “myth of time” constraints. Nevertheless, findings cannot be generalized beyond the study sample. Furthermore, this article presented more opinion and conjecture surrounding the concept of time constraints within the medical visit than important findings about healthcare professionals screening practices.

Gerbert and associates (2002) conducted a nation wide study in which they compared physicians’ behaviors and beliefs in screening/intervention for IPV to screening behaviors for tobacco use, alcohol abuse, and HIV/STD risk behaviors. The

sample was randomly selected and the response rate was moderate (69%). Once violence was identified, respondents reported intervening at comparable or greater frequency for IPV than for other risk behaviors. A majority of physicians (86%) in this study believed that IPV intervention was part of the physicians' professional role. Also, once violence was identified, respondents intervened at equal or greater frequency for IPV than for other health risk behaviors.

Chamberlain and Perham-Hester (2002) conducted a cross sectional study of family medicine, internal medicine, obstetrics/gynecology, and general practice physicians in Alaska to determine screening for intimate partner abuse within different clinical situations. Their findings suggest the two facilitating factors associated with screening were physicians' awareness of the prevalence of abuse and the belief that they have a responsibility to assess for violence during routine office visits. Both of these factors were associated with increased screening of patients at initial visits and annual exams. The only variable predictive of screening in this study was injury; most respondents (86%) routinely screened female patients if they presented with injuries. Findings from this study also suggest that there was a positive impact for patients when healthcare professionals' acknowledge abuse and affirm the patients' worth.

Researchers mailed a self-administered questionnaire to physicians and nurses at a major university teaching hospital to determine factors associated with screening prior to the implementation of screening protocols (Smith et al., 1998). Authors identified what they termed as "enabling" factors to assessment. Findings indicate that the most significant enabling factor associated with routine screening was perceived competency

on the part of the healthcare provider. Competency was defined as the provider's confidence in how prepared they were to ask patients about abuse, document injuries, and refer patients to community resources. These findings suggest that effective screening and assessment is more than simply changing screening behaviors through the use of protocols. Training programs must be designed to build knowledge and competence as well as assessment and treatment skills.

These empirical studies provide insight into facilitating factors for screening, namely respondents' beliefs that screening is part of the professionals' roles, education about violence within intimate relationships, awareness of the prevalence of violence, and perceived competence to assess and intervene. Each of these studies was well designed and two had large samples with moderate to high response rates (Chamberlain & Perham-Hester, 2002; Gerbert, Gansky et al., 2002). However, all findings were based on self-administered questionnaires and may reflect social desirability bias of the respondents. Hence, actual screening practices may be less frequent than reflected in these studies. Nevertheless, knowledge, perceived competence, and belief that screening is part of the healthcare professional's role were associated with increased assessment and identification of domestic and sexual violence.

2.4 Theoretical Perspectives and IPV Assessment

A theoretical perspective that supports healthcare professionals' assessment and identification of IPV is crisis theory. Crisis occurs when unexpected or disruptive events produce unusual stress and renders the individual physically or emotional unable to cope (Hendricks, McKean, and Hendricks, 2003). Crisis is the cognitive, affective,

and behavioral response to a critical event such as an assault. The crisis is in fact inability to problem solve and may result in increased anxiety, depression, disorganized thoughts, and disordered behavior.

Resolution of the crisis can be *adaptive* as demonstrated by emotional growth and increased insight or the resolution can be *maladaptive* as demonstrated by defensiveness, denial, and disorganization (France, 1996). Healthcare professionals are often in a unique position to intervene before an individual reaches a crisis state. Slaikeu (1990) states, “Ultimately crisis resolution depends upon a number of factors, including severity of the precipitating event, the individual’s personal resources (ego strength, experience with previous crisis), and the individual’s social resources (assistance available from “significant others”)” (p. 15). All human beings at various times in their lives may experience crises’, however, victimization within intimate relationships brings a convulsion of emotional, mental, and spiritual dynamics that make it particularly crisis evoking.

France (1996) says, “Crisis is a brief period of transition during which the person has the potential for heightened maturity and growth or for deterioration and greater vulnerability to future stress” (p. 4). This brief span of time is seen as a transitional period in which both the danger of increased vulnerability and the opportunity for personal growth is present. Thus the brevity of the crisis necessitates a goal-oriented, proactive response on the part of both the patient and the healthcare provider.

Screening and assessment of domestic and sexual violence opens the door for healthcare professionals to address the crisis many patients experience. The healthcare provider can be viewed as a “significant other” by virtue of their professional status. A healthcare provider offering options in a supportive and non-judgmental manner may lessen the anxiety, depression and hopelessness associated with patients experiencing violence within intimate relationships. The crisis is not an illness but it could be viewed as a symptom and can be regarded as an indicator of the potentially life threatening circumstance in the patient’s life.

Ecological theory is another useful model for healthcare professionals to evaluate factors associated with violence within families and conceptualize not only the family dynamics but the individual, community, and societal factors that come into play. Individual factors may include mal-adaptive coping mechanisms, health risk behaviors, and conflict resolution strategies that utilize denial and violence as a means of interaction. Family stressors such as financial difficulties, unemployment, addiction, and poor health or disability can exacerbate relationship problems and increase the likelihood of abuse. Furthermore, stressors associated with affluence and privilege, such as pressures to succeed or keep up appearances, may contribute to controlling behaviors that result in intimidation, dominance, and abuse within families. Ecological theory can enable healthcare professionals to evaluate the multi-dimensional characteristics of violence within relationships.

2.5 Policy and IPV Assessment

The Urban Institute (1996) has identified the failures of the criminal justice system to treat IPV as a serious crime. This is due in part to inadequate legislation, failure of the criminal justice system to respond aggressively, and deeply ingrained censorious attitudes about this crime. The 1980s marked a time of grass roots advocacy in bringing IPV and other crimes against women to public attention while demanding the expansion of legal protections. Research indicates that without coordination of services and changes in attitudes about IPV, legal reforms alone are not enough to address the problem of violence against women. Furthermore, victims of these crimes are more likely to be re-victimized (Urban Institute, 1996). Current programs mandated by the court, such as batterers' intervention and anger management, may not adequately address rigid gender roles and misogynistic beliefs that underlie more threatening forms of abuse, psychological control, and intimidation. Also, interventions that focus only on safety planning negate the role of the criminal justice system, counteract advocacy efforts to change social policies, and reinforce societal views that victims' should be responsible for safety.

Zweig, Burt, and Van Huss (2003) published a report on the effects of victim service programs to victims of IPV. Their findings suggest that victims benefit from coordinated victims' services and that arrests and convictions happen more frequently when community agencies work together to support victims and collaborate in efforts to obtain justice. Also, a collaboration of victim serves that promoted the safety, respect, and dignity of the victim increased the likelihood that the victim would utilize victims'

services more effectively. Given these findings, Zweig and associates suggest that funding policies should require collaborative service efforts among community agencies.

Definitions of IPV, family violence, and domestic violence vary among social institutions as well as among researchers. Johnson (1995) argues that IPV should be defined more distinctively, with a typology to distinguish between types and studies conducted to determine effective interventions. Distinctive typologies may prove useful for research in effective interventions at the individual level. However, when researching the effects of IPV on an institutional level, broader, more comprehensive terms must be considered. To effect change at the macro level, definitions of relationship violence must fully encompass the reality of the phenomenon as it effects society so that change can and will occur through institutional policies, protocols, and procedures.. Violence brings to mind a physical, aggressive type of interaction that results in serious harm and injury. Sexual abuse may be violent and assaultive as well as coercive and insidious. However, more covert forms of physical, emotional, and sexual violence include threats of physical harm, psychological battery, intimidation, manipulation, coercion, and control. Therefore, maltreatment may be a useful term that more clearly captures the full extent of the phenomenon of IPV. Maltreatment has become a term that is now used in the dialogue and study of child abuse. Thus maltreatment could encompass all forms of violence, assault, abuse, intimidation, manipulation, coercion, and control.

Little and Kantor (2002) point out community and societal factors associated with family violence that includes professional and legal definitions which are incorrect, incomplete, or vague. Legal sanctions hold battered mothers responsible for ending the abuse and accountable for children's safety more so than fathers, resulting in the victim suffering the same consequence as the perpetrator (Beeman, as cited in Little and Kantor, 2002). These researchers also cite staff shortages, stereotypical views of victims, and non-compliance with screening protocols as institutional factors within healthcare facilities. Incorporating a routine practice of IPV assessment in healthcare settings would remove the stigma associated with victimization and open the door to identifying the complexities that impact the community and society. Universal assessment of all patients could normalize the process and thereby lessen the discomfort for both provider and patient. Assessment that is done in a non-judgmental way could lead to identifying strengths that facilitate change in individuals, families, communities, and society.

Healthcare professionals who are educated in the dynamics of domestic and sexual violence could impact the community by refuting negative perceptions within healthcare and health management organizations. Healthcare professionals' could present the problems of domestic and sexual violence at health fairs and community forums thus becoming a vital resource for education and prevention efforts at the community level. Furthermore, healthcare professionals who are educated and trained to assess can educate colleagues and combat negative attitudes and stereotypical views of victims and perpetrators.

2.6 Studies on the Effectiveness of Education

Studies have been completed to determine the effectiveness of education for changing behavior surrounding all types of health issues. Health behavior models and health education frameworks have been utilized by healthcare professionals in the hopes of changing patient behavior to promote health and decrease health-risk behaviors (Glanz, et al., 1997). However, studies have also shown that education has been effective in changing the behavior of healthcare professionals and improving the link between theory, research, and practice. Dalton, Blau, Carlson, Mann, Bernard, Toomey, et al. (1996) completed a study on the relationship between knowledge, self-reported behavior, and documented behavior in relation to pain management with patients. These researchers used a quasi-experimental time-series design to measure the effectiveness of a program to change nurse knowledge, attitude, and behavior and evaluate the relationship between outcomes. Findings suggested that knowledge and attitudes did improve on measurement instruments. Behavioral changes with regard to documentation in patient records also improved but were slow to occur. Nevertheless, the researchers' findings indicate that education did make a difference in practice behaviors and providers' reported feelings of increased credibility and effectiveness with their patients.

Hamberger, Guse, Boerger, Minsky, Pape, and Folsom (2004) completed a study to evaluate the impact of a healthcare provider training program to identify and assist victims of partner violence. The hypothesis was that training would increase participants' self-efficacy, increase endorsement of participants' intervening with

victims, increase comfort with making referrals, and that prior training effects would be moderated by past experience with intimate violence victims. The construct of self-efficacy was adapted from the work of Bandura and was operationalized as the self-appraisal of how well one can perform certain tasks that are influenced by “verbal persuasion, modeling, skill performance, and physiological states” (p.3). Findings indicate that all changes in measurement scales from pretest to post-test were significant. Participants with no prior training showed a significantly larger increase in self-efficacy, changes in attitudes, and values than those with prior training and the increase held at a six month follow up with a random sample of study participants. Thus, results show that training resulted in desirable changes in self-efficacy, attitudes, and values that were thought to be important in healthcare professionals’ assessment and intervention with victims of violence and abuse.

Thompson, Rivara, Thompson, Barlow, Sugg, Maiuro, and Rubanowice (2000) completed a study to test the effectiveness of an intense training intervention that included a skills based education model coupled with environmental cues (i.e., a bi-monthly newsletter, clinical education rounds, posters, cue cards, and questionnaires) with regard to the identification and management of domestic violence. Results indicated an increase in positive knowledge, attitudes, and beliefs outcomes up to twenty-one months after the program initiation. Findings suggest that the intervention used in this study improved the assessment of IPV in practice for up to nine months following the intervention.

Sitterding, Adera, and Shields-Fobbs (2003) conducted a study to determine if physicians, primarily family and obstetricians/gynecologists, who received violence education training were more likely to screen patients. A survey questionnaire was developed using questions from four spouse/partner violence surveys used in other studies to determine current practice, attitudes/opinions, perceived barriers, violence education, protocols/procedures, practice specialty, and patient demographics. Results indicate that regardless of specialty, participants who had violence education during their residency were three times more likely to screen than non-residency trained participants. Even when controlling for other variables such as age, gender and years of experience, the trend of universal screening for family practice participants with residency training was consistent. Also, obstetricians/gynecologists with residency training were found to be significantly more likely to complete screening with all patients. Thus, these researchers maintain that IPV education during residency increasing the likelihood of universal screening practices among this study sample (Sitterding et al.).

Other studies indicate that training and education do indeed increase the likelihood that healthcare professionals will screen for IPV (Covington, 1997; Harwell, 1998; Jonassen, 1999; Kripke, 1998; Wist & McFarlane, 1999). Nevertheless, few are rigorously designed studies have been conducted to determine the most effective training programs for healthcare professionals in the assessment and intervention for IPV (Davidson, Grisso, Garcia-Moreno, Garcia, King, & Marchant, 2001). Tower (2003) completed a study of medical social workers in Florida and found that

participants in her study who had completed continuing education, agency in-service training, and additional training on IPV identified more domestic violence victims. However, Waalen, Goodwin, Spitz, Petersen, & Saltzman (2000) maintain that education must be combined with other strategies such as written protocols, the provision of screening questions, and verbal/visual prompts would be more effective in changing behavior related to IPV screening in practice.

2.7 Implications for Practice

Although facilitating factors for assessment and screening have been identified, research suggests that healthcare professionals are not routinely assessing for intimate partner and sexual violence in the lives of their patients. Studies indicate that healthcare professionals lack knowledge about the prevalence of violence, are uneducated about the forms of abuse within intimate relationships, and lack the skills to accurately assess for violence and lethality. Furthermore, healthcare professionals appear to be overlooking the link between IPV and negative health outcomes. Moreover, healthcare professionals are uncomfortable with discussing violence with patients thus indicating interpersonal barriers to be identified and overcome.

Multiple factors have been identified that inhibit rather than facilitate assessment of IPV in healthcare settings. The research primarily discusses violence perpetrated against female patients by male partners. The association between negative health outcomes and IPV perpetration or victimization for male patients has yet to be thoroughly researched. With the exception of two articles (Coker, Smith, McKeown, et al., 2000; McGrath et al., 1997), the phenomena of sexual abuse was not associated with

IPV, indicating a lack of knowledge about the types and levels of abuse within intimate relationships and perhaps uncovering another layer of discomfort and lack of awareness on the part of healthcare professionals. Furthermore, most articles evaluated the screening practices of physicians, assuming that physicians are skilled in assessment and are the only healthcare professionals who can intervene in the lives of patients.

Whether the violence is current or past, between adults or in childhood, witnessed or experienced, physical, sexual, or psychological; violence causes harm and harm can result in poor health, unhealthy lifestyles, and health risk behaviors thus making violence a healthcare issue. To suggest that patients are solely responsible to disclose abuse within the context of the provider-patient relationship with no inquiry on the part of the provider runs contrary to the fact that there is a relationship. Professional practice is based on knowledge, skills, ethics, and standards. Medical practice standards are models that involve diagnostic evaluation through assessment, screening, and inquiry into personal matters that effect health. Consequently, patients are asked about health risk behaviors, personal habits, and experiences that influence the healthcare professional's recommendations. Neglecting to ask about or assess for violence based upon presumptions that the patient will not disclose, the patient will fail to comply or is some how responsible for the abuse, does not negate professional responsibility to address the possibility of violence in the lives of patients.

Overall, the research indicates that healthcare professionals do not have the knowledge or training to confidently or appropriately assess for intimate partner violence. Reluctance or resistance on the part of healthcare professionals to assess may

be linked to a lack of proficiency or could be linked to healthcare professionals' biases that have not been explored in the research identified in this review. The research also indicates that when healthcare professionals are trained and educated about assessment, treatment, and referral, they are more likely to assess for violence or assault.

Implications for healthcare practice include the following:

- Universal IPV assessment with all patients.
- Develop realistic expectations of self & patients.
- Reframe violence as a health issue.
- Refute institutional views of violence as a private issue.
- Recognize the importance of the patient/provider relationship.
- Promote IPV prevention models in healthcare settings.

Foege, Rosenbert, and Mercy (1995) suggest use of the public health model as a long term approach to the prevention of IPV. The public health model promotes current scientific research as a guide to investing in prevention of IPV. These authors argue that addressing economic and social causes of violence is important to alter the cultural acceptance of violence and change social norms. Moreover, efforts to coordinate actions among healthcare organizations, early intervention within healthcare settings, and making IPV prevention a priority may result in significant social change.

The use of medical metaphors to describe IPV may prove helpful to healthcare professionals. The effects of IPV can manifest in the form of “acute or chronic symptoms.” The recurrent “outbreak” of IPV can be assessed and “treatment options” discussed. Healthcare professionals can use their training and expertise to recognize the

symptoms of IPV and make recommendations. As is often the case with other life threatening conditions, if the presenting problem is outside the scope of the healthcare professionals' expertise, the patient is referred to a specialist. The healthcare professional is not responsible for the health outcome but he/she is responsible for providing information and treatment options. There will be occasions when the patient will find it impossible to "comply" with recommendations. However, that does not negate professional responsibility to adhere to "best practice" standards. Healthcare professionals can assist patients in making an informed choice by addressing IPV and other forms of abuse as a health issue, documenting findings, expressing concerns for patient well being, encouraging the use of available resources, and in extreme cases, assist them in taking immediate steps to ensure safety.

The profession of social work has historically been involved in advocacy and empowerment of clients who experience IPV. Social workers have the expertise to address the issues of IPV and other forms of abuse. However, most of the research in this review was obtained from nursing, medical and public health journals. Social workers in healthcare have a unique opportunity to conduct research, impart knowledge, and provide education to other healthcare professionals about assessment of patients who experience IPV or any type of abuse. Nevertheless, it is essential for social work researchers to collaborate with healthcare professionals and do further studies on the subject of IPV as a major health issue. Implications for social work practice include:

- Social work professionals in outpatient healthcare settings addressing IPV & sexual violence as a health issue.

- Social work in partnership with public health officials to focus on prevention and awareness.
- Social work participation in education in healthcare settings.
- Social work advocating for policy and legislative changes.
- Social work collaborating with healthcare agencies in program development and evaluation.

Social workers can serve as a vital link in the outpatient setting and provide accurate assessment, comprehensive treatment, and appropriate referrals when IPV is identified. When healthcare professionals do assess and identify IPV, social work has been identified as the primary profession to consult when referring patients (Abbott & Williamson 1999). Thus social work has the potential to be more involved in outpatient medical settings and become a vital participant in a holistic treatment approach for patients experiencing IPV or any type of abuse.

Most of the articles cited in this review were obtained from medical and nursing journals and thus provide a medical research perspective. Nursing and medical journals were the primary source for research on the impact of IPV on health, health risks and health behaviors. Furthermore, in review of the articles, nursing researchers were studying the problems of physical, psychological, and sexual violence from a psychosocial standpoint. Thus, nursing researchers are using an ecological perspective consistent with social work theory and practice. Perhaps social work and nursing researchers could work together to study a wide array of social issues impacting health. The partnership of social work and nursing could be at the forefront in contributing to

current knowledge, building theory, and support new and innovative practice to address psychosocial phenomena that affect health and well being. Consequently, social work and nursing research partnerships could encourage a research agenda that would support a comprehensive and collaborative response to social, institutional and cultural problems through practice in healthcare settings.

2.8 Theoretical Frameworks

2.8.1 Trans-Theoretical Model

The Trans-Theoretical Model (TTM) evolved through a comparative analysis of theories from psychotherapy that integrates the process of change from major theories of intervention (Prochaska, Redding, & Evers, 1997). From initial studies of health risk behaviors, researchers looked at smoking cessation and ‘self-changers’ compared to smokers using professional interventions (DiClemente & Prochaska, as cited in Prochaska et al., 1997). These researchers discovered that participants used different processes at different times in their efforts to change thus revealing that behavioral change unfolds through a series of stages. The core constructs of TTM include the stages of change, decisional balance (i.e., pros and cons of change), self-efficacy (i.e., confidence), and the processes of change. Stages of change include pre-contemplation, contemplation, preparation, action and maintenance. Processes of change involve intrapersonal and interpersonal activities that occur as people progress through the stages of change. TTM is a comprehensive model of behavioral change as a process that occurs through a sequence of stages, each stage being stable or open to change (Prochaska et al.). TTM has primarily been used to adjust interventions to adapt to the

identified stage of change when working with individuals needing to adjust their behavior. However, TTM is a comprehensive model that is open to use with other theoretical variables including describing, explaining and predicting changes in groups, organizations, and communities. Thus, the use of TTM in a study of changes in healthcare professionals' behaviors with regard to assessment and intervention of IPV may prove useful for future education programs and interventions with professionals in a variety disciplines.

2.8.2 Theory of Reasoned Action

The Theory of Reasoned Action (TRA) suggests that the relationship between attitudes and behaviors is based on an individual's attitude toward performing the behavior and the subjective norm associated with a behavior change (Montano, Kasprzyk, & Taplin, 1997). Attitude is determined by the individual's beliefs about the benefits of performing the behavior. The subjective norm is essentially the normative beliefs of peers or referent individuals about the adoption of a particular change in behavior. Therefore, if an individual believes that positive outcomes will result from changing a particular behavior and that peers or referent individuals support the behavior change, the individual is more motivated to change the behavior. The causal chain of TRA begins with behavioral and normative beliefs in connection with behavioral intention and behavior vis-à-vis attitude and subjective norms (Montano et al.). However, Fishbein (as cited in Montano et al.) maintains that some behaviors are better described as being under attitudinal control and while others are considered more under normative control. Thus, depending upon the population, interventions efforts

must be adapted to adjust to the behavioral beliefs or the normative beliefs more closely associated with intention and behavior of the study participants.

2.8.3 PRECEDE/PROCEED Model

The PRECEDE/PROCEED Model (PPM) was originally developed to enhance the quality of health educational interventions by offering practitioners a systemic planning process for designing, implementing, and evaluating health behavior change programs (Glanz et al., 1997) PPM is based on the premise that educational diagnosis precedes an intervention plan and is typically focused on programs delivered in practice settings. PPM focuses on predisposing factors (knowledge, attitudes, and beliefs), enabling factors (organizational processes), and reinforcing factors (positive outcomes and feedback) and can be used as a structure for determining the most appropriate interventions strategies and implementation within healthcare settings (Gielen & McDonald, 1997).

PRECEDE stands for Predisposing, Reinforcing, and Enabling Factors in Educational Diagnosis and Evaluation. PROCEED stands for Policy, Regulatory, and Organizational Constructs in Educational and Environmental Development. The PPM framework relies on the principle of participation which posits that success in achieving change is increased by the participation of members of the target audience in defining the problem/goals and in developing/implementing solutions. Thus PPM may facilitate empowering the target audience (i.e., healthcare professionals) in program planning, implementation and evaluation while fostering consideration of individual and environmental factors that influence behavior (Geilen & McDonald).

Tenets of PPM suggest that behavior change is a function of the predisposing factors that not only include knowledge, attitudes and beliefs but also personal preferences, existing skills, and beliefs in self-efficacy. Reinforcing factors provide continued incentive for the behavior change to remain consistent. Enabling factors include environmental aspects such as programs, resources, and services that make it possible for change to occur (Glanz et al.). Thus PPM is a useful model to consider for implementing planned change within healthcare settings that foster the routine assessment of intimate partner violence with all patients.

CHAPTER 3

METHODS

3.1 Introduction

This chapter will provide an overview of the research design and methods for this study as well as the research questions and hypothesis to be tested. Study participants will be introduced and a discussion of sample demographics will be provided. Scoring for the PREMIS survey instrument will be explained and the rationale for computation of scores on scales and subscales will be discussed. The education intervention utilized in this study will also be outlined. Finally, data analysis procedures will be presented.

3.2 Research Design

This study was quasi-experimental utilizing a pretest-post-test only, non-equivalent, comparison group design to evaluate three groups of healthcare professionals in a rural area of east Texas. Specifically, data was gathered from healthcare professionals employed in three outpatient healthcare settings. The healthcare professionals who participated in this study were representative of professionals in primary and outpatient healthcare and included physicians, physician assistants, nurse practitioners, registered nurses or licensed vocational nurses, and medical assistants as well as other professionals who included dentists, dental assistants,

social workers, and physical therapists to name a few. Data were collected from three healthcare settings where healthcare professionals (i.e., licensed or certified) were asked to voluntarily participate in completing a questionnaire to determine their educational background, knowledge, opinions, and practice behaviors regarding intimate partner violence. The study utilized a staggered group design as follows:

Group 1	O ₁	X	O ₂	
Group 2	O ₁		O ₂	X
Group 3			O ₂	X

3.3 Research Questions and Hypothesis

3.3.1 Research Hypothesis

Healthcare professionals who receive an education intervention will have improved knowledge, opinion, and practice scores on the PREMIS Survey Instrument.

3.3.2 Research Questions

1. To what extent are healthcare professionals knowledgeable about intimate partner violence?
2. To what extent do healthcare professionals' possess opinions reflective of intimate partner violence management readiness?
3. To what extent do healthcare professionals perform intimate partner violence assessment behaviors in practice?
4. What factors influence healthcare professionals' intimate partner violence assessment behaviors in practice?

3.4 Study Population

3.4.1 Power Analysis

A number of *a-priori* power analyses were conducted using the methods outlined by Cohen (1988) as well as power analysis calculators developed by Lenth (2006) and Faul, Erdfelder, Lang, and Buchner (2007) to determine the sample size needed to provide sufficient statistical power. Cohen argues that experiments should strive for a minimal power of .80 with a medium effect size. The first power analysis looked at the appropriate sample size for the research question that will utilize multiple regression techniques with three independent variables (i.e., previous training, degree or certification, and gender) and an alpha level of .05. Based on the power tables from Cohen (1992), a total sample of 76 is required to detect medium effect size of .15 using Cohen's specifications and three independent variables. G*Power, a statistical power analysis program developed by Faul and associates (2007) computed a total sample size of 77 for three independent variables for a medium effect size of .15 and power of .80.

Another power analysis was conducted to examine the appropriate sample size for the study hypothesis utilizing a one-way analysis of variance (ANOVA) with three independent groups and an alpha level of .05. Using Cohen's (1992) sample tables, a sample of 52 is required for each of the three groups to detect a medium effect size of .25. G*Power calculated a sample size of 53 per group to detect a medium effect size of .25 with statistical power of .80 (Faul et al.).

Additional power analyses were conducted to determine the sample size needed for comparisons of mean scores. Using Lenth's (2006) calculations, at an alpha level of

.05, a sample size of 27 is satisfactory to yield a minimum power of .81 for a one-sample *t*-test of pretest-post-test means. An independent samples *t*-test with a medium effect size of .50 and power of .80 will require 51 per group (Faul et al.).

3.4.2 Study Sample

Group 1 participants were employed at a community medical center (CMC) established in 1977 to provide services to individuals and families in a four county area of rural east Texas. The CMC receives federal funds to provide healthcare in rural, underserved areas. The CMC accepts Medicare, Medicaid, CHIP, and private insurance. Individuals who are uninsured or underinsured may obtain healthcare at an adjusted rate based upon household income. The CMC's healthcare services include primary healthcare to adults of all ages, pediatrics, obstetrics/gynecology, and dental care. Group 1 participants completed the PREMIS questionnaire at pretest, participated in the education intervention approximately three weeks later and completed the PREMIS questionnaire again at post-test immediately following the intervention.

Group 2 participants were members of a private healthcare association (HCA) established in the 1970s in rural east Texas. The HCA provides primary medical care to adults, children ages 12 and older, and specializes in geriatrics, women's health, and wellness programs. The HCA accepts Medicare, some Medicaid, and private insurance. The HCA's service area includes a two county segment of rural east Texas. Group 2 participants completed the PREMIS questionnaire at pretest and then again approximately three weeks later at post-test with the education intervention immediately following completion of the PREMIS survey.

Group 3 participants were healthcare professionals working in the emergency medical care and home health (EDHH) units of a hospital located in rural east Texas. Emergent, urgent, and out-patient services are provided by physicians, mid-levels, nurses, and medical assistants, as well as social workers and physical therapists to patients of all ages who present for evaluation or have a physician's order for care. The EDHH accepts Medicare, Medicaid, and private insurance. The service area is primarily the county in which the hospital is located however patients who present for evaluation in the emergency unit are not denied care and all patient care is prioritized according to the level of care needed. Group 3 participants completed the PREMIS survey at post-test only.

A total number of 149 healthcare professionals participated in this study. Group 1 had 61 participants, Group 2 was the smallest group with 29, and Group 3 had 59 professionals participate. Of the total study sample, 93% were female (n = 130) and 7% were male (n = 19). Study participants ranged in age from less than 29 to more than 60 years of age. Fifty-two percent (n = 78) of participants were between the ages of 30 and 50. Study participants had practiced an average of 14.6 years (sd = 11.7). Participants included physicians/dentists (n = 15; 10%), physician assistants (n = 6; 4%), nurse practitioners (n = 7; 5%), RN/LVNs (n = 74; 49%), medical assistants (n = 30; 20%) and other (n = 17; 12%). Other healthcare professionals included an emergency medical technician (n = 1), social workers (n = 3), physical therapists (n = 5), a nutritionist (n = 1), a radiology technician (n = 1), a psychologist (n = 1), and dental assistants (n = 5). Table 3.1 provides an overview of study group demographics.

Table 3.1 Study Group Demographics

Group	n	Age Range	Mean # of Years		Degree/Certification
			In Practice (sd)	Gender	
1	61	23% < 29 54% 30-50 16% 51-60 7% 60 +	10.9 (11.6)	93% F 7% M	15% Physicians 5% Physician Assist. 5% Nurse Practitioner 31% RN/LVN 33% Med. Assist. 11% Other
2	29	17% < 29 45% 30-50 28% 51-60 10% 60 +	15.4 (10.8)	76% F 24% M	14% Physicians 10% Physician Assist. 14% Nurse Practitioner 28% RN/LVN 17% Med. Assist. 17% Other
3	59	16% < 29 55% 30-50 26% 51-60 3% 60 +	18.2 (11.1)	86% F 14% M	3% Physician ** Physician Assist. ** Nurse Practitioner 78% RN/LVN 9% Med. Assist. 10% Other

** No participants in this category

3.4.2.1 Age, Gender, and Degree/Certification by Group

Chi square analyses were utilized to determine if there were demographic differences between Groups 1, 2, and 3. Initial chi square results for age revealed that three cells had expected cell counts of less than five. The 60+ age category had the least number of participants and a decision was made to collapse age groups 51 – 60 and 60+ into one category. Results of the second chi square analysis revealed that there was no significant difference between groups with regard to age ($\chi^2 [6] = 6.030; p = .420$).

Another chi square analysis was conducted to evaluate study groups on the variable gender. Results revealed that one cell had an expected count of less than five. Chi square results were not significant ($\chi^2 [2] = 5.518; p = .06$) however a cursory view of the data revealed that males represented 7%, 24% , and 14% of study participants across Groups 1, 2, and 3, respectively, thus the groups appear to be somewhat different on the variable gender and most study participants are female.

A final chi square was obtained to evaluate groups on the variable degree/certification. Because eight cells had counts of less than five, there were not sufficient cell counts to run a chi square analysis of groups by degree/certification. Conceptual differences in educational backgrounds between degree/certification groupings prohibited collapsing categories. Furthermore, there are known differences between categories due to distinctions in education levels of participants which included physicians as well as non-physician healthcare professionals. There are also differences within the degree/certification category for nursing as nursing education backgrounds could vary substantially and may include participants with a two year associates degree as well as participants with a five year graduate degree.

3.4.2.2. Years in Practice by Group

One way ANOVA statistics were obtained to evaluate differences between study sample groups with regards to years of practice. The ANOVA was calculated bearing in mind the differences in group size, thus between group variation was partitioned into linear trends. Results revealed that Groups 1 and 3 differed significantly ($F [1] = 12.290; p = .00$) on the variable Years in Practice and Brown-

Forsythe Test of Equality of Means confirmed this finding ($F [2, 112.275] = 6.338; p = .00$). Games-Howell post hoc analysis also confirmed that Groups 1 and 3 differed significantly and indicated that Group 1 had significantly fewer years in practice than Group 3 ($p = .00$) while Group 2 did not differ significantly from either Group 1 or 3 ($p > .05$).

3.4.3 Procedures

Approval to conduct this study was obtained from the University of Texas at Arlington Institutional Review Board. Approval to collect data from healthcare professionals was obtained from the aforementioned agencies' administrators prior to beginning the study. The survey instrument along with a consent form was given to staff at the three healthcare settings and staff members were asked to voluntarily complete the survey instrument. Anonymity and confidentiality of responses was assured in the consent form.

The respondent profile section of the survey instrument was modified to collect data regarding age group, gender, degree or certification, years of practice, number of patients seen, and past participation in IPV training. Participants were asked to provide an alphanumeric code that included the month and day of their birth plus the first two letters of their last name (ex: 1124sh) for identification purposes to match pretest and post-test surveys for statistical analysis.

3.4.4 PREMIS Survey Instrument

PREMIS (Physician Readiness to Manage Intimate Partner Violence Survey) is a survey questionnaire developed by Short, Alpert, Harris, and Surprenant (2006) to

measure healthcare professionals' preparedness to manage IPV with patients and was adapted from items developed by the CDC and the Massachusetts Medical Society. Content validity was established by review from an outside group of IPV educators who selected items that reflected four key theoretical constructs, namely IPV education background, knowledge, opinions, and practice issues. PREMIS is a 67-item self-administered survey questionnaire that takes approximately twenty minutes to complete (see Appendix A). Item scores are calculated on the four constructs, as described above, to determine healthcare professionals' readiness to manage IPV in healthcare settings.

PREMIS determines respondents' IPV background through a series of questions about prior IPV training, how prepared participants believe they are to assess for IPV (perceived preparation), and how knowledgeable they believe they are about IPV (perceived knowledge). Participants' knowledge scores are calculated by summing the number of correct responses to IPV knowledge questions. The PREMIS opinion subscales are scored by obtaining a mean of Likert scale responses to statements reflective of healthcare professionals' readiness to manage IPV by means of legal requirements to report, sensitivity to IPV in the work place, confidence to assess, awareness of alcohol/drug use, and understanding of IPV victims. The Practice Issues scale is scored from a series of questions about practice behaviors performed within the previous six months during routine medical visits with patients.

PREMIS authors used maximum likelihood factor analysis with an oblique rotation to verify how well survey items fit the constructs they were designed to measure. Authors used the Rand coefficient to test the construct validity of identified

scales by examining the relationship between the empirically derived scales and the objective values assigned to scale items based on an expert panel's original theoretical constructs. The Rand coefficient ranges between 0 and 1 and compares items grouped according to two different clustering solutions (Short, et al.). Higher values for the Rand coefficient indicate higher levels of agreement between two solutions. PREMIS authors reported a high degree of association between the empirically derived opinion scales and the original theoretical constructs developed by the expert panel (Rand coefficient = 0.89) with the factor analysis. Multiple regression was used to test the internal predictive validity of key survey items. Correlations between all four PREMIS instrument scales revealed that perceived knowledge score was significantly correlated with the amount of previous training ($r = .34, p = .00$) and perceived preparation ($r = .79, p = .00$). Actual knowledge was correlated with perceived knowledge ($r = .20, p = .01$). Five of the six opinion scales were significantly correlated with perceived preparation and perceived knowledge. Three of the six opinion scales were significantly correlated with the amount of previous training.

Short and associates used multiple regression analysis of the practice issues scale as the dependent variable and all other scales as the independent variables. Analysis revealed a significant relationship with the independent variables and practice issues ($F = 5.76; p = .00$) that explained the variation in practice issues scores ($r = .62; r^2 = .32$). Step-wise regression analysis revealed that previous training, workplace issues, and self-efficacy opinion scales best predicted the variation in practice issues (adjusted $r^2 = .35$).

Short and colleagues completed their psychometric evaluation of the preliminary survey and revised the tool. The researchers then administered a paper version of the survey instrument to a group of 67 practicing physicians in community-based practices on three separate occasions approximately six months apart. Multivariate analysis of variance (MANOVA) revealed that the psychometric properties of the tool were consistent and reliable between the two groups of physicians. Between scale correlations revealed the survey development group scores were consistent with the evaluation group scores. Researchers also found consistency in survey scores over a 12-month period of time and in the absence of outside IPV education.

3.4.5 Scoring PREMIS Scales

The three groups of healthcare professionals participating in this study completed survey instruments at different points in time. All study participants provided demographic information and responded to questions regarding their IPV education background. Participants placed a checkmark (i.e., yes) beside all statements that indicated their previous IPV training experience. A response for “other” was included for participants to provide specifics about any additional training experience. A decision was made to create a variable that would indicate a count of activity and thus reflect prior training. A score for the variable Previous Training was calculated by summing responses to statements about the participants past training experiences. Participants who checked the box marked “none” had a 0 score. The remaining prior training statements included “read my institution’s protocols,” “watched a video,”

“attended a lecture,” etc. Participants who checked one or more of the remaining 10 responses were given 1 point each for a total Previous Training score.

The Knowledge Score was calculated from responses to survey questions about participants’ knowledge of the strongest risk factors for IPV, as well as their knowledge of batterers, warning signs, reasons victims cannot leave an abusive partner, appropriate assessment questions, Stages of Change, and True/False statements. Responses were summed to compute Knowledge Scores and scores were analyzed for each of the three groups (Short et al).

Opinion Scores were calculated from participants’ responses to opinion statements reflective of IPV management readiness. Participants were given a Likert scale response set of strongly disagreed (1) to strongly agreed (7) for each opinion statement associated with empirically derived theoretical constructs for readiness to manage IPV (Short et al.). Opinions items were grouped to form Opinion Subscales found to be associated with the readiness to manage IPV which include Staff Preparation, Legal Requirements, Work Place Issues, Self-Efficacy, Alcohol/Drugs, & Victim Understanding. Negatively worded opinion items were inversely recoded (i.e., recoded to reflect the opposite response) thus if respondents strongly disagreed with a negative worded opinion statement, this was recoded to reflect strongly agree with a positive statement. Opinion scores were computed by calculating a mean score of responses on the six subscales and higher scores indicate opinions reflective of readiness to manage IPV.

The PREMIS survey authors completed psychometric studies of the instrument with physician participants only, thus the reliability of Opinion Subscale items with non-physician healthcare professionals in this study was evaluated. A reliability analysis was conducted on the participants' Opinion Subscale scores to obtain Cronbach's alpha coefficients and determine the internal consistency of the subscales. Analysis revealed consistent Cronbach's alpha coefficients for Staff Preparation ($\alpha = .79$), Legal Requirements ($\alpha = .79$), Work Place Issues ($\alpha = .73$), and Self-Efficacy ($\alpha = .70$). However, analysis of Alcohol/Drugs ($\alpha = -1.03$) and Victim Understanding ($\alpha = .46$) required further scrutiny.

Review of Cronbach's alpha for the Alcohol/Drugs subscale revealed that the negative alpha coefficient ($\alpha = -1.03$) was due to a negative average covariance among the three items in the Alcohol/Drugs subscale and violated reliability model assumptions. A re-check of Alcohol/Drugs items coding revealed that the items were coded correctly with one item, "alcohol abuse is a leading cause of IPV" being reverse coded, i.e., the opposite response was calculated, while the other two items, "patients who abuse alcohol or other drugs are likely to have a history of IPV" and "use of alcohol or drugs is related to IPV victimization" were computed using the original responses. Problems with internal consistency may be a result of the expectation that participants will be able to distinguish between alcohol/drugs being viewed as a "cause" (i.e., the "wrong" answer for the reverse coded items) and alcohol/drugs being viewed as a correlate (i.e., the "right" answer for the other items). It is possible that the advanced education level of physicians made them more proficient in making these

distinctions, resulting in considerably higher alpha coefficients on this subscale in the PREMIS authors' original validation studies. Further review of the inter-item correlation revealed that none of the items within the Alcohol/Drugs subscale were correlated for participants in this study.

The Victim Understanding subscale contained six items and all were reverse coded except one. Review of Cronbach's alpha and inter-item correlation for Victim Understanding revealed a low alpha coefficient ($\alpha = .46$) and all six items had a low inter-item correlation ($r \leq .33$). Given the lack of internal consistency in the Alcohol/Drugs and Victim Understanding subscales, a decision was made to exclude results on these two subscales from further data analysis.

Practice Issues scores were computed using a number of variables which include encountered a new diagnosis of IPV in the past six months, current screening behaviors, situations in which IPV assessment questions are asked, actions taken when IPV was identified, referrals made, knowledge of institutional protocols and policies, availability of a camera to document injuries, and legal requirements to report. Some variables were recoded and scores on all were computed. A composite Practice Issues Score was calculated by summing responses and means on all practice issues variables.

3.4.6 Education Intervention

The education intervention for this study was derived and adapted from a program developed for the Family Violence Prevention Fund (Ganley, 2004). The Family Violence Prevention Fund (FVVPF, 2002) defines IPV as:

A pattern of assaultive or coercive behavior that includes physical injury, psychological abuse, sexual assault, progressive social isolation, stalking, deprivation, intimidation, and threats perpetrated by someone who is, was, or wishes to be involved in an intimate relationship with an adult or adolescent in an attempt to establish control over the intimate partner. (p. 2)

The education intervention consisted of an overview of the epidemiology of IPV including the prevalence, healthcare costs, and the association between IPV and leading healthcare indicators as outlined in current research and by the FVPPF. Sessions covered issues of health, dynamics of IPV, clinical skills, legal issues, and community resources.

The education intervention included didactic lecture, audio-visual aids, and group discussion between and among participants. Trans-theoretical Model and Stages of Change were integrated into the educational intervention to provide a framework for understanding how individuals make changes in behavior beginning with recognition of the need for change and contemplation of the pros and cons of change. Change thus occurs in stages and is a process for every individual. Education sessions focused on the importance of viewing IPV as a health issue and thus appropriate to be addressed in healthcare settings vis-à-vis assessment and intervention.

A segment on the legal and ethical issues surrounding assessment, intervention, and referral included confidentiality, validating the worth of the individual, respect for the patients' autonomy, and legal requirements to report. The education intervention included IPV information and skills based components to advance enabling and reinforcing factors that empower professionals to inquire about IPV. Participants were

given examples of direct questions to ask as well as information about how to respond effectively and supportively in cases of disclosure or denial of violence. Behavioral skills includes emotionally supportive statements, safety planning, patient education, referral, and documentation.

A skills training component of the education intervention utilized the Ask, Validate, Document, and Refer (AVDR) model developed by Gerbert, Moe, et al. (2002). AVDR is a model designed to simplify healthcare professionals' role in addressing IPV in healthcare settings. The AVDR model focuses on the importance of asking about abuse, validating the worth of the patient, thoroughly documenting the patient's presentation and disclosure, and referrals for follow up. Gerbert and associates maintain that asking about abuse equals success; validation empowers and expresses a concern for health and safety; documentation provides a record of the abuse; and referral to IPV specialists provides the patient resources with which to follow up. The AVDR model can be used in all situations whether patients disclose abuse or not. The focus of AVDR is to enable healthcare professionals to successfully manage IPV in practice and provide support without imposing unreasonable expectations on patients or on themselves to solve the problem of IPV.

3.5 Data Analysis

Data was analyzed using SPSS version 15. Frequencies, percentages, and measures of central tendency provided information about the study sample demographics. Univariate, bivariate, and multivariate statistics were utilized to answer research questions and determine participants' prior IPV training, current knowledge,

opinions, and practice behaviors. Table 3.2 provides a complete overview of the data analysis used to test each of the research questions and the research hypothesis.

Table 3.2: Matrix of Data Collection & Data Analysis

Research Questions	Data Source	Data Analysis
1. To what extent are healthcare professionals' knowledgeable about IPV?	Previous Training & Knowledge Scores	Descriptives & One Sample <i>t</i>
2. To what extent do healthcare professionals' possess opinions reflective of IPV management readiness?	Opinions Sub-Scale	Descriptives & One Sample <i>t</i>
3. To what extent do healthcare professionals' perform IPV assessment behaviors in practice?	Practice Issues Scale	Descriptives & One Sample <i>t</i>
4. What factors influence healthcare professionals' IPV assessment behaviors in practice?	DV: Practice Issues IVs: Previous Training, Knowledge, Gender, Opinions, & Degree/Cert.	Independent Samples <i>t</i> , Correlation, & Multiple regression
Hypothesis	Data Source	Data Analysis
Healthcare professionals who participate in an education intervention will have improved knowledge, opinion, and practice scores on the PREMIS Survey Instrument.	Group 1 Pre & Post	Paired Samples <i>t</i>
	Groups 1 & 2 Post-test	Independent Samples <i>t</i> & Effect Size
	Groups 1, 2, & 3 Post-test	One Way ANOVA

CHAPTER 4

STUDY FINDINGS

4.1 Introduction

The data from participants' responses to the PREMIS survey questionnaire were entered into SPSS 15. Descriptive statistics and one sample *t* tests provided characteristics of the total study sample. Paired samples *t* tests, independent samples *t* tests, correlation, multiple regression and analysis of variance (ANOVA) were utilized to compare groups and to determine if a statistically significant change occurred in PREMIS scores across groups at post-test. This chapter will review the data analysis of participants' responses on PREMIS scales and discuss statistical results.

4.2 Research Questions and Hypothesis

4.2.1 Research Question 1

To what extent are healthcare professionals knowledgeable about intimate partner violence?

4.2.1.1 Previous Training, Knowledge Scores, and Years of Practice

In order to gain an understanding of study participants' IPV training and knowledge, descriptive statistics were obtained for the total sample pretest scores on Previous Training and Knowledge scales. Group 3 post-test only scores were evaluated as pre-test scores in all statistical analysis examining the total study sample. Descriptive

statistics revealed that 32 % (n = 47) of study participants indicated that they had no previous IPV training. Of those who had previous training, 30% (n = 45) attended a lecture or talk prior to participating in this study. Twenty-six percent (n = 39) of participants' indicated medical school, nursing school, or other classroom training as their past training experience. Table 4.1 provides an overview of the healthcare professionals within their respective Degree/Certification (frequency and percentages within categories) and their reported previous training experience prior to participation in this study.

Table 4.1 Previous Training by Degree/Certification

Previous Training Items	Degree/Certification**					
	DR n (%)	PA n (%)	NP n (%)	RN n (%)	MA n (%)	Other n (%)
Read Protocols	4(27)	2(33)	1(14)	27(36)	5(17)	6(35)
Watched a Video	1(7)	1(17)	3(43)	15(20)	3(10)	4(24)
Attended a Lecture or Talk	6(40)	2(33)	4(57)	24(32)	5(17)	6(35)
Attended a Skills Workshop	2(13)	1(17)	*	7(9)	*	2(12)
Med/Nur/Other School Class Training	4(27)	2(33)	4(57)	20(27)	6(20)	3(18)
Med/Nur/Other School Clinical Training	4(27)	3(50)	1(14)	6(8)	*	2(12)
Residency/Fellowship/Post Grad Training	6(40)	1(17)	*	*	*	*
CME Program	4(27)	3(50)	3(43)	16(22)	1(3)	*
Other In-Depth Training	*	1(17)	*	6(8)	*	1(6)
Other	*	1(17)	1(14)	4(5)	1(3)	1(6)

**DR = Physician; PA = Physician Assistant; NP = Nurse practitioner; RN = Nurse; MA = Medical Assistant.

*No previous training of this type reported by respondents in this category.

Analysis of reported hours of previous training revealed a mean score of five hours (sd = 9.44). Hours of previous training ranged from 1 to 50 with 60% (n = 89) of respondents reporting ≤ 2 hours and 8% (n = 12) reporting ≥ 20 hours. A previous training count was calculated by summing responses for type of prior training

experience. Participants who indicated “none” (i.e., no previous training) had a score of zero. The ten remaining previous training items were summed for a possible total of 10. The Previous Training count provided an interval/ratio measure of participants’ past training. The Previous Training mean for the total sample was 1.58 (sd = 1.60) and 58% (n = 86) of the respondents scored ≤ 1 with 3% (n = 4) scoring ≥ 5 .

4.2.1.2 Knowledge Scores and Normed Data Set

Knowledge scores were calculated from responses to PREMIS survey questions regarding participants’ knowledge of IPV. Responses are a measure of actual IPV knowledge and correct responses were summed to determine study participants’ scores on the Knowledge Scale. Scores ranged from 8 to 33 with a mean score of 23.9 (sd = 5.95) and 53 % (n = 74) of participants’ scoring ≤ 25 . PREMIS authors reported a normed data mean score of 26.6 (sd = 5.46) for the Knowledge Scale. A one sample *t* test was used to compare study sample Knowledge scores with the normed data scores. Results indicated that the study sample Knowledge scores were significantly lower than the normed data set at the .01 level ($t [139] = -5.340; p = .00$). Table 4.2 provides an overview of study participants’ scores compared to the normed data set and results of the one sample *t* test.

4.2.2 Research Question 2

To what extent do healthcare professionals’ possess opinions reflective of IPV management readiness?

4.2.2.1 Opinion Subscales and Normed Data

To obtain an understanding of study participants' opinions in relation to IPV management readiness, pretest responses on the Opinion Subscales were evaluated. Opinion Subscales included the constructs of Staff Preparation, Legal Requirements, Work Place Issues, and Self-Efficacy. Responses to negatively worded statements were inversely recoded to reflect the opposite response and higher scores on the Opinion Subscales are a measure of participants' readiness to manage IPV. Descriptive statistics were obtained and participants' mean scores on each of the opinion subscales were evaluated. Scores ranged from 1 to 7 and mean scores were compared to the normed data from PREMIS authors (Short et al.). Results indicated higher scores for participants in this study for all Opinion Subscales (see Table 4.2).

Table 4.2: Study Sample Scores and Normed Data at Pretest

PREMIS Scale	N	Study Sample	Normed Data	One Sample	
		Mean (sd)	Mean (sd)	<i>t</i> (df)	<i>p</i>
Previous Training	149	1.58 (1.60)	**	**	**
Knowledge Scale	140	23.9 (5.95)	26.6 (5.46)	-5.340 (139)	.00*
Opinion Scales					
• Staff Prep	140	4.29 (1.25)	4.13 (1.05)	1.471 (139)	.14
• Legal Req.	138	4.74 (1.37)	3.83 (0.99)	7.775 (137)	.00*
• Work Place Issues	139	4.43 (1.01)	4.24 (1.07)	2.224 (138)	.03*
• Self-Efficacy	139	4.00 (1.32)	3.87 (1.18)	1.195 (138)	.23
Practice Issues Scale	141	23.54 (9.70)	14.40 (8.36)	11.193 (140)	.00*

** Normed data statistics were not available for this measure.

* Significant at the .05 level, 2-tailed, bolded.

A one-sample *t* test was utilized to determine if the difference between study participants' Opinion Subscales scores and the normed data set were statistically significant. Review of the statistical analysis revealed that scores for Legal

Requirements ($t [137] = 7.775; p = .00$) and Work Place Issues ($t [138] = 2.224; p = .03$) were significantly higher. There was no statistically significant difference between study sample scores on Staff Preparation and Self-Efficacy when compared to the normed data set. Table 4.2 provides an overview of study sample means scores and results of the one sample t test.

4.2.3 Research Question 3

To what extent do healthcare professionals perform intimate partner violence assessment behaviors in practice?

4.2.3.1 Practice Issues Scale and Normed Data

In order to obtain information regarding study participants assessment behaviors in practice, descriptive statistics were obtained for the variable Practice Issues. Practice Issues scores were computed using a number of PREMIS survey variables including participants' encountering a new diagnosis of IPV in the past six months, current screening behaviors, situations in which participants' asked IPV assessment questions, and actions taken when IPV was identified. A number of these variables were recoded and mean scores computed. A composite Practice Issues score was calculated from recoded responses and means. The mean score at pretest was 23.54 ($sd = 9.70$) with 51% ($n = 72$) of respondents scoring ≤ 24 . Scores ranged from 3 to 49 and were normally distributed. The observed score for Practice Issues appeared to be substantially higher for the study sample when compared to the normed data score (14.40; $sd = 8.36$). Analysis of a one sample t test revealed that study sample Practice

Issues scores were significantly higher ($t [140] = 11.193; p = .00$) than the normed data scores (see Table 4.2).

4.2.4 Research Question 4

What factors influence healthcare professionals' intimate partner violence assessment behaviors in practice?

4.2.4.1 Previous Training and Practice Issues

To determine what factors influence assessment behaviors in practice a number of statistical tests were used to evaluate associations between Previous Training, Gender, Degree/Certification and Practice Issues scores. A Pearson's correlation was used to evaluate the relationship between Previous Training and Practice Issues at pretest. Results indicate a linear relationship between Previous Training and Practice Issues with Previous Training accounting for 4% of the variation in Practice Issues scores ($r^2 = .04; p = .02$).

4.2.4.2 Perceived Preparation, Perceived Knowledge, and Practice Issues

A bivariate analysis of the relationship between Perceived Preparation and Practice Issues as well as Perceived Knowledge and Practice Issues was conducted. Both Perceived Preparation ($r = .35; p = .00$) and Perceived Knowledge ($r = .31; p = .00$) were found to be correlated with Practice Issues at the .01 level of significance.

4.2.4.3 Gender and Practice Issues

An independent samples t test was used to evaluate mean pretest and post-test Practice Issues scores between males and females. Evaluation of results revealed mean pretest scores for female and male participants were virtually the same (females = 23.5;

males = 23.8) and there was no statistically significant difference in scores ($t [139] = 0.131; p = .90$). Another independent samples t test was obtained to evaluate scores at post-test. Although Practice Issues scores had improved from pretest to post-test, scores for both males and females were again virtually the same (males = 24.6; females = 24.9) and there was no statistically significant difference in scores ($t [135] = 0.041; p = .97$).

4.2.4.4 Degree/Certification and Practice Issues

A one way ANOVA was utilized to evaluate the association between Degree/Certification and Practice Issues scores for the entire data set. Subgroups within the variable Degree/Certification varied in size and review of the Levene's statistic indicated equal variance could not be assumed. The ANOVA between-group statistic was partitioned for weighted and un-weighted trends to address the variation in size of Degree/Certification subgroups. Weighted linear trends takes the varying group sizes into account and review of the F statistic indicated no statistically significant difference in the subgroups ($F [1] = 2.590; p = .11$).

4.2.4.5 Correlation and PREMIS Scales

Correlation statistics were used to evaluate linear relationships between Years in Practice, Age, Previous Training, Perceived Preparation, Knowledge, and Opinion Subscales with Practice Issues at pretest. Review of the correlation statistics revealed that Previous Training ($r = .23; p = .04$) and Perceived Preparation ($r = .39; p = .00$) were significantly correlated with Practice Issues while Years in Practice, Age, and Knowledge were not. Evaluation of Opinion Subscales revealed that Legal Requirements, Work Place Issues, and Self-Efficacy were also significantly correlated

with Practice Issues. Table 4.3 provides an overview of the correlation results for the aforementioned variables and Practice Issues.

Table 4.3: Correlation of PREMIS Scales & Practice Issues at Pretest

PREMIS Scale	Prac. Issues	Yrs in Prac.	Age	Prev. Train	Perceived Prep.	Know Score	Staff Prep.	Legal Req.	Work Place
Practice Issues	1.00								
Yrs in Practice	.119	1.00							
Age	.054	.734*	1.00						
Previous Training	.229*	.103	.195*	1.00					
Perceived Prep.	.386**	-.055	-.020	.551**	1.00				
Knowledge Score	.009	-.061	.001	.437**	.365**	1.00			
Opinion Scale									
• Staff Prep.	.213	-.112	-.073	.426**	.636**	.398**	1.00		
• Leg. Req.	.324**	.027	.003	.431**	.604**	.051	.302**	1.00	
• Wk Place Is.	.296**	-.067	-.145	.368**	.566**	.166	.461**	.660**	1.00
• Self-Efficacy	.457**	.062	-.002	.493**	.573**	.206	.453**	.530**	.599**

**Significant at the .01 level (2-tailed, bolded).

* Significant at the .05 level (2-tailed).

4.2.4.5 Multiple Regression and Strongly Correlated Variables

A multiple regression analysis was conducted to further evaluate the relationship between variables found to have a strong correlation with Practice Issues. Thus Perceived Preparation, Legal Requirements, Work Place Issues, and Self-Efficacy (i.e., independent variables) were included in a regression model with Practice Issues (i.e., the dependent variable). Multiple regression statistics confirmed a linear relationship between these independent variables and Practice Issues. A review of the full model including evaluation of multicollinearity diagnostics indicated that Perceived Preparation (Tolerance = 0.497; VIF = 2.012) and Work Place Issues (Tolerance = 0.412; VIF = 2.425) were highly correlated. Given the high collinearity between

Perceived Preparation and Work Place Issues, a second multiple regression was obtained excluding these two variables from the model.

The results of the second multiple regression model indicated a linear relationship between Legal Requirements and Self-Efficacy with Practice Issues and these independent variables explained 22% of the variability in Practice Issues ($r^2 = .22$; $p = .00$). Further evaluation of the second regression model revealed that Self-Efficacy was the strongest predictor of variation in Practice Issues and this finding is significant at the .01 level. Results indicate that for every one unit increase in Self-Efficacy, Practice Issues increased by 3.22 points. Table 4.4 provides a thorough presentation of the results for the second multiple regression model.

Table 4.4: Multiple Regression & Practice Issues (DV) at Pretest

Model	Variables	Unstandardized Coefficients		Standardized	<i>t</i>	sig.
		B	Std. Error	Beta		
1	Constant	9.393	4.095		2.294	.025
	Legal Requirements	2.583	.859	.324	3.006	.004
2	Constant	5.236	4.055		1.291	.201
	Legal Requirements	.913	.954	.115	.957	.341
	Self-Efficacy	3.220	.975	.395	3.302	.001

4.2.5 Research Hypothesis

Healthcare professionals who participate in an education intervention will have improved knowledge, opinion, and practice scores on the PREMIS Survey instrument.

4.2.5.1 Group 1 Pretest/Post-test

Statistical analysis to test the research hypothesis for Group 1 began with a paired samples *t* test to evaluate the differences in pretest-post-test scores. A paired

samples *t* test is appropriate when comparing the means of two variables that represent the same group at different times (Kerr, Hall, & Kozub, 2002). Review of Group 1 scores revealed that post-test scores on the Knowledge, Opinion, and Practice Issues scales were indeed higher following the education intervention. Results of a paired samples *t* test revealed that post-test scores for Group 1 were significantly higher than pretest scores for all PREMIS scales except Practice Issues. Table 4.5 provides an overview of the paired samples *t* test results for Group 1.

Table 4.5: Group 1 Pre-Post-Test Scores & Paired Samples *t* Test

PREMIS Scale	N	Pretest (sd)	Post-test (sd)	Paired Samples <i>t</i>	
				<i>t</i> (df)	<i>p</i>
Knowledge	48	24.42 (5.21)	32.10 (4.36)	-10.756 (47)	.00*
Opinion Subscales					
• Staff Prep	47	4.41 (1.06)	5.30 (1.10)	-4.913 (46)	.00*
• Legal Requirements	47	4.74 (1.36)	6.01 (.93)	-6.254 (46)	.00*
• Work Place Issues	48	4.45 (1.04)	5.09 (.94)	-4.081 (47)	.00*
• Self-Efficacy	48	3.82 (1.28)	4.83 (1.06)	-6.337 (47)	.00*
Practice Issues	48	22.35 (9.44)	23.09 (11.26)	-.595 (47)	.55

* $\alpha = .01$; all 2-tailed, bolded.

4.2.5.2 Groups 1 and 2 Post-test Scores

An independent samples *t* test is appropriate when there is a nominal level dichotomous independent variable, in this case two groups, and an interval/ratio level dependent variable (Rubin & Babbie, 2005). An independent samples *t* test was used to determine if there was a statistically significant difference when comparing the mean difference in the post-test scores of Group 1 with the mean difference in scores of Group 2. Results revealed that Group 1 post-test scores were higher on all scales and the difference in means for Groups 1 and 2 post-test scores was statistically significant for all scales except Practice Issues (see Table 4.6).

Effect size (Cohen's *D*) was calculated to determine the magnitude of the difference in PREMIS mean scores for Groups 1 and 2. Effect size serves to indicate the difference in outcomes for a group who receives an intervention from a group who did not receive an intervention. Cohen (1988) notes that the effect size can be treated as a parameter that takes the value of zero when the null hypothesis is true or some other non-zero value when the null hypothesis is false. Thus, effect size "serves as an index of the degree of departure from the null hypothesis" (Cohen, 1988, p. 10). According to Cohen (1992) the effect size value, when examining the difference between two independent means, is .20 for small effect, .50 for medium effect, and .80 for large effect.

Effect sizes for the difference in means of Groups 1 and 2 were calculated using an effect size calculator developed by Becker (2000). A correlation measure of effect size was also obtained. According to Becker, the effect size correlation is a special case of correlation between a dichotomous independent variable and a continuous dependent variable and the value is the same as that obtained from Pearson's product moment correlation. The effect size correlation (ESr) is computed from Cohen's d and the square of the r -value (ESr^2) is "the percentage of variance in the dependent variable that is accounted for by membership in the independent variable groups" (Becker, 2000, p.6).

Results of effect size calculations reveal a large effect ($d \geq .80$) for all scales except Practice Issues ($d = -.11$) and a medium effect size ($d > .50$) for staff preparation. The effect size for the difference in means for Practice Issues indicated no difference

when comparing Groups 1 and 2. Results also indicate that 41% ($ESr^2 = .41$) of the variability in Knowledge can be explained by group membership, hence Group 1's participation in the education intervention explains 41% of the variability in group Knowledge scores. Table 4.6 provides an overview of Group 1 and 2 mean scores, Cohen's d , and effect size correlations for each of the PREMIS scales.

Table 4.6: Group 1 & 2 Independent Samples t Test

PREMIS Scale	Group 1 MD (sd)	Group 2 MD (sd)	Independent Samples		Cohen's	
			t (df)	p^*	d^{**}	ESr^2
Knowledge	7.68 (4.95)	1.04 (2.61)	7.334 (66.540)	.00	1.68	.41
Opinion Subscales						
• Staff Prep	0.89 (1.25)	0.11 (1.15)	2.433 (66)	.01	.65	.10
• Legal Requirements	1.26 (1.39)	0.01 (0.75)	4.754 (60.894)	.00	1.12	.24
• Work Place Issues	0.64 (1.10)	-0.07 (0.59)	3.517 (64.006)	.00	.80	.14
• Self-Efficacy	1.01 (1.10)	0.11 (0.78)	3.864 (53.284)	.00	.94	.18
Practice Issues	0.74 (8.56)	1.57 (6.09)	-0.467 (55.840)	.64	-.11	-.12

* $\alpha = .05$; all 2-tailed, bolded. **Large Effects Size ($d \geq .80$) bolded.

4.2.5.3 Group 1, 2, and 3 Scores

Initial review of the total study sample scores on the PREMIS scales revealed a significant improvement in scores for Group 1 and a slight improvement in scores for Group 2. Group 3 (post-test only) scores were used as pretest scores for purposes of evaluating the total study sample and the influence of Previous Training, Gender, Degree/Certification on Practice Issues in earlier analyses. Table 4.7 provides an overview of pretest-post-test scores for all three study groups.

Table 4.7: Study Sample Pretest-Post-Test Scores

PREMIS Scale	Group 1 Scores		Group 2 Scores		Group 3 Scores	
	PRE (sd)	POST (sd)	PRE (sd)	POST (sd)	PRE (sd)	POST (sd)
Knowledge	24.42(5.21)	32.10(4.36)	23.75(7.78)	24.67(7.19)	24.08(5.68)	24.08(5.68)
Opinion Sub Scales						
• Staff Prep	4.41 (1.06)	5.30 (1.10)	4.14 (1.48)	4.30 (1.19)	4.33 (1.26)	4.33 (1.26)
• Legal Requirements	4.74 (1.36)	6.01 (.93)	4.37 (1.33)	4.36 (1.38)	4.94 (1.44)	4.94 (1.44)
• Work Place Issues	4.45 (1.04)	5.09 (.94)	4.13 (1.03)	4.08 (1.06)	4.61 (.98)	4.61 (.98)
• Self Efficacy	3.82 (1.28)	4.83 (1.06)	3.46 (1.39)	3.89 (1.32)	4.49 (1.17)	4.49 (1.17)
Practice Issues	22.35(9.44)	23.09(11.26)	19.88(11.61)	22.58(8.84)	26.91(7.42)	26.91(7.42)

Evaluation of study sample post-test scores revealed that Group 1 had higher scores on all scales when compared to Group 2 and higher scores when compared to Group 3 on all scales except Practice Issues. A one way ANOVA was used to compare Group 1, 2, and 3 post-test mean scores to determine if scores for the three groups were statistically significantly different. A one-way ANOVA is useful to determine significant differences in group means from data gathered by an independent group design and tests the null hypothesis that the means will not be significantly different (Kerr, Hall, & Kozub, 2002).

An initial review of a one way ANOVA table revealed that the standard deviation in Knowledge Scores for Group 2 (sd = 7.19) was almost twice that of Group 1 (sd = 4.36) and the standard error for Group 2 (se = 1.57) was nearly three times that of Group 1 (se = 0.58) suggesting that the group variances were not equal. Review of Levene's test also indicated that equal variance between the groups could not be assumed for the variables Knowledge and Legal Requirements, suggesting that at least one study group's mean scores differed from the other groups' scores.

Since the study groups differed in size the between-group variation was partitioned into linear trends and weighted linear trends were evaluated across scales to

determine group differences. Evaluation of the ANOVA statistics revealed differences between groups on all scales except Self-Efficacy ($F [1] = 1.827; p = .18$). Robust Tests of Equality of Means provides an alternative to the F test to determine group differences. Review of the Brown-Forsythe Test of Equality of Means indicated that study groups differed on all independent variables. Games-Howell post hoc analysis revealed that Group 1 means differed from Group 2 on all scales except Practice Issues and the differences were statistically significant at the .05 level. Group 1 means differed from Group 3 across all scales except Work Place Issues and Self-Efficacy and the differences were significant at the .05 level (see Table 4.8).

Table 4.8: ANOVA of Group Means Post-test & Post Hoc Analysis

PREMIS Scale	Group	Mean (sd)	ANOVA		POST HOC	
			<i>F</i> (df)	sig.	Mean Diff. **	sig.
Knowledge Score	1	32.21(4.36)	63.456 (1)	.00	7.548	.00*
	2	24.67 (7.19)				
	3	24.08 (5.68)				
Staff Preparation	1	5.31 (1.08)	20.015 (1)	.00	1.009	.01*
	2	4.30 (1.19)				
	3	4.33 (1.26)				
Legal Requirements	1	5.95 (0.90)	18.753 (1)	.00	1.594	.00*
	2	4.36 (1.38)				
	3	4.94 (1.44)				
Work Place Issues	1	5.02 (0.96)	4.809 (1)	.03	.939	.00*
	2	4.08 (1.06)				
	3	4.61 (0.98)				
Self-Efficacy	1	4.79 (1.02)	1.827 (1)	.18	.409	.07
	2	3.89 (1.32)				
	3	4.49 (1.17)				
Practice Issues	1	22.81 (10.59)	5.935 (1)	.02	.897	.02*
	2	22.58 (8.84)				
	3	26.91 (7.42)				
					.227	.99
					-4.098	.04*

**Group 1 – Group 2 mean difference displayed first; Group 2 – Group 3 mean difference displayed second.

*Significant at the .05 level, bolded.

CHAPTER 5

DISCUSSION

5.1 Introduction

This study evaluated the effects of education on healthcare professionals' assessment of IPV in practice. A pretest-post-test, quasi-experimental design was utilized to compare PREMIS survey responses of three groups of healthcare professionals in primary and out-patient healthcare settings and explore the effects of an education intervention on IPV assessment behaviors. This chapter will provide a discussion of the study findings in relation to the research questions and hypothesis continuing with a discussion of the study limitations. Implications for social work policy, practice, and research will also be discussed.

5.2 Discussion of Findings

5.2.1 IPV Training and Knowledge

Intimate partner violence continues to be a social problem of consequence and has been found to be associated with poor health, negative health outcomes, and an increase in health risk behaviors (Carbone-Lopez et al., 2006; Chang et al., 2005; Coker et al., 2000; Rand, 1997). Thus it seems appropriate for healthcare professionals to consider the impact of IPV on physical health as well as mental and emotional wellbeing. This study was intended to evaluate what factors influence healthcare

professionals' IPV assessment in outpatient healthcare settings and what effect education has on healthcare professionals' IPV assessment in practice. The PREMIS Survey is an instrument designed to assess IPV training efficacy and was used to measure the effectiveness of education on participants' IPV knowledge, opinions, and assessment behaviors in practice.

An underlying assumption of this study was that healthcare professionals with prior IPV training would have supplementary knowledge and would be more likely to perform assessment behaviors in practice. Findings revealed that 32% of participants in this study had no previous training and 60% of those with training reported two or less hours. Furthermore, 30% of those with previous training identified their training to be reading agency protocols. The extent of IPV knowledge, efficacy, and skills that can be gained from two hours of training that may only include reading agency protocols is debatable and requires further study. Moreover, two hours of training is a negligible amount of preparation to address IPV in practice when considering that participants' in this study reported an average of 11 to 18 years of healthcare practice. The limited amount of training and the questionable validity of reading protocols to augment IPV knowledge and assessment skills may serve to explain the finding that Previous Training accounted for only four percent of the variation in the Practice Issues pretest scores for participants in this study.

Results of the Knowledge scale were considered to provide insight into the level of IPV knowledge of participants in this study. Analysis revealed that participants had significantly lower scores on the Knowledge Scale at pretest when compared to a

normed data set (Short, et al.). These findings suggest that study participants were not knowledgeable about IPV risk factors, warning signs, and the dynamics of IPV. Furthermore, these preliminary results support earlier research that indicates healthcare professionals lack the knowledge and skill to assess for IPV (Cohen et al., 1997; Goff et al., 2001; & Tilden et al., 1994). However, analysis of pretest-post-test scores and effect size for changes in group means at post-test indicated a significant increase in Knowledge scores for Group 1 (experimental group) and 41% of the variability in Knowledge scores can be explained by experimental group membership and participation in the education intervention.

5.2.2 IPV Management Readiness

IPV management readiness can be characterized as the healthcare professional's unbiased view of IPV as a health issue and realistic expectations of how to address IPV with patients in order to aid successful management of health and wellbeing. IPV management readiness was considered, by PREMIS authors, to be reflected in healthcare professionals' opinions about how prepared they are to assess, their awareness of legal requirements to report, work place supports and community resources, confidence in their skills to assess, their knowledge of the role of alcohol and drugs in IPV, and their understanding of IPV victimization. Higher scores on the Opinion Subscales were thought to be indicative of readiness to manage IPV. Evaluation of Group 1 post-test scores revealed higher scores on all Opinion Subscales compared to pre-test scores indicating an increase in scores in the desired direction

following the education intervention and thus may be an indication of progress toward IPV management readiness.

IPV management readiness of the individual healthcare professional is a vital component in the management of IPV in the lives of patients. Study findings coincides with those of Thompson and associates (2000) who evaluated the effects of an education intervention coupled with environmental cues and administrative supports within in a practice setting. Thompson and colleagues conducted their study over a period of approximately two years and their findings suggest that improvements in assessment behaviors were consistent up to nine months following the education intervention. Thus prior research and the current study indicate that education is associated with healthcare professionals' management readiness. Nevertheless, changes in practice are more likely to occur if supported by enabling factors within the healthcare setting (Thompson et al., 2000; Waalen et al., 2000).

5.2.3 IPV Assessment

Participants in this study scored significantly higher on the Practice Issues scale at both pretest and post-test when compared to the normed data set and the total study sample's scores were positively skewed well above the mean at pretest. Higher Practice Issues scores at pretest may be indicative of Group 3 agency policies that mandate assessment and result in Group 3 participants screening every patient. Perhaps the higher scores are also indicative of a shift in the healthcare community's approach to IPV since the normed data set was obtained. Nevertheless, the fact that the study participants' observable scores were approximately ten points higher on the Practice

Issues scale is interesting given that 35% of participants in Groups 1 and 2 reported that they did not currently screen for IPV thus one explanation for higher Practice Issues scores could be attributed to mandated IPV assessment for participants in Group 3.

Review of survey responses indicated that Groups 1 and 2 study participants were not routinely performing IPV assessment in practice prior to participation in this study. Furthermore, evaluation of Practice Issues revealed no significant changes in scores for Group 1 at post-test compared to pre-test or when compared to Group 2 post-test scores. These findings are not surprising given that Group 1 post-test survey responses were collected immediately following participation in the education intervention and thus post-test scores are not a true reflection of changes in assessment behaviors as participants had no opportunity to apply newly acquired knowledge in practice. Thus, follow up with study participants is necessary to fully evaluate the effects of education on participants' IPV assessment in practice, to determine if assessment behaviors increased and were sustained as well as to discern if assessment behaviors have remained the same or declined.

5.2.4 Factors that Influence Assessment

5.2.4.1. Perceived Preparation and Knowledge

Several statistics were utilized to determine what factors influence study participants' IPV assessment behaviors in practice. A bivariate analysis of participants' Perceived Preparation and Perceived Knowledge to assess for IPV revealed that these variables were correlated with IPV assessment in practice and 12% of the variability in Practice Issues. Also, Perceived Preparation and Knowledge were found to be more

highly correlated with Practice Issues than Knowledge for professionals in this study. Thus, participants' perceptions of their knowledge and preparedness to assess for IPV had a stronger relationship with assessment behaviors in practice than did actual knowledge.

Perceived preparation and knowledge are important to consider in light of the tenets of Trans-theoretical Model and Stages of Change. Education serves to increase awareness and prepare an individual for analysis, assimilation, and application of knowledge. Education also serves to initiate the Pre-contemplation Stage of Change, the stage where one realizes the need for change and perhaps moves into the Contemplation stage, the stage where one begins to weigh the pros and cons associated with change (Prochaska et al., 1997). The Stages of Change appear to be linear but are in fact circular as movement may occur from Pre-contemplation to Contemplation to Preparation back to Contemplation, etc. Preparation is the stage in which one is preparing to make identified changes. Study findings suggest that perception of preparedness and knowledge to address IPV may ameliorate study participants' current practice behaviors and increase the likelihood of assessment in practice.

5.2.4.2 Self-Efficacy

Previous Training, Gender, and Degree/Certification were not found to have a significant influence on Practice Issues scores but further evaluation revealed that Self-Efficacy was an influence on Practice Issues for participants in this study. Multiple regression analysis indicated that Legal Requirements may have some influence but Self-Efficacy was a significantly strong predictor of variability in Practice Issues for

participants in this study. Given that Self-Efficacy was a measure of participants' opinions about their confidence, preparedness, and readiness to manage IPV and this finding aligns with the constructs of Perceived Knowledge and Preparation to manage IPV in practice. This finding supports earlier research that indicates healthcare professionals' assessment behaviors are strongly associated with their perceived preparation to assess and that preparedness serves as an enabling factor to IPV assessment (Smith et al., 1998; Goff et al., 2001). Furthermore, self-efficacy is a component of the Trans-theoretical Model's Process of Change, which are the overt and covert activities that enable one to progress through the Stages of Change (Prochaska et al., 1997). Self-efficacy is characterized as one's ability to engage in a behavior during challenging situations and one's ability to resist the temptation to disengage in a behavior in challenging situations (Prochaska et al.).

Study findings also support the research of Hamberger and colleagues (2004) on the concept of self-efficacy and its impact on assessment behaviors in practice. These researchers hypothesized that education would increase their study participants' self-efficacy and their findings indicated increases in self-efficacy were correlated with healthcare professionals' increased assessment behaviors in practice following an education intervention.

5.2.5 Research Hypothesis

The research hypothesis for this study was supported and Group 1 healthcare professionals had improved Knowledge, Opinion, and Practice Issues scores on the PREMIS survey following participation in the education intervention. Group 1 post-test

scores were significantly improved from pretest and when compared to the comparison/control groups. This finding coincides with those of Dalton and associates (1996) who also used a quasi-experimental design to study the effectiveness of training and found not only improvement in knowledge and attitude scores following education but improvement in documentation. Dalton et al. found that study participants reported feelings of integrity and effectiveness in their practice with patients and that IPV assessment behaviors increased following education however the improvements in assessment behaviors were slow and occurred over time.

Although Group 1 Practice Issues scores did improve following the education intervention the increase was not significant when compared to Group 3. This finding may be attributed to the fact that Group 3 study participants are employed at a hospital where agency policies and JCAHO accreditation standards mandate IPV assessment for all patients. Furthermore, the difference in scores for Group 1 and 2 participants who did not routinely assess and those of Group 3 who are mandated to assess was so large that significant differences in Practice Issues scores were not expected. Perhaps agency mandates that require routine IPV assessment serve to normalize assessment to the extent that it diminishes discomfort, circumvents reluctance, enables frequent interaction, and increases victim understanding, all of which are phenomena to be operationalized and considered for future study.

5.3 Study Limitations

The findings of this study must be considered in light of a number of study limitations. The use of a non-randomized, quasi-experimental design presents a

weakness in the study and poses a threat to internal validity. Furthermore, social desirability bias is common for participants completing a self-administered survey thus responses may not reflect true opinions and practice behaviors. Testing was a concern since the participants were given the same survey at pretest-post-test and surveys were administered within a relative short time frame of only three weeks. However, slight variations in scores from pre to post-test indicate minimal testing influence and the inclusion of a third comparison/control group served to control for testing.

The fact that there has been no psychometric data on the use of PREMIS with non-physician healthcare professionals is a limitation (Short et al., 2006). One of the PREMIS authors (John M. Harris, Jr., M. D., personal communication, 11/02/07) maintains that it is reasonable to assume that PREMIS could be used to evaluate the readiness of non-physician healthcare professionals such as nurses, nurse practitioners, medical students, and physician assistants, to assess and intervene with patients in outpatient healthcare settings. However, PREMIS was developed using the expert consensus of physicians and tested as a self-assessment tool with physician subjects and thus may have subtle nuances open to interpretation by non-physician healthcare professionals. Therefore, the challenge of fully capturing the unique perspectives of such a diverse sample of healthcare professionals with educational backgrounds that vary in both instruction and intensity is a challenge and can be considered a limitation. Nevertheless, reliability analysis was conducted to evaluate PREMIS Survey subscales and the final analysis included only results that were found to be a reliable measure of study participants' responses.

5.4 Implications for Social Work Practice, Policy, and Research

5.4.1 Implications for Social Work Practice

Social work has historically been involved in empowerment of clients who experience IPV and in advocacy to influence changes in policy and legislation. As social work continues to build upon the foundation of knowledge through program development, evaluation, and research, the profession can serve to influence the direction of healthcare practice with regard to IPV. Therefore, it is essential for social work practitioners to fulfill the role of initiators by substantiating IPV as a major health issue and fulfill the role of researchers to study the impact of IPV on health and healthcare utilization.

Ways in which social work can influence change in healthcare practice include proactive prevention through community education. Educated consumers are more likely to expect and require services from healthcare professionals and provide impetus for changes in the way the healthcare community responds to consumer needs. Partnerships between social work practitioners and public health officials should continue to focus on developing prevention and awareness initiatives that reach urban and rural communities within public and private agencies.

Social workers can also fulfill the role of analysts in both in-patient and out-patient healthcare settings to evaluate program and agency effectiveness. Social workers can fulfill the role of educators and actively participate in the development of curriculum for medical, nursing, and other clinical education programs. When healthcare professionals do assess and identify IPV, social work has been acknowledged

as the primary profession to consult when referring patients (Abbott & Williamson 1999). Thus social work has the potential to develop and integrate programs that provide a holistic approach to addressing IPV in primary and tertiary healthcare settings.

5.4.2 Implications for Social Work Policy

Results of this study suggest that IPV assessment behaviors occur in agency settings where policies and protocols compel routine assessment. Findings suggest the importance of evaluating healthcare agency policies and incorporating evidence based practice that not only complies with legal requirements but supports professional ethics through healthcare agency protocols. Incorporating routine IPV assessment in healthcare settings serves to initiate a proactive stance in the healthcare community and may circumvent discomfort for both healthcare professionals and patients, thereby normalizing the process of IPV assessment. Social work can also endorse legislation that recognizes IPV as a major health issue effecting individuals, families, and communities.

Policies based on research that clearly identifies realistic management of IPV as a health issue will serve to refute negative perceptions and support changes within healthcare agencies, health management organizations, and among healthcare professionals. Furthermore, it is imperative that changes in policies lessen the burden and expectations that healthcare professionals' control the outcome for patients experiencing IPV. Policies must support healthcare professionals' readiness to manage

IPV vis-à-vis developing organizational processes that serve to enable the acquisition of proficiency and competence to assess for IPV (Gielen & McDonald, 1997).

5.4.3 Implications for Social Work Research

The exploratory nature of this study provides information useful for future research. The results indicate that the experimental group's scores on the PREMIS survey instrument did improve following an education intervention however improvement in scores did not reflect changes in practice behaviors. Follow up with study participants is necessary to determine if assessment behaviors did indeed increase in practice and if so, have assessment behaviors been sustained following participation in this study.

Future research to empirically substantiate what factors increase IPV assessment in practice is needed to add to the current knowledge and promote change in the way IPV assessment is addressed by the medical community. Evaluation of the effectiveness of policies that mandate assessment is needed to determine if mandates result in effective IPV assessment in practice or if mandates result in “going through the motions” of assessment. Also, further research to determine what are inhibiting factors that undermine assessment mandates and what factors may circumvent the effectiveness of assessment protocols in practice are also in order.

Findings from this study suggest that perceived knowledge and perceived preparation had a higher association with assessment behaviors in practice than did actual IPV knowledge, which begs the question, what factors influence perceived knowledge and preparation? How are perceived knowledge and preparation acquired?

Since findings suggest self-efficacy to be predictive of assessment behaviors in practice, how does one develop self-efficacy? Results of this study suggest the need to fully operationalize the constructs of self-efficacy, perceived knowledge, and preparation with regard to IPV assessment and more fully explore the association between these constructs and assessment behaviors in practice. Wood and Bandura (1989) define self-efficacy as “beliefs in one’s capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands” (p. 408). Perhaps qualitative studies to explore healthcare professionals’ motivation, cognitive resources, and selection of effective courses of action or the lack there of, could bring to light more effective methods to increase assessment behaviors in practice.

Reliability analysis on the PREMIS Opinion Subscales revealed that Victim Understanding responses were not sufficiently inter-correlated and thus were considered an unreliable measure of study participants’ understanding of victims experiencing IPV. Closer inspection of the Victim Understanding subscale items indicated that they are statements reflective of the respondent’s opinions about the victim’s perspective (“screening for IPV is likely to offend those who are screened”) and behaviors (“if victims of abuse remain in the relationship after repeated episodes of violence, they must accept responsibility of that violence” or “victims of abuse could leave the relationship if they wanted to”) as well as their professional role in addressing IPV with a victim (“If an IPV victim does not acknowledge the abuse, there is little that I can do to help,” “if a patient refuses to discuss the abuse, staff can only treat the patient’s injuries,” or “healthcare providers have a responsibility to ask all patients about IPV”).

The development of Opinion Subscale items designed to measure empathy, or the lack thereof, might serve to add another facet to the PREMIS Opinion Subscale, help to identify underlying biases, and capture presumptions that could be addressed in future education interventions.

Definitions of IPV vary among social institutions as well as among researchers, thus IPV should be defined more distinctively, with a typology to distinguish between types, and studies conducted to determine effective interventions (Johnson, 1995). Although the term is intimate partner violence all episodes of IPV are not violent but lie on a continuum that may escalate to violence and thus there is the risk of physical injury, disability, or death. Continued meta-analysis of the effects of all types of abuse and maltreatment on health and wellbeing are hoped to provide evidence to support healthcare professionals' screening and assessment and are needed to effect change within the healthcare community.

Researching the effects of IPV on an institutional level will require broader and more comprehensive terms for consideration. To effect change at the macro level, definitions must fully encompass the reality of the phenomenon of IPV as it impacts health and the increased utilization of healthcare resources so that change can and will occur through institutional policies, protocols, and procedures. Also, further studies could evaluate the effectiveness of the AVDR model, a framework designed to simplify healthcare professionals' role in the management of IPV, and determine if a structured model for assessment does indeed lessen the burden on healthcare professionals to "cure" IPV (Gerbert et al., 2002).

Nursing and medical journals were the primary source of current research to examine the impact of IPV on health, thus nursing and medical researchers are studying IPV from a psychosocial standpoint utilizing an ecological perspective consistent with social work. A social work and nursing research collaboration would be most effective in building theory, contributing to the current knowledge, and evaluating effective and innovative practice to promote overall physical and mental health and well being.

5.5 Conclusions

Intimate partner violence continues to be a problem that has far reaching consequences for families, communities, and society as a whole (Campbell & Wasco, 2005). This study sought to advance social work knowledge in regard to the effectiveness of education on healthcare professionals' IPV assessment in practice and to increase the knowledge that supports IPV assessment in primary and out-patient care settings. Findings in this study suggest that healthcare professionals' perceived knowledge, perceived preparation, and self-efficacy to assess and manage IPV are more likely to result in increased assessment in practice. How does one acquire knowledge, preparation, and self-efficacy without education and training? Given that many participants in this study reported less than two hours of previous training and post-test data were obtained immediately following the education intervention, it remains to be seen how much education has impacted actual assessment behaviors in practice for participants in this study.

A secondary benefit to this study is the possibility that participation has broaden the study participants' understanding of IPV and heighten their awareness of missed

opportunities to assess, document, and refer patients. Furthermore, it is hoped that involvement in this study has motivated participants to further evaluate their practice as well as their agencies' policies, contemplate the need for change, actively make changes in their practice, and assess all patients for IPV.

APPENDIX A

PHYSICAN READINESS TO MANAGE
INTIMATE PARTNER VIOLENCE SURVEY
(PREMIS)

Every attempt will be made to ensure that your study results are kept confidential. A participant code is requested for the purposes of matching pre-test or initial survey questionnaires with post-test or subsequent survey questionnaires. This is necessary to distinguish pre-test and post-test survey responses and complete a thorough statistical analysis of the data.

Participants are asked to please provide a participant code as described below. The participant code is included on a separate sheet and will not be linked to the actual survey questionnaire following statistical analysis. Once data entry is complete this sheet will be separate from the survey questionnaire and the information will be discarded.

Participant code (your birth month / birth day / first 2 letters of your last name):

__ __ / __ __ / __ __
(Example: 11 / 24 / SH)

Your candid responses on the following survey will greatly assist us in our attempt to improve health care professionals' recognition and management of intimate partner violence-related* injuries and illnesses. Please record your first, instinctive answer, even if you don't think it is "politically correct." Don't try to think about what your answers "should" be.

Some questions may seem similar to others. However, we ask that you answer all questions to help ensure the reliability of the assessment. Thank you for taking the time (estimated at 15-25 minutes) to complete this survey.

Section I: Participant Profile

1. Age: < 29 yrs 30 – 40 yrs 41 – 50 yrs 51 – 60 yrs 60 or older
2. Gender: Male Female
3. What year did you graduate from medical or professional school? _____
4. What degree or certificate did you receive? Physician PA NP
 RN/LVN Medical Assistant
 Other (Specify): _____
5. Including any residency training or internship, how long have you been practicing in this field?
_____ Months _____ Years
6. Average number of patients you care for per week (*check one*):
 not seeing patients
 less than 20
 20-39
 40-59
 60 or more
7. Including you, how many physicians or physician assistants practice at your work site?

How many nurses or nurse practitioners? _____. How many medical assistants? _____
8. Including you, how many practitioners at your work site have participated in an Intimate Partner Violence (IPV) training course in the past 6 months: _____?
This represents: All Most Some A few Don't know
9. Do you primarily practice in an Urban or Rural community?

* Intimate partner violence (IPV is also commonly referred to as domestic violence, partner violence, or family violence. It is typically violence between intimate partners including spouses or boy/girlfriends.

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Section II:

1. How much previous training about intimate partner violence (IPV/DV) issues have you had? (Please check all that apply.)

- None
 - Read my institution's protocol
 - Watched a video
 - Attended a lecture or talk
 - Attended a skills-based training or workshop
 - Medical/nursing/other school—classroom training
 - Medical/nursing/other school—clinical setting
 - Residency/fellowship/other post grad training
 - CME program
 - Other in-depth training (more than 4 hours)
 - Other (specify)
-

2. Estimated total number of hours of previous IPV training: _____

3. Please circle the number which best describes how prepared you feel to perform the following: (1 = Not prepared; 2 = Minimally prepared; 3 = Slightly prepared; 4 = Moderately prepared; 5 = Fairly well prepared; 6 = Well prepared; 7 = Quite well prepared)

	<i>Not Prepared</i>				<i>Quite Well Prepared</i>		
	1	2	3	4	5	6	7
a. Ask appropriate questions about IPV	1	2	3	4	5	6	7
b. Appropriately respond to disclosures of abuse	1	2	3	4	5	6	7
c. Identify IPV indicators based on patient history, and physical examination	1	2	3	4	5	6	7
d. Assess an IPV victim's readiness to change	1	2	3	4	5	6	7
e. Help an IPV victim assess his/her danger of lethality	1	2	3	4	5	6	7
f. Conduct a safety assessment for the victim's children	1	2	3	4	5	6	7
g. Help an IPV victim create a safety plan	1	2	3	4	5	6	7
h. Document IPV history and physical examination findings in patient's chart	1	2	3	4	5	6	7
i. Make appropriate referrals for IPV	1	2	3	4	5	6	7
j. Fulfill state reporting requirements for:							
- IPV	1	2	3	4	5	6	7
- Elder abuse	1	2	3	4	5	6	7
- Child abuse	1	2	3	4	5	6	7

4. How much do you feel you now know about: (1 = Nothing; 2 = Very Little; 3 = A little; 4 = A moderate amount; 5 = A fair amount; 6 = Quite a bit; 7 = Very Much)

	<i>Nothing</i>					<i>Very Much</i>	
	1	2	3	4	5	6	7
a. Your legal reporting requirements for:							
- IPV	1	2	3	4	5	6	7
- Child abuse	1	2	3	4	5	6	7
- Elder abuse	1	2	3	4	5	6	7
b. Signs or symptoms of IPV	1	2	3	4	5	6	7
c. How to document IPV in patient's chart	1	2	3	4	5	6	7
d. Referral sources for IPV victims	1	2	3	4	5	6	7

e.	Perpetrators of IPV	1	2	3	4	5	6	7
f.	Relationship between IPV and pregnancy	1	2	3	4	5	6	7
g.	Recognizing the childhood effects of witnessing IPV	1	2	3	4	5	6	7
h.	What questions to ask to identify IPV	1	2	3	4	5	6	7
i.	Why a victim might not disclose IPV	1	2	3	4	5	6	7
j.	Your role in detecting IPV	1	2	3	4	5	6	7
k.	What to say and not say in IPV situations with a patient	1	2	3	4	5	6	7
l.	Determining danger for a patient experiencing IPV	1	2	3	4	5	6	7
m.	Developing a safety plan with an IPV victim	1	2	3	4	5	6	7
n.	The stages an IPV victim experiences in understanding and changing his/her situation	1	2	3	4	5	6	7

Section III: Check one answer per item, unless noted otherwise.

1. What is the strongest *single* risk factor for becoming a victim of intimate partner violence?
 - Age (<30yrs)
 - Partner abuses alcohol/drugs
 - Gender – female
 - Family history of abuse
 - Don't know
2. Which *one* of the following is generally true about batterers?
 - They have trouble controlling their anger
 - They use violence as a means of controlling their partners
 - They are violent because they drink or use drugs
 - They pick fights with anyone
3. Which of the following are warning signs that a patient may have been abused by his/her partner? (Check all that apply)
 - Chronic unexplained pain
 - Anxiety
 - Substance abuse
 - Frequent injuries
 - Depression
4. Which of the following are reasons an IPV victim may not be able to leave a violent relationship? (Check all that apply)
 - Fear of retribution
 - Financial dependence on the perpetrator
 - Religious beliefs
 - Children's needs
 - Love for one's partner
 - Isolation

5. Which of the following are the most appropriate ways to ask about IPV? (Check all that apply)

- "Are you a victim of intimate partner violence?"
- "Has your partner ever hurt or threatened you?"
- "Have you ever been afraid of your partner?"
- "Has your partner ever hit or hurt you?"

6. Which of the following is/are generally true? (Check all that apply)

- There are common, non-injury presentations of abused patients
- There are behavioral patterns in couples that may indicate IPV
- Specific areas of the body are most often targeted in IPV cases
- There are common injury patterns associated with IPV
- Injuries in different stages of recovery may indicate abuse

7. Please label the following descriptions of the behaviors and feelings of patients with a history of IPV with the appropriate stage of change.

1 = Pre-contemplation 2 = Contemplation 3 = Preparation
4 = Action 5 = Maintenance 6 = Termination

- Begins making plans for leaving the abusive partner
- Denies there's a problem
- Begins thinking the abuse is not their own fault
- Continues changing behaviors
- Obtains order(s) for protection

8. Circle **T** for "true", **F** for "false", or **DK** if you "don't know" the answer to the following:

- | | | | |
|---|---|---|----|
| a. Alcohol consumption is the greatest single predictor of the likelihood of IPV. | T | F | DK |
| b. There are no good reasons for not leaving an abusive relationship | T | F | DK |
| c. Reasons for concern about IPV should not be included in a patient's chart if s/he does not disclose the violence | T | F | DK |
| d. When asking patients about IPV, physicians should use the words "abused" or "battered." | T | F | DK |
| e. Being supportive of a patient's choice to remain in a violent relationship would condone the abuse. | T | F | DK |
| f. Victims of IPV are able to make appropriate choices about how to handle their situation. | T | F | DK |
| g. Health care providers should not pressure patients to acknowledge that they are living in An abusive relationship. | T | F | DK |
| h. Victims of IPV are at greater risk of injury when they leave the relationship. | T | F | DK |
| i. Strangulation injuries are rare in cases of IPV. | T | F | DK |
| j. Allowing partners or friends to be present during a patient's history and physical exam ensures safety for an IPV victim | T | F | DK |
| k. Even if the child is not in immediate danger, physicians in all states are mandated to report an instance of a child witnessing IPV to Child Protective Services | T | F | DK |

Section IV:

For each of the following statements, please indicate your response on the scale from "Strongly Disagree" (1) to "Strongly Agree" (7).

Statements	Strongly Disagree		Disagree		Agree		Strongly Agree
1. If an IPV victim does not acknowledge the abuse, there is very little that I can do to help.	1	2	3	4	5	6	7
2. I ask all new patients about abuse in their relationships.	1	2	3	4	5	6	7
3. My workplace encourages me to respond to IPV.	1	2	3	4	5	6	7
4. I can make appropriate referrals to services within the community for IPV victims.	1	2	3	4	5	6	7
5. I am capable of identifying IPV without asking my patient about it.	1	2	3	4	5	6	7
6. I do not have sufficient training to assist individuals in addressing situations of IPV.	1	2	3	4	5	6	7
7. Patients who abuse alcohol or other drugs are likely to have a history of IPV.	1	2	3	4	5	6	7
8. Victims of abuse have the right to make their own decisions about whether hospital staff should intervene.	1	2	3	4	5	6	7
9. I feel comfortable discussing IPV with my patients.	1	2	3	4	5	6	7
10. I don't have the necessary skills to discuss abuse with an IPV victim who is:							
a) Female	1	2	3	4	5	6	7
b) Male	1	2	3	4	5	6	7
c) a different cultural/ethnic background	1	2	3	4	5	6	7
11. If victims of abuse remain in the relationship after repeated episodes of violence, they must accept responsibility for that violence.	1	2	3	4	5	6	7
12. I am aware of legal requirements in this state regarding reporting of suspected cases of:							
a) IPV	1	2	3	4	5	6	7
b) child abuse	1	2	3	4	5	6	7
c) elder abuse	1	2	3	4	5	6	7
13. Health care providers do not have the time to assist patients in addressing IPV.	1	2	3	4	5	6	7
14. I am able to gather the necessary information to identify IPV as the underlying cause of patient illnesses (e.g., depression, migraines).	1	2	3	4	5	6	7
15. If a patient refuses to discuss the abuse, staff can only treat the patient's injuries.	1	2	3	4	5	6	7
16. Victims of abuse could leave the relationship if they wanted to.	1	2	3	4	5	6	7

Statements	Strongly Disagree	Disagree	Agree	Strongly Agree			
17. I comply with the Joint Commission standards that require assessment for IPV.	1	2	3	4	5	6	7
18. Health care providers have a responsibility to ask all patients about IPV.	1	2	3	4	5	6	7
19. My practice setting allows me adequate time to respond to victims of IPV.	1	2	3	4	5	6	7
20. I have contacted services within the community to establish referrals for IPV victims.	1	2	3	4	5	6	7
21. Alcohol abuse is a leading cause of IPV.	1	2	3	4	5	6	7
22. Victims of abuse often have valid reasons for remaining in the abusive relationship.	1	2	3	4	5	6	7
23. I am too busy to participate on a multidisciplinary team that manages IPV cases.	1	2	3	4	5	6	7
24. Screening for IPV is likely to offend those who are screened.	1	2	3	4	5	6	7
25. There is adequate private space for me to provide care for victims of IPV.	1	2	3	4	5	6	7
26. I am able to gather the necessary information to identify IPV as the underlying cause of patient injuries (e.g., bruises, fractures, etc.).	1	2	3	4	5	6	7
27. Women who choose to step out of traditional roles are a major cause of IPV.	1	2	3	4	5	6	7
28. Health care providers do not have the knowledge to assist patients in addressing IPV.	1	2	3	4	5	6	7
29. I can match therapeutic interventions to an IPV patient's readiness to change.	1	2	3	4	5	6	7
30. I understand why IPV victims do not always comply with staff recommendations.	1	2	3	4	5	6	7
31. Use of alcohol or other drugs is related to IPV victimization.	1	2	3	4	5	6	7
32. I can recognize victims of IPV by the way they behave.	1	2	3	4	5	6	7

Section V:

- How many *new diagnoses* (picked up an acute case, uncovered ongoing abuse, or had a patient disclose a past history) of intimate partner violence (IPV) would you estimate you have made in the last 6 months?
 - None
 - 1-5
 - 6-10
 - 11-20
 - 21 or more
 - N/A – not in clinical practice

2. Check the situations listed below in which you currently screen for IPV: (*check all that apply*)

- Not applicable – I am not in clinical practice
- I do not currently screen
- I screen all new patients
- I screen all new female patients
- I screen all patients with abuse indicators on history or exam
- I screen all female patients at the time of their annual exam
- I screen all pregnant patients at specific times of their pregnancy
- I screen all patients periodically
- I screen all female patients periodically
- I screen certain patient categories only (check below & continuing on next page)
 - Teenagers
 - Young adult women (under 30 years old)
 - Elderly women (over 65 years old)
 - Single or divorced women
 - Married women
 - Women with alcohol or other substance abuse
 - Single mothers
 - Black or Hispanic women
 - Immigrant women
 - Lesbian women
 - Homosexual men
 - Depressed/suicidal women
 - Pregnant women
 - Mothers of all my pediatric patients (if applicable)
 - Mothers of pediatric patients who show signs of witnessing IPV
 - Mothers of children with confirmed or suspected child abuse, neglect
 - Other. Please specify: _____

3. How often in the past six months have you asked about the possibility of IPV when seeing patients with the following:

	<i>Never</i>	<i>Seldom</i>	<i>Some-</i>	<i>Nearly</i>	<i>Always</i>	<i>N/A</i>
a. Injuries	1	2	3	4	5	6
b. Chronic pelvic pain	1	2	3	4	5	6
c. Irritable bowel syndrome ¹	1	2	3	4	5	6
d. Headaches	1	2	3	4	5	6
e. Depression/Anxiety	1	2	3	4	5	6
f. Hypertension	1	2	3	4	5	6
g. Eating disorders	1	2	3	4	5	6

4. In the past 6 months, which of the following actions have you taken when you identified IPV? (Check all that apply)

- Have not identified IPV in past 6 months
- Provided information (phone numbers, pamphlets, other information) to patient
- Counseled patient about options she / he may have
- Conducted a safety assessment for the victim
- Conducted a safety assessment for victim's children
- Helped patient develop a personal safety plan
- Referred patient to:
 - Individual therapy
 - Couples therapy
 - Child Protective Services
 - Legal advocate/victim witness advocate
 - Child therapy/support group
 - On-site social worker/advocate
 - Battered women's program/shelter
 - Alcohol/substance abuse counseling
 - Local DV/IPV hotline
 - Battered women's treatment program
 - Religious leader/organization
 - Battered women/s support group
 - National DV/IPV Hotline
 - Lesbian/Gay/Transvestite/Bisexual support group
 - Police, sheriff, or other local law enforcement
 - Housing, educational, job or financial assistance
 - Other referral (describe): _____
 - Other action (describe): _____

5. Is there a protocol for dealing with adult IPV at your clinic/practice? (Check one)

- Yes, and widely used
- Yes, and used to some extent
- Yes, but not used
- No
- Unsure
- Not applicable to my patient population
- I am not currently in a clinical practice

6. Are you familiar with your institution's policies regarding screening & management of IPV victims?

- Yes
- No
- N/A

7. Is a camera available at your work site for photographing IPV victims' injuries?

- Yes - - Type: Polaroid or other instant camera, Digital, Other: _____
- No
- Unsure
- Not applicable to my patient population
- I am not currently in a clinical practice

8. Do you practice in a state where it is legally mandated to report IPV cases involving competent (non- vulnerable) adults?

- Yes
- No
- Unsure
- N/A (Not in practice)

9. For every IPV victim you have identified in the past 6 months, how often have you:

	Never	Seldom	Some Times	Nearly Always	Always	NA
a. Documented patient's statements re. IPV in chart	1	2	3	4	5	6
b. Used a body-map to document patient injuries	1	2	3	4	5	6
c. Photographed victim's injuries to include in chart	1	2	3	4	5	6
d. Notified appropriate authorities when mandated	1	2	3	4	5	6
e. Conducted a safety assessment for victim	1	2	3	4	5	6
f. Conducted a safety assessment for victim's children	1	2	3	4	5	6
g. Helped an IPV victim develop a safety plan	1	2	3	4	5	6
h. Contacted an IPV service provider	1	2	3	4	5	6
i. Offered validating or supportive statements	1	2	3	4	5	6
j. Provided basic information about IPV	1	2	3	4	5	6
k. Provided referral and/or resource information	1	2	3	4	5	6

10. Are IPV patient education or resource materials (posters, brochures, etc.) available at your practice site? (*Check one*)

- Yes, well displayed, and accessed by patients
- Yes, well displayed, but not accessed by patients
- Yes, but not well displayed
- No
- Unsure
- Not applicable to my patient population
- Am not currently in a clinical practice

11. Do you provide abused patients with IPV patient education or resource materials? (*Check one*)

- Yes, almost always
- Yes, when it is safe for the patient
- Yes, but only upon patient request
- No, due to inadequate referral resources in the community
- No, because I do not feel these materials are useful in general
- No, other reason (*specify*) _____
- Not applicable to my patient population
- I am not currently in a clinical practice

12. Do you feel you have adequate adult IPV referral resources for patients **at your work site** (including mental health referral)?

- Yes
- No
- Unsure
- I am not currently in a clinical practice
- Not applicable to my patient population

13. Do you feel you have adequate knowledge of referral resources for patients **in the community** (including shelters or support groups) for adult IPV victims?

- Yes
- No
- Unsure
- I am not currently in a clinical practice
- Not applicable to my patient population

Thank you for completing this survey

REFERENCES

- AAP. (1998). *The role of pediatricians in recognizing and intervening on behalf of abused women*. Elk Grove, IL: American Association of Pediatricians.
- AAFP Commission on Special Issues and Clinical Interests. (1994). Family violence: An AAFP white paper. *American Family Physician*, 50(8), 1636 – 1646.
- AANP. (2000). Statement on violence. Austin, TX: American Academy of Nurse Practitioners.
- Abbott, P., & Williamson, E. (1999). Women, health and intimate partner violence. *Journal of Gender Studies*, 8(1), 83-102.
- ACOG. (1995). *Intimate partner violence (209)*. Washington, DC: American College of Obstetricians and Gynecologists.
- AMA. (1992). *Diagnostic and treatment guidelines on intimate partner violence*. Chicago, IL: American Medical Association.
- AMA Council on Scientific Affairs. (2005). *Report 7 of the Council on Scientific Affairs (A-50)*. Retrieved April 19, 2008, <http://www.ama-assn.org/ama/pub/category/print/15248.html>.
- ANA. (1991). *Position statement on physical abuse against women*. Kansas City, MI: American Nurses Association.
- APA Women's Program Office. (1999). *Resolution on violence against women*. Washington, DC: American Psychological Association.

- APHA. (1992). Policy statement 9211: Intimate partner violence. *APHA Policy Statements*. Washington, DC: American Public Health Association.
- Bachman, R. (1994). *Violence Against Women: A National Crime Victimization Survey Report*. Washington, DC: U. S. Department of Justice, Bureau of Justice Statistics.
- Bassuk, E. (1993). Social and economic hardships of homeless and other poor women. *American Journal of Orthopsychiatry*, 63(3), 340-347.
- Becker, L. (2000). *Effects size calculators*. University of Colorado at Colorado Springs. Retrieved September 24, 2008, <http://web.uccs.edu/lbecker/Psy590/escalc3.htm>.
- Browne, A., & Bassuk, S. (1997). Intimate violence in the lives of homeless and poor housed women: Prevalence and patterns in an ethnically diverse sample. *American Journal of Orthopsychiatry*, 67, p. 26-278.
- Bureau of Justice Statistics. (1998). *National Crime Victimization Survey, 1992-1998*. Washington, DC: U. S. Department of Justice.
- Campbell, J. (2002). Health consequences of intimate partner violence. *Lancet*, 359(9314), 1331-1337.
- Campbell, J., & Soeken, K., (1999). Forced sex and intimate partner violence: Effects on women's risk and women's health. *Violence Against Women*, 5(9), 1017-1035.

- Campbell, R., & Wasco, S. (2005). Understanding rape and sexual assault: 20 Years of progress and future directions. *Journal of Interpersonal Violence, 20*(1), 127-131.
- Cann, K., Withnell, S., Shakespeare, J., Doll, H., & Thomas, J. (2001). Intimate partner violence: A comparative survey of levels of detection, knowledge, and attitudes in healthcare workers. *Public Health, 115*, 89-95.
- Carbone-Lopez, K., Kruttschnitt, C., & Macmillan, R. (2006). Partners of intimate partner violence and their associations with physical health, psychological distress and substance abuse. *Public Health Reports, 121*, 382-392.
- Center for Disease Control and Prevention. (2003). *Costs of Intimate Partner Violence Against Women in the United States*. National Center for Injury Prevention and Control, Atlanta GA. Retrieved June 17, 2007, http://www.cdc.gov/ncipc/pub-res/ipv_cost/IPVBook-Final-Feb18.pdf.
- Chamberlain, L., & Perham-Hester, K. (2002). The impact of perceived barriers on primary care physicians' screening practices for female partner abuse. *Women & Health, 35*(2/3), 55-69.
- Chang, J., Berg, C., Saltzman, L., & Herndon, J. (2005). Homicide: A leading cause of injury deaths among pregnant and postpartum women in the United States, 1991-1999. *American Journal of Public Health, 95*(3), 471-477.
- Chez, R., & Jones, R. (1995). The battered woman. *American Journal of Obstetrics & Gynecology, 173*, 677-679.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd edition). Hillsdale, NJ: Erlbaum.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.
- Cohen, S., De Vos, E., & Newberger, E. (1997). Barriers to physician identification and treatment of family violence: Lessons from five communities. *Academic Medicine*, 72(1), 819 – 825).
- Coker, A., Smith, P., Bethea, L., King, M., & McKeown, R. (2000). Physical health consequences of physical and psychological intimate partner violence. *Archives of Family Medicine*, 9(5), 451-457.
- Coker, A., Smith, P., McKeown, R., & King, M. (2000). Frequency and correlates of intimate partner violence by type: Physical, sexual and psychological battering. *American Journal of Public Health*, 90(4), 553-559.
- Cole, T. (2000). Is intimate partner violence screening helpful? *Journal of the American Medical Association*, 284(5), 551-553.
- Council on Ethical and Judicial Affairs. (1992). Physicians and intimate partner violence: Ethical considerations. *Journal of the American Medical Association*, 267(23), 3190-3193.
- Covington, D., Dalton, V., Diehl, S., Wright, B., & Piner, M. (1997). Improving the detection of violence among pregnant adolescents: Systematic violence assessment. *Journal of Adolescent Health*, 21, 18.
- Cronholm, P. (2006). Intimate partner violence and men's health. *Primary Care Clinic Office Practice*, 33, 199-209.

- Dalton, J., Blau, W., Carlson, J., Mann, J., Bernard, S., Toomey, T., et al. (1996).
Changing the relationship among nurses' knowledge, self-reported behavior, and
documented behavior in pain management: Does education make a difference?
Journal of Pain and Symptom Management, 12(5), 308-319.
- Davidson, L., Grisso, J., Garcia-Moreno, C., Garcia, J., King, V., & Marchant, S.
(2001). Training programs for healthcare professionals in domestic violence.
Journal of Women's Health & Gender-Based Medicine, 10(10), 953-969.
- Dube, S., Felitti, V., Dong, M., Chapman, D., Giles, W., & Anda, R. (2003). Childhood
abuse, neglect, and household dysfunction and the risk of illicit drug use: The
Adverse Childhood Experiences Study. *Pediatrics, 111*(3), 564-572.
- Dube, S., Felitti, V., Dong, M., Giles, W., & Anda, R. (2003). The impact of adverse
childhood experiences on health problems: Evidence from four birth cohorts
dating back to 1900. *Preventive Medicine, 37*, 268-277.
- Du Plat-Jones, J. (2006). Intimate partner violence: The role of health professionals.
Nursing Standard, 21(14-16), 44 – 48.
- Eisenstat, S. & Bancroft, L. (1999). Intimate partner violence. *The New England
Journal of Medicine, 341*(12), 886 – 892.
- Family Violence Prevention Fund. (2002). *National consensus guidelines on
Identifying and responding to domestic violence victimization in healthcare
settings*. San Francisco, CA: Family Violence Prevention Fund (FVPF).

- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A., (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.
- Felitti, V., Anda, R., Nordenberg, D., Williamson, D., Spitz, A., Edwards, V., Koss M., & Marks, J. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245-258.
- Foege, W., Rosenbert, M., & Mercy, J. (1995). Public health and violence prevention. *Current Issues in Public Health*, 1, 2-9.
- France, K. (1996). *Crisis intervention: A handbook of immediate person to person help* (3rd Ed.). Springfield, IL: Charles C. Thomas.
- Gagan, M. (1998). Correlates of nurse practitioners' diagnostic and intervention performance for intimate partner violence. *Western Journal of Nursing Research*, 20(5), 536-54.
- Ganley, A. (2004). *Improving the healthcare response to domestic violence: A trainer's manual for healthcare providers*. Funded by the Conrad N. Hilton Foundation. San Francisco, CA: Family Violence Prevention Fund.
- Gazmararian, J., Petersen, R., Spitz, A., Goodwin, M., Saltzman, L., & Marks, J. (2000). Violence and reproductive health: Current knowledge and future research directions. *Maternal and Child Health Journal*, 4(2), 79-84.

- Gerbert, B. & Abercrombie, P. (1999). How healthcare providers help battered women: The survivor's perspective. *Women & Health, 29*(3), 115-136.
- Gerbert, B., Caspers, N., Milliken, N, Berlin, M., Bronstone, A., & Moe, J. (2000). Interventions that help victims of intimate partner violence. *Journal of Family Practice, 49*(10), 889-900.
- Gerbert, B., Gansky S., Tang, J., McPhee, S., Carlton, R., Herzig, K., Danley, D., & Caspers, N. (2002). Intimate partner violence compared to other health risks: A survey of physicians' beliefs and behaviors. *American Journal of Preventive Medicine, 23*(2), 82-90.
- Gerbert, B., Moe, J., Caspers, N., Salber, P., Feldman, M., Herzig, K., & Bronstone, A. (2002). Physicians' response to victims of intimate partner violence: Toward a model of care. *Women & Health, 35*(2/3), 1-22.
- Gielen, A., & McDonald, E. (1997). The PRECEED-PROCEED planning model. In K. Glanz, F. Lewis, & B. Rimer (Eds.), *Health behavior and health education: Theory, research and practice* (2nd Ed.) (pp. 359-383). San Francisco, CA: Jossey-Bass Publications.
- Glanz, K., Lewis, F., & Rimer, B (Eds.). (1997). *Health behavior and health education: Theory, research and practice* (2nd Ed.). San Francisco, CA: Jossey-Bass Publications.
- Goff, H., Byrd, T., Shelton, A., & Parcel, G. (2001). Healthcare professionals' skills, beliefs, and expectations about Screening for intimate partner violence in a border community. *Family Community Health, 24*(1), 39-54.

- Green, L. & Kreuter, M. (1991). *Health promotion planning: An educational and environmental approach* (2nd Ed.). Mountain View, CA: Mayfield Publishing.
- Gremillion, D., & Kanof, E. (1996). Overcoming barriers to physician involvement in identifying and referring victims of intimate partner violence. *Annals of Emergency Medicine*, 27, 769-773.
- Hägglom, A., Hallbert, L., & Moller, A. (2005). Nurses' attitudes and practices towards abused women. *Nursing and Health Sciences*, 7, 235-242.
- Hamberger, L., Guse, C., Boerger, J., Minsky, D., Pape, D., & Folsom, C. (2004). Evaluation of a healthcare provider training program to identify and help partner violence victims. *Journal of Family Violence*, 19(1), 1-11.
- Harwell, T., Casten, R., Armstrong, K., Dempsey, S., Coons, H., & Davis, M. (1998). Results of a domestic violence training program offered to the staff of urban community health centers: Evaluation Committee of the Philadelphia Family Violence Working Group. *American Journal of Preventive Medicine*, 15, 235-242.
- Heinzer, M. & Krimm, J. (2002). Barriers to screening for intimate partner violence in an emergency department. (Theme Articles). *Holistic Nursing Practice*, 16(3), 24-34.
- Hendricks, J., McKean, J., & Hendricks, C. (2003). *Crisis Intervention: Contemporary issues for on-site interveners* (3rd ed.). Springfield, IL: Charles C. Thomas Publisher, LTD.

- Hines, D. & Malley-Morrison, K. (2001). Psychological effects of partner abuse against men: a neglected research area. *Psychology of Men & Masculinity*, 2(2), 75-85.
- Hornung, C., McCullough, B., & Sugimoto, T. (1981). Status relationships in marriage: Risk factors in spouse abuse. *Journal of Marriage and the Family*, 43, 675-692.
- Johnson, M. (1995). Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and the Family*, 57, 283-294.
- Johnson, M. & Elliott, B. (1997). Intimate partner violence among family practice patients in midsized and rural communities. *Journal of Family Practice*, 44(4), 391-401.
- Jonassen, J., Pugnaire, M., Mazor, K., Regan, M., Jacobson, E., Gammon, W., Doepel, D., & Cohen, A. (1999). The effect of a domestic violence inter-clerkship on the knowledge, attitudes, and skills of third-year medical students. *Academic Medicine*, 74, 821-828.
- Kerr, A., Hall, H., & Kozub, S. (2002). *Doing statistics with SPSS*. London: Sage Publications.
- Kilpatrick, D. (2004). What is violence against women: Defining and measuring the problem. *Journal of Interpersonal Violence*, 19, 1209-1234.
- Kripke, E., Steele, G., O'Brien, M., & Novack, D. (1998). Domestic violence training program for residents. *Journal of General Internal Medicine*, 13, 839-841.

- Lamberg, L. (2000). Intimate partner violence: What to ask, what to do. *Journal of the American Medical Association*, 284(5), 554 – 556.
- Lenth, R. V. (2006). Java Applets for Power and Sample Size [Computer Software]. Retrieved April 28, 2008 from <http://www.stat.uiowa.edu/~rlenth/Power>.
- Little, L., & Kantor, G. (2002). Using ecological theory to understand intimate partner violence and child maltreatment. *Journal of Community Health Nursing*, 19(3), 133-145.
- Lutenbacher, M., Cohen, A., & Mitzel, J. (2003). Do we really help? Perspectives of abused women. *Public Health Nursing*, 20(1), 56-64.
- Lyon, E. (2000). Welfare, poverty and abused women: New research and its implications. *Building Comprehensive Solutions to Intimate partner violence, Publication #10*. Philadelphia, PA: Pennsylvania Coalition Against Intimate Partner Violence.
- McCauley, J., Kern, D. E., Kolodner, K., Dill, L., Schroeder, A. F., DeChant, H. K., et al. (1995) The “Battering Syndrome”: Prevalence and clinical characteristics of intimate partner violence in primary care internal medicine practices. *Annals of Internal Medicine*, 123(10), 737-746.
- McCauley, J., Yurk, R., Jenckes, M., & Ford, D. (1998). Inside “Pandora’s Box:” Abused women’s experiences with clinicians and health services. *Journal of General Internal Medicine*, 13, 549-555.

- McGrath, M., Bettacchi, A., Duffy, S., Peipert, J., Becker, B., & St. Angelo, L. (1997). Violence against women: Provider barriers to intervention in emergency departments. *Academic Emergency Medicine*, 4(4), 297 – 300.
- McKie, L, Fennell, B., & Mildorf, J. (2002). Time to disclose, timing disclosure: GPs' discourses on disclosing domestic abuse in primary care. *Sociology of Health & Illness*, 24(3), 327-346.
- Max, W., Rice, D., Finkelstein, E., Bardwell, R., & Leadbetter, S. (2004). The economic toll of intimate partner violence against women in the United States. *Violence and Victims*, 19(3), 259-272.
- Montano, D., Kasprzyk, D., & Taplin, S. (1997). The Theory of Reasoned Action and the Theory of Planned Behavior. In K. Glanz, F. Lewis, & B. Rimer (Eds.), *Health behavior and health education: Theory, research and practice* (2nd Ed.) (pp. 85-112). San Francisco, CA: Jossey-Bass Publications.
- National Center for Injury Prevention and Control. (2003). *Costs of Intimate Partner Violence Against Women in the United States*. Atlanta, GA: Centers for Disease Control and Prevention.
- National Resource Center on Intimate partner violence. (2002, March). *Children exposed to intimate partner violence*. Harrisburg, PA: National Resource Center.
- Parnis, D. & Du Mont, J. (2002). Examining the standardized application of rape kits: An exploratory study of post-sexual assault professional practices. *Healthcare for Women International*, 23, 846-853.

- Parsons, L., Zaccaro, D., Wells, B., & Stovall, T. (1995). Methods of and attitudes toward screening obstetrics and gynecology patients for intimate partner violence. *American Journal of Obstetricians and Gynecologists*, 173(2), 381-387.
- Pihlgren, E. (2002). Female patient response to routine physician inquiry regarding sexual assault history. Retrieved October 16, 2004 from *ProQuest Digital Dissertations Database* (UMI Number: 3040737).
- Prochaska, J., Redding, C., & Evers, K. (1997). The trans-theoretical model and stages of change. In K. Glanz, F. Lewis, & B. Rimer (Eds.), *Health behavior and health education: Theory, research and practice* (2nd Ed.) (pp. 60-84). San Francisco, CA: Jossey-Bass Publications.
- Punukollu, M. (2003). Intimate partner violence: Screening made practical. *Journal of Family Practice*, 52(7), 537-44.
- Rand, M. (1997). Violence-related injuries treated in hospital emergency departments. *Bureau of Justice Statistics Special Report*. Washington, DC: U.S. Department of Justice.
- Resnick, H., & Acierno, R. (1997). Health impact of interpersonal violence 2: Medical and mental health outcomes. *Behavioral Medicine*, 23(2), 65-79.
- Rhodes, K., & Levinson, W. (2003). Interventions for intimate partner violence against women: Clinical implications. *Journal of the American Medical Association*, 289(5), 601 – 605.

- Richardson, J., Coid, J., Petruckevitch, A., Chung, W. S., Moorey, S., & Feder, G. (2002). Identifying domestic violence: Cross sectional study in primary care. *British Medical Journal*, *324*, 274-280.
- Rivara, F., Anderson, M., Fishman, P., Bonomi, A., Reid, R., Carroll, D. et al. (2007). Healthcare utilization and costs for women with a history of intimate partner violence. *American Journal of Preventive Medicine*, *32*(2), 89-96.
- Rodrigues, M., Szkupinski, Q., & Bauer, H. (1996). Breaking the silence: Battered women's perspective on medical care. *Archives of Family Medicine*, *5*, 153-158.
- Rubin, A., & Babbie, E. (2005). *Research methods for social work* (5th ed.). Belmont, CA: Brooks/Cole.
- Sethi, D., Watts, S., Zwi, A., Watson, J., & McCarthy, C. (2004). Experience of domestic violence by women attending an inner city accident and emergency department. *Emergency Medicine Journal*, *21*(2), 180-5.
- Shepard, M., Elliott, B., Falk, D. & Regal, R. (1999). Public health nurses' responses to intimate partner violence: A report from the Enhanced Domestic Abuse Intervention Project. *Public Health Nursing*, *16*(5), 359-366.
- Short, L., Alpert, E., Harris, J. & Surprenant, Z. (2006). A tool for measuring physician readiness to manage intimate partner violence. *American Journal of Preventive Medicine*, *30*(2), 173-180.

- Sitterding, H., Adera, T., & Shields-Fobbs, E. (2003). Spouse/partner violence education as a predictor of screening practices among physicians. *The Journal of Continuing Education in the Health Professions*, 23, 54 – 63.
- Slaikue, K. (1990). *Crisis intervention: A handbook for practice and research (2nd ed.)*. Needham Heights, MA: Allyn & Bacon.
- Smith, P., Danis, M., & Helmick, L. (1998). Changing the healthcare response to battered women: A health education approach. *Family & Community Health*, 20(4), 1-18.
- Stover, C. (2005). Intimate partner violence research: What have we learned and where do we go from here? *Journal of Interpersonal Violence*, 20(4), 448-454.
- Stringham, P. (2006). Violence and men's health. *Primary Care Clinic Office Practice*, 33, 187-197.
- Straus, M., Gelles, R., & Steinmetz, S. (1980). *Behind closed doors: Violence in the American family*. Garden City, NY: Anchor Press.
- Sugg, N. & Inui, T. (1992). Primary care physicians' response to intimate partner violence: Opening Pandora's box. *Journal of the American Medical Association*, 267(23), 3157-3161.
- Thompson, R., Rivara, F., Thompson, D., Barlow, W., Sugg, N., Maiuro, R., & Rubanowice, D. (2000). Identification and management of domestic violence: A randomized trial. *American Journal of Preventive Medicine*, 19(4), 253-263.

- Tilden, V., Schmidt, T., Limandri, B., Chiodo, G., Garland, M., & Loveless, P. (1994). Factors that influence clinicians' assessment and management of family violence. *American Journal of Public Health, 84*(4), 628-633.
- Tjaden, P., & Thoennes, N. (2000a). Prevalence and consequences of male-to-female and female-to-male intimate partner violence as measured by the National Violence Against Women Survey. *Violence Against Women, 6*(2), 142-161.
- Tjaden, P., & Thoennes, N. (2000b). *Extent, Nature, and Consequences of Intimate Partner Violence*. Washington, DC: U. S. Department of Justice, Office of Justice Programs.
- Tolman, R., & Raphael, J. (2000). A review of research on welfare and intimate partner violence. *Journal of Social Issues, 56*, 655-682.
- Tower, L. (2003). Domestic violence screening: Education and institutional support correlates. *Journal of Social Work Education, 39*(3), 479-494.
- Ulrich, Y., Cain, K., Sugg, N., Rivara, F., Rubanowice, D., & Thompson, R. (2003). Medical care utilization patterns in women with diagnosed intimate partner violence. *American Journal of Preventive Medicine, 24*(1), 9-15.
- Urban Institute (1996). *The Violence Against Women Act of 1994: Evaluations of the Stop Grants to combat violence against women, Chapter 1*. Retrieved on February 15, 2007, from <http://www.ncjrs.org/vaw.chp1.htm>.
- Waalén, J., Goodwin, M., Spitz, A., Petersen, R., & Saltzman, L. (2000). Screening for intimate partner violence by healthcare professionals: Barriers and interventions. *American Journal of Preventive Medicine, 19*(4), 230-237.

- Walch, A. & Broadhead, E. (1992). Prevalence of lifetime sexual victimization among female patients. *Journal of Family Practice, 35*(5), 511-517.
- Wasson, J., Jette, A., Anderson, J., Johnson, D., Nelson, E., & Kilo, C. (2000). Routine, single-item screening to identify abusive relationships in women. *Journal of Family Practice, 49*(11), 1017-25.
- Wisner, C., Gilmer, T., Saltzman, L., & Zink, T. (1999). Intimate partner violence against women: Do victims cost health plans more? *Journal of Family Practice, 48*(6), 439 – 449.
- WHO. (2002). *World report on violence and health*. Geneva, Switzerland: World Health Organization.
- Williamson, K., Coonrod, D., Bay, C., Brady, M., Partap, A., & Wolf, W. (2004). Screening for intimate partner violence: Practice, patterns, knowledge and attitudes of physicians in Arizona. *Southern Medical Journal, 97*(11), 1049-1054.
- Wilson, P., Cesario, S., Fredland, N., Walsh, T., McFarlane, J., Gist, J., et al. (2001). Primary healthcare providers' lost opportunity to help abused women. *Journal of the American Academy of Nurse Practitioners, 13*(12), 565.
- Wingood, G., & DiClemente, R. (1997). The effects of an abusive primary partner on the condom use and sexual negotiation practices of African-American women. *American Journal of Public Health, 87*, 1016-1018.

- Wist, W. & McFarland, J. (1999). The effectiveness of an abuse assessment protocol in public health prenatal clinics. *American Journal of Public Health, 89*(8), 1217-1221.
- Wood, R., & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. *Journal of Personality and Social Psychology, 56*, 407-415.
- Yllo, K., & Straus, M. (1981). Interpersonal violence among married and cohabitating couples. *Family Relations, 30*, 339-347.
- Yodanis, C., Godenzi, A. & Stanko, E. (2000). The benefits of studying costs: A review and agenda for studies on the economic costs of violence against women. *Policy Studies, 21*(3), 263-276.
- Zink, T., Elder, N., Jacobson, J., & Klostermann, B. (2004). Medical management of intimate partner violence considering the stages of change: Pre-contemplation and contemplation. *Annals of Family Medicine, 2*(3), 231-39.
- Zink, T., & Putnam, F. (2005). Intimate partner violence research in the healthcare setting: What are appropriate and feasible methodological standards? *Journal of Interpersonal Violence, 20*(4), 365-372.
- Zweig, J., Burt, M., & Van Ness, A. (2003). *The effects on victims of victim service programs funded by the STOP formula grants program*. Retrieved on April 15, 2006 from <http://www.urban.org/url.cfm?ID=410645>.

BIOGRAPHICAL INFORMATION

Sherry Sheffield, Ph.D., LCSW, is Assistant Professor at Texas A & M University – Commerce. Dr. Sheffield has experience working with individuals, couples, and families in both mental health and healthcare fields and has been actively involved in program development and agency coordination in rural areas of east Texas. Dr. Sheffield continues to work in the community through area social service agencies as a volunteer and consultant. She earned a Bachelors of Social Work from East Texas State University, a Masters of Science in Social Work from the University of Texas at Arlington in 1997, as well as a Ph.D. in Social Work in 2008. Her research interests include intimate partner violence, sexual assault, addiction, health, and spirituality. Dr. Sheffield plans to continue in academia, program development, and research as well as work with community healthcare professionals to develop innovative healthcare programs that provide comprehensive services to individuals and families.