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Effect of Intimate Partner Violence Education on Nurses Readiness to Screen

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Effect of Intimate Partner Violence Education on Nurses Readiness to Screen

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Abstract

This quality improvement translational project was intended to increase the confidence of nurses screening for intimate partner violence, through education. The project utilized a focus group and the Physicians Readiness to Manage Intimate Partner Violence Survey to gather needs, knowledge gaps, and prior education to develop IPV education for a group of nurses at a public health department. Nurses were found to have a low level of IPV knowledge, with a mean score of 42.44 (SD= 15.13), on a 100-point scale. Six of the nurses also reported less than one hour of previous IPV training in the past. Nurses reported their confidence to screen on a confidence visual analog scale pre-and post IPV education. Nurses confidence to screen for IPV was 2 points higher after receiving IPV education, 95% CI [1.93, 2.23]. Pre- and post-scale scores were strongly and positively correlated ($r = 0.982$, $p < 0.000$) and there was a significant average difference between pre- and post-scale scores ($t_8 = 31.385$, $p < 0.000$). Nurses were also introduced to the HITS screening tool to begin using to screen all their clients post education. Chart audits were completed over a nine-week timeframe on the number of clients seen and referred using the HITS tool. Nurses saw 759 clients during the project period, only 10.67% were screened with the HITS tool and 2.46% were referred to additional resources. Results supported that IPV education can increase the confidence of nurses screening for IPV. Further implications for standardizing a universal screening tool was indicated.

Effect of Intimate Partner Violence Education on Nurses Readiness to Screen

Chapter 1

The Centers for Disease Control (2013) has stated that intimate partner violence (IPV) is a major public health problem, noting that it is experienced by both men and women. Nearly 10 million people report abuse by their partner every year and one of four males report being abused by their partner within their lifetime (Black et al., 2011). IPV can include reproductive, emotional, sexual, and physical violence and can lead to long term effects on physical and mental health (American Congress of Obstetricians and Gynecologists, 2012). Black et al. (2011) reports that an estimated 29 million women have experienced physical IPV in their lifetime and are most likely to suffer from IPV. The U.S. Preventive Services Task Force (2015) and the American Congress of Obstetricians and Gynecologists (2012) currently recommend routine screening for intimate partner violence during women's health exams for all women of childbearing age. Current research and surveys are also beginning to show the importance of screening all clients, men and women for IPV (Breiding et al., 2014).

Statement of the Problem

Current literature reports that there are many reasons why healthcare providers do not screen patients for IPV, although there is a clear need for routine screening. Some providers who do not routinely screen for IPV report barriers such as time constraints, lack of education on screening, overall lack of confidence addressing this sensitive material, and uncertainty of where to refer patients who report abuse (CDC, 2013). Many healthcare facilities limit the amount of time healthcare providers are allotted for routine patient appointments, therefore, addressing IPV can potentially lead to additional time needed (CDC, 2013). Time is needed to complete an assessment, provide necessary education, and to make needed referrals. These factors must be

considered when developing education, implementing screening techniques and tools, and possibly referring patients. Healthcare providers need the knowledge and confidence to screen patients for IPV. They have the duty to provide patients with additional information regarding IPV and should be committed to address and respond to any questions or responses patients may present when being screened. Providers should be aware of available resources for patients that who report IPV.

All the necessary tools, policies, and recommendations have been developed by national organizations that promote screening for IPV, but many healthcare providers are behind in implementing screening. The development of an IPV education tailored to the needs of nurses can improve their readiness to begin screening and making the appropriate referrals if needed.

Background of the Problem

Intimate partner violence has potential devastating effects on the health of individuals, families, and the economy. The World Health Organization (2013) reports intimate partner violence can increase the risk of sexually transmitted infections, human immunodeficiency virus, depression, suicidal ideations, unintended pregnancies, substance abuse addictions, and chronic pain among victims. Children who are exposed and experience to intimate partner violence themselves and within their family are at higher risk of suffering from depression, anxiety, and post-traumatic stress disorders as they become adults (Hamby, Finkelhor, Turner, & Ormrod, 2011).

Capaldi, Knoble, Short, and Kim (2012) recognized several risks factors that put people at risk for IPV. Unemployment or having a low income increased risks for IPV. Minorities, adolescents, young adults, and pregnant women are at the greatest risk for experiencing IPV.

Disability and substance use and abuse also play a factor in IPV risks. These risks make it important for providers to address IPV for every patient, every visit.

IPV has several signs that can be easily overlooked by healthcare providers, due to similar assessment findings found in other diagnosis (Black, 2011; Trevillion, Agnew-Davies & Howard, 2013). These signs can be acute conditions such as broken bones, black eyes, fractures, and bruising. Chronic signs of IPV can include hypertension, headaches and migraines, seizures, chest pain, and complaints of pain. Additional signs can consist of frequent health service visits and missed appointments. A patients' current health situation could be a direct result of IPV, making thorough assessment by healthcare providers imperative. Therefore, a treatment plan that considers addressing their risk for IPV could be the actual cure for their ailment.

Intimate partner violence has detrimental effects on the economy. It affects not only the number of work day's loss for victims, 7.2 days per victim, but also the cost of caring for victims which exceeds \$8.3 billion every year (CDC, 2016). It also influences the rate of unemployment, as many victims quit or lose their jobs as a result of IPV (CDC, 2016).

Purpose of the Project

The purpose of the project was to increase nurse's readiness to screen for intimate partner violence through education. Many providers report having limited IPV education in their formal programs as well as within their current employment. This project focused on developing education for a specific group of nurses (DeBoer et al., 2013). Nurse focused IPV education must address the needs of those in which the education is intended for. Assessing the educational needs of the nurses will help to solidify the new IPV content for the nurse and enable them to incorporate the education into their everyday practices. The addition of IPV education for nurses will not only provide new knowledge for nurses but also add the breadth of information nurses

are able to provide for their patients. Nurses will begin using their new knowledge to begin screening every patient every time for IPV. The project is intended to translate current research into practice through introducing nurses to IPV education to promote screening for IPV.

Terms and Definitions

This section will contain terms and definitions that will be used throughout this translational project.

Intimate partner violence (IPV) is a term used to describe the relationship between two close individuals in which one partner exerts physical, sexual, psychological, or stalking against their partner (Breiding, Basile, Smith, Black, & Mahendra, 2015). An intimate partner can be anyone who shares a close relationship, may be the same or opposite sex, and may or may not cohabit.

Needs Assessment and Feasibility

A needs assessment of a public health clinic was conducted with the Chief Nurse and Director of the Georgia Department of Public Health. The Georgia Department of Public Health consists of 159 health departments that combines into 18 health districts (GeorgiaGOV, n. d.). The department's goal is to maintain the health and wellbeing of all citizen within the state of Georgia. It also focuses on services which include infectious disease and immunizations, health promotion and disease management, maternal and child health, environmental health, epidemiology, emergency medical services, emergency medical services, emergency preparedness and response, and many others. The Chief Nurse and Director expressed interest and a need for an IPV education and screening tool for healthcare providers to promote screening for all clients.

Further assessment with the county nurse manager at a local public health clinic revealed that their healthcare providers currently only screen female clients for IPV, and do not have any IPV education available for nurses. The nurse manager expressed interest in having IPV education and implementing a new screening tool in place of their current process.

The Centers for Disease Control (2013) recognizes that IPV is as a public health problem which supports the critical need for public health clinics to implement IPV education and screening. Provider readiness to screen and lack of IPV education are two of the main factors found in research explaining the limited screening of clients. Stakeholders for the project included all staff within the public health clinic, the local community within the public health clinic, and clients that chose to visit the health clinic.

Project Specific Aims

There were five specific aims for this project:

- Aim One. The Physician Readiness to Manage Intimate Partner Violence Survey will identify nurses previous amounts IPV education.
- Aim Two. The Physician Readiness to Manage Intimate Partner Violence Survey will identify nurses IPV knowledge gaps.
- Aim Three. Nurses will have an increased confidence to screen for IPV following IPV education.
- Aim Four. All patients will be screened for IPV with the HITS screening tool.
- Aim Five. All patients will be referred if indicated by the results on the HITS screening tool.

Project Clinical Questions

The clinical questions associated with this quality improvement project are directly drawn from the specific aims of the project.

- Clinical Question One. Will the Physician Readiness to Manage Intimate Partner Violence Survey identify nurses previous IPV education?
- Clinical Question Two. Will the Physician Readiness to Manage Intimate Partner Violence Survey identify nurses IPV knowledge gaps?
- Clinical Question Three. Will IPV education increase nurses' confidence to screen for IPV?
- Clinical Question Four. Will nurses use the HITS screening tool to screen all patients after receiving IPV education?
- Clinical Question Five. Will all patients be referred if indicated by the results on the HITS screening tool?

Opportunities and Challenges

The development of IPV education for nurses, has the potential to benefit nurses, victims of IPV, their family members, and friends. The use of the developed education session/module can serve as a tool for use by other healthcare clinics to provide IPV education to their nurses. The proposed method for developing the education can also be used to create education based on the specific needs nurses in a different healthcare clinic settings.

Intimate partner violence is considered a complex topic that many nurses prefer not to address. Not only is the topic sensitive for nurses, but also for patients that have encountered or are currently experiencing some form of violence within their intimate relationships. Potential challenges can occur as nurses begin to screen and make referrals. They may be tasked with

answering additional questions presented by the IPV victim regarding resources or information about IPV. Some nurses may feel overwhelmed by some of the information that victims may divulged regarding their abusive relationships. Patients may also not feel comfortable sharing information about their relationships to nurses. Education that explores a variety of possible scenarios and questions nurses may encounter can help ease the feelings of discomfort that nurses and even patients may feel when sharing the information. Ultimately, the project benefited both healthcare providers and clients. Providers had an opportunity to learn a new skill and do their due diligence as healthcare providers in ensuring their client's wellbeing. Clients benefited as they could receive the necessary referrals if they were victims of IPV.

Chapter 2

A review of literature was completed for this quality improvement project. First this chapter reviews the search criteria used for the major topic of IPV screening. Secondly, this chapter will review current literature regarding IPV in relation to the importance and need for IPV screening for women, men, the LGBT community, and adolescents. Thirdly, it will focus on the importance of IPV education for healthcare providers as well as barriers to IPV screening. Lastly, the Physicians Readiness to Manage Intimate Partner Violence survey and pertinent research is detailed that supports its use within this translational project. This is followed by the HITS screening tool and supporting literature implemented in this translational project.

Literature Review

Search Descriptions

The terms screening for domestic violence, screening for IPV, screening for intimate partner violence, domestic violence, intimate partner violence, assessing domestic violence, assessing intimate partner violence, intimate violence survey, domestic violence survey, violence against women, intimate partner violence among men, and intimate partner violence in LGBT community were used in the literature search. Intimate partner violence education, intimate violence report, domestic violence report was entered into the search engines and databases Galileo, PubMed, and Google Scholar. A total of 947 articles were initially found amongst all listed databases. After reviewing and cross matching, the articles, 20 articles were selected that met the qualifications for this review. Articles that qualified had IPV as their main topic, published within the last 5-6 years, and screened for IPV. The intentions of the literature review

were to review the literature and implement evidence based findings. It was also used to select the best screening tool to implement IPV screening in healthcare settings (see *Figure 1*).

Routine Screening

The American Congress of Obstetricians and Gynecologists (ACOG) and the United States Preventative Services Task Force (USPSTF) recommend routine screening of women for intimate partner violence. Routine screening was encouraged because women often do not report current episodes of IPV. In many cases, they experienced IPV in their recent past or during their lifetime, or within the previous 12 months before they are ever screened (Higgins, Manhire, and Marshall, 2015). Additionally, screening during preventative women's health screening such as human immunodeficiency virus (HIV) testing and cancer screenings has shown an increase in the incidence of reports of IPV identified (Brown, Weitzen, and Lapane, 2013). Research showed specifically that IPV has detrimental effects on women reproductive health, as shown in the study completed by Lévesque et al. (2016). These found a significant need for screening during women's health exams, as women that required contraceptives and education reported higher degree of IPV. This also supported the need to make screening apart of all women's health visit.

Age

Women have found to experience IPV at different ages. Higgins, Manhire, and Marshall (2015) report that most women who reported IPV in their past were 36-45 years old. Breiding et al. (2014) found the opposite with most women reporting IPV before the age of 25. Per the 2011 National Intimate Partner and Sexual Violence Survey, 21% of girls and 10% of boys participating reported having experienced some form of physical or sexual dating violence

(Breiding et al., 2014). More than 8.5 million women were reported to have experienced rape and 1.5 million men were made to have sex before reaching the age of 18 (Breiding, 2014). The range of ages supports routine screening during the childbearing years, so that all women can be included during such crucial times in which they may face exposure.

LGBT

Although ACOG and the USPTF have supported screening women of childbearing age for IPV, there is also a great need to screen men and members of the LGBT community. Lévesque et al. (2016) did not specify whether the women participants identified as women who have sex with men only or women who have sex with both men and women were more susceptible to reproductive health issues. However, McCauley et al. (2015) supported that women who did not identify as heterosexual were more susceptible to IPV, one of every ten women in their study reported either having sex with women only or with women and men. These women in the study reported higher lifetime experiences of IPV than women who were heterosexual. They reported IPV more often than the heterosexual women participants with an odds ratio of 3.00. These women identified as having sex with men and women and were shown to have more reproductive and sexual health risks as those women identified (Lévesque et al., 2016). Women who identified as lesbian and bisexual engaged in risky behaviors that put them at risk for not only IPV but sexually transmitted infections, unwanted pregnancies, and they were less likely to seek contraceptives. The difference in subjects between these two research studies showed the significance in recognizing those factors such as sexual identity and orientation when assessing for IPV.

Men

There has also been extensive research that supported the screening of men for IPV in the healthcare setting. The 2010 National Intimate Partner and Sexual Violence Survey showed that 1 in 4 men reported IPV, which equates to about 28% of the United States population (Black et al., 2011). Higher rates of IPV were disproportionate among the different ethnicities and races of men that participated in the survey. Men who report being Native American, African American, and Hispanic reported the highest rates of IPV. Implications for this survey supported the implementation of screening of all women, men, and even children for IPV. Finneran and Stephenson (2013) conducted a systematic review of literature that supports IPV screening of men who have sex with men (MSM). Their review found that MSM reported rates of IPV like those reported by women.

Young men who have sex with men showed an association between their negative sexual behaviors and reports of IPV (Stults, Javdani, Greenbaum, Kapadia, & Halkitis, 2016). Men who have sex with men were susceptible to several sexual transmitted infections, most notably HIV. Overall Stults, Javdani, Greenbaum, Kapadia, and Halkitis (2016) showed that young men who have sex with men were more prone to report IPV and engage in condom less sex. The study participants reported higher rates of IPV when engaging in condom less oral sex and receptive and insertive anal sex. There was a significant association found between those that reported IPV and condom less oral and receptive anal sex, with an adjusted odds ratio of 1.81 and 2.2 and 95% CI [1.21, 2.72] and 95% CI [1.22, 4.31]. Overall, implications supported the need for IPV screening for young men who have sex with men, but also recognition that these men were more at risk for sexually transmitted infections as of results of their intimate partner relationships.

The two studies conducted by Stults, Javdani, Greenbaum, Kapadia, and Halkitis looked also at the rate of perpetration by the young men who have sex with men. Perpetration being the cause of IPV, towards their own intimate partner. Young men who have sex with men also reported condom less sex more often while being the perpetrator of the violence enacted on their intimate partner (Stults, Javdani, Greenbaum, Kapadia, & Halkitis, 2016). There was also association found between young men who have sex with men that were perpetrators of IPV and their report of substance use 30 days prior to participating in the study (Stults, Javdani, Greenbaum, Kapadia, & Halkitis, 2015). These two studies shared a common theme of the need for IPV screening among men, which can also help in resolving healthcare related issues that may result.

Substance Use

Substance use and abuse has been reported as a sign and symptom of IPV (Black, 2011). Stults, Javdani, Greenbaum, Kapadia, and Halkitis (2015) found an association between substance use and abuse and IPV among young men who have sex with men. Men were recruited and questioned regarding their use of alcohol, stimulants, marijuana, and any other drug in the previous 30 days as well as their lifetime experiences with IPV. Intimate partner violence was associated with a more than 1.5 increased risk of using alcohol, marijuana, or a stimulant among study participants. There was an increased risk of using any other drug among the young men who have sex with men. Mason, Wolf, O'rinn, and Ene (2017) found a connection between IPV and substance use and developed educational curriculum for healthcare providers to address both issues during assessment.

Ethnicity

As previously mentioned men of differing ethnicities and races are affected by IPV at varying rates. Gonzalez-Guarda, De Santis, and Vasquez (2013) found that Hispanic men reported IPV at rates like Hispanic women. They also looked at additional factors and their relationship to IPV. The sexual orientation of Hispanic men, their education, specific demographics, cultural, and certain psychological aspects were explored in its association to being a victim or perpetrator of IPV. Hispanic men identifying as homosexual or bisexual reported IPV in comparable rates. The most significant results were found among those who identified as bisexual. These men reported higher rates of being victims of IPV with an odd ratio of 3.70 and 95% CI [1.14,12.06] and IPV perpetration with an odds ratio of 5.33 and 5% CI [1.62, 17.54] when not considering other factors. It was also noted that when all factors were considered, sexual orientation, demographics, cultural assimilation, and psychological factors played no part in the reports of IPV victimization in this study. However, sexual orientation affected the rate of report of IPV perpetration. This research further supports the need to screening men.

Intimate Partner Violence Education

Wathen et al. (2009); DeBoer, Catherine, Kothari, Kothari, and Rohs (2013) noted in their research that IPV education was recognized as the most important barrier. There was a definite need for IPV education for nurses that incorporated current screening guidelines and techniques.

Wathen et al. (2009) took a different approach to recognizing the IPV education and training of providers, by reaching out directly to educational institutions in Canada. The

researchers contacted a variety of healthcare programs including dentistry, nursing, medical, and allied health programs; throughout Canada, to question if they offered IPV training or education to their students. The programs included ranged from associate to doctoral level programs. Around 50% of the 212 schools interviewed reported formal IPV education for students. Most of the schools found to offer IPV education were undergraduate nursing and allied health programs. Some of the postgraduate schools reported some IPV education, but many did not.

An older study focused on nurse practitioners surveyed whether their undergraduate and graduate programs included IPV education. The survey revealed a significant component of IPV education in their formal education (Hinderliter, Doughty, Delaney, Pitula, & Campbell, 2003). Nurses felt more confident screening clients when they received IPV education. Providers in this study reported the majority, 77.9% of 557 participants, had some form of IPV education in their studies, which introduced them to the topic of IPV. This education did not, however prepare them to screen for IPV in the clinical setting. So therefore, they required additional education after graduating from their respective programs that introduced them to the tools and other resources available when addressing IPV out in the communities in which they worked.

Papadakaki, Petridou, Kogevinas, and Lionis (2013) implemented IPV education to a group of physicians that included pre-and post-tests. The physicians, general practitioners and residents, were given IPV training over a two-day time frame in which they were surveyed on their actual IPV knowledge, beliefs about IPV, and perceived preparation. Physicians in the implementation group showed significant increases in their perceived knowledge and preparation immediately following the implementation of IPV education and was retained 12 months afterwards when compared with the control group of physicians who received no IPV training, $p=0.012$ and $p=0.001$. Residents that received the IPV education showed a significant increase

in actual knowledge in comparison to the physicians that received the IPV training after 12 months, $p= 0.012$.

Intimate partner violence has been linked to several comorbid conditions. There is research evidence that supports these conditions can be a result of IPV and in some cases a predisposing factor (Black, 2011). Mason, Wolf, O'rinn, and Ene (2017) developed an education curriculum to cover IPV, substance use, and mental health disorders to inform healthcare clinicians of the potential link between the three. Using education, pre- and post-test, participants had a significant higher understanding of the connection between all three conditions. The researchers bridged the gap between recognizing those factors which can play upon each other to ensure that patients were receiving the necessary care, education, and referrals needed.

Barriers to Intimate Partner Violence Screening

There have been many documented barriers to screening for IPV. Baig, Ryan, and Rodriguez (2012) interviewed healthcare providers to obtain some of the major barriers they felt prevented them from screening for intimate partner violence. The healthcare providers came from a variety of private and public hospitals and provided all levels of care. Providers were questioned regarding their personal beliefs regarding the need for IPV screening, their IPV screening behavior, their definition of IPV, barriers to screening, and ways to prevent such barriers. Some of the important themes regarding barriers revealed in this study were responsibility, time, additional resources, privacy, legalities, education, relationships, and focus. Ancillary staff and nurses felt that the doctor was responsible for addressing IPV. Some physicians also mentioned that IPV was not within their scope of practice. They focused only on patients' main complaint or their specialty area. They mentioned not receiving education on IPV and not knowing the questions to ask and the response they should give when confronted with

IPV victims. This study, reported providers feeling as if they did not have enough time to address IPV. They reported their concern for being involved in legal trouble and the lack of referral resources and lack of support staff to help guide IPV victims through the necessary resources. Healthcare providers in the study recognized IPV education as the main important factor in overcoming the barriers for IPV screening.

In further research studies, nurses identified education as pertinent to screening for IPV. DeBoer, Catherine, Kothari, Kothari, and Rohs (2013) survey of nurses recognized that IPV education was one the main factors needed to overcome barriers to screening. The nurses reported feeling comfortable in their role in assessing for IPV and recognizing victims of IPV. Limitations of this study, however, were a small sample size of nurses surveyed, and most of the participants reported to have only actually cared for two or less victims of IPV. DeBoer, Catherine, Kothari, and Rohs (2013) also noted that the study only considered nurses' perceptions rather than their actual practices. The study does recognize that there was a need for IPV education for nurses and that nurses were receptive to learning about IPV and screening.

Summary of Evidence

There is a definite need for IPV screening within healthcare facilities. The use of IPV screening among men has been shown to be just as pertinent as screening among women. Homosexual men and women have been shown to report higher rates of IPV than heterosexual women. It is important for healthcare providers to recognize these differences and ensure universal screening regardless of gender or sexual orientation.

There are obvious needs for cultural considerations when addressing IPV. IPV was found statistically higher in minority ethnicities. The use of IPV screening can be beneficial in

alleviating co-morbidities that patients may be presented with. IPV has been associated with other health conditions and patients were more at risk for disease. Both men and women have reported higher rate of IPV when diagnosed with sexually transmitted infections.

Education is one of the major barriers to IPV screening. Healthcare providers report limited education in their formal education programs and from their employers. The use of IPV training and education centered on the needs of the provider can improve some of the additional barriers report by providers, such as comfort and confidence. IPV education can present providers with resources that can be utilized for referrals as well as communication techniques that can improve IPV conversations between patients and providers.

Limitations of Current Evidence

Research on screening for IPV among men and the LGBT community is limited (Black, 2011; Finneran and Stephenson, 2013; McCauley et al, 2015; Stults, Javdani, Greenbaum, Kapadia, & Halkitis, 2016). IPV screening has mainly focused on women, with little data on women's sexual orientation (Lévesque et al., (2016). National surveys conducted by the Centers for Disease Control has shown that some men report higher rates of IPV than women, and even in some cases lesbian women report higher rates of IPV.

Strengths of Current Evidence

The articles utilized for the literature review provided some basis for increasing healthcare providers' readiness to screen for IPV. Intimate partner violence has been recognized as a problem and there is substantial information to support screening. There were a variety of research approaches that recognize the need for IPV education for providers. The research supported the use of IPV in all areas of healthcare so that it may be applicable to all patients

regardless of their health condition, gender, ethnicity, and sexual orientation. The literature reviewed supported this current translational project, which was intended to provide IPV education that will increase nurses' readiness to screen for IPV.

Theoretical Framework

RE-AIM is a public health based framework that stands for reach, effectiveness, adoption, implementation, and maintenance (Gaglio, Shoup, & Glasgow, 2013) (See *Figure 2*).

RE-AIM is described as:

1. Reach addresses gaining the attention and participation of others that are intended to participate in the desired project.
2. Effectiveness considers if the project is successful in addressing the needs identified. This can include its impact on identified aims and outcomes as well as any negatives effects that may result.
3. Adoption refers to the willingness of an organization to accept the project or program. Support from the identified agency will aid in an effective delivery of the translational project.
4. Implementation is the process of an organization putting a program into practice as it was designed.
5. Maintenance is the ability of an organization to continue use of the implemented program beyond the training period.

RE-AIM was cited as a sufficient theoretical framework to support public health concerns such as intimate partner violence (Glasgow, Vogt, & Boles, 1999). It was used in projects

pertaining to physical activity, obesity, and disease management (Gaglio, Shoup, & Glasgow, 2013). This framework also allowed project managers to reassess a program after its implementation.

The RE-AIM framework was applicable in this project because it supported the implementation of research into practice. The use of IPV screening was recommended by several healthcare organizations. IPV screening was supported by researchers although it was not thoroughly adopted fully in many health centers. The development of IPV education for nurses based on the RE-AIM framework helped to support that current IPV recommendations were implemented in the proposed health center. The use of RE-AIM allowed for evaluation this project and helped to determine its public health impact.

Instruments and Tools

Physician Readiness to Manage Intimate Partner Violence

The Physician Readiness to Manage Intimate Partner Violence (PREMIS) survey was a tool that has been used to assess IPV training, knowledge, attitudes and behaviors of healthcare providers (Short et al., 2006). The survey consisted of 67 items that measure healthcare provider's readiness to manage intimate partner violence. The survey looked at provider's background which included their perceived preparation and knowledge, actual knowledge, opinions, attitudes, and beliefs, and their current practice issues. The survey was expected to take 15-25 minutes to complete. It has been used to evaluate current IPV curriculum and trainings, and identify those who need IPV training (Short et al., 2006).

Papadakaki, Petridou, Kogevinas, and Lionis (2013) used a modified PREMIS when implementing IPV education to a group of physician and residents. They intended to measure the

effect of IPV on the physicians and residents' behaviors. The survey used a pre-and posttest and looked at the physicians' and residents' perceptions of IPV, knowledge of IPV, and actual behaviors. The timeline included posttests immediately after the educational intervention and 12 months later to determine any changes with the three factors measured. The survey showed significant differences in pre-and post-changes made between the types of providers and the differences in those providers that received the education versus those that did not. Physicians showed an increase in their perceived preparation for IPV screening and perceived knowledge on the PREMIS following receiving the IPV training. Residents showed a higher increase in their actual knowledge of IPV following the trainings on the survey. The survey was recorded to have a Cronbach alpha of 0.65 and good internal consistency (Short et al., 2006).

HITS

Basile, Hertz, and Back (2007) reported several tools developed to screen patients for intimate partner violence. Research has shown many of those tools to be efficient at recognizing victims, which can help to alleviate the public health crisis (Basile, Hertz, and Back, 2007). However, the lack of use of such tools limits the number of victims that are recognized by healthcare providers and referred for additional services that can potentially save their lives. Screening tools for intimate partner violence varied on the concepts that are recognized by the tool. Some measured violence in the home, intimate partner violence within a specified time frame, current safety, potential danger, and a host of other characteristics that may be present in an intimate relationship (Basile, Hertz, and Back, 2007). There were also tools that measure more than one characteristic of abuse. The frequency of abuse was another aspect of measurement for many screening tools. This rate can be broken down to include how many times a violent incident occurred to a victim. So, when considering intimate partner violence, which included physical abuse, stalking, sexual violence, and psychological aggression as mentioned

above, the frequency of these features would be measured. Frequency was based on a client's perception, as to how often they feel an incident occurred. Tools for measurement looked at the frequency of intimate partner violence over a specified timeframe or a more general span of time. Frequency as a measurement to screen for intimate partner violence may give providers a sense of urgency in directing a client to the appropriate resources.

The HITS screening tool, which stands for Hurt, Insult, Threatened with Harm, and Screamed at, is a 4-question tool that can be self-reported by the victim or administered by a provider (Basile, Hertz, and Back, 2007). It has been previously used in a variety of settings with male and female patients, and comes in a Spanish and English version (Basile, Hertz, and Back, 2007). The survey is scored on a 5-point frequency scale in which 1= never, 2= rarely, 3= sometimes, 4= fairly often, and 5= frequently (Basile, Hertz, and Back, 2007). Final scores range from 4-20, females with a score of 10 are higher and males with a score of 11 or greater are considered victimized and are referred to additional services (Basile, Hertz, and Back, 2007).

HITS measured the frequency of intimate partner violence in regards to:

- how often a victim has been hurt by their partner physically,
- how often their partner insults or talk down to them,
- how often their partner threatens them with physical harm,
- and how often their partner screams or fusses at them. (Basile, Hertz, and Back, 2007)

HITS has shown a high sensitivity and specificity when studied among women and men, with both the English and Spanish version of the screening tool. The English version among women had a specificity of 91%-99% and sensitivity of 86%-96% (Basile, Hertz, and Back, 2007). The English version among men had a specificity of 97% and sensitivity of 88% (Basile, Hertz, and Back, 2007). The Spanish version had a specificity of 86% and sensitivity of 100%

(Basile, Hertz, and Back, 2007). The English version had an internal consistency 0.76 and the Spanish version has an internal consistency of 0.61 (Basile, Hertz, and Back, 2007).

The HITS survey was the ideal tool for measuring the frequency of intimate partner violence. HITS survey was simple to use and very straightforward. It can be completed by either the provider or victim. The survey even had the potential to be completed verbally, without requiring the need of paper and pencil if unavailable. Additionally, the HITS tool was the most studied of majority of IPV screening tools.

HITS was researched in multiple recent studies and found to be a reliable tool for measuring the frequency of intimate partner violence incidences. Iverson et al. (2013) completed a study on the accuracy of HITS in a randomized survey that was mailed to participants' home. The Revised Conflict Tactics Scale (CTS-2), the gold standard screening tool for intimate partner violence, was used as the reference for the study. Participants were asked to report their prior year experience with intimate partner violence. Results of this study showed a HITS Roc curve of 0.85 and 95% CI [0.78, 0.91], which was significant for determining intimate partner violence. When compared to the CTS-2, HITS had a Roc curve of 0.79 and 95% CI [0.69, 0.89], so comparable with the gold standard screening tool.

There are numerous screening tools for intimate partner that were available for clinician use. Although the tools varied in several different factors and some had been researched more than others, implementation of screening for intimate partner violence in healthcare practices can benefit any patient population. Intimate partner violence was a challenging problem that must be addressed in all healthcare settings. When determining which tool to use, one that can be quickly administered and has significant research to support its use made a good fit for this project.

Chapter 3

This translational project provided IPV education to nurses to increase their readiness to screen, increase the number of patients screened, and create a sustainable education session/module for further use in an organization. This chapter detailed the methodology of the translational project. It provided information about the research design, research questions, the project participants, data collection, instrumentation, and data analysis plan.

Methodology

Project Design

The translational project used a quality improvement design method within a public health clinic over a 9-week timeframe. The project was intended to improve current screening procedures within the health clinic. Current procedures at the health department for quality control to ensure nurses compliance with IPV screening were random chart audits, which were to include their current document for IPV screening. The project was not a change in clinic procedures of screening clients for IPV, but an assessment of a new method of IPV education to increase nurse confidence to screen and of the use of a new screening tool.

Prior to the project, the public health clinic were screening women only for IPV, by asking if they had been exposed to IPV in their current relationship, however the nurse manager wanted to change their screening process to include males and add IPV education and a new screening tool to their current methods. The translational project was intended to improve the current methods used by the public health clinic. Subjects for the project included healthcare providers, which included licensed practical nurses, registered nurses, and nurse practitioners that provide health related services and education to all clients in the public health clinic.

The translational project provided education about IPV to healthcare providers within the public health clinic and used results from a confidence visual analog scale and a chart audit tool to determine a change in nurse's confidence to screen and if clients were screened and referred. Nurses completed a confidence to screen visual analog scale and the PREMIS prior to participating in the IPV education. Screening measures were implemented following the IPV education, and chart audits were completed over a 9-week timeframe. All consents, surveys, audits, and education were conducted by the principal investigator.

Clinical Questions

Intimate partner violence education tailored to the needs of healthcare providers can increase their readiness to screen for IPV and the number of patients screened. This translation project was intended to answer the following questions:

- Clinical Question One. Will the Physician Readiness to Manage Intimate Partner Violence Survey identify IPV knowledge gaps?
- Clinical Question Two. Will the Physician Readiness to Manage Intimate Partner Violence Survey identify previous IPV education?
- Clinical Question Three. Will IPV education increase nurses' confidence to screen for IPV?
- Clinical Question Four. Will nurses use the HITS screening tool to screen all patients after receiving IPV education?
- Clinical Question Five. Will all patients be referred if indicated by the results on the HITS screening tool?

Setting

The translation project took place in a department of public health clinic located in southeastern United States. The clinic offered the following public health services to clients that lived within this area: women's health services, sexually transmitted disease testing and treatment, tuberculosis testing and treatment, Women, Infant, and Children services, immunizations, prenatal services, dental health services, a sickle cell clinic, a car seat safety program, and environmental health services.

Sample

Project participants were recruited during a weekly routine nurse meeting at the public health clinic in June 2017 by the principal investigator. A convenience sample of nurses employed at the facility during a staff meeting were recruited. The inclusion criteria for the project consisted of all health care providers that identified as a licensed practical nurse, registered nurse, or nurse practitioner that were employed at the public health clinic at the time of recruitment that assess and treat patients. The principal investigator provided a detailed description of the project and participants were given an informed consent to voluntarily sign up and complete before participating in the project. The public health clinic employs 15 nurses; all were solicited to participate in the project. Six registered nurses, one nurse practitioner, and two licensed practical nurses agreed to participate. Only those nurses who agreed to participate received the IPV education.

Data Collection and Instrumentation

Data was collected on five separate occasions throughout the project. Nurses initially participated in a focus group and completed the PREMIS prior to development of the IPV education. They completed a visual analog scale of their confidence to screen for IPV pre-and post-education and a chart audit was completed by the principal investigator after the education, over a nine-week time frame. No personal identifying information was collected except for provider type. Data obtained from the chart was restricted to the information on the chart audit tool, which included provider type and documentation if screening and referral occurred. All data was analyzed with IBM SPSS Statistics version 23 and reported in aggregate. All data and research records were retained in a locked box during the project and will be kept locked up for three years following the project completion.

Focus Group

Nurses participated in a focus group with the principal investigator in which they could share specific needs that they had for IPV education. The nurses were concerned about the steps to take when presented with a client that reports IPV and is in immediate danger. They were aware of some of the signs and symptoms, but were interested in learning about other unfamiliar ones. They also were concerned about referral resources in their area. They also request communication techniques that they can use when assessing for IPV.

PREMIS

The PREMIS was developed to measure healthcare provider readiness to begin screening for intimate partner violence. For this project, the survey was used to assess nurses IPV perception, knowledge, and background. The principal investigator modified the survey to

remove the profile section to eliminate identifying information; nurses were asked only their provider type, licensed practical nurse, registered nurse, or nurse practitioner. The PREMIS consists of 57 questions that covered nurses IPV background which includes their perceived preparation and knowledge, their actual intimate partner violence knowledge, their opinions of their preparation, IPV legal requirements, workplace issues related to IPV, their self-efficacy, knowledge of alcohol and drug use related to IPV, victim understanding and autonomy, and constraints, and practice issues the nurse currently encounters. Questions ranged from multiple choice, true false, Likert scales, and check all that apply. The survey has a Cronbach alpha of 0.65 and was shown to have good internal consistency and reliability (Short, Alpert, Harris, and Surprenant, 2006). The tool was used to assess the needs of the nurses to develop an IPV education, through descriptive statistics. No permission was required to use the survey.

Visual Analog Scale

An 8.5-point visual analog scale was created to measure nurses' confidence to screen for IPV. The scale was used to show a comparison between nurse confidence prior to the implementation of IPV education and afterwards. Nurses marked their level of confidence on a linear line which extends from not confident to begin IPV screening to extremely confident to begin screening.

Chart Audit

The chart audit tool was created by the student researcher and utilized at completion of the translation project to review client charts. The tool was used to assess for documentation of screening for IPV and appropriate referral for treatment per health department protocols.

Implementation

Nurses at the public health clinic received a detailed description of the proposed project and voluntarily completed an informed consent to participate. Prior to developing an educational session/module, the PREMIS to assess nurses' knowledge, opinions, attitudes, and current practices regarding IPV and screening and referrals. They also completed a visual analog scale in which they will rate their confidence to screen for IPV. After collection of all surveys, the nurses were asked to voluntarily participate in an one-hour focus group. The focus group allowed the principal investigator to gain insight on some of the needs and barriers that the nurses have. The nurses had an opportunity to give their input on ideas they may feel should or should not be included within the education session/module. The focus group also centered on screening and referral methods, resources for intimate partner violence victims, and interviewing techniques. Following obtaining these results, an education session/module for IPV was created for the public health clinic that focused on those needs identified by the PREMIS and the suggestions and information obtained from the focus group meeting. Nurses also received education on a screening tool, HITS.

After the initial assessment by the PREMIS and the focus group nurses participated in the education session/module one week later and completed another visual analog scale on their confidence to screen for IPV. They were asked to begin using the HITS survey to screen for IPV the same day following the education. The principal investigator completed a retrospective review of patients' charts weekly for nine weeks following implementation of the educational material. A chart audit tool was used to monitor the effectiveness of the new process for IPV screening and appropriate referral. The tool gathered information regarding the type of provider that screened the patient and whether IPV screening and referral occurred.

Protection of Human Subjects

The project received approval from the Georgia College and State University Institutional Review Board and the Georgia Department of Public Health Institutional Review Board. Participation in the IPV project was completely voluntary. There was minimal stress, and no physical, psychological, social, or legal risks beyond those ordinarily encountered in daily life or during the performance of routine examinations or tests by participating in this project. Nurses were asked to complete the PREMIS, visual analog scale, participate in a focus group, attend an educational session/module, and screen for IPV. There was an estimated total time commitment of three hours and 10 minutes. If participants experienced stress, they could opt out of the project at any time. No remediation or incentives were offered to participants. Incentives were not used as part of the project.

All surveys and collected chart information remained confidential. Only the student researcher had access to collected data, committee members would have access on a need to know basis for data input and analysis. All data is stored on a locked computer in a locked office, where it will remain for three years and destroyed afterwards.

Feasibility

The project was intended to take 13 weeks from recruitment until the final chart audit. That timeframe allowed the principle investigator enough time to gather information for a needs assessment of the nurses at the public health clinic prior to development of an IPV education. Therefore, recruitment, completion of scales, survey, focus groups, and education was expected to take 4 weeks. Nurses had a total of nine weeks to screen and refer patients for IPV, during which time the principal investigator reviewed charts on a weekly basis.

The total cost for all project materials was \$65 and was absorbed by the principal investigator. Costs included printing scales and surveys for nurses to complete as well as purchasing pens and folders to compile the documents.

Nurses were expected to benefit from new knowledge gained from IPV education which will allow them to provide better care for their patients. Humankind benefited as IPV screening and the appropriate referrals for victims becomes customary in the healthcare settings. This will lessen the effect that IPV had on health and the economy.

Data Analysis Plan

Descriptive statistics was used to analyze the data from the PREMIS because the data was not normally distributed and the sample size was small. Scoring of actual knowledge questions were completed though reverse coding and all questions were summed for a total score. Reverse coding of opinion questions was completed and grouped and analyzed under the following topics, legal requirements, workplace issues, self-efficacy, alcohol and drugs, and autonomy. Mean values were calculated for opinion questions and perceived preparation and knowledge.

Descriptive statistics of the mean and high and low value for pre- and post-scale results were used to describe the data. A boxplot was created to show the distribution of scores on the pre- and post-scales. A Shapiro-Wilkes test was used to determine normality of the data because of the sample size. A paired sample *t*-test was used to determine if there was significance in the reported level of confidence pre- and post-scale scores.

Descriptive statistics was used to analyze the data from the chart audit. Percentages of the number of clients screened and referred were calculated.

RE-AIM

This translational project was intended to improve provider readiness to screen. This helped to improve the health of clients that could potentially be affected by IPV and recognized as a victim through screening. The PRE-AIM survey was applied to the project in a systematic manner (see Figure 2). Reach was applicable as the nurses were summoned to participate in a survey, a focus group, an education session/module, and begin screening and referring clients appropriately. Nurses worked in an expanded role in the health department setting, so they were the main healthcare providers. Their role was to screen and provide education and referrals for clients in this setting. The effectiveness of the project was the use of the PREMIS and the focus group. These two methods gave information to develop IPV education. The project was adopted when the nurses received the IPV education. Implementation occurred as the nurses screened and referred clients. The implementation of the project was measured by comparing pre-and post IPV education confidence visual analog scale scores and reviewing charts to determine if clients were screened and referrals documented if needed. The public health clinic made their specific needs known and were anticipating the development of an IPV education to influence IPV screening. The clinic was given an electronic copy of the IPV education to share with all their healthcare providers.

Conclusion

This quality improvement project took place over nine weeks after IPV education was initiated. Nurses were introduced to a new IPV screening tool and IPV education that was created based on assessed needs through a focus group and the PREMIS. Data was also collected using a chart audit and visual analog scale. All steps of the project were completed per the

proposed plans submitted to the institutional review boards. Data analysis was completed to complement the size of the sample population and the normality of data.

Chapter 4

This chapter will explore the data analysis of the translational project. One of the first steps of the project included an assessment of nurses IPV knowledge, background, and perceptions through use of the PREMIS. Information was also obtained from a focus group meeting with nurses to aide in the development of an IPV education. Nurses completed a confidence to screen visual analog scale pre- and post-receiving IPV education. Following education, nurses were encouraged to begin screening all their clients using the HITS survey. When used, the survey was scanned into each patient's chart, which was reviewed during chart audits. The chart audit collected the following data, if a client was screened, if a client was referred, and the total number of clients seen in the client during the project period.

Sample

The convenience sample consisted of $n = 9$ out of 15 available public health nurses from a health department.

Results

Clinical Question One

Will the Physician Readiness to Manage Intimate Partner Violence Survey identify nurses previous IPV education?

This clinical question was answered. The data was not distributed normally so descriptive statistics was used. The assumptions for the t test was not met. Nurses reported varied level of previous IPV training, three (33%) had no previous IPV training, three (33%) had at least one hour of IPV training, one (11%) had three hours of training, one (11%) had four hours of training, and one (11%) had 16 hours of training, mean of 1.8 (SD= 1.09).

Clinical Question Two

Will the Physician Readiness to Manage Intimate Partner Violence Survey identify nurses IPV knowledge gaps?

This clinical question was answered. The data was not distributed normally so descriptive statistics was used. The assumptions for the *t* test was not met. The mean actual IPV knowledge score was 42.44 (SD= 15.13) on a 100 scale, with the mean perceived IPV knowledge as a 3 (a little) on a 7 point Likert scale. The highest score was 70 and the lowest score 20. Six participants scores ranged from 40-50 on the knowledge section of the survey. The top two questions missed by participants was a true/false question regarding IPV victim's ability to make choices to handle their situation, with 77.8% (7) nurses missing this question, and a multiple-choice question of the strongest single risk factor for IPV, which 88.9% (8) of nurses missed.

Clinical Question Three

Will IPV education increase nurses' confidence to screen for IPV?

This clinical question was answered. Descriptive statistics was used and the Shapiro-Wilkes test was used to determine normality of the data sets obtained from the confidence visual analog scales. The data was normally distributed. The nonparametric paired sample *t* test was used and calculations of the Pearson correlation of the set of pre- and post-test scores. A paired sample *t*-test was used to address the clinical question if there would be reports of higher confidence for IPV screening following the receipt of IPV education. Data was obtained from both pre- and post-confidence on an 8.5-point visual analog scale. Before any testing, descriptive statistics were ran, pre- scale scores had a high of 4.4 and a low of 1.9, post scale scores had a high of 6.5 and low of 3.7. The mean post scale score was much higher than the mean pre- scale

score (3.02 versus 5.10) (see Table 1). There was an area of overlap between pre- and post-scale. The boxplot showed that the center of the post scale score was much higher than the center of the pre- scale scores (see *Figure 3*). The two variables also looked to be symmetrically distributed which prompted further testing. The Shapiro-Wilkes test was used to determine normality of the data since the sample size was small (9). The two datasets were normally distributed, pre-test ($p > 0.072$) and post-test ($p > 0.439$). The paired sample correlation table showed pre- and post-scale scores were strongly and positively correlated ($r = 0.982$, $p < 0.000$) (see Table 2). There was a significant average difference between pre- and post-scale scores ($t_8 = 31.385$, $p < 0.000$) (see Table 3). On average, post scale scores were 2 points higher than pre- scale scores (95% CI [1.93, 2.23]).

Clinical Question Four

Will nurses use the HITS screening tool to screen all patients after receiving IPV education?

This clinical question was answered. The data was not distributed normally so descriptive statistics was used. The assumptions for the t test was not met. The chart audit revealed a total of 759 patients were seen in the clinic during the project period. A total of 81 (10.67%) clients were screened for IPV using the HITS screening tool and 2 (2.46%) were referred for additional IPV services.

Clinical Question Five

Will all patients be referred if indicated by the results on the HITS screening tool?

This clinical question was answered. The data was not distributed normally so descriptive statistics was used. The assumptions for the t test was not met. Only 2 (2.46%) of those screened were referred for additional IPV services.

Summary

The results of the statistical analysis were presented in this chapter. Chapter 5 will discuss the results of the project in detail.

Chapter 5

Intimate partner violence was a growing public health problem (CDC, 2013). Women, men, and children were deeply affected by the effects of IPV. There was ample research on the effects of IPV on health and wellbeing, research on screening methods, and research on health provider's readiness and practices of screening. Although there were recommendations for IPV screening, many health centers have fallen behind and do not screen routinely. The public health clinic that participated in this project screened for IPV but lacked IPV education for healthcare providers, as evident in this project. Lack of IPV education has been cited as one of the number one reasons why many healthcare providers do not screen for IPV. This has been noted in formal education settings as well as work settings.

This translation project was attempted to answer the following questions:

- Clinical Question One. Will the Physician Readiness to Manage Intimate Partner Violence Survey identify nurses previous IPV education?
- Clinical Question Two. Will the Physician Readiness to Manage Intimate Partner Violence Survey identify nurses IPV knowledge gaps?
- Clinical Question Three. Will IPV education increase nurses' confidence to screen for IPV?
- Clinical Question Four. Will nurses use the HITS screening tool to screen all patients after receiving IPV education?
- Clinical Question Five. Will all patients be referred if indicated by the results on the HITS screening tool?

The review of literature explored the need for IPV screening for everyone that may present to a health clinic. IPV can have detrimental effects on women, men, and children. The literature review also explored the disparities of IPV as it related to members of the LGBT community as well as minorities. IPV education for healthcare providers was explored in the literature review, as it is one of the most documented reasons for lack of IPV screening. The use of the HITS screening tool was presented in the tools section, as it has been highly studied and recommended as an efficient IPV screening tool. HITS was also chosen as the screening tool of choice for this translational project. The PREMIS was also introduced in the tool section. It is a survey that measures healthcare providers' knowledge, opinions, practice issues regarding IPV.

The sample used for the project included nurses who were licensed practical nurses, registered nurses, and nurse practitioners. The translational project asked nurses to complete the PREMIS survey and participate in a focus group to determine educational needs they may have prior to an IPV education. Results from the survey and focus group were used to develop an IPV education. Prior to completing the education nurses rated their confidence to screen for IPV. Following completion of the education session/module nurses rated their confidence to screen for IPV once again. The nurses were also introduced to the HITS screening tool as a method to screen for IPV during the education session/module. They then were expected to begin screening for IPV using the HITS screening tool.

Summary of Findings

Aim One. The Physician Readiness to Manage Intimate Partner Violence Survey will identify nurses previous amounts IPV education.

This aim was met. The PREMIS identified nurses previous amounts of education. Nurses reported very few hours of previous IPV education. More than half of the project sample

reported no previous IPV training, and many had just one hour of previous training.

Aim Two. The Physician Readiness to Manage Intimate Partner Violence Survey will identify nurses IPV knowledge gaps.

This aim was met. The PREMIS survey identified nurses IPV knowledge gaps. The PREMIS revealed that the nurses had an overall low level of IPV knowledge. Their actual knowledge of general IPV questions were limited, with many not understanding who is most affected by IPV. This project aim was met as the knowledge gaps of the nurses were determined. The PREMIS has been used as a measurement of knowledge pre-and post IPV education. This project used the survey solely to determine the needs of nurses. Papadakaki, Petridou, Kogevinas, and Lionis (2013) used the survey to measure providers pre-and post IPV knowledge, in which there were reports of higher levels of knowledge following IPV education. This project showed an increase in nurse confidence to screen for IPV following education. Changes in knowledge was not a part of this project, but it leaves room for additional projects to analyze if nurses have a higher knowledge post education.

Aim Three. Nurses will have an increased confidence to screen for IPV following IPV education.

This aim was met. Nurses had an increased confidence to screen for IPV following IPV education. Results from the project data analysis showed that nurses reported a significantly higher confidence to screen for IPV following IPV education. Nurses were equipped with an ample amount of IPV knowledge that they could use to screen clients. The results were similar to those of a study by Papadakaki, Petridou, Kogevinas, and Lionis (2013), in which physicians and residents had an increased readiness to screen after being introduced to IPV education. IPV education has the been listed as one of the top reasons for nurses of why they do not screen or feel comfortable doing so (Baig, Ryan, and Rodriguez, 2012). With this new level of confidence, the nurses may improve upon their screening and referral techniques.

Aim Four. All patients will be screened for IPV with the HITS screening tool.

This aim was not met. Nurses did not screen all patients for IPV. Despite receiving IPV education, only a small number of clients were screened utilizing the newly introduced screening

tool HITS. There were several potential reasons for the decreased number of screening with the HITS tool. Not all providers in the public health clinic agreed to participate in this project and those who participated worked varying schedules during the project period. So, there was no guarantee that a provider from the participating sample saw each client. The project location previously used a screening tool for clients in the clinic, and this method continued along with the use of the HITS screening tool. There were possible resistances to change secondary to using two methods which can be time consuming and cause possible confusion and duplication of screening.

The HITS tool has been used in a variety of other settings among both men and women in which it showed a HITS Tool ROC curve was 0.79 (CI: 0.69, 0.89), when comparing to a gold standard IPV screening tool (Iverson et al., 2013). In those cases, it appropriately recognized individuals who were exposed to IPV and those who needed referrals. This project had similar results, as the nurses could screen some clients and found that 2.46% of patients screened met the requirements for referral.

In future studies, HITS screening tools should be placed on all patients' chart prior to visiting the nurse, or electing to have patients fill out the surveys and nurses validating the answers and providing referrals if need once the patients gets in the examination room. Daily chart audits during the first few weeks of implementation and the immediate reporting of results to nurses, could possibly improve initiative to ensure all clients are screened with the HITS instrument.

Aim Five. All patients will be referred if indicated by the results on the HITS screening tool.

This aim was met. Patients were referred utilizing the HITS screening tool. Nurses referred 2.46% of the 81 (10.67%) patients that were seen. Unfortunately, the number of patients screened was very small and data was not collected on the actual screening score results for each client, as more patients could have met the qualifications for referral and where not referred or the 2.46% could have been referred based off nursing judgement rather than scoring over 10 on the HITS tool. There is uncertainty if this aim was met, since there was no reporting of HITS scores. Further evaluations would require collection of HITS score, so that it can be determined if a referral was made based on the indicated score.

RE-AIM Framework

RE-AIM is described as:

1. Reach addresses gaining the attention and participation of others that are intended to participate in the desired project.
2. Effectiveness considers if the project is successful in addressing the needs identified. This can include its impact on identified aims and outcomes as well as any negatives effects that may result.
3. Adoption refers to the willingness of an organization to accept the project or program. Support from the identified agency will aid in an effective delivery of the translational project.
4. Implementation is the process of an organization putting a program into practice as it was designed.
5. Maintenance is the ability of an organization to continue use of the implemented program beyond the training period.

The RE-AIM framework was somewhat successfully used throughout each stage of the project. Some nurses were reached and agreed to participate in the project, although all the nurses within the clinic did not participate in the project. Their responses to the PREMIS and focus group were effective, which allowed them to adopt the IPV education and they began implementing screening. However, implementation of the HITS tool was not successful, as only 10.67% of clients were screened with the tool and 2% referred. Should the clinic decide to reevaluate the use of the HITS screening tool the RE-AIM framework can be used. The clinic received a copy of the IPV education to maintain education for all employees as well as share with other clinics within the district. The framework can be applied again, as the IPV education is shared and used as a method to increase confidence and screening in other clinics.

Recommendations

The results of this project can be used to standardize IPV screening in all departments of the public health clinic. Not all nurses agreed to participate in the project, so there is uncertainty if all departments participated. The public health clinic for this project was given an electronic copy of the education to aide in maintenance of IPV education for all employee who did not participate and for them to use with new employees. It is also imperative that the public health clinic adopts a universal screening tool to be used throughout its clinic and establish protocols for nurses to follow related to IPV. Shared knowledge of the project results and education with other public health clinics is one of the biggest factors that can play into extending IPV knowledge across boundaries.

The project was focused more in the public health arena, however acute care, emergency, and primary care settings have a need for routine IPV screening. IPV victims can present to any healthcare locations, so screening is necessary in all those areas. IPV education can be tailored to

the needs of nurses in these different settings. Standardization of IPV education and screening in all healthcare facilities need to be explored, as there are numerous healthcare systems that manage many healthcare organizations. If all hospitals and all public health departments utilized similar screening tools and programs for documentation, this information has the potential to be shared amongst organizations. This sharing of data, can improve patient overall health. IPV screening tools need to be implemented into all practice settings. There were a variety of tools available that can fit into a variety of healthcare settings. The tool used for this project HITS, had a high internal consistency, reliability, and validity. It also has an ease of use, which was ideal for the public health setting.

Conclusion

Education related to IPV is necessary in all healthcare facilities. Providing education that tailored to the needs of healthcare providers can increase their confidence to screen and has the potential to increase the number of clients that are routinely screened. Literature supports the use of education to increase IPV knowledge and screening in the healthcare settings. Some formal education programs do not introduce healthcare providers to IPV and many workplaces lack education to provide to employees. This project was used to improve the quality of nursing care through IPV education and screening. Nurses have a set of ethical values they must abide by. IPV is an alarming problem that affects everyone. Nurses must be diligent in screening clients and providing the necessary referrals to prevent further detriment to IPV victims' lives.

IPV education can be beneficial to nurses and their clients. Therefore, nurses should be educated on IPV screening and have basic IPV knowledge. Nurses should also use the best evidence based screening tools. Healthcare organizations should support employee IPV education which leads to the goal of client IPV screening. IPV screening has the potential to

affect everyone's lives in major ways. Nurses will have a sense of satisfaction identifying IPV patients, providing education, and in some cases making the necessary referrals. Clients who screen positive for IPV can be directed to the appropriate resources and receive the help they need.

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Appendix A

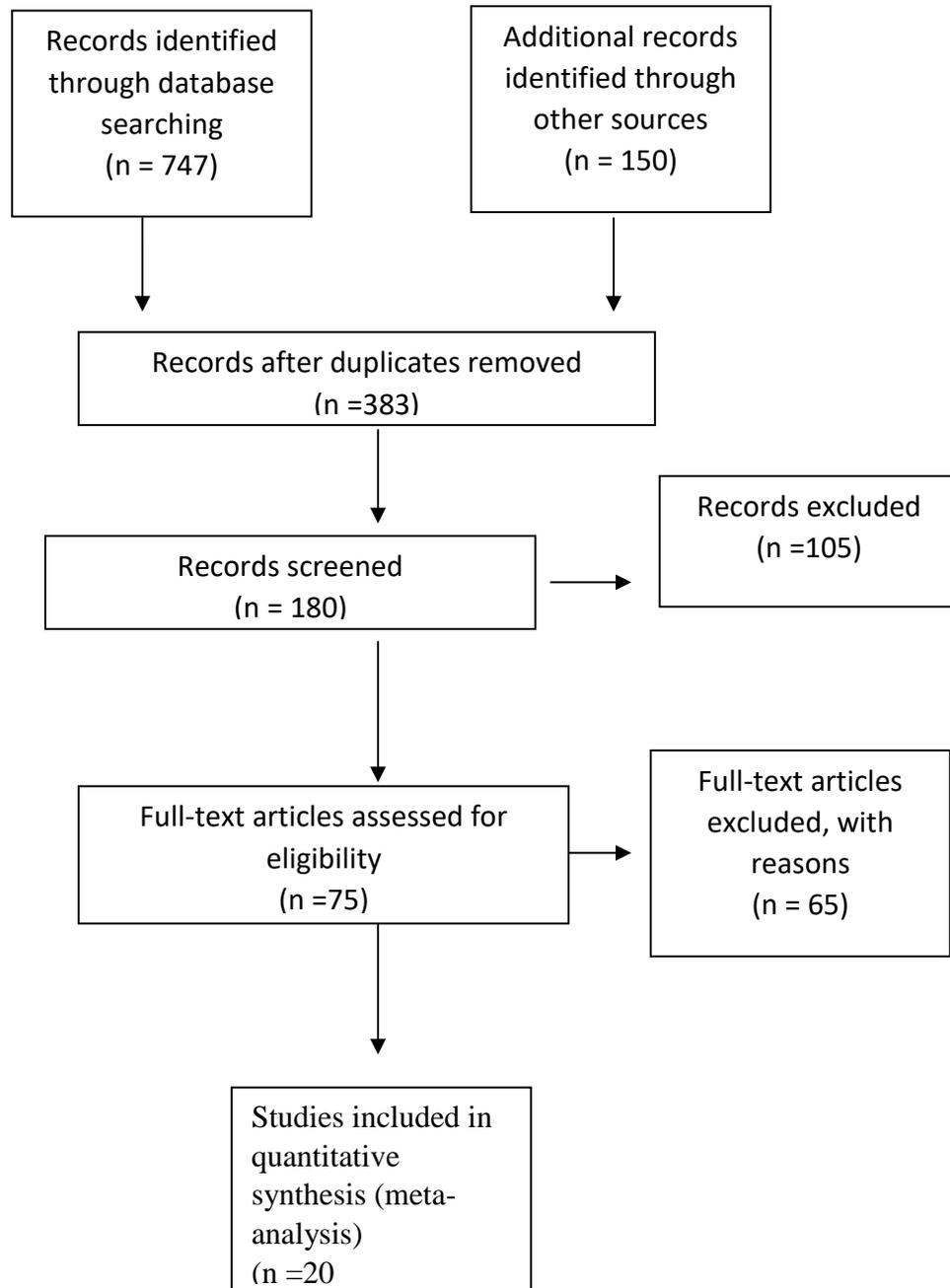


Figure 1. IPV Literature Selection Process. Adapted from: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med* 6(6): e1000097. doi:10.1371/journal.pmed1000097

Appendix B

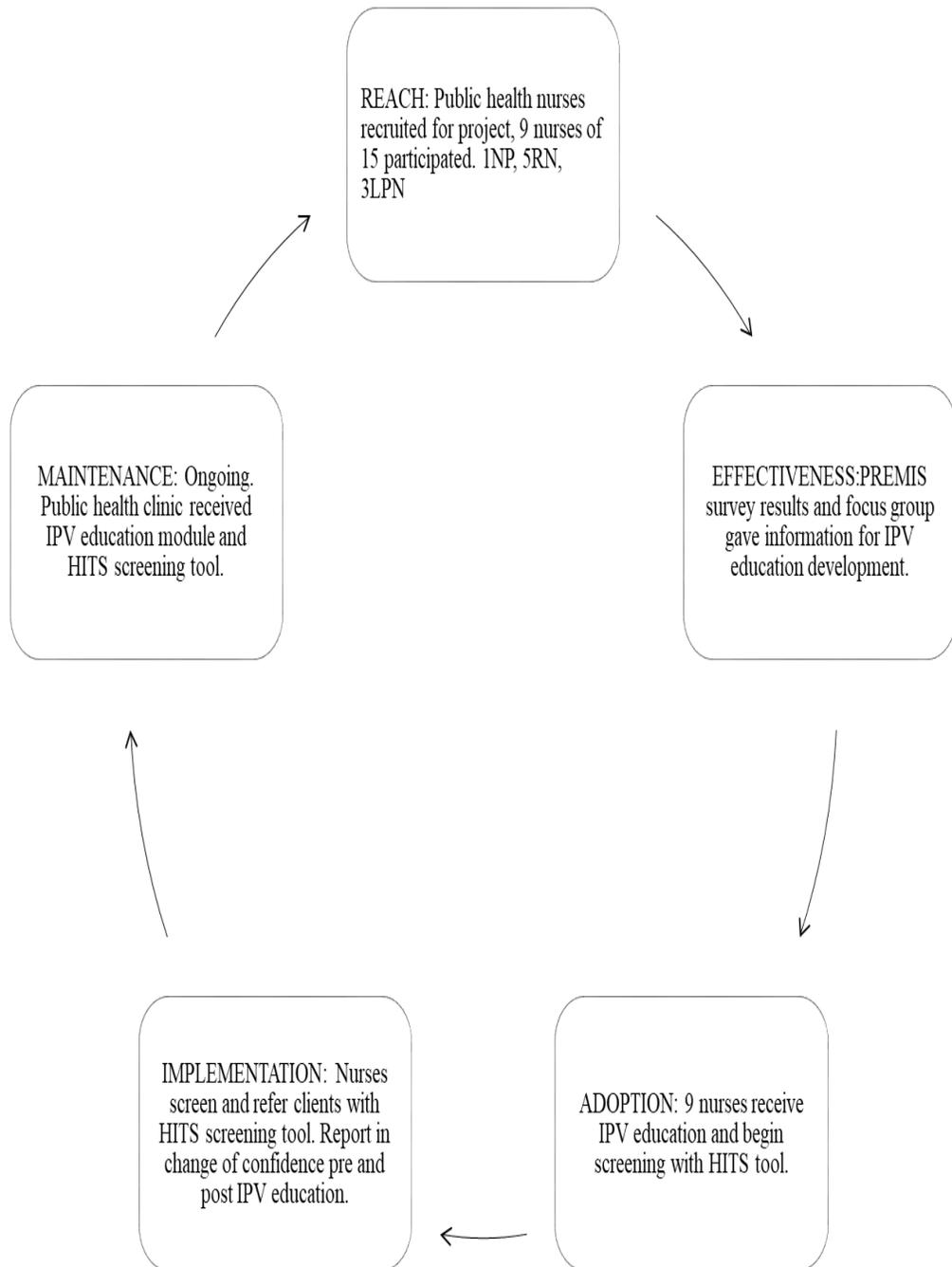


Figure 2. RE-AIM Framework. Adaptation of the project into the RE-AIM framework.

Appendix C

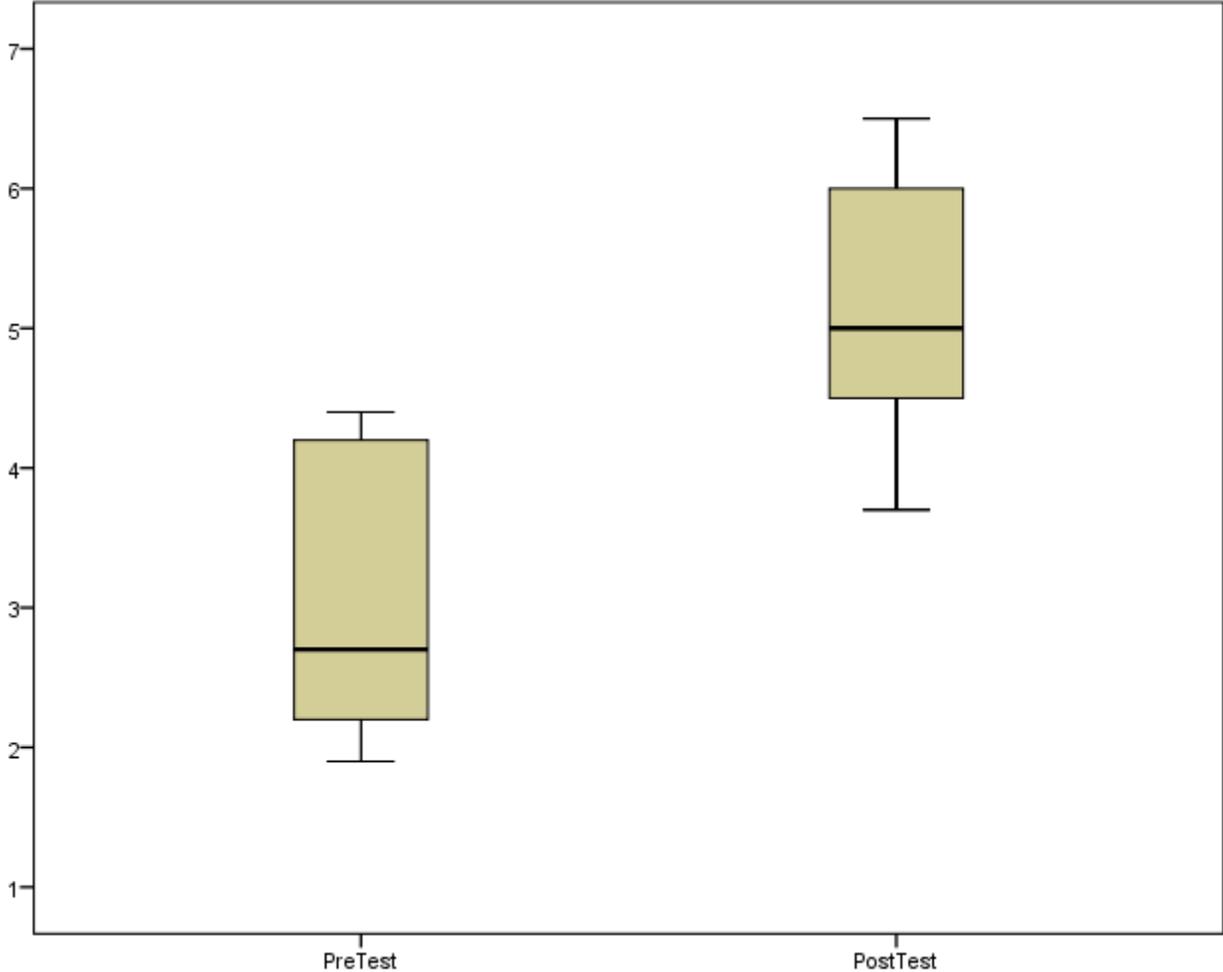


Figure 3. Boxplot of Confidence Visual Analog Pre- and Post-Scale Scores

Table 1

Descriptive Statistics of Confidence Visual Analog Scale Scores

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Post Scale Score	5.1000	9	.99121	.33040
Pre-Scale Score	3.0222	9	1.04616	.34872

Table 2

Correlations of Confidence Visual Analog Scale Scores

	N	Correlation	Sig.
Pair 1 Pre- & Post Scale	9	.982	.000

Table 3

Paired Samples Test of Confidence Visual Analog Scale

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Post Scale – Pre- Scale	2.07778	.19861	.06620	1.92512	2.23044	31.385	8	.000