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Recognizing and reporting of child maltreatment in a pediatric primary care setting.

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Abstract

Child abuse and neglect, together known as child maltreatment, is a global problem with grim lifelong consequences (WHO, n.d.). Education and confidence in reporting child maltreatment are imperative for medical providers who are responsible for the evaluation of children during routine visits with pediatric providers. Research continues to link child maltreatment with adverse health outcomes that span throughout a person's lifetime. For this reason, medical providers must be provided with continued education on early recognition and reporting of concerns for child maltreatment.

The purpose of this project is to increase provider knowledge on the identification and reporting of child maltreatment. An educational intervention focused on child physical abuse identification with a pretest/posttest design will be presented to medical professionals in a pediatric primary care setting using the TEN-4 FACESp Bruising Rule. There will be two pre and post-test questionnaires to measure identification and confidence in identifying signs of child maltreatment and reporting findings concerning child maltreatment to Child Protective Services (CPS) or a child maltreatment team.

Keywords: Child maltreatment, child abuse, adverse childhood experiences, child protective services,

Identification and Reporting of Child Maltreatment in a Pediatric Primary Care Setting

Problem Statement

Child maltreatment is a growing epidemic in our nation and one that has significant implications for the health and well-being of a developing child (Childhelp, 2021). Child abuse not only affects a child in the early stages of life; research continues to link child abuse with adverse health outcomes throughout a person's lifetime. According to the American Academy of Pediatrics (AAP) "1 in 4 children will experience some form of child abuse or neglect in their lifetime with some form of abuse or neglect experienced by 1 in 7 children in the last year" plus nationwide in 2019, 1,840 children died as a result of abuse or neglect (2021, para. 1). Medical providers are mandated reporters of child maltreatment and are a key component in the early recognition of abuse in the healthcare system (AAP, 2021). However, a vast majority of family medicine physicians and pediatric nurse practitioners do not screen for child maltreatment nor are they familiar with how to diagnose it. (Eniola & Evarts, 2017; Honor et al.,2017).

Background/Significance of the Problem

The Federal Child Abuse Prevention and Treatment Act defines child abuse as "any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation" (Christian & Committee on Child Abuse and Neglect, 2015, para. 3). While this provides a minimum guideline for the definition, each state defines abuse within its own civil and criminal statutes. Child maltreatment is a term used to describe all forms of child physical abuse, child sexual abuse, and neglect. Physical abuse is one of the most common forms of child maltreatment second to neglect.

For the past several years, Kentucky has topped the nation in child maltreatment rates. According to Prevent Child Abuse Kentucky (PCAK), in 2021, 38,862 reports to Children

Protection Services (CPS) for child maltreatment met the criteria for case investigation involving 55,911 children. Neglect is the most common form of child abuse in Kentucky resulting in 15,794 of the cases accepted for investigation. Physical abuse is second with a total of 3,674 cases accepted for investigation. Substance use was a noted risk factor in 64% of the cases substantiated by CPS (PCAK, 2022).

Treating the adverse effects of abuse and neglect can be costly. Over the last couple of years, the number of child maltreatment cases has declined in Kentucky. Data collected by National Child Abuse and Neglect Data System (NCANDS) demonstrated that in 2018, the state of Kentucky investigated 83,902 cases which had an estimated lifetime economic burden of over $69 trillion. Of those cases, 23,752 were substantiated (abuse or neglect was found) with an estimated lifetime economic burden of over $19 trillion (Klika et al., 2020).

Literature Review

Medical providers must know and be able to recognize signs of child maltreatment such as physical abuse. They also should be familiar with the process for reporting the suspected maltreatment to CPS. In the literature review, medical providers' knowledge of signs of child abuse and comfort in reporting suspected abuse were evaluated. Cumulative Index to Nursing and Allied Health Literature (CINAHL) with Full Text, PubMed, EBSCO Host Discovery for Health Sciences, and Medline/OVID databases were accessed to perform the literature search. Search terms used included “pediatric”, ‘child abuse”, “child maltreatment”, AND “education”, “reporting”, and “healthcare”. The search was limited to full-text articles written in the past 10 years (2012-2022) written in the English language.

Research supports that there is a lack of education and confidence in the recognition and reporting of child abuse (Carson, 2018; Eniola & Evarts, 2017; Hornor et al., 2017; Lupariello et

al.,2022; Pinto et.al.,2018; Tiyyagura et.al., 2019). There are gaps noted in education regarding the recognition and reporting of child maltreatment. Lupariello et al., (2022) supported the lack of education noting majority of 179 medical students (77%) had low knowledge of child abuse and neglect but they had a high insight into their lack of knowledge surrounding child abuse and neglect. However, educational interventions resulted in a significant improvement in the recognition and evaluation of child abuse (Carson, 2018; Riney et al., 2018; Tiyyagura et al., 2019). Carson (2018) noted a significant increase in provider confidence and recognition scores while Riney (2019) demonstrated that education and electronic support at the point of care helped providers adhere to an implemented guideline for all children 3 years or younger undergoing evaluation of suspected child maltreatment. Riney et al. (2019) reported increased provider adherence to guidelines from 47% to 69%. Tiyyagura et al. (2019) reported overall positive perceptions from key stakeholders, noting perceived improvement in awareness, knowledge about connecting with specialists, and overall improved communication involving cases of suspected abuse.

There is also apprehension about reporting suspected abuse. Providers cite a lack of protocols, desires to believe the child's caregiver, and personal biases about the child's caregivers as barriers to reporting suspected abuse (Enola & Evart, 2017; Tiyyagura et al., 2015). Pinto et al. (2018) noted that there is a possible discrepancy in what providers constituted as child abuse in a culture where harsh punishment of children is common practice. Teeuw et al. (2016) used tools known as the Dutch SPUTOVAMO checklist and Top Toe Inspection (TTI) in the evaluation of child abuse which had moderate improvement in the process citing that completing the Dutch SPUTOVAMO or TTI was complicated due to a lack of time and lack of proper exam rooms. Teeuw et al. (2016) demonstrated a decline in the use of these tools after a

9-month interval. In this study, the checklists were utilized in 36% of patients that were compliant with the screening protocol and in 0.4% of patients that were not compliant with the screening protocol. With bruising being the most common injury caused by physical abuse, Pierce et al. (2021) validated a bruising clinical decision rule (BCDR), TEN-4 FACESp, to assist providers in detecting abuse in children based on the characteristics of the bruising.

Problem

Adverse childhood experiences, or ACEs, are traumatic events that occur during the life of a child that can have an impact on their health and well-being as an adult (Centers for Disease Control and Prevention [CDC], 2021; Felitti, 1998). ACEs include violence, neglect, or abuse; having a family member that attempts or dies by suicide; witnessing domestic violence; living with a caregiver who has substance use issues or mental health problems, or in an unstable household due to parental separation or a family member being incarcerated. The more ACEs that a child experiences, the more likely they are to experience chronic health conditions, mental illness, and substance use issues as an adult. The quicker ACEs can be recognized, the more the child and their family can benefit from trauma-informed interventions to help mitigate these negative outcomes as adults (Centers for Disease Control and Prevention, 2021; Felitti, 1998).

Child abuse is a major health crisis across the nation that not only affects the victim but society as well. Treating the adverse effects of abuse and neglect can be costly. According to data obtained from the National Child Abuse and Neglect Data System (NCANDS) from 2018, nonfatal investigated cases of child abuse and neglect, are estimated to have a lifetime cost upwards of $2.94 trillion. If the fatal cases were added to this total, the cost jumps to $2.96 trillion. The cost per victim is estimated to be over $830,000 per case in non-fatal cases and over $16 billion for fatal cases.

Intervention

The educational component of the session was presented via PowerPoint utilizing the TEN-4 FACESp clinical decision rule (Pierce et.al., 2021) with clinical photographs. Education focused on bruising patterns as a basis for reasonable suspicion of physical abuse of a child. TEN-4-FACESp is a validated clinical decision rule that will assist medical providers in the recognition of physical abuse in young children who present with bruising. The acronym TEN-4 FACESp stands for the torso (including genitourinary region and buttocks), ears, neck, frenulum, angle of the jaw, cheeks (fleshy), eyelids, subconjunctivae, and patterned bruising on any child under 4 years old and bruising anywhere on any child under 4.99 months old. Bruising on these body areas as well as patterned bruising was highly associated with abuse. The TEN-4 FACESp clinical decision rule has a sensitivity of 95.6% and a specificity of 87.1% for distinguishing abusive injury from non-abusive injury.

Summary

Child abuse is a growing epidemic (Childhelp, 2021) that is not widely recognized by healthcare providers and is largely underreported. Providers in the reviewed studies recognize there is a lack of education in identifying and reporting child maltreatment. (Carson, 2018; Eniola & Evarts, 2017; Hornor et al., 2017; Pinto et.al., 2018; Tiyyagura et.al., 2019). They were also aware that they have the responsibility of being able to recognize when there is a concern. The need for education on all areas of abuse was also identified, not just physical abuse.

The ACE study (Felitti et al., 1998; CDC, 2021) has demonstrated that adverse childhood experiences (ACEs) such as physical abuse are closely associated with an increase in health and social problems in adulthood. The quicker ACEs can be recognized, the sooner trauma-informed interventions can be started, which will help mitigate the negative outcomes in adulthood

(Centers for Disease Control and Prevention, 2021). The trillions of dollars in economic burden alone for adults who have experienced adverse childhood experiences, such as maltreatment, supports the need for early identification of risk factors and early intervention. The research demonstrated an increase in provider confidence and reporting after education. Early intervention is key to reducing the economic burden and mitigating negative outcomes into adulthood. Ongoing education for nurses and medical providers is an area that will need to be addressed. This is to ensure that staff has the education needed to recognize signs of abuse and how to report it.

Rationale

Needs Assessment

Recognizing and reporting instances of child maltreatment to CPS continues to be a challenge for medical providers. The forensic nurse specialist at a local children's hospital reported that part of the challenge is related to the lack of education and training, but it is also related to the negative perception that comes with reporting concerns of child maltreatment to CPS. Some medical providers lack the confidence to report concerns to CPS with the perception that CPS is a negative intervention.

There have been many instances of patterned bruising on the torso or face that were consulted to the child abuse team where the physician would not definitively make the diagnosis of child abuse when the skin findings were an indication of child abuse. Medical providers consult the child abuse team in the children's hospital to confirm or rule out suspected child abuse. The forensic nurse specialist received calls from providers stating they "had to call" because of the injuries, but "they know the family and know this is not abusive injury." The

forensic nurse specialist has noted instances in patients' charts where marks or bruises were documented with no report to CPS, or the child abuse team being called for those concerns.

Medical record reviews in instances of child death have noted documented instances of concern for abuse due to skin findings, but no report was made to CPS or the child abuse team. Medical providers will call the child abuse team with concerns but state that they do not want to notify CPS due to their relationships with the families and fear that the family will not return to them with the child for medical care. Medical providers have also called the child abuse team with concerns and do not want to report to CPS due to the abuse not being an "ongoing" issue or if it is their "first time" with a concern for abuse. The number of calls that the child abuse team receives involving suspected child abuse and the low reporting history needs to be addressed,

Variables that can affect the identification and reporting of child maltreatment include bias, limited education, resistance to reporting to CPS, and decreased confidence in reporting concerns for child maltreatment. Education on recognition of child maltreatment will increase provider confidence and increase the likelihood of a continued workup and reporting of child maltreatment if indicated.

Conceptual Framework

The conceptual framework that was used to guide this project was Bandura's Theory of Self-Efficacy. Self-efficacy is the belief in one's ability to accomplish something. Individuals who gain self-efficacy and feel that they have more control over their behavior end up more likely to carry out positive behaviors for their well-being. Bandura theorized that there were four key components to achieving self-efficacy. The first one is mastery of experiences or past experiences. Mastery can only happen when one attempts something and is successful. Case studies were used as an opportunity to recognize child abuse scenarios and serve as "past

experiences.” The second component, physiological state, or emotional status is one that the participant can control. However, increasing knowledge and confidence can reduce the participants' stress reactions. Verbal persuasion is the third component in the framework and included instruction on recognizing child abuse with feedback provided in the identification of child abuse. The last component, vicarious experience or observation of self and others was addressed using photographs in the case studies and group discussion. The discussion allowed the medical providers and front office staff to learn from one another.

Purpose

The purpose of this project was to implement evidence-based child maltreatment recognition education and training for pediatric medical providers. The aims were to improve provider confidence in the recognition of child maltreatment and increase confidence in reporting suspected child maltreatment. It is also important to establish the importance of prevention and early recognition by exhibiting the link between child maltreatment and how it affects a person’s health and well-being into adulthood. Short term, the goal was to increase knowledge about child maltreatment risk factors, signs, and reporting processes. Long term, the goal is to help mitigate ACEs and prevent the long-term effects of child abuse that occur over a patient’s lifetime. Long-term goals also include this training being mandatory throughout the hospital system. Children are not only seen in pediatric facilities, but they are also seen in adult settings, family practice offices, and specialty provider offices.

Quality Improvement Model

Evidence-based practice models improve the quality of patient care as well as clinical practice. The IOWA Model (Iowa Model Collaborative, 2017) was originally developed in the 1990s at the University of Iowa Hospitals and Clinics to help serve as a guide for nurses to

implement evidence-based practice by using research to guide their nursing practice. The IOWA Model guided the process of this DNP project using steps that included identifying a problem, determining if the problem was a priority, evaluating and synthesizing relevant research, and if the research supports the change, designing, planning, and implementing evidence-based change into clinical practice (Brown, 2015). The IOWA Model (Iowa Model Collaborative, 2017) is unique in that it utilizes a test phase before a full-scale implementation into practice. This project represented the test phase before implementation of any ongoing child maltreatment education for the future. The IOWA Model is also designed for interprofessional collaboration which was an important feature in this project that encouraged providers to collaborate with other professional organizations such as Child Abuse Pediatricians (CAPs), CPS, and/or law enforcement. The IOWA includes integrating and sustaining the systemwide change for future practice.

Methods

Design

A pretest-posttest design was used in conjunction with an educational intervention to improve provider competence and confidence related to child maltreatment concerns. Provider knowledge was measured using the child abuse recognition practice scenarios. Providers' confidence was measured using the Teacher Reporting Attitudes Scale (TRAS) (Choo et al., 2012), which was modified to fit the healthcare setting, and assessed attitudes regarding reporting child maltreatment, specifically child abuse, and neglect. The TRAS is a fourteen-item scale with a 5-point Likert scale ranging from one (strongly agree) to five (strongly disagree). There are four subscales (commitment, value, concern, and confidence) to assess attitudes toward reporting suspected child abuse. The scale has a Cronbach's alpha reliability for the

parent sample ranging from 0.58-0.81. Items in the TRAS measure multiple items to assess confidence in reporting child abuse including the professional responsibility to report suspected abuse, the importance of guidelines, laws about reporting, fear of retaliation from the family or community, lack of confidence, and feelings about the system for reporting to CPS (Choo et al., 2012). Choo et al. (2012) modified the original TRAS-CSA (child sex abuse) to include child abuse, not just child sex abuse referring to the scale as simply TRAS (Foster et al., 2017).

Setting

This quality improvement took place within a large urban hospital system. Norton Healthcare (2022) is Louisville's second-largest employer with over 18,000 employees staffing six hospitals, 18 Norton Immediate Care Centers, 8 outpatient centers, and 8 Norton Prompt Care at Walgreens clinics. There are also more than 20 offices and 125 providers that make up the Norton Children's Medical Groups, affiliated with the UofL School of Medicine, the largest network of pediatric primary care servicing the Louisville and Southern Indiana area (Norton Children's, 2022). The project took place in two Norton Children's Medical Groups, pediatric primary care settings. They are located in the Crestwood and Germantown areas.

Participants

Pediatric primary care providers (PCPs) were recruited from a list of pediatric providers from an urban hospital network. Team members for this project included the practice supervisors. Emails were sent to the pediatric PCPs requesting participation in the project. Two physicians responded and were agreeable to participating with their staff (front office staff, medical assistants, nurses, Advanced Practice Registered Nurses, and/or Physician Assistants). Physicians have requested that all office staff participate in the project. Practice supervisors helped facilitate the time for the training sessions.

The ability to confidently make informed decisions regarding identifying child maltreatment concerns will empower the participants (medical providers and front office staff) to report concerns of child maltreatment to child protective services (CPS) and/or law enforcement. Barriers to success could be "buy-in" to the education and being open to reporting concerns to CPS. Many other factors play a role in the lack of education regarding the recognition of abuse. Employee turnover and staff shortages can play a major role in safeguarding that staff are educated properly. Many providers are also not comfortable with the discussion of possible child maltreatment or contacting CPS. Providing continuing education will help to build confidence regarding recognition and reporting (Christian & Committee on Child Abuse and Neglect, 2015).

Context

Poor Socioeconomic Status

It is well known that children living in poverty experience disadvantages in their physical and mental health as well as overall development. Children who are raised in families who live at or below the poverty level have an economic disadvantage and have been associated with a greater risk of child maltreatment for many years. Across the nation, children living in homes with lower socioeconomic status are five times more likely to experience child abuse and neglect as compared to those with higher socioeconomic status. Families with lower socioeconomic status are at much higher risk for child abuse due to the stress that is placed on the family concerning social support and access to available resources. This can cause changes in caregivers' mental health, family dynamics, and parenting behaviors (Lefebvre et al., 2017).

Cultural Practice

The definition of what is considered abuse or neglect varies by culture. In most cultures, much of the population shares the same values and beliefs when it comes to parenting styles.

When a person tries to transfer those actions to another culture, it can be viewed negatively. This can include something such as a Danish family leaving their child in a stroller outside a restaurant in the US. This is a widely accepted practice in Danish countries, whereas it is not an acceptable practice in the U.S. While in the U.S., U.S. laws must be followed as it pertains to abuse and neglect. This includes refugees who flee to the U.S., they must change their practices to fit within the law of their new home (United States Conference of Catholic Bishops, 2018). This also includes practices such as female genital mutilation in countries such as Africa, Asia, Eastern Europe, and Latin America. This practice is common in some countries and is believed to be a necessity to help prepare a girl for adulthood and marriage. This is also believed to be a way of reducing sexual arousal therefore the girl can resist extramarital sex. In most countries where this is practiced, it is considered a cultural tradition (World Health Organization, 2020).

Domestic Violence

There is an increased risk of child abuse in families where domestic violence occurs. Even if the child is not the intended target of the violence and is only exposed to the violence, it can have the same effect as a child who is physically or sexually abused. According to the Children's Hospital of Philadelphia (CHOP), over 15.5 million children in the U.S. are exposed every year to domestic violence in the home. Frequently, children may be physically injured or threatened as a form of punishment or control over the victim of domestic violence. Other times, the children are unintentionally injured when they are in the presence of a domestic violence incident (Children's Hospital of Philadelphia, n.d.).

Substance Abuse

Substance abuse can negatively affect parenting due to the constant physical and mental impairment as a result of the use of alcohol and drugs. This includes difficulty regulating

emotions, controlling anger, and impulsivity. There can also be a lack of household resources stemming from the frequent spending on drugs and alcohol. These families also suffer from caregivers being absent during incarceration, as well as while seeking out or manufacturing illicit substances. Children who are exposed to caregivers who abuse substances are at greater risk for substance abuse issues later in life. This cycle increases the likelihood that these children as adults, will abuse their children as well (Kaliszewski, 2022).

Key stakeholders for this intervention include the hospital system, the office supervisor, pediatricians, APRNs, nurses, and medical assistants. Key stakeholders would also include the patients, families, CPS, and the community at large. While reporting of suspected child maltreatment is already mandated in Kentucky, having the education and confidence to report these issues can provide the child with opportunities for early interventions and decrease the negative impact of maltreatment into adulthood.

Ethical Consideration/Permissions

This quality improvement was submitted to Institutional Review Board (IRB) for approval from the University of Louisville and Norton Healthcare. Letters were obtained from the practice supervisors stating their willingness to participate. Permission was sought to use the TRAS scale.

Ethical impacts could include trauma triggers in a person who has a history of abuse or neglect. The education could also cause resentment from participants if they were once part of an investigation for child maltreatment. There could also be feelings of guilt in providers who may not have recognized signs of abuse in patients in the past.

Intervention Implementation

The educational intervention was presented to participants at a pediatric primary care office. It consisted of one sixty-minute session divided into segments as follows: 10 minutes for pre-intervention document completion, 30 minutes for the educational component, 10 minutes for questions and answers, and 10 minutes to complete the post-intervention documents. The education was presented to the participants at a scheduled meeting time.

Demographic data was collected before the education consisting of the type of provider completing the questionnaire (i.e., medical assistant, nurse, nurse practitioner, physician, front office staff), years of practice, practice setting, gender, age, history of not reporting suspected child maltreatment, type of maltreatment not reported, reasons for not reporting, and the number of suspected cases of maltreatment reported in your career. Each demographic data sheet had a random number assigned to it. That number was specific to that participant and was added by the participant to the pre and post-test questionnaire to allow for comparison.

Participants were given the TRAS to assess confidence in reporting to CPS. Once the TRAS was completed, the child abuse recognition practice scenario questionnaire served as a pre-test to assess their skills in recognizing child abuse. This questionnaire consisted of 7 case scenarios and asked the participant to identify whether the situation indicated a concern for physical abuse and warranted a report to CPS. The response choices were yes or no.

The educational intervention consisted of using the TEN-4 FACESp as a guide to recognize and as a basis for reporting child maltreatment. After the education, participants completed the TRAS and then the child abuse recognition practice scenario questionnaire again. All data were collected by the DNP student. Data was stored on a password-protected laptop as well as an encrypted zip drive to maintain proper data stewardship. Information was deidentified

to ensure confidentiality and anonymity are maintained. All HIPAA protocols were followed. The data were entered and stored in Microsoft Excel. All questionnaires remained anonymous and confidential and were identified only by a randomly assigned number. Participants were asked to write the number that was on the demographic data sheet on all documents to allow for comparison. No personal identification questions were available on the questionnaires. Child abuse recognition practice scenarios questionnaires were not related to any specific child who has been impacted by maltreatment.

The costs associated with this project included copies of the questionnaires and educational handouts. The DNP student was responsible for the costs. The estimated cost for child abuse education performed by a specialist such as a Forensic Nurse Specialist in the future would be approximately $100 for preparation and training.

Measures

Measures included evaluating if there is an increase in recognition and confidence in reporting child abuse. The child abuse recognition practice scenarios questionnaire measured the recognition of physical abuse of a child. The practice scenarios were scored using one point for each correct answer and zero for any wrong answer or if the participant indicated they were not sure of the answer. Proficiency was demonstrated by a score range of 5 to 7 points. A score range of 0 to 4 points indicates that the participant is a novice at recognizing signs of physical abuse.

Providers' confidence was measured using a modified Teacher Reporting Attitudes Scale (TRAS) (Choo et al., 2012), which was tailored for the healthcare setting used in a later study. Modifications included changing the wording from "teacher" to "healthcare provider" and "sexual abuse" to "child maltreatment" which assesses attitudes regarding reporting child maltreatment, specifically child abuse and neglect (Foster et al., 2017). The TRAS is a fourteen-

item measure with a 5-point Likert scale ranging from five (strongly agree) to one (strongly disagree) with a high score of 70 and a low score of zero (Foster, et al., 2017). There are four subscales (commitment, value, concern, and confidence) to assess attitudes toward reporting suspected child abuse. Items in the TRAS assess confidence in reporting child abuse including the professional responsibility to report suspected abuse, the importance of guidelines, laws about reporting, fear of retaliation from the family or community, lack of confidence, and feelings about the system for reporting to CPS (Choo et al., 2012). Higher scores equate to a greater level of confidence and commitment to maltreatment reporting roles, greater confidence in child protective services responsiveness to reports, and fewer concerns about the negative consequences of reporting child abuse (Foster et al., 2017). The scale has a Cronbach's alpha reliability for the parent sample ranging from 0.58-0.81.

Data Analysis

Statistical Package for Social Sciences (SPSS) was used for statistical data analysis. Demographics were analyzed using descriptive statistics. Demographic data analysis allowed comparison between type of provider, gender, age, and experience. The paired t-test was used to analyze confidence in reporting child abuse for each participant at the two offices pre-and post-intervention. A paired t-test was used to analyze the recognition of child abuse using scenarios at each of the two offices.

Results

There were 14 participants in the educational sessions. Participants were physicians, nurse practitioners, nurses, medical assistants, and support staff. The majority of participants were female (93%) with half being between the ages of 31-45. Participants that had between one to five years of practice experience made up 50% of the group. The majority of participants

reported that they believed they were mandated reporters (86%) and 50% reported that they had reported concerns about child maltreatment in the past. Only 57% of participants reported having prior training related to child maltreatment identification and reporting. When participants were asked if they believed it was legal to “spank” a child in the state of Kentucky, 50% reported that it was not legal to “spank” a child.

A paired samples t-test was used to compare the mean difference in the TRAS scores for the participants' pre and post-test. The mean for the pre-test was 48.06 with a standard deviation of 4.81 and 51.33 with a standard deviation of 5.02 for the post-test. p-value <.003. A paired t-test was also used to compare the mean difference in the scenario scores for the participants' pre and post-test. The mean for the pre-test scores was 5.13 with a standard deviation of .91548. The mean for the post-test scores was 6.26 with a standard deviation of .45774. with a p-value < .001. These results indicate a statistically significant difference in the pre and post-test scores for both questionnaires.

Discussion

Healthcare personnel are in a position to identify children who are being abused. The purpose of this project was to provide evidence-based child maltreatment education to healthcare providers. Based on the results of this project, the use of an educational session and training increase recognition and confidence in reporting child maltreatment concerns.

The sample included mostly females who were just beginning their careers. Only half of the participants reported prior education regarding child maltreatment which could have led to a decrease in knowledge surrounding the legality of “spanking” a child. This may have also played a role in the decreased number of participants that have reported concerns for child maltreatment in the past. Child maltreatment is not a common topic of discussion in most settings. This is why

deliberate education must be provided to medical providers to bring awareness to these situations. The more education that providers have, the more confident they will be in the decisions to address the concerns.

At the end of the sessions, participants expressed that the education was very helpful and that continued education in the future would be welcome. Participants expressed that in the future they would appreciate seeing more photographs of children with various skin tones to help differentiate normal versus concerning skin findings. The educational session was effective in increasing the recognition of physical abuse. It would be beneficial to incorporate evidence-based information regarding the recognition and reporting of sexual abuse and neglect in the future.

The project limitations included a smaller sample size than anticipated which restricted the amount of data able to be analyzed. One group of providers that agreed to have the education session had to cancel last minute and was unable to reschedule before the deadline for data collection. The time limit for the educational session was also a limitation as participants asked many questions after the presentation. Many requested a more in-depth presentation in the future. Moving forward I hope to have more education sessions throughout the organization to increase provider recognition and confidence in reporting child maltreatment concerns.

Conclusion

Child maltreatment is a global issue that has lifelong consequences (WHO, n.d). It is a major health crisis that not only affects the child but the society as well. To mitigate the lifelong implications of child maltreatment, there must be early intervention. Failure to intervene can be costly for the child, their family, and society. Medical providers are in a unique position to see and identify these children and be able to intervene. The results while limited, supported the

literature that stated that when given the education, provider recognition, and confidence in reporting improved. This will increase the chance of early intervention and help mitigate the negative effects of child maltreatment. Continued education regarding the identification and reporting of child maltreatment is necessary to improve the rates of child maltreatment.

References

American Academy of Pediatrics. (2021). *Child abuse and neglect*. www.aap.org/en/patient-care/child-abuse-and-neglect/. https://www.aap.org/en/patient-care/child-abuse-and-neglect/

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215. https://doi.org/10.1037/0033-295X.84.2.191

Brown, C.G. (2014). The Iowa model of evidence-based practice to promote quality care: An illustrated example in oncology nursing. *Clinical Journal of Oncology Nursing.* https://pubmed.ncbi.nlm.nih.gov/24675251/

Buckwalter, K. C., Cullen, L., Hanrahan, K., Kleiber, C., McCarthy, A., Rakel, B., Steelman, V., Tripp-Reimer, T., & Tucker, S. (2017). Iowa model of evidence-based practice: Revisions and validation. *Worldviews on Evidence-Based Nursing*, *14*(3), 175–182. https://doi.org/10.1111/wvn.12223

Carson, S. M. (2018). Implementation of a comprehensive program to improve child physical abuse screening and detection in the emergency department. *Journal of Emergency Nursing*, *44*(6), 576–581. https://doi.org/10.1016/j.jen.2018.04.003

Centers for Disease Control and Prevention. (n.d.). *Fast facts: Preventing adverse childhood experiences*. https://www.cdc.gov/violenceprevention/aces/fastfact.html

Centers for Disease Control and Prevention. (2022, April 6). *Preventing adverse childhood experiences.* National Center for Injury Prevention and Control, Division of Violence Prevention.https://www.cdc.gov/violenceprevention/aces/fastfact.html?CDC_AA_refVal=https://www.cdc.gov/violenceprevention/acestudy/fastfact.html

Childhelp. (2021). *Child abuse statistics*. https://www.childhelp.org/child-abuse-statistics/

Children's Hospital of Philadelphia. (n.d.). *Domestic violence and child abuse*. Center for Violence Prevention. https://violence.chop.edu/domestic-violence-and-child-abuse

Choo, W. Y., Walsh, K., Chinna, K., & Tey, N. P. (2012). Teacher reporting attitudes scale (TRAS). *Journal of Interpersonal Violence*, *28*(2), 231–253. https://doi.org/10.1177/0886260512454720

Christian, C. W. (2021). The evaluation of suspected child physical abuse. Child abuse: Overview and evaluation, pp. 53–70. *American Academy of Pediatrics.* https://doi.org/10.1542/9781610022927-the_evaluation_of_suspected

Eniola, K., & Evarts, L. (2017). Diagnosis of child maltreatment: A Family Medicine Physician's Dilemma. *Southern Medical Journal*, *110* (5), 330–336. https://doi.org/10.14423/SMJ.0000000000000644

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (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. https://doi.org/10.1016/S0749-3797(98)00017-8

Foster, R. H., Olson-Dorff, D., Reiland, H. M., & Budzak-Garza, A. (2017). Commitment, confidence, and concerns: Assessing Health Care Professionals' child maltreatment reporting attitudes. *Child Abuse & Neglect*, *67*, 54–63. https://doi.org/10.1016/j.chiabu.2017.01.024

Hornor, G., Bretl, D., Chapman, E., Herendeen, P., Mitchel, N., Mulvaney, B., Quinones, S. G., & VanGraafeiland, B. (2017). Child Maltreatment Screening and Anticipatory Guidance:

A Description of Pediatric Nurse Practitioner Practice Behaviors. *Journal of Pediatric Health Care*, *31*(6), e35–e44. https://doi-org.echo.louisville.edu/10.1016/j.pedhc.2017.05.006

Kaliszewski, M., (2022, March 15). *The link between child abuse and substance abuse*. American Addiction Centers. https://americanaddictioncenters.org/blog/the-link-between-child-abuse-and-substance-abuse

Klika, J., Rosenzweig, J., & Merrick, M. (2020). Economic burden of known cases of child maltreatment from 2018 in each state. *Child and Adolescent Social Work Journal*, *37*(3), 227–234. https://doi.org/10.1007/s10560-020-00665-5

Lupariello, F., Capello, F., Grossi, V., Bonci, C., & Vella, G. D. (2022, September). Child abuse and neglect: Are future medical doctors prepared? *Legal Medicine. 58,* https://www.sciencedirect.com/science/article/abs/pii/S1344622322000888?via%3Dihub

Norton Healthcare. (n.d.). *About us* https://nortonhealthcare.com/about-us/

Norton Children's. (2022) *Norton Children's pediatrician offices*. https://nortonchildrens.com/locations / pediatrician-offices.

Pierce, M. C., Kaczor, K., Lorenz, D. J., Bertocci, G., Fingarson, A. K., Makoroff, K., Berger, R. P., Bennett, B., Magana, J., Staley, S., Ramaiah, V., Fortin, K., Currie, M., Herman, B. E., Herr, S., Hymel, K. P., Jenny, C., Sheehan, K., Zuckerbraun, N., Hickey, S., … Leventhal, J. M. (2021). Validation of a clinical decision rule to predict abuse in young children based on bruising characteristics. *JAMA Network Open*, *4*(4), e215832. https://doi.org/10.1001/jamanetworkopen.2021.5832

Pinto, L., Lein, A., Mahoque, R., Wright, D. W., Sasser, S. M., & Staton, C. A. (2018). A cross-sectional exploratory study of knowledge, attitudes, and practices of emergency health care providers in the assessment of child maltreatment in Maputo, Mozambique. *BMC Emergency Medicine*, 18(1). https://doi.org/10.1186/s12873-018-0162-9

Riney, L. C., Frey, T. M., Fain, E. T., Duma, E. M., Bennett, B. L., & Murtagh Kurowski, E. (2018). Standardizing the evaluation of nonaccidental trauma in a large pediatric emergency department. *Pediatrics*,*141(*1).

Teeuw, A. H., Sieswerda-Hoogendoorn, T., Sangers, E. J., Heymans, H. S., & Van Rijn, R. R. (2016). Results of the implementation of a new screening protocol for child maltreatment at the emergency department of the academic medical center in Amsterdam. *International Emergency Nursing*, *24*,9–15. https://doi.org/10.1016/j.ienj.2015.05.002

Tiyyagura, G., Schaeffer, P., Gawel, M., Leventhal, J. M., Auerbach, M., & Asnes, A. G. (2019). A qualitative study examining stakeholder perspectives of a local child abuse program in community emergency departments. *Academic Pediatrics*, *19*(4), 438–445. https://doi.org/10.1016/j.acap.2019.01.006

World Health Organization. (n.d.). *Child maltreatment*. https://www.who.int/news-room/fact-sheets/detail/child-maltreatment

Appendix B
Annotative Table and Evidence Level

Citation: Carson, S.M. (2018). Implementation of a comprehensive program to improve child abuse screening and detection in the emergency department. *Journal of Emergency Nursing, 44(6), 576-581. https://doi-org.echo.lousiville.edu/10.1016/j.jen.2018.04.003*

Keywords: Child abuse, non-accidental trauma, screening, emergency department, healthcare provider, staff education

Study Purpose (copy exactly from study)	**Type of Study**	**Sample/ Setting**	**Major Variables Studied and their Definitions**	**Data Analysis and Findings**	**Appraisal: Strength of Evidence and Worth to Practice**
To implement an evidenced based screening program that included provider education on child abuse, a systematic screening protocol, and use of the validated	Systematic Review	Tucson, Arizona Evidenced based QI project in the pediatric emergency department of a children's hospital within a large, urban, academic level 1 trauma	Diagnostic coding of child abuse using ICD-9 and ICD-10 codes entered by health care providers for suspected and confirmed child physical abuse. **Ordinal** Documentation of child physical abuse-**Ordinal** ED Healthcare providers knowledge and confidence in screening for a recognizing child physical abuse measured using the 7-item Child Abuse Awareness pre-test and post-test. Items 1 and 2 used a 5-point Likert scale to assess HCP confidence, and items 3 through 7 used multiple choice and multiselect responses to evaluate HCP knowledge. The tests	Significant increase in provider knowledge and confidence scores for child physical abuse screening and recognition Average knowledge on pretest was 21.4%; after 20 min educational session average was 73.2%. Average confidence for recognition pretest was 3.48; posttest was 3.87 No significant difference in the	**LEGEND: Evidence Appraisal 1a- A Good quality evidenced based QI project** Increased emergency nurse's knowledge confidence, and self-efficacy in child abuse screening and recognition Improved detection of non-accidental

Escape Instrument		center staffed with one attending physician and several emergency room residents and emergency nurses each shift.	were similar, except for items 5 and 6, which were changed to evaluate accurate use of the Escape Instrument on the posttest **Ordinal** Content validity was assessed using a content validity index (CVI). Only items with CVI scores of 1.00 and agreed-upon face validity by all 3 experts were included in the final pre-test and post-test. **Ordinal** The utility of the child physical abuse screening program was evaluated using the 8-item Project Evaluation Survey which evaluated the implementation process from the healthcare providers perspective. **Ordinal**	child abuse diagnostic coding (this information was limited due to the loss of access to ICD coding data 30 days after implementation of this screening program)	childhood injuries in the ED setting

Citation: Tiyyagura, G., Schaeffer, P., Gawel, M., Leventhal, J.M., Auerbach, M., & Asnes, A.G. (2019). A qualitative study examining stakeholder perspectives of a local child abuse program in community emergency departments. *Academic Pediatrics*, *19* (4), 438-445. https://doi-org. echo.louisville.edu/10.1016/j.acap.2019.01.006

Keywords: champions, child abuse, community of practice, emergency department

Study Purpose (copy exactly from study)	**Type of Study**	**Sample/ Setting**	**Major Variables Studied and their Definitions**	**Data Analysis and Findings**	**Appraisal: Strength of Evidence and Worth to Practice**
The aims of this study were to understand the Program's (Community ED CAN Program) strengths and challenges and to explore factors that influenced **i mplementati on.**	Systematic Review Qualitative research design with semi structured one-on-one interviews to understand key stakeholders ' perspectives of the Community ED CAN Program	3 community emergency departments and 1 academic medical center in different regions in Connecticut. 6 ED clinicians; 4 local CAN champions; 4 regional CAN experts; 5 Physician, Advanced Level Practitioner, and Nursing Chiefs/managers; 2 CPS social workers; 5 hospital social	Analysis of the interview data using the comparative method of grounded theory (Strauss et al., 1990) **Ordinal** Researchers independently reviewed the transcripts and applied codes or labels to summarize and categorize portions of the data: **Continuous** The code list was generated with definitions of the codes and categories, guidelines for their application, and excerpts	Program strengths included: Comfort in seeking help from local champions; facilitated access to and direction from CAN experts on uncertain cases; increased education and awareness about CAN; Improved networks and communication. Stakeholders expressed a perceived improvement in awareness about CAN, linkages to subspecialty expertise, and communication about cases of	**LEGEND: Evidence Appraisal 1a Good Quality QI project** Comfort in seeking help from local champions Facilitated access to and direction from CAN experts on uncertain cases Increased education and awareness about CAN Improved networks and communication.

		workers; and 1 hospital lawyer	of data exemplifying the categories: **Continuous**	suspected CAN through the Community ED CAN Program. Findings will be used to iteratively improve current programs and inform development and dissemination of additional programs. Ongoing work will measure the effectiveness of the CAN Programs to increase the appropriate reporting of cases to CPS and to improve provider self-efficacy related to caring for abused and neglected children.	

Citation: Riney, L., Frey, T. M., Fain E. T., Duma, E. M., Bennett, B. L., & Murtagh Kurowski, E. (2018). Standardizing the evaluation of nonaccidental trauma in a large pediatric emergency department. *Pediatrics, 141 (1)*. https://doi-org.echo.louisville.edu/10.1542/peds.2017-1994

Keywords: Child maltreatment, Emergencies, Interdisciplinary health team

Study Purpose (copy exactly from study)	**Type of Study**	**Sample/ Setting**	**Major Variables Studied and their Definitions**	**Data Analysis and Findings**	**Appraisal: Strength of Evidence and Worth to Practice**
Increase the percent of patients evaluated in the emergency department for NAT who receive guideline-adherent evaluation from 47% to 80% by December 31, 2016.	Systematic review	Cincinnati, Ohio a large pediatric tertiary care center and its satellite community hospital, with an annual emergency department (ED) volume of ~95 000 children across the 2 sites. This 600-inpatient bed pediatric institution has a level I trauma center responsible for 85% to 90% of pediatric	Suspected non-accidental trauma **Ordinal** Age **Continuous** Indication for skeletal survey **Ordinal**	Adherence to age-specific guideline recommendations for NAT evaluation improved from a baseline of 47.1% to 68.5% that took place from November 2015 through March 2017. The baseline rate of EMR order set use was 4.4% before the initiation of this initiative. After our interventions were completed, order set use increased to 20.9% with 2 nonconsecutive points above the upper control limit A higher proportion of visits were adherent to guideline recommendations when the order set was used (50%	**LEGEND: Evidence Appraisal 1a Good Quality systematic review/quality improvement** Earlier detection of subtle abusive injuries in infants and young children can identify those at risk for future injury. Implementing standardized child abuse algorithms and guidelines in EDs can eliminate disparities in care.

		admissions from a population base of 2 000 000 people. Patients <3 years of age evaluated in the pediatric emergency department for suspected NAT based on chart review.		before the initiative, 100% after interventions were completed) compared with when the order set was not used (36.4%–75%) Implementation of a quality improvement initiative has resulted in increased adherence to the evidence-based care guideline for evaluation of pediatric patients with concern for NAT.	

Citation: Teeuw AH, Sieswerda-Hoogendoorn T, Sangers EJ, Heymans HS, van Rijn RR. Results of the implementation of a new screening protocol for child maltreatment at the Emergency Department of the Academic Medical Center in Amsterdam. *Int Emerg Nurs*. 2016 Jan;24:9-15. doi: 10.1016/j.ienj.2015.05.002. Epub 2015 Jun 8. PMID: 26067096.

Keywords: child maltreatment, checklist, emergency department, screening

Study Purpose (copy exactly from study)	**Type of Study**	**Sample/ Setting**	**Major Variables Studied and their Definitions**	**Data Analysis and Findings**	**Appraisal: Strength of Evidence and Worth to Practice**
This study examines the results of the implementation of a new screening protocol for child maltreatment (CM) at the Emergency Department (ED) of the Academic Medical Center in Amsterdam, The Netherlands.	Systematic Review	Patients ages 0-18 years who were admitted to the Emergency Department (ED) of the Academic Medical Center in Amsterdam, The Netherlands.	ICD codes **Continuous** completion of the screening and reasons for non- adherence: **Continuous** Age**: Continuous** Gender: **Ordinal** reason for visiting the ED (defined by International Classification of Disease, ICD), presence of a chronic illness: **Continuous**	**Dutch SPUTOVAMO checklist** **TTI (Top Toe Inspection)** Statistical analysis was performed with **PASW Statistics for Windows**, Version 18.0. (Chicago: SPSS Inc). Non-normally distributed data were described with median and interquartile range (IQR). **Pearson Chi square** was used for calculating statistical difference in performing SPUTOVAMO and TTI between February and November. Factors influencing chances for performing SPUTOVAMO and TTI were assessed with **Pearson's Chi square** in case of two	**LEGEND: Evidence Appraisal 1a Good Quality systemic review** The implementation of the new screening protocol was moderate and showed a decline 9 months after introduction possibly due to need for re-education.

			type of professional performing the TTI: **Ordinal** admission during week or weekend days: **Ordinal**	variables and with univariate logistic regression in case of more than 2 variables or numeric variables. A p-value <0.05 was used as cut-off. Older age and presence of a chronic illness influenced the chance of having both SPUTOVAMO and TTI performed negatively. The completion rate of SPUTOVAMO was influenced by ICD code. Completion of TTI was influenced by type of investigator. The best performing professional was the ED physician followed by the pediatrician followed by the ED nurse. The reasons for not performing a TTI were not documented. Refusal of the TTI by a patient or parent was reported three times.	

Citation: Pinto, L., A., Mahoque, R., Wright, D. W., Sasser, S. M., Staton, C. A. (2018). A cross-sectional exploratory study of knowledge, attitudes, and practices of emergency health care providers in the assessment of child maltreatment in Maputo, Mozambique. *BMC Emergency Medicine*, *18*(1), N.PAG. https://doi-org.echo.louisville.edu/10.1186/s12873-018-0162-9

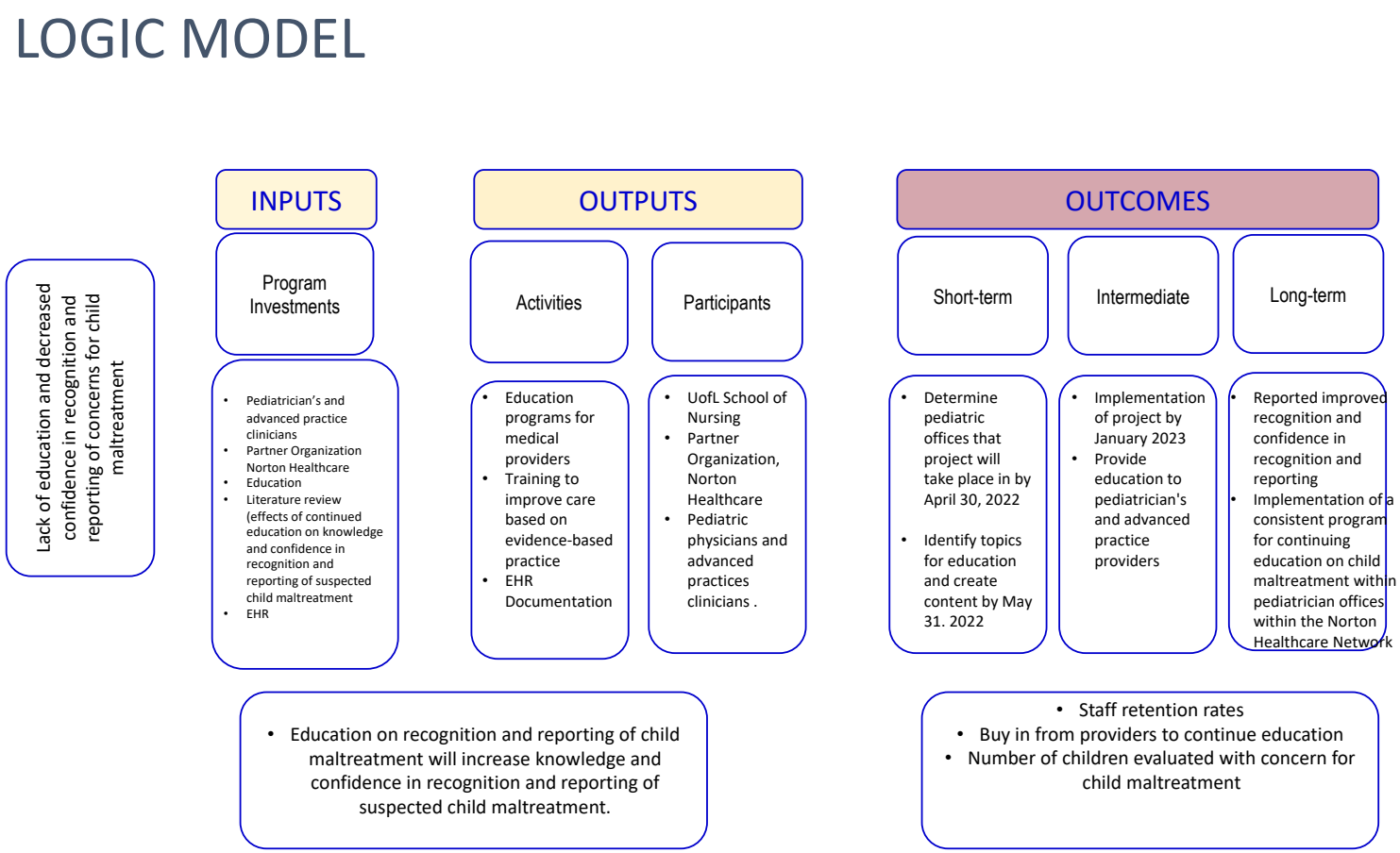
Keywords: Child maltreatment, Emergency care services, Health care providers, Mozambique-Africa, Human rights abuses

Study Purpose (copy exactly from study)	**Type of Study**	**Sample/ Setting**	**Major Variables Studied and their Definitions**	**Data Analysis and Findings**	**Appraisal: Strength of Evidence and Worth to Practice**
The purpose of this article is to present an evidence-based discussion regarding the scope of the problem of child maltreatment, contributing barriers to recognition and reporting, and suggestions for interventions designed to achieve the goals of primary and secondary	Systematic Review	MGH in Maputo, Mozambique MGH is a tertiary care facility with a catchment area of 19 neighborhoods, a covered population of 521,333 inhabitants (47.6% of the population of Maputo). A 25 min, pilot-tested verbal interview questionnaire was	The survey consisted of a combination of demographic: **Continuous**, multiple-choice (E.g. "Identify which of the below are forms of child maltreatment") yes-no (**Ordinal**) (E.g. "Does child maltreatment cause long-term adverse effects on child development?") (Ordinal), and Likert-type scale items (E.g. "Indicate your	Findings revealed a disconnect between the attitudes held by health care providers and the training they receive; one plausible explanation for this discrepancy is a lack of consensus and blurred boundaries around what constitutes CM amid a context in which the harsh punishment of children is	**LEGEND: Evidence Appraisal 1B A Lesser Quality cross sectional study** Identified gaps in education regarding child maltreatment Portrayed need to provide further education regarding child maltreatment and the need for covering all areas of maltreatment, not just physical abuse. After education, providers agreed that they play an important role in identification and reporting child maltreatment

prevention before a devastating outcome occurs.		administered to 49 physicians and nurses working in ECS at Mavalane General Hospital. Interviews were completed between October–November 2010. Data were managed and analyzed in SPSS 14.0 and descriptive statistics were generated.	level of agreement with the statement that 'health care providers have an important role in treating CM", (**Ordinal**) organized in the following four sections: 1) sociodemographic characteristics, 2) health care provider knowledge of CM, 3) health care provider attitudes of CM, and 4) health care provider practices in recognizing and responding to CM Surveys, containing both qualitative short answer as well as quantitative Likert scale (**Ordinal**)	normalized and widespread.	

			questions, were administered by an interviewer trained by the study's principal investigator.		

Appendix C
Logic Model



Appendix D

GANNT Chart

C					
	April, 2022	May, 2022	January, 2023	May, 2023	August, 2023
Identify areas for project implementation	X				
Identify topics for education		X			
Create topics for education		X			
Implement Project			X		
Poster Presentation					X

Appendix E

Participant number: _____

Demographic Data

Type of provider: physician APRN PA nurse medical assistant support staff

Years of practice: 1-5 6-10 11-15 16-20 >20

Gender: Male Female

Age: <18 18-30 31-45 46-60 >60

Have you ever NOT reported a concern for child maltreatment? Yes/No

Have you ever had training related to child abuse recognition or reporting in the past? Yes/No

Is it legal to “spank” a child? Yes/No

As a healthcare professional, if you suspect child abuse or neglect, are you a mandated reporter? Yes/No

Appendix F

	Strongly Disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly Agree (5)
I plan to report child abuse when I suspect it.					
I would like to fulfill my professional responsibility by reporting suspected cases of child abuse.					
Reporting child abuse is necessary for the safety of children.					
I would still report child abuse even if my administration disagreed with me.					
It is important for healthcare professionals to be involved in reporting child abuse to prevent long-term consequences for children.					
Child abuse reporting guidelines are necessary for healthcare professionals.					
Healthcare professionals who report child abuse that is unsubstantiated can get into trouble.					
I would find it difficult to report child abuse because it is hard to gather enough evidence.					
Reporting child abuse can enable services to be made available to children and families.					

I would be apprehensive to report child abuse for fear of family/community retaliation.					
I would be reluctant to report a case of child abuse because of what parents will do to the child if he/she is reported.					
I lack confidence in the authorities to respond effectively to reports of child abuse.					
It is a waste of time to report child abuse because no one will follow up on the report.					
I believe that the current system for reporting child abuse is effective in addressing the problem.					

Foster, R. H., Olson-Dorff, D., Reiland, H. M., & Budzak-Garza, A. (2017). Commitment, confidence, and concerns: Assessing Health Care Professionals' child maltreatment reporting attitudes. *Child Abuse & Neglect*, *67*, 54–63. https://doi.org/10.1016/j.chiabu.2017.01.024

Appendix G

Case Scenarios: Is a report to CPS indicated?	**Yes**	**No**	**Unsure**
2-month-old with a bruise on the torso. Guardian reported sibling hit him with a toy.			
11-day-old with subconjunctival hemorrhage which guardian reported present at birth which was confirmed through medical record review.			
10-month-old with soft portion of the cheek bruising. Guardian reported that “the child plays rough with the dog and that’s how it occurred.”			
4-month-old with a upper oral frenulum tear. Guardian reported he cut his mouth on the clip of his pacifier.			
5-month-old with a bruise on the forehead. Guardian reported fell from chair.			
3-month-old nondisplaced femoral shaft fracture. Involved in MVA which was confirmed. Guardian is also being treated.			
3-year-old with a bruise on the forehead that parents reported he tripped and fell. Reported to cry and console easily.			

Appendix H

Education on Identification and Reporting of Child Maltreatment in a Pediatric Primary Care Setting

Objectives

Physical abuse vs Discipline

Who does this happen to?

Statistics

Demographics

How Can I Not Miss Abuse?

What is normal bruising?

TEN-4 FACESp Bruising Rule

- Torso
- Ears
- Neck
- Frenulum
- Angle of the jaw
- Cheek
- Eyelid
- Subconjunctiva
- Patterned

The Evaluation

Risk Factors

Triggering Situations

Family Risk Factors

Children at Risk

Tips on Talking to Children

Making a CPS Report