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2024

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Los Angeles

Evaluating the Impact of Trauma-Informed Care Training for Healthcare Staff Working in

Reproductive Care

A dissertation submitted in partial satisfaction of the

requirements for the degree

Doctor of Nursing Practice

by

Tracy Stockstill

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ABSTRACT OF THE DISSERTATION

Evaluating the Impact of Trauma-Informed Care Training for Healthcare Staff Working in

Reproductive Care

by

Tracy Stockstill

Doctor of Nursing Practice University of California, Los Angeles, 2024

Professor Wei-Ti Chen, Chair

Background: Experiencing trauma is a unique and complex public health issue. An individual's experience with trauma may affect their relationship with the healthcare system. Personal medical questions, touch, removal of clothing, and vulnerable positions required for an exam may trigger and re-traumatize patients. Trauma-informed care (TIC) and trauma-informed practice (TIP) is a valuable approach that provides conscientious, ethical, professional, patient-centered care that prepares patients for difficult conversations, exams, and procedures.

Objective: This project aimed to demonstrate the effectiveness of educational TIC training on clinician, staff, and leadership knowledge and attitudes related to TIC in the reproductive healthcare setting. The training included didactic education on TIC practices in a clinical setting,

including language and physical exam techniques to facilitate a more trauma-informed workplace. Methods: A single-group pre- and post-survey quality improvement project (QI) evaluated change in knowledge and attitude of TIC practices for clinicians, staff, and leadership working in a reproductive community clinic in Los Angeles. The TIC training included a prerecorded 20-minute didactic computer training on TIC practices in a clinical setting, focusing on trauma, triggers, language, and physical exam techniques. Participants completed a 15-item survey before and after the training to determine change in TIC knowledge and attitudes. The results were evaluated using descriptive statistics and the Wilcoxon Rank-Sum Test. A statistician was consulted to analyze the statistical findings of the TIC pre- and post-surveys. **Results:** The QI project consisted of 12 participants: Nurse Practitioners (n=4), a Physician Assistant (n=1), Medical Assistants (n=5), and Clinic Supervisors (n=2). The course demonstrated no change in TIC knowledge (p=0.062) and a significant change in attitude (p=0.009). While there was no significant change in knowledge, an overall evaluation of the change in knowledge and attitude combined was significant (p=0.004). Conclusion: This QI project showed that a brief 20-minute training on TIC is feasible and can impact the healthcare staff's attitude toward TIC and TIP. The change in staff's attitudes regarding TIC and TIP represents an increase in awareness of trauma and paths to recovery. Consistent with TIC attitudes, participants expressed interest in more training on TIC and TIP. The desire for ongoing learning of TIC and TIP in the clinical setting reflects an increased understanding of the complexity of trauma and dedication to support patients and communities.

The dissertation of Tracy Stockstill is approved.

Dana C. Beck

Colleen K. Keenan

Benissa E. Salem

Wei-Ti Chen, Committee Chair

University of California, Los Angeles

This dissertation is dedicated to my parents for their boundless love and compassion; their altruism has instilled in me a deep desire for equity and social justice. To my sisters, whose empathy, humility, and genuine kindness have unmeasurably rooted us together forever, akin to redwood trees, we grow stronger together. To my partner, whose infectious humor and unparalleled perspective on life have shaped my reality into a dream. I find solace in your presence. To our beloved cat, whose companionship has always been a constant source of joy and immeasurable happiness. To you all, my deepest gratitude. This accomplishment is as much mine as it is yours.

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ACKNOWLEDGEMENTS

I want to acknowledge several key supporters of this project. First and foremost, I want to thank Dr. Chen, my committee chair, for patiently guiding me through this process. Throughout all the changes and redirections of this project, your guidance grounded me and allowed me to continue without pause. I would also like to thank my committee members, Dr. Beck, Dr. Salem, and Dr. Keenan, for the countless hours spent reviewing and revising this project. My committee members' unwavering dedication to providing holistic, compassionate care has been the foundation of this project and an inspiration during this program. Their commitment to TIC and women's health has shaped and enriched my project and clinical practice.

I would also like to thank the incredible reproductive clinic staff I have been privileged to work alongside and call my friends. You work tirelessly to render holistic, empathic care to our patients, families, and community, and I am forever grateful.

Lastly, I would like to acknowledge the University of California, Los Angeles (UCLA) Doctor of Nursing Program (DNP) faculty for allowing me this opportunity. Thank you, Dr. Nancy Jo Bush, Dr. Theresa Brown, and Soo Kwon, for your constant guidance and support. Your dedication to this program has made me proud to be a nurse. Thank you.

VITA

Tracy Stockstill MSN, FNP-BC, RN

EDUCATION

BSN	California State University Long Beach	2010
	Bachelor of Science, Nursing	
MSN	University of California Los Angeles, Family Nurse Practitioner Program	2017
	Master of Science, Nursing	
DNP	University of California Los Angeles	2024
	Doctor of Nursing Practice, expected graduation June 2024	
LICENSURE		
California	Registered Nurse License: 79225	02/16/2011
California	Family Nurse Practitioner <i>License:</i> NP95007234	08/29/2017
California	Family Nurse Practitioner Furnishing <i>License: NP95007234</i>	08/29/2017
BOARD CERTIFICATION	VS	

Certification	State of California Department of Health Services Nurse Assistant, <i>Home Health</i> <i>Aide</i> , <i>Convalescent Care</i> , <i>Acute Care</i>	04/2008
Certification	State of California National Registry Emergency Medical Technician, <i>Emergency</i> <i>Medical-Basic</i>	01/2008
Certification	American Nurses Credentialing Center, Critical Care Registered Nurse	02/2021
Certification	American Nurses Credentialing Center, Family Nurse Practitioner, <i>Board</i> <i>Certification: 2017015806</i>	10/2017

PROFESSIONAL EXPERIENCE

EMT-B	Royal Ambulance, San Leandro, California	03/2007- 08/2008
RN	Long Beach Memorial Medical Center	03/2011- 06/2013

	Neuro-Trauma ICU RN	
RN	Ronald Reagan UCLA Hospital	05/2013-
	Neuro-Trauma ICU RN III	12/2019
Family Nurse Practitioner	Planned Parenthood Los Angeles, Hollywood Clinic	10/2019- 5/1/2024
Family Nurse Practitioner	Community Action Partnership of San Luis Obispo: <i>The Center for Health and</i> <i>Prevention</i>	5/16/2024- Present

PROFESSIONAL ORGANIZATIONS

2023	American Association of Nurse Practitioners
COMMUNITY SERVICE	

2014	Non-Profit Medical Mission Kenya Hunger and Relief, Volunteer
2019-	Homeboy Industries, Medical Volunteer
2021	Tattoo removal, <i>32 hours a month</i>

HONORS AND SPECIAL AWARDS

2017	Inducted, Sigma Theta Tau International Honor Society of Nursing, Gamma Tau-at- Large (UCLA)
2020	Planned Parenthood Workplace Values Award

CREATIVE and SCHOLARLY WORKS

6/2024	Evaluating the Impact of Trauma-Informed Care Training for
	Healthcare Staff Working in Reproductive Care [DNP scholarly
	work]
	Chair: Wei-Ti Chen, Ph.D., RN, CNM, FAAN

CHAPTER ONE: INTRODUCTION

Trauma is an event or set of circumstances experienced by an individual that results in physical or emotional harm that has lasting adverse effects on mental, emotional, social, physical, or spiritual well-being (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). SAMHSA (2014) conceptualized trauma by the 3Es: events, experience, and lasting adverse effects. Examples of trauma include, but are not limited to, childhood neglect, experiencing or witnessing violence, poverty, systemic discrimination, and physical, sexual, and emotional abuse (SAMHSA, 2022). Trauma can lead to long-term neurobehavioral and cognitive changes (American Psychology Association [APA], 2018). Typical physical and psychological injuries include - traumatic brain disorders, chronic pain, headaches, insomnia, gastrointestinal symptoms, pelvic pain, generalized anxiety, depressive disorders, posttraumatic stress disorder (PTSD), substance use disorders, and suicide (APA, 2018). Experiencing trauma can also lead to hopelessness, fear, powerlessness, shame, and isolation (APA, 2018). A cornerstone study by Felitti et al. (1998) correlated exposure to childhood trauma to health risk behaviors and chronic diseases experienced in adulthood, such as an increased risk for drug use, alcoholism, depression, suicide, and poor self-health ratings.

An individual's experience with trauma and stress may influence their health and relationship with the healthcare system (Dubay et al., 2018). As a result, individuals who have experienced trauma may delay seeking preventative medical care due to anxiety about specific medical examinations and procedures (The American College of Obstetricians and Gynecologists [ACOG], 2021). Personal medical questions, touch, removal of clothing, and vulnerable positions required for exams may trigger and re-traumatize patients (ACOG, 2021).

Re-traumatization is the conscious or unconscious recreation of the initial traumatic memory (ACOG, 2021).

Recognizing the pervasiveness of trauma and the potential long-lasting impact on adult psychological and physical well-being, SAMHSA (2014) developed TIC to optimize outcomes for trauma survivors. TIC is a valuable approach that recognizes the prevalence and effects of trauma on an individual and incorporates approaches to deliver care that create a safe and empowering environment (SAMHSA, 2014). TIC is guided by the four R's: realization of the widespread impact of trauma, recognizing the signs of trauma, responding to trauma through organizational and clinical leadership, and resisting re-traumatization (SAMHSA, 2014; see Appendix A). TIC is a beneficial framework for providing conscientious, ethical, professional, and patient-centered care (Elisseou et al., 2019). TIC is a patient-centered approach that improves communication between the clinician and patient by creating an environment that prepares patients for difficult conversations, exams, and procedures (SAMHSA, 2022). The objective of TIC is to increase feelings of safety and comfort and decrease feelings of anxiety and post-traumatic stress (Stevens et al., 2016). Providing TIC can positively impact patients, families, communities, healthcare staff, and organizations (SAMHSA, 2014).

While TIC has been acknowledged as a multifaceted approach to connecting with patients and providing holistic care, many healthcare staff report a lack of training and knowledge regarding TIC (Elisseou et al., 2019). While TIC is deemed best practice, many TIC experts and frontline providers report a significant need for TIC training (SAMHSA, 2022). Integrating TIC into the healthcare system requires intentional adaptation of TIC into policies, procedures, healthcare culture, and staff wellness (Elisseou et al., 2019). Access to TIC training

and education can increase frontline workers' ability to feel equipped to address trauma-related concerns (SAMHSA, 2022).

This Doctor of Nursing Practice (DNP) Quality Improvement (QI) scholarly project evaluated the impact of TIC training for healthcare staff in reproductive care by examining knowledge and attitude changes.

Problem Statement

The DNP scholarly project evaluated the integration of TIC education in a Los Angeles (LA) reproductive healthcare affiliate. Reproductive healthcare focuses on physical, mental, and social well-being in all matters related to the reproductive system and its processes (World Health Organization [WHO], 2023). The LA affiliate consists of 24 individual reproductive clinics located in various neighborhoods within LA, rendering reproductive care to a diverse patient population, primarily those who live below the poverty line. Each clinic sees a high volume of patients daily, with each clinician schedule having up to 50 patient appointments. During the hiring and onboarding process, each healthcare staff member is required to complete an online training module regarding California's mandatory legal reporting guidelines on domestic violence and child abuse; however, there is no training or education regarding TIC or trauma-informed treatment approaches. Integrating TIC into practice and policy can improve patient engagement, health outcomes, and staff wellness (Menschner & Maul, 2016). Recognizing the potential long-lasting negative impact of trauma on mental and physical health, healthcare staff are uniquely positioned to recognize signs and symptoms of trauma and promote paths of recovery to resist re-traumatization (Menschner & Maul, 2016). Thus, this DNP Scholarly Project aims to bridge the care gap and evaluate the integration of TIC into a reproductive healthcare affiliate.

Clinical Question

This DNP scholarly project will address the following clinical question: Does providing TIC education affect the knowledge and attitude of healthcare staff working in a reproductive community clinic?

Scientific Underpinning and DNP Essentials

TIC is a universal approach to addressing the widespread impact of experiencing psychological or physical trauma. By integrating TIC into practice, healthcare staff can promote healing, resilience, and recovery while reducing the re-traumatization of their patients (ACOG, 2021). DNP providers are uniquely positioned to bridge the gap between research and clinical practice (American Association of Colleges of Nursing [AACN], 2021).

The AACN (2021) set forth the *Essentials* as a foundation for nursing education. Recognizing the environmental influence on an individual's health, healing, and well-being, the nursing discipline must evolve and collaborate to achieve equitable healthcare that incorporates equity, diversity, and inclusion (AACN, 2021). Implementing TIC into organizational and clinical practice requires translating and disseminating research into practice (AACN, 2021; Domain 1). Recognizing that patient care does occur in a silo, synthesis of knowledge from other disciplines to inform education, practice, and research is essential in delivering comprehensive TIC (AACN, 2021). Incorporating TIC into practice also prioritizes strategies to prevent and reduce adverse patient outcomes while modeling best care practices (AACN, 2021; Doman 2). Fostering activities that support lifelong learning for healthcare staff promotes compassion, humanization, and wellness of individuals, families, communities, and healthcare staff (Domain 10, AACN, 2021).

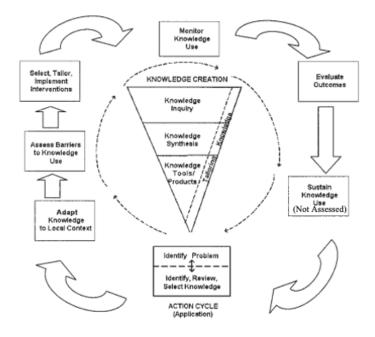
CHAPTER TWO: THEORETICAL FRAMEWORK

The Knowledge-to-Action (KTA) framework provides a structured process to guide the translation of research into practical application and facilitate the integration of knowledge into policy and practice (Field et al., 2014). Developed by Graham and colleagues (2006), the KTA framework consists of two main phases: the <u>knowledge creation</u> phase and the <u>action cycle</u> phase. The KTA framework recognizes that effective knowledge translation requires collaboration, shared decision-making with stakeholders, and consideration of external and internal factors that influence successful sustainable integration into practice.

The <u>knowledge creation</u> phase begins with a knowledge inquiry, conducting research, and synthesizing evidence to address a specific problem or gap in care. The knowledge synthesis systematically reviews and synthesizes key messages and recommendations.

The <u>action cycle</u> phase identifies the problem and action required to address the gap in knowledge while identifying key stakeholders. Adapting knowledge through tools/products tailored to fit the target audience's specific needs will facilitate barriers to knowledge. In addition, the feasibility and potential impact of implementation are assessed with the key stakeholders.

Figure 1: Theoretical Framework



The Knowledge to Action Framework. From Graham I, Logan J, Harrison M, Strauss S, Tetroe J, Caswell W, Robinson N: Lost in knowledge translation: time for a map? *The Journal of Continuing Education in the Health Professions* 2006, 26, p. 19.

CHAPTER THREE: REVIEW OF LITERATURE

The literature search focused on implementing TIC education for healthcare staff working in a community clinic setting. Using PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL) Complete, and APA PsychInfo, the following search terms were utilized: *nursing, healthcare staff, education, training, and trauma-informed care*. Medical Subject Headings (MeSH) terms, such as *clinician, provider, in-service, and care for survivors*, were also utilized. Boolean phrases were also utilized. The initial search yielded 1,415 journal articles; duplicates were removed, and the following filters were applied: *peer-reviewed journal articles published between 2013 and 2023, full-text availability, and English language*. After applying filters, 126 journal articles were assessed for eligibility. Reports focusing on hospital care/critical care, traumatic injury/wound care, foster care system, school education system/learning disabilities, and immigrant reunification were removed. A total of 11 journal articles were selected based on their relevance to the clinical question.

Literature Review

A total of 11 journal articles were selected based on their relevance to the clinical question. One article focused on patient history of trauma and self-efficacy in communication, five articles focused on staff education, two on organizational integration of TIC, two on secondary trauma, and one on developing an instrument to measure TIC. Similarities among all articles included education on TIC and TIP, and differences among articles included how the education was delivered and measured. See the Table of Evidence for a listing of each article included and a summary of each article below.

A key step in integrating TIC into practice is to involve patients in the treatment process (Menschner & Maul, 2016; Stevens et al., 2016). Steven and colleagues (2016) evaluated a group (N=41) of urban pregnant women in an outpatient obstetric clinic in Chicago, 93% of whom were recipients of Medicaid insurance, to understand the psychological distress and change to self-efficacy and communication of survivors with providers and detection rates of abuse by obstetricians. The study used the Childhood Trauma Questionnaire (CTQ) was used to assess for childhood abuse, the Trauma History Questionnaire (THQ) to evaluate the lifelong history of abuse and violence, the PTSD Symptoms Checklist (PLC-C) for PTSD symptoms, the Patient Health Questionnaire (PHQ-9) to assess for depression, and a pregnancy-related anxiety questionnaire to examine feelings of anxiety. Stevens and colleagues (2016) found that 83% (n=34) of patients reported at least one past episode of violence, while obstetricians only detected abuse in 22% (n=9) of the cases. In addition, 46% (n=19) of the participants received

invasive exams during the study. Depression and PTSD were found to be associated with lower self-efficacy in communication preference to providers (depression p<0.01, SD=6.05 and PTSD p<0.05, SD=16.35). The inability to communicate preferences to providers while undergoing invasive exams places patients who have experienced trauma at a high risk of re-traumatization. This valuable study also provides recommendations for implementing TIC practices, such as clear communication, anticipatory guidance, stopping an exam, and discussing coping strategies with patients.

Recognizing the lack of TIC training for healthcare staff, Elisseou et al. (2019) conducted a quantitative educational intervention study evaluating the integration of TIC into the medical school curriculum. Focusing on sensitive exams, such as gynecologic pelvic exams in lesbian, gay, bisexual, transgender, and queer (LGBTQ+) patients, Elisseou and colleagues (2019) provided a 3-hour lecture and skills training on TIC best practices for 148 first-year medical students. The education adhered to SAMHSA's (2014) fundamental principles - trauma awareness, safety, patient choice, collaboration, and empowerment. The education was provided by a physician faculty member along with a social-behavioral health faculty member. Evaluating the training with a pre-and post-5 point Likert scale, students reported that the TIC approach to physical exam is essential to patient care (M=4.3, SD=0.7) and would improve overall patient care (M=4.9, SD=0.4). Students reported a high satisfaction with their education (M=4.1, SD=0.8). The lack of validated pre and post-test measurements is a study limitation. While the study showed overall satisfaction with the learning activity, further research regarding attitudes and behaviors over time would provide insight into successful integration into care. Elisseou et al. (2022) study is one of the first to address the gap in the literature on integrating TIC into gynecological pelvic exams and utilizing gender-inclusive language.

Another key step in implementing TIC into practice is to train staff in trauma-specific treatment (Menschner & Maul, 2016; Kyle et al., 2021). Despite recommendations for screening and counseling, many providers report personal discomfort, lack of knowledge, and limited resources as barriers to providing TIC and intimate partner violence (IPV) screening (Sprague et al., 2012). Kyle and colleagues (2021) performed a quantitative pre and post-test study to evaluate knowledge after an educational intervention in 40 residents working in an ambulatory medicine rotation at the Veterans Affairs (VA). The educational intervention consisted of a 3hour didactic, communication, and simulated skills evaluation. The curriculum was developed by the University of Pittsburg and local expert recommendations. The Patient Response to Intimate Partner Violence Screen (PREMIS) survey assessed knowledge, attitudes, and comfort with IPV screening before and after the educational intervention. PREMIS is a validated and reliable tool that measures IPV screening in healthcare. The study found an increase in knowledge (precurriculum M=2.16-4.27, post-curriculum M=5.81-6.28, p<0.01), an increase in comfort in discussing IPV (pre-curriculum M=2.49-4.14, post-curriculum M=5.21-5.76, p<0.01), and an increase in documentation of IPV screening and counseling (pre-curriculum M=1.7-5.3, postcurriculum, 7.5%, 5 out of 67 charts had documentation of IPV, p=0.039). This study is essential to the research of TIC as it shows that an educational intervention can improve screening and counseling for IPV. While many residents reported improvement in competency, most continued to report challenges implementing into routine care due to time constraints due to competing medical needs. Further research on integrating TIC and IPV screening into clinical workflow that accounts for time barriers must be considered.

Implementing TIC into the clinical setting can improve early identification and treatment of trauma-related illnesses (Bills et al., 2023). Bills and colleagues (2023) conducted a

longitudinal study of 29 clinics (N=13 mental health treatment clinics, N=16 substance use clinics) in rural Pennsylvania over 15 months. The TIC educational intervention comprised approximately three thousand employees, addressing the need for TIC training in rural areas. Agency leadership formed an organizational-level QI team (QIT) to promote universal screening, create an organizational culture of safety and respect, and shift organizational practice to recognize secondary trauma experienced by healthcare staff. Before implementation, stakeholders identified critical barriers to providing TIC to patients: diminished resources, limited funding, inadequate supervision, a few master's level clinicians, and high staff turnover (Bills et al., 2023). It is important to note that most master's level clinicians worked in mental health clinics, whereas more peer support providers worked in substance use clinics. Staff were provided trauma-informed learning collaboration (TLC), consisting of evidence-based TIC training, cognitive behavioral processing therapy, and safety-seeking. Data was collected using monthly webinars and workbook submissions that reflected TIC screening rates, the number of staff trained in TIC, and staff confidence in delivering TIC. Data analysis was performed using analysis of variance (ANOVA) and Greenhouse-Geisser correction. Trauma screening rates increased from 41.1% to 93.3% (p<0.001, 95% CI); staff members trained in TIC increased from 24 to 140, and TIC delivery confidence increased from 15.8% to 80.5% (p<0.001, 95% CI). While the study did not examine the staff turnover rate during the study and its effects on the results, Bills et al. (2023) showed that implementing TIC in a multiagency organization was feasible and could improve TIC practices across healthcare disciplines.

Recognizing the lack of TIC education in clinical practice, Choi & Seng (2015) implemented a nurse-led TIC in-service training to assess for change in knowledge, skills, and attitudes. Consisting of mental health professionals, healthcare staff, and administrative

professionals (*N*=47) working in perinatal care agencies in Michigan (urban and rural community clinics), Choi & Seng (2015) conducted a single group pretest and posttest pilot study. The intervention consisted of 1 hour of continuing education with an interactive slide show presentation. Utilizing an 11-item pretest and posttest questionnaire with 10 Likert scale questions and one open-ended question, Choi & Seng (2015) found a 6% increase in knowledge (p<0.001), an 11% increase in skills (p<0.001), and a 5% increase in attitudes (p<0.001). While the participants found the education to be beneficial, participants' qualitative feedback focused on tailoring TIC education to specific patient populations and professional roles for future consideration.

Another key step in integrating TIC into practice is to train clinical and non-clinical staff members (Buysse et al., 2022; Menschner & Maul, 2016). Buysse et al. (2022) provided TIC educational training via Zoom to participants (N=100) working at 54 agencies (Federally Qualified Health Centers [FQHC], Community behavioral health organizations, and educational institutions) in California. The education consisted of 12 virtual bimonthly educational sessions, each session 75 minutes in length, over 6 months. The participants included primary care providers (PCP), behavioral health providers, nurses, child welfare workers, educators, community health workers, and a single attorney. A 5-point Likert scale evaluated a single-group pretest and posttest. Screening for adverse childhood events (ACE) increased from 26-45% (p=0.008), and interprofessional communication increased by 50%. Even though participants were found to have attended less than half of the educational sessions, Buysse and colleagues (2022) found improvement in screening and a change in practice. Future considerations should focus on organizational change and allowing protected time for participants to attend the curriculum.

An additional key step in TIC is organizational and clinical implementation (Miller et al., 2017; Menschner & Maul, 2016). Miller et al. (2017) conducted a randomized control trial of 11 family planning clinics in western Pennsylvania to evaluate TIC education on clinician competency, knowledge, and patient self-efficacy. The study comprised 18 providers (11 Nurse Practitioners [NP]), 23 Medical Assistants, 1 Health Educator, 8 Administrators, and 49 patients. After completing the TIC Addressing Reproductive Coercion in Health Setting (ARCHES) education, semi-structured interviews were conducted, and audio-recorded interviews were uploaded to a coding program. Miller and colleagues (2017) found that 100% of providers reported training as beneficial and necessary, 94% reported increased confidence, 83% reported providing resources to patients, and 44% reported constantly screening and discussing IPV with patients. Administration interviewers revealed that a half-day training was feasible, low-cost, and sustainable. Lastly, one-third of patients reported an appreciation of providers discussing IPV. This study is vital to the research as it shows increased clinician confidence with training. While all providers reported benefiting from the training, time limitations with patients continued to be a barrier to providing TIC IPV screening and counseling.

Recognizing the importance of organizational change, Burge et al. (2021) evaluated the effectiveness of implementing TIC at the organizational level across 7 different services from the same organization. Focusing on healthcare staff who deliver care to individuals facing homelessness, Burge and colleagues (2021) provided education regarding psychologically informed environments (PIE) and TIC to participants (*N*=88) working at community clinics, hostels, and transition services in the United Kingdom. Delivered over four days by two clinical psychologists, a social worker, and a cognitive behavioral therapist, Burge and colleagues (2021) utilized the TICOMETER to evaluate organizational change. The TICOMETER comprises five

domains: building trauma-informed knowledge and skills, establishing trusting relationships, respecting service users, fostering trauma-informed services, and promoting policies (Burge et al., 2021). Burge and colleagues (2021) found an increase in the knowledge and skills of participants by 86% (n=18; pre-training M 11.11 to post-training M 13.7) and a modest increase in TIC service delivery, recognizing that the TICOMETER may require more organizational cultural change to achieve significant results. This study is important as it shows that incorporating TIC into clinical practice must accompany a cultural shift supported by the organization.

Another key component in integrating TIC into practice is creating a safe environment and preventing secondary traumatic stress in staff members (Menschner & Maul, 2016; Walker & Allan, 2013). Using a mixed methods service evaluation, Walker and Allen (2013) examined quantitative and qualitative data identifying common themes among providers' feelings in caring for patients who have experienced childhood sexual abuse (CSA). Data collection comprised a literature review, a questionnaire, and a focus group. The questionnaire consisted of Likert-style questions and a few open-ended questions. The questionnaire was completed by nurses, general practitioners, nurse colposcopists, and clinical nurse specialists (N=62). Walker and Allen (2013) found that 50% of providers discussed CSA with patients, 50% felt confident examining a woman who had experienced CSA, and 66% felt confident performing cervical cancer screening. The focus group consisted of four nurses who expressed concerns about doing more harm than good and desired more TIC training. A limitation of this study is that it focuses on CSA care and may be challenging to generalize to a broader population. This study is valuable to the research question as it demonstrates the staff's desire to learn TIC practices to provide better care to patients.

Recognizing the presence of secondary trauma in healthcare staff, Kim et al. (2023) conducted a cluster randomized control trial evaluating the effectiveness of Internet-Based Training in Trauma Care for Nurses (IBTTCN) to evaluate nurse's self-efficacy and professional quality of life. Community mental health and welfare center participants (N=41) were divided into a control and intervention group. The intervention group (N=20) completed online learning modules and individual workbooks, while the control group (N=21) received the training 1 month after the intervention group. Measurements were taken at baseline, one month after intervention, and two months after the intervention. Kim and colleagues (2023) found a significant increase in self-efficacy in the intervention group (p<0.001) but no significant change in professional quality of life (p=0.67). While the intervention was beneficial in providing training to staff, further research regarding secondary trauma, compassion burnout, professional quality of life, and job satisfaction also needs to be considered.

Healthcare organizations and staff are uniquely positioned to improve patient care by implementing TIC (King et al., 2019). Focusing on knowledge, attitude, and practice, King and colleagues (2019) recognized the lack of validated tools that assess healthcare professionals and practice regarding TIC. While King and colleagues recognize the Attitudes Related to Trauma Informed Care Scale (ARTIC) as a validated psychometric survey with strong internal consistency, participants worked outside the healthcare setting. As a result, King and colleagues (2019) adopted an unvalidated survey called the Knowledge, Attitudes, and Practices of TIP, a 36-item survey tool by Abdoh et al. (2017). After performing a pilot study, adjusting the language to reflect the healthcare setting, and examining data distribution, King and colleagues (2019) decreased the number of questions to 21. The final 21-item questionnaire was administered to almost three thousand pediatric healthcare staff, and 592 surveys were returned.

Internal consistency (*Cronbach's alpha* \geq 0.74) for every 3 categories and the standardization interactor correlation coefficients were 0.55 for knowledge-attitude (p< 0.001), 0.28 for knowledge-practice (p<0.001), and 0.65 for attitude-practice (p<0.0001). Since this study, the KAP tool has been used to evaluate educational interventions for TIC for healthcare staff (King et al., 2019). Future post-intervention measurements should be considered to examine reliability further. While the generalizability of this study has not been evaluated, the baseline study will help to provide a framework for assessing knowledge, attitude, and practice in the healthcare setting.

Synthesis of Literature Review

Common themes that are integral to the integration of TIC into clinical practice were found in the literature review, including the long-lasting impact of experiencing trauma, the need for front-line staff education, organizational cultural change, and acknowledgment of secondary trauma on healthcare staff. Recognizing the importance of clear communication, Stevens and colleagues (2016) found a correlation between patients who have experienced violence and expressed difficulty communicating preferences to providers in the clinical setting, placing patients at a high risk of re-traumatizing. Recognizing the signs and symptoms of trauma and PTSD is necessary to provide anticipatory guidance and prevent re-traumatizing (Bills et al., 2023; Buysse et al., 2022; Choi & Seng, 2015; Elisseou et al., 2019; Kyle et al., 2021). Education on integrating TIC into practice has been found to increase healthcare staff knowledge, attitude, and competency in providing patient care (Bills et al., 2023; Buysse et al., 2022; Choi & Seng, 2015; Elisseou et al., 2019; Kim et al., 2023; Buyes et al., 2022; Choi & Seng, 2015; Elisseou et al., 2019; Kim et al., 2023; Buye et al., 2021; Buysse et al., 2022; Choi & Seng, 2015; Elisseou et al., 2019; Kim et al., 2023; Kyle et al., 2017; Miller et al., 2017; Walker & Allan, 2013). Integrating TIC in practice requires organizational and clinical transformation (Burge et al., 2021; Miller et al., 2017). Recognizing that healthcare staff may also experience secondary trauma in patient care must be valued and supported at an organizational and clinical level (Burger et al., 2021; Kim et al., 2023).

While integrating TIC into practice has potential benefits for staff and patients, more data regarding implementation still needs to be collected. Integrating TIC into practice is still considered a novel idea, and each study uniquely integrates TIC into practice (Choi & Seng, 2015). Variations in the patient population, clinical setting, and organizational structure can present challenges for standardizing practice and educational curricula (Choi & Seng, 2015). The use of valid and reliable tools to consistently measure TIC integration at clinical and organizational levels would advance the provision of TIC. Further research should be considered regarding integrating TIC into various clinical settings with a diverse patient population and the development or use of validated tools.

CHAPTER FOUR: METHODS

Ethical Consideration

The DNP scholarly project was a QI project aimed to assess the impact on knowledge and attitudes of healthcare staff working at a reproductive community care clinic in LA before and after a TIC educational training. This scholarly project met the definition of a QI project and was deemed exempt from requiring Institutional Review Board (IRB) review by the University of California, Los Angeles (UCLA). Before implementation, the educational material and preand post-surveys were evaluated and approved by the clinic's chief executive officer (CEO), chief operating officer (COO), vice president of patient services, and the legal, training, and diversity departments. Due to the sensitive nature of the content, resources for mental health support offered by the organization were provided to the participants at the end of the educational training.

Project Design

The DNP scholarly project was a convenience sample, single-group pre- and post-survey QI design. This project was designed to evaluate changes in knowledge and attitude before and after receiving educational training on TIC by following the KTA framework. Inclusion criteria for this QI project included current employment at a designated community clinic, clinic computer access, the ability to complete a 20-minute TIC educational training during lunch (see Appendix B), and an online pre- and post-survey (see Appendix C, Appendix D) on Survey Monkey. Data was kept in a secure location and only accessible to the project lead. All data was appropriately destroyed.

Sample and Setting

The QI project was implemented at a single outpatient community reproductive care clinic in LA. The convenience sample included frontline healthcare staff: clinic administration, medical assistants (MA), and midlevel clinicians (MLC). Participation in the DNP scholarly project was voluntary, confidential, and anonymous. Each participant created a unique alphanumeric code as an identifier to compare the pre and post-test surveys via Survey Monkey. Participants were asked to provide demographic background, such as role/title, years of working in the medical field, and previous TIC education training.

This will be the first TIC training offered and performed at this clinic location. An email containing directions for participation, links to the pre- and post-survey, and directions on how to access the educational training on the computers was sent to all the healthcare staff at the clinic. The training department downloaded the educational training to each computer desktop and made it accessible to everyone at this clinic site.

Intervention Development

Following SAMHSA's (2014) landmark publication of the *Concept of Trauma and Guidance for Trauma-Informed Approach,* integrating TIC into practice must begin with training and workforce development. Utilizing the six key principles of TIC set forth by SAMSHA (2014), the curriculum focused on integrating TIC into a reproductive healthcare setting. The development of the curriculum was centered around Seidman's (2023) overview of the key principles of TIC and integration into reproductive healthcare, along with Elisseou et al. (2019) language and gynecological examination techniques.

This curriculum is the first of its kind offered at this healthcare clinic. Thus, the curriculum focuses on basic introductory concepts of the six key principles of integrating TIC into practice (see Appendix E). The educational training had four learning objectives and a 20-minute pre-recorded didactic PowerPoint presentation.

Table 1: Trauma-Informed Care Training Objectives

By the	end of the presentation, participants will be able to:
1.	Define trauma and the impact of experiencing trauma in reproductive care.
2.	Define the 6 key principle of trauma-informed care.
3.	Describe the benefits of trauma-informed care.
4.	Describe universal trauma-informed care precautions and how to apply them in reproductive care.

Data Collection, Evaluation, and Analysis

The pre-and post-survey data was collected through Survey Monkey to evaluate changes in the knowledge and attitudes of healthcare staff before and after educational training on TIC. For this survey, *knowledge* was defined as how familiar, informed, and aware staff were with the application of TIC in the healthcare setting, and *attitude* was defined as how staff felt about TIC (King et al., 2019). Data from a single group of participants at two different time intervals were evaluated using descriptive statistics and the Wilcoxon Rank-Sum Test. A statistician was consulted to analyze the statistical findings of the TIC pre-and post-surveys. The assessed variables included participants' knowledge of and attitude before and after the educational training.

The TIC survey consisted of 15 questions with five point-Likert style answers ranging from - *strongly disagree, disagree, neutral, agree, and strongly agree* (King et al., 2019). Each of the Likert answers were assigned a numerical value – *strongly disagree (0), disagree (1), neutral (2), agree (3), and strongly agree (4)*. The 15 questions were derived from a more extensive validated survey comprising 21 items that assessed knowledge, attitude, and practice related to TIC (King et al., 2019). For this QI project, only knowledge and attitude were evaluated. The survey instrument is reliable and has strong internal consistency in measuring knowledge and attitude change related to TIC (King et al., 2019).

The Wilcoxon Ran-Sum Test was utilized to analyze the significance of educational training by evaluating the pre-and-post survey. For this project, the null hypothesis is that the mean difference from pre to post equals 0, and the alternative hypothesis is that it is greater than 0.

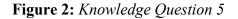
CHAPTER FIVE: RESULTS

The QI project initially consisted of 13 healthcare staff participants. After omitting one participant who did not complete the post-survey, a final sample of 12 participants was used in this analysis. Of the participants, 33% (n=4) reported 0-5 years of experience working in the healthcare field, 42% (n=5) with 5-10 years of experience, and 25% (n=3) with more than 10 years of experience. Only 25% (n=3) of the participants reported having previous TIC training, while 75% (n=9) reported no previous TIC training.

Job Role	N=12	% (N)
Nurse Practitioner	<i>n</i> =4	33%
Physician's Assistant	<i>n</i> =1	8%
Medical Assistant	<i>n</i> =5	42%
Clinic Supervisor	<i>n</i> =2	17%

This project evaluated changes in knowledge and attitude before and after receiving

educational training on TIC. The pre-survey scores were predominantly high in all components, with a modest mean improvement in the post-survey for knowledge (M=0.08-0.5) and attitude (M=0.3-1.5) (see Appendix F). In evaluating change in knowledge and attitude, questions five (*distrusting behavior can be indicative of past traumatic experiences of adverse childhood events* [ACE]) (M=0.5), question six (*retraumatization can occur unintentionally*) (M=0.5) and 12 (I *have a comprehensive understanding of* [TIP]) (M=1.5) showed the most considerable changes in the post-survey. In addition, question 15 (I would like to receive more training on TIP) revealed that 92% (n=11) of participants agree or strongly agree that they would like to receive more training on TIP.



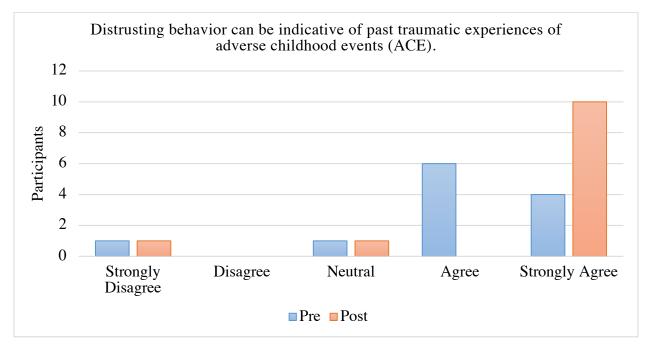


Figure 3: Knowledge Question 6

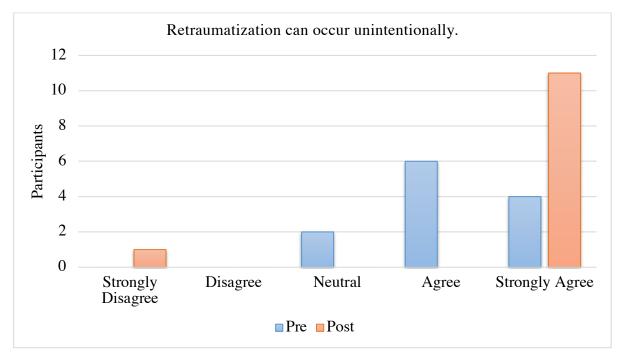


Figure 4: Attitude Question 12

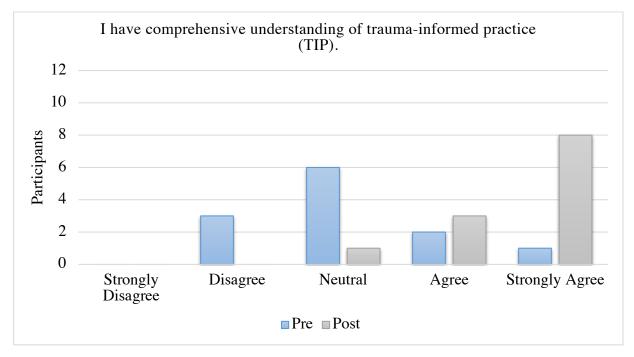
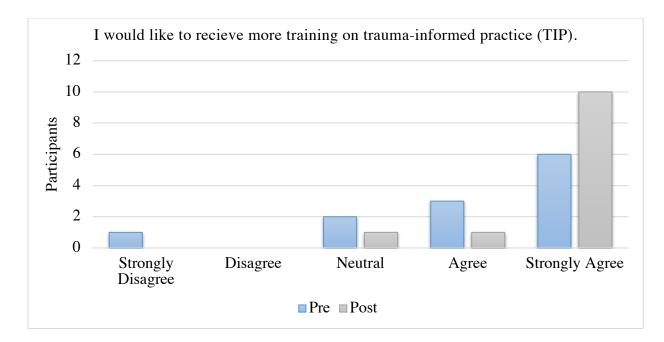


Figure 5: Attitude Question 15



The Wilcoxon Ran-Sum test found knowledge not to be statistically significant (p=0.062), while attitude was found to be statistically significant (p=0.009). While there was no significant change in knowledge, an overall evaluation of the change in attitude and knowledge combined was significant (p=0.004). Post-educational survey results indicated that 100% (N=12) of participants believe TIP is essential for working effectively with patients and families (question 11) and support the principles of TIP (question 13).

In summary, the results of this QI project demonstrated an improvement in the attitudes of healthcare staff working in reproductive healthcare in providing TIC and an overall improvement in attitude and knowledge combined.

CHAPTER SIX: DISCUSSION

This QI project examined the impact of integrating TIC training for healthcare staff in reproductive care, finding an improvement in attitude and overall knowledge and attitude combined after educational training. The educational training was an introduction to TIC and was developed according to SAMSHA's (2014) six key principles of TIC. The educational

training was performed at a clinic staffed with 14 employees; of those, 13 volunteered to participate in this QI project, with a final total of 12 participants completed this project.

In this QI project, no significant change in knowledge of TIC was found; however, an overall change in attitude was found to be significant. The knowledge pre-survey results were relatively high, with only a slight gain in the post-survey results, resulting in an insignificant change in knowledge. The subtle change between pre-and-post survey results could represent that the healthcare staff were already familiar with and aware of trauma and the application of some of these practices. As noted in other studies, staff working in specific healthcare settings, such as reproductive, perinatal, pediatrics, and mental health, may already have a baseline understanding of trauma, PTSD, and TIC communication strategies (Choi & Seng, 2015; Kim et al., 2023; King et al., 2019; Kyle et al., 2021).

While staff working in reproductive healthcare may already have a baseline understanding of TIC, the change in staff's attitude after the educational intervention is essential to note. Shifting attitudes towards TIC and TIP represents an increase in awareness of the impact of trauma and the importance of safety, trust, collaboration, and empowerment in providing holistic patient-centered care (SAMHSA, 2014). Consistent with TIC attitudes, participants were interested in more training on TIC and TIP. The desire for ongoing learning, reflection, and adaptation of TIC and TIP into the clinic setting reflects a broader understanding of the complexity of trauma and dedication to further supporting patients and the community in healing and recovery.

Limitations

This DNP project has three limitations. This QI project's first limitation is convenience sampling with a small sample size at a single clinical location. While the results of this QI

project demonstrated an improvement in the attitude of healthcare staff working in reproductive healthcare, the results cannot be generalized across TIC training programs. Due to the small sample size (N=12), this study does not have enough power to generalize across healthcare staff TIC training programs. However, similar to previous studies that evaluated interprofessional inservice training on TIC with a larger sample size and longer training sessions, scores on the presurvey of TIC knowledge were relatively high, and the gain from the training was small (Koi & Seng, 2015). As this study was conducted in a small community-based clinic, evaluation of larger healthcare facilities should be included in future studies. Overall, the findings helped establish a baseline and will be able to direct the future development of training at both the clinical and organizational levels. Similar to previous studies, participants in the clinic volunteered to participate in the training, and thus, the sample may have been biased toward healthcare staff interested in TIC and TIP (Bills et al., 2023; Koi & Seng, 2015). Therefore, further evaluation is needed to determine the project's effectiveness and generalizability to other clinical sites. Tailoring education to the needs of the healthcare staff and patient population is paramount for the successful integration of TIC. This was the first TIC training offered and performed at this clinic location, and as such, this QI project can serve as a template for integrating TIC into practice for future studies. Future evaluation of qualitative data and integration at an organizational level would also be beneficial (Koi & Seng, 2015).

The second limitation of this QI project is the lack of evaluation of practice application. Only 15 questions from the 21-item survey were used to evaluate the knowledge and attitude of healthcare staff (King et al., 2019). Assessing practice change is beneficial as it allows us to evaluate new practices and identifying possible barriers to care. While practice application was not assessed, it is an essential aspect of evaluating the integration into the clinical and

organizational levels that should be considered for future studies (King et al., 2019; Koi & Seng, 2015).

Lastly, further evaluation to determine sustainability must also be considered. Evaluating knowledge, attitude, and practice sustainability after an intervention is critical to assessing progress. It is important to note that during this QI project, a significant staff overturn in the Information Technology (IT) department occurred, resulting in delayed data retrieval and an inability to complete further follow-up evaluations.

CONCLUSION

Trauma is increasingly recognized as a serious public health concern (Racine et al., 2020). TIC is a patient-centered approach that improves communication between the healthcare staff and patients by creating an environment that promotes shared decision-making (Stevens et al., 2016). This DNP Scholarly Project evaluated the impact of implementing TIC training on healthcare staff working in a busy reproductive community clinic. This DNP Scholarly project showed that a 20-minute online TIC training improved the healthcare staff's attitude in providing TIC. While a small sample size of front-line healthcare staff and lack of organizational integration limits this project, this DNP Scholarly Project aims to serve as a template for integrating TIC into practice and creating a more trauma-informed workplace. Future TIC integration must occur at organizational and clinical levels to positively impact patients, families, communities, healthcare staff, and organizations (SAMHSA, 2014).

APPENDICES

Appendix A: Substance Abuse and Mental Health Services Administration (SAMHSA)

SAMHSA Four Assumptions: Rs	Explanation	Example
Realization	Realization of how trauma affects individuals, families, communities, and	The reproductive healthcare setting may be triggering.
	organizations.	Utilize universal precautions for everyone.
		Types of traumas: individual interpersonal, collective.
Recognition	Recognize signs of trauma.	Physical triggers: touch, removal of clothing, invasive procedures, closed spaces.
		Emotional Triggers: invasive questions, power dynamics, stigmatization, lack of choice.
Responding	The organization integrates TIC for staff and patients seeking services. Supported through budget planning,	Welcome people back to the clinic. Positive language.
	leadership, policies, and mission values.	Provide staff with support to provide care for patients and themselves.
Resisting Re-traumatization	Working to decrease toxic work environments that may create unnecessary stress. Creating a trauma-informed workplace.	Open communication and collaboration. Providing patients with choice and alternatives care and exams.
SAMHSA 6 Key Principles	Explanation	Example
Safety	People (staff and patients) feel physical and psychologically safe	Knock on the door before entering the room and wait for a response. Listen, do not interrupt, be present.
Trustworthiness and Transparency	Organizational decisions are formulated with transparency with the goal of building and maintaining trust.	Be consistent and maintain boundaries. Do not make promises that cannot be kept.

Four Key Assumptions and Six Key Principles

Peer Support	Enhancing collaboration through peer support in	Acknowledge and validate concerns. Connect with
	establishing safety and hope.	local resources and
	establishing safety and hope.	facilitate warm hand-offs when possible.
Collaboration and Mutuality	Partnering between staff, patients, and the organization to promote a leveling of power.	Ask questions rather than statements/commands, such as – may I begin?
Empowerment, Voice, and	Building resilience in the	Shared decision making,
Choice	community and organization. Fostering an environment of	patients have a choice and control over care.
	empowerment for staff and clients to voice and set goals. Staff help to facilitate recovery.	
Cultural, Historical, and Gender Issues	Acknowledging and moving past biases regarding historical, cultural, and gender issues.	Using words that do not stigmatize, such as, barriers to care instead of
	Incorporating policies and protocols to address racial, ethnic, and cultural needs of	noncompliant. Promoting equality, diversity, and inclusion. Acknowledging
SAMUSA 2014)	the organization.	implicit bias.

(SAMHSA, 2014)

Appendix B: Trauma-Informed Care (TIC) Educational Training









nexpected.	na - can be identified and anticipated and subtle and
Fight	Flight
Rage	Panic
Arger	Wony
Bullying	Rumination
Intimidation	Perfectionism
Freeze	Fawn
Dissociation	Martifu configion
Anger	No boundaries
Numb	Codependency
Dissociation Anger	Identity confusion No boundaries

Abuse	Neglect	Household Dysfunction	Behavior	Physical & Men Health
Physical	Physical	Mental Illness	Lack of Physical	Severe Obesit
Emotional	Emotional	Violence Against Mother	Activity Smoking	Diabetes
Sexual		Divorce	Alcoholism	Depression
		Incarcerated Relative	Drug Use	Suicide
		Substance Abuse		Stroke
				Heart Disease
				Cancer

	Prevalence of	Trauma		
	s in 7 children experience child abuse and neglect last year	1 in 4 girls and 1 in 13 boys in the United States experience child sexual abuse	3 to 10 million children and adolescents witness violence violence between their parents or caregivers each year	t in 6 adults reported experiencing four or more types of Adverse Childhood Experiences
))	64% of U.S. add	uts reported they had experie Experiences i	nced at least one type of Adv before age 18	erse Childhood
	8			











×	×
Bed	Table
Sheet	Drape
Normal	Healthy
Stirrups	Foot rests
"I want to"	" I am going to"
"Look at"	"Inspect"
Feel, Touch	Examine, Evaluate
Relax	Deep relaxing breathing

Power of Body Language

















References Certer for Disease Control and Prevention (2002) Adverse childhood experiences local. *Minute Control and Prevention (2002)* Adverse childhood experiences local. *Minute Control and Prevention (2002)* Expecting the Strategy of the







Appendix C: Demographic Questions, Knowledge and Attitude Pre-and-Post Likert Survey

Demographic Questions	Answers
1. Role/Job Title	Fill in the blank
2. Years Working in healthcare	0-5, 5-10, 10+
3. Previous education on trauma-informed care?	Yes, No

Survey Question	Strong Disagree	Disagree	Neutral	Agree	Strongly Agree
Knowledge					
1. Exposure to trauma is common.					
2. Trauma affects physical, emotional, and mental well-being.					
3. Substance use issues can be indicative of past traumatic experiences or adverse childhood events (ACE).					
4. There is a connection between mental health issues and past traumatic experiences or adverse childhood events (ACE).					
5. Distrusting behavior can be indicative of past traumatic experiences of adverse childhood events (ACE).					
6. Retraumatization can occur unintentionally.					
Attitude					
7. Recovery from trauma is possible.					
8. Paths to healing/recovery from trauma are different for everyone.					
9. People are experts in their own healing/recovery from trauma.					
10. Informed choice is essential in healing/recovery from trauma.					
11. Trauma-informed practice (TIP) is essential for working effectively with our patients and their families.					
12. I have comprehensive understanding of trauma-informed practice (TIP).					
13. I believe in and support the principles of trauma-informed practice (TIP).					

14. I share my expertise and collaborate effectively with colleagues regarding the use of trauma-informed practice (TIP).			
15. I would like to receive more training on trauma-informed practice (TIP).			

(King et al., 2019)

Appendix D: Survey Permission

Good evening Tracy,

Thank you for reaching out! I am happy to share our 21-Item Knowledge, Attitude and Practice related to Trauma Informed Care tool.

Thank you for raising the questions regarding add family to the questions. The is a very good suggestions in a patient/family centered environment. When we originally did this work we work looking at the clinician relationship with the patient, but I completely agree that this addition would be appropriate. You have permission to use and to make these edits and I look forward to you additional psychometric analysis to support reliability and validity of the tool.

We ask that you acknowledge our work by providing the citation to your references and manuscript should you decide to publish in the future.

Manuscript citation:

King, S., Chen, KLD., Chokshi, B.(2019). Becoming Trauma Informed: Validating a Tool to Assess Health Professional's Knowledge, Attitude, and Practice. Pediatric Quality & Safety. 5:e215. doi: 10.1097/pq9.0000000000215

With regard to scoring, we used a 5-point Likert scale for each question, and each point had the same weight. You could present the data by subscales of knowledge, attitude and practice and overall findings.

If you do decide to use our tool we would be very interested in hearing about the results of your research `

Behavioral Objectives for Learner	Specific Content	Teaching Strategies Method of Instruction	Resources/ Materials needed	Method of Evaluation
Objective 1: By the end of the presentation, participants will be able to define trauma and the impact of experiencing trauma in reproductive care. Domain: Cognitive Domain Level: 1: Remembering 2: Understanding	 Define Trauma Slide 5: definition of trauma Slide 6: definition of trigger and discission of trauma response (fight, flight, freeze, fawn) Impact of experiencing trauma Slide 7-10: discussion of adverse childhood experiences, prevalence of trauma, types of traumas, and healthcare setting Centers for Disease Control and Prevention. (2023). Adverse childhood experiences (aces). https://www.cdc.gov/violenceprevention/ace s/index.html 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. American Journal of Preventive Medicine, 14(4), 245–258. https://doi.org/10.1016/s0749-3797(98)00017-8 Stevens, N. R., Tirone, V., Lillis, T. A., Holmgreen, L., Chen-McCracken, A., & Hobfoll, S. E. (2016). Posttraumatic stress 	 Online Pre-recorded PowerPoint presentation Objective 1: 5 minutes Presentation Total 20 minutes 	 Online access: Survey Monkey pre and post survey Computer access: 20 minute- PowerPoint presentatio n Optional: pen and paper for note taking 	 Pretest and post- survey evaluation 21-Item- Knowledge, Attitude, and Practice Related to Trauma Informed Care (using questions 1-15) King, S., Chen, KLD., Chokshi, B.(2019). Becoming Trauma Informed: Validating a Tool to Assess Health Professional's Knowledge, Attitude, and Practice. Pediatric Quality & Safety. 5:e215. doi: 10.1097/pq9.0000 00000000215

Appendix E: Trauma-Informed Care Training Objectives

and depression may undermine abuse survivors' self-efficacy in the obstetric care setting. Journal of Psychosomatic Obstetrics & Gynecology, 38(2), 103–110. https://doi.org/10.1080/0167482x.2016.1266 480 • Seidman, D. (2023). Intgrating trauma- informed practices into reproductive health services (PDF]. https://familypact.org/wp- content/uploads/2023/10/FPACT-Trauma- Informed- Care_Rebrand_FINAL_8.30.23_updated_w_ housekceping_remEQ.pdfSubstance • Substance Abuse and Mental Health Services Administration. (2014). Samhas's concept of trauma and guidance for a trauma- informed approach (PDF). https://ncsaev.acf.hhs.gov/userfiles/files/SA MHSA_Trauma.pdf • Substance Abuse and Mental Health Services IPDF]. https://store.samhsa.gov/sites/default/files/sm a14_4816.pdf • The American College of Obstetricians and Gynecologists & Committee on Health Care for Underserved Women. (2021). Caring for patients who have experienced trauma. https://www.acog.org/clinical/clinical- guidance/committee- opinion/articles/2021/04/caring_for-patients-		
guidance/committee-	 survivors' self-efficacy in the obstetric care setting. <i>Journal of Psychosomatic Obstetrics & Gynecology</i>, <i>38</i>(2), 103–110. https://doi.org/10.1080/0167482x.2016.1266 480 Seidman, D. (2023). Intgrating trauma-informed practices into reproductive health services [PDF]. https://familypact.org/wp-content/uploads/2023/10/FPACT-Trauma-Informed-Care_Rebrand_FINAL_8.30.23_updated_w_housekeeping_remEQ.pdfSubstance Substance Abuse and Mental Health Services Administration. (2014). Samhsa's concept of trauma and guidance for a trauma-informed approach [PDF]. https://ncsacw.acf.hhs.gov/userfiles/files/SA MHSA_Trauma.pdf Substance Abuse and Mental Health Services [PDF]. https://store.samhsa.gov/sites/default/files/sm a14-4816.pdf The American College of Obstetricians and Gynecologists & Committee on Health Care for Underserved Women. (2021). Caring for patients who have experienced trauma. 	
https://www.acog.org/clinical/clinical- guidance/committee-	Gynecologists & Committee on Health Care for Underserved Women. (2021). Caring for	
who-have-experienced-trauma	https://www.acog.org/clinical/clinical- guidance/committee- opinion/articles/2021/04/caring-for-patients-	

Objective 2: By the end of the presentation, participants will be able to define the 6 key principles of Trauma- Informed Care. Domain: Cognitive Domain & Affective Thoughts and Behaviors Level: 1: Remembering 2: Understanding	 6 Key Principles of TIC Slide 12-21: Review of each 6 key principles of TIC Safety Trustworthiness & transparency Peer support Collaboration & mutuality Empowerment & choice Cultural, historical, & gender issues Menschner, C., Maul, A., & Center for Health Care Strategies. (2016). <i>Key ingredients for successful trauma-informed care implementation</i> [PDF]. https://www.samhsa.gov/sites/default/files/pr ograms_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf Substance Abuse and Mental Health Services Administration. (2014). Samhsa's concept of trauma and guidance for a trauma-informed approach [PDF]. https://ncsacw.acf.hhs.gov/userfiles/files/SA MHSA_Trauma.pdf 	 Online Pre-recorded PowerPoint presentation Objective 2: 13 minutes Presentation Total 20 minutes 	As above	As above
Objective 3 : By the end of the presentation, participants will be able to describe the benefits of Trauma-	 Described Benefits Slide 12-22: review of the 6 key principles with application and benefit to the clinical setting and practice. Slide 24: overview of key take aways and benefits to practice Create a safe environment for patients and staff Connect, build trust, and respect 	 Online Pre-recorded PowerPoint presentation Objective 3: 13 minutes (as covered in objective 2) 	As above	As above

Informed Care practices. Domain: Cognitive Domain & Affective Thoughts and Behaviors Level: 1: Remembering 2: Understanding 3: Applying	 3. Self care and team support Elisseou, S., Puranam, S., & Nandi, M. (2019). A novel, trauma-informed physical examination curriculum for first-year medical students. MedEdPORTAL. https://doi.org/10.15766/mep_2374- 8265.10799 Seidman, D. (2023). Intgrating trauma- informed practices into reproductive health services [PDF]. https://familypact.org/wp- content/uploads/2023/10/FPACT-Trauma- Informed- Care_Rebrand_FINAL_8.30.23_updated_w_ housekeeping_remEQ.pdf Substance Abuse and Mental Health Services Administration. (2014). Samhsa's concept of trauma and guidance for a trauma- informed approach [PDF]. https://ncsacw.acf.hhs.gov/userfiles/files/SA MHSA_Trauma.pdf 	• Presentation Total 20 minutes		
Objective 4: By the end of the presentation, participants will be able to describe universal Trauma- Informed Care precautions and	 Describe & Apply Universal Precautions Slide 11: discussion on what is TIC and the four R's according to SAMSHA Slide 19: example scenario and application of TIC in a clinical setting Seidman, D. (2023). Intgrating trauma-informed practices into reproductive health services [PDF]. https://familypact.org/wp-content/uploads/2023/10/FPACT-Trauma-Informed- 	 Online Pre-recorded PowerPoint presentation Objective 4: 2 minutes Presentation Total 20 minutes 	As above	As above

how to apply	Care_Rebrand_FINAL_8.30.23_updated_w_
them in the	housekeeping_remEQ.pdf
reproductive	Substance Abuse and Mental Health Service
healthcare	Administration. (2018). Tip 57 trauma-
setting.	informed care in behavioral health services
	[PDF].
Domain:	https://store.samhsa.gov/sites/default/files/sm
	a14-4816.pdf
Cognitive	Substance Abuse and Mental Health Services
Domain	Administration. (2014). Samhsa's concept
	of trauma and guidance for a trauma-
Level:	informed approach
	[PDF].https://ncsacw.acf.hhs.gov/userfiles/fil
1: Remembering	es/SAMHSA_Trauma.pdf
2: Understanding	
3: Applying	
4: Analyzing	
5	

(Jeffery et al., 2015)

Appendix F: Pre-and Post-Survey Mean Scores

Survey Question	Pre- Survey Mean	Post- Survey Mean	Mean Difference
Knowledge			
1. Exposure to trauma is common.	1.25	1.583	0.333
2. Trauma affects physical, emotional, and mental well-being.	1.75	1.666	0.083
3. Substance use issues can be indicative of past traumatic experiences or adverse childhood events (ACE).	1.333	1.416	0.083
4. There is a connection between mental health issues and past traumatic experiences or adverse childhood events (ACE).	1.583	1.666	0.083
5. Distrusting behavior can be indicative of past traumatic experiences of adverse childhood events (ACE).	1	1.5	0.5
6. Retraumatization can occur unintentionally.	1.166	1.666	0.5
Attitude			
7. Recovery from trauma is possible.	0.5	1.25	0.75
8. Paths to healing/recovery from trauma are different for everyone.	1.333	1.666	0.333
9. People are experts in their own healing/recovery from trauma.	0.25	0.666	0.416
10. Informed choice is essential in healing/recovery from trauma.	0.083	1.5	0.666
11. Trauma-informed practice (TIP) is essential for working effectively with our patients and their families.	0.083	1.833	0.999
12. I have comprehensive understanding of trauma-informed practice (TIP).	0.083	1.583	1.5
13. I believe in and support the principles of trauma-informed practice (TIP).	0.75	1.916	1.166
14. I share my expertise and collaborate effectively with colleagues regarding the use of trauma-informed practice (TIP).	0.166	1.333	1.166
15. I would like to receive more training on trauma-informed practice (TIP).	1.083	1.75	0.666

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Bills, L. J., Hutchison, S. L., Snider, M. H.Skrzypek, B. E., Minnich, C. L., Korney, J. M., Taylor, R. M., & Herschell, A. D. (2023). Implementing a trauma-informed system of care: An analysis of learning collaborative outcomes. <i>Journal of</i> <i>Traumatic Stress</i> , <i>36</i> (2), 433–443. https://doi.org/10.10 02/jts.22931	The purpose of this study is to examine if the implementation of TIC for Medicaid- enrolled adults and children in 23 rural Pennsylvania counties to changed trauma symptom screening, training, provider confidence.	 <u>Sample</u> 23 counties of North Central region of Pennsylvania Treatment agencies, n=29, n=13 mental health agencies, n=16 substance use disorder agencies <u>Sample size</u> N=2,935 staff members trained in trauma-informed care <u>Setting</u> North Central region of Pennsylvania 	 <u>Method Design</u> 15-month trauma learning that focused on organizational development of an agency-wide strategy for development Develop universal screening procedures. <u>Intervention</u> Participants – 5- hour orientation Seeking safety counseling model and education for providers <u>Measurement</u> Self-reported workbook submission Number of patients seen, screened for trauma, and clinical staff confidence 	 <u>Results</u> Trauma screening improved from 41.1% to 93.3% p<0.001 Number of staff trained in trauma-informed care increased from 24.42 to 140, p<0.001 Confidence in delivering trauma-informed care increase from 15.8% to 80.5% 	 <u>Discussion</u> Goal to change organizational and clinical approach to trauma. <u>Interpretation</u> Staff confidence increased with education regarding trauma informed care. Noticed statistical significance around 11 months. <u>Limitations of Findings</u> High turnover rate with staff. Difficulty sustaining long training program. Nonrandom selection may result in bias in results. <u>Future Considerations</u> Future research on association between population-based approaches and systemic outcomes

TABLE OF EVIDENCE

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Burge, R., Tickle, A., & Moghaddam, N. (2021). Evaluating trauma informed care training for services supporting individuals experiencing homelessness and multiple disadvantage. <i>Housi</i> <i>ng</i> , <i>Care and</i> <i>Support</i> , 24(1), 14– 25. https://doi.org/10 .1108/hcs-01-2021- 0002	The purpose of this study is to implement TIC training to healthcare staff providing care to individuals facings homelessness.	 Sample 7 services from the same organization: community-based 'Fulfilling Lives' project, Opportunity Nottingham, 3 15-bed hostels, 3 transition services. Sample size N=88 Setting United Kingdom 	 <u>Method Design</u> Single group pretest and posttest design <u>Intervention</u> Training focused on TIC and PIE Delivered over 4 days by two clinical psychologists, a social worker, and a cognitive-behavioral therapist. <u>Measurement</u> TICOMETER Pretest at baseline and posttest 6 months after and again 1 year after baseline 	 <u>Results</u> 80 respondents completed baseline. 18 completed post training 26 respondents for follow up. Only 9 participants completed all three surveys. ANOVA & Paired t tests Increase in knowledge and skills by 86% Pre-training scores negatively correlated with change in score. 	 <u>Discussion</u> Modest increase in TIC service delivery TICOMETER may require more cultural change to achieve significant results. <u>Interpretation</u> TICOMETER does not differentiate between job roles and titles. TICOMETER may require more cultural change to achieve significant results. <u>Limitations of Findings</u> Low response rate No control group. <u>Future Considerations</u> TIC training needs to be completed by a cultural shift supported by organizations

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Buysse, C. A., Bentley, B., Baer, L. G., & Feldman, H. M. (2022). Community echo (extension for community healthcare outcomes) project promotes cross- sector collaboration and evidence-based trauma-informed care. <i>Maternal and</i> <i>Child Health</i> <i>Journal</i> , 26(3), 461– 468. https://doi.org/1 0.1007/s10995-021- 03328-8	The purpose of this study is to provide educational training on TIC for healthcare staff working in maternal and child health workforce.	 <u>Sample</u> 100 participants representing 54 agencies and 3 counties. <u>Sample size</u> N= 100 <u>Setting</u> California FQHC Community behavioral health organizations Educational institutions agencies serving low-income children and families 	 <u>Method Design</u> Single group pretest and posttest evaluation <u>Intervention</u> 12 virtual bimonthly educational sessions over 6 months using Project ECHO model via Zoom. 75 minutes – 15 minute didactic and 55-minute case- based discussion. Lecture provided by behavioral pediatric clinician and adult education specialists. CME credit provided to participants. <u>Measurement</u> Qualtrics pretest and posttest survey 5-point Likert scale 	 <u>Participants</u> 100 participants Attended an average of 5 of the 12 educational sessions. Attendees: PCP, behavioral health providers, nurses, child welfare workers, educators, community health workers, and an attorney. Results Screening for ACE increased from 26% to 45% post-intervention. 	 <u>Discussion</u> Feasibility and effectiveness in delivery of a curriculum of training Increase confidence in delivering TIC <u>Interpretation</u> Attendees were able to increase screening for ACE and begin to address re- traumatization and toxic stress. <u>Limitations of Findings</u> Participants attended fewer than half of the educational sessions. Practice change was self-reported and noted based on documentation or billing. <u>Future Considerations</u> Future considerations should promote protected time for participants to attend

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Choi, K. R., & Seng, J. S. (2015). Pilot for nurse-led, interprofessional in- service training on trauma-informed perinatal care. <i>The</i> <i>Journal of</i> <i>Continuing</i> <i>Education in</i> <i>Nursing</i> , 46(11), 515– 521. <u>https://doi.org/1</u> 0.3928/00220124- 20151020-04	The purpose of this study is to evaluate knowledge, skills, and attitudes of perinatal healthcare staff after receiving a TIC in-service training.	 <u>Sample</u> Mental health professionals, healthcare staff, and administrative staff roles <u>Sample size</u> N=47 <u>Setting</u> 2 perinatal care agencies in Michigan (one urban and one rural community clinics) 	 <u>Method Design</u> A single group, pretest-posttest design <u>Intervention</u> 1 hour continuing education programming. Interactive slide show presentation Direct instruction and application- based education <u>Measurement</u> 11-item questionnaires were developed. Selected standardized questionnaires. 10 items used 5- point Likert agree and disagree scales. Scale 10-50, higher scale indicating better knowledge, skills, attitudes for TIC. One open ended question. 	 <u>Participants</u> 31 social workers 5 nurses or nurse midwives 10 administrati ve personnel 5 doulas 2 staff identified as "other" <u>Results</u> Pretest, Cronbach's alpha = 0.78 Posttest, Cronbach's alpha = 0.85 Improvemen t on the post-test increased 0.53 points to 1.15 points. 	 <u>Discussion</u> Pretest scores started high, gain from the program posttest was small. Many found the program to be helpful and relevant to their practice setting. <u>Interpretation</u> While small gain in knowledge, attitudes, and skills attendees found the education to be helpful. <u>Limitations of Findings</u> Small sample size Participants self- selected, more clinicians and providers enrolled. <u>Future Considerations</u> Future continuing education for TIC needs to be considered. Learning needs assessment needs to be conducted

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Elisseou, S., Puranam, S., & Nandi, M. (2019). A novel, trauma- informed physical examination curriculum for first- year medical students. <i>MedEdPORTAL</i> . https://doi.org/10.15 766/mep_2374- 8265.10799	The purpose of this study is to address the gap in knowledge regarding TIC.	 <u>Sample</u> 148 first year medical students and 40 faculty members <u>Sample size</u> 148 students <u>Setting</u> Warren Alpert Medical School of Brown University 	 <u>Method Design</u> Large-scale group lecture <u>Intervention</u> Integrated TIC regarding physical exams into first-year medical students' skills curriculum 3-hour lecture & small group activities regarding trauma-informed framework: trauma awareness, safety, choice, collaboration, and empowerment <u>Measurement</u> 5-point scale to measure student satisfaction and effective teaching intervention 	<u>Results</u> Satisfaction with learning intervention = 4.08 (scale out 5), SD = 0.81 Session was highly effective in teaching = 4.29 (scale out of 5), SD = 0.70 	 <u>Discussion</u> First time TIC has been integrated into medical school. <u>Interpretation</u> Innovative and feasible integration of trauma-informed teaching <u>Limitations of Findings</u> Lack of time Lack of measurement on attitudes and behaviors over time <u>Future Considerations</u> Successful integration into other aspects of care Further, examine downstream impact on patients and communities.

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Kim, S., Kim, GU., & Park, J. (2023). Evaluation of internet-based training in trauma care for nurses in mental health welfare centers: A cluster randomized controlled trial. Journal of Primary Care & Community Health, 14. https://doi.org/10.11 77/21501319231181 982	The purpose of this stud is to evaluate the efficacy of IBTTCN to improve nurses' trauma intervention self- efficacy, attitude, and professional quality of life about PTSD.	 <u>Sample</u> 108 community mental health and welfare centers 8 metropolitan cities in Korea <u>Sample size</u> N= 41 Control = 21 Intervention =20 <u>Setting</u> Korea May to July 2021 Online education 	 <u>Method Design</u> Cluster randomized control trial <u>Intervention</u> Online self-learning 8 sessions, 20 minutes each Workbook with nursing preventative interventions for patients who have experienced trauma. After completion of online learning, 2- hour real-time online workshop conducted. <u>Measurement</u> Self-efficacy, Professional Quality of Life, and Attitude and Knowledge Scales Self-efficacy measurement Professional Quality of Life Attitudes and Knowledge about PTSD 	 <u>Participants</u> 31 nurses license in mental health <u>Results</u> Self-efficacy improved over time (F=10.095, p<0.001, T14.97, T2 6.60, T3 6.77) Professional quality of life not significancy different (F=2.795, p =0.67) Attitudes and knowledge increased in the intervention group (p=0.02) 	 <u>Discussion</u> Significant increase in self-efficacy in control group No difference in professional quality of life <u>Interpretation</u> Effective education on TIC with patients with PTSD Online nursing modules effective training modality <u>Limitations of Findings</u> Participants currently work in mental health, generalized understanding of PTSD and communication strategies already assumed. <u>Future Considerations</u> Further evaluation of staff quality of life needs to be addressed.

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
King, S., Chen, K L., & Chokshi, B. (2019). Becoming trauma informed: Validating a tool to assess health professional's knowledge, attitude, and practice. Pediatric Quality & Safety, 4(5), e215. https://doi.org/10.10 97/pq9.000000000 000215	The purpose of this study is to validate a 21-item survey tool to assess knowledge, attitude, and practice of TIC amongst pediatric healthcare staff	 <u>Sample size</u> N=592 surveys <u>Setting</u> Pediatric healthcare institute 	 <u>Methods Design</u> Single group survey <u>Intervention</u> Adaptation of existing survey-36- item survey by Abdoh et al. (2017) to 21 items Distributed to 2,659 staff members, 592 responses were collected. <u>Measurement</u> Cronbach's alpha Standardized interfactor correlation coefficients 	 <u>Participants</u> 37% male residents 60% <u>Results</u> Cronbach's alpha > 0.74 for every 3 categories and the Standardizat ion interactor correlation coefficients 0.55 for knowledge-attitude (p< 0.001) 0.28 for knowledge-practice (p<0.001) 0.65 for attitude-practice (p<0.001 	 <u>Discussion</u> The 21-item survey can reliability assess knowledge, attitude, and practice. The survey can be used to develop educational training. <u>Interpretation</u> Validated tool for measuring knowledge, attitude, and practice regarding TIC. <u>Limitations of findings</u> Single baseline survey Generalizability to practices outside of the pediatric healthcare setting Further testing and re- testing should be considered.

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Kyle, J., Buranosky, R., Mutter, M., Rothenberger, S., Hamm, M., & McNeil, M. (2021). A multifaceted intimate partner violence communication skills curriculum increases screening among internal medicine residents. <i>Journal of Women's</i> <i>Health</i> , 30(12), 1778-1787. <u>https://doi.org/10.10</u> 89/jwh.2020.8685	The purpose of this study is to evaluate the effectiveness in screening, documentation, knowledge, comfort, and attitude of internal medical residents after completing communication skills training and didactics for IPV curriculum.	 Sample First year residents Sample size N=40 residents Setting Ambulatory medicine rotation at Veteran Affairs (VA) January – October 2019 	 <u>Methods Design</u> Qualitative and quantitative Patient participants eligible from USPSTF guidelines <u>Intervention</u> 1-hour didactic lesson: risk factor, definition, screening, documentation 1-hour communication skills: screening, responses to screening 1-hour patient simulated experience <u>Measurement</u> McNemar test Pre and post curriculum chart review and documentation audit Survey: Physician Readiness to Manage intimate Partner Violence Survey (PREMIS) 	 <u>Participants</u> 37% male residents 60% female 73% of residents completed medical school within the last year. <u>Results</u> 73% of residents completed both the pre and post survey. Increase screening (p<0.05) 80% reported increase in knowledge (p<0.01) Improvemen t in attitude (p<0.05) 	 <u>Discussion</u> IPV curriculum improvement screening, documentation, attitudes, and knowledge. Residents' reports continued time restraint as barrier. <u>Interpretation</u> Improvement of overall competency and knowledge of screening, documentation, and providing resources. <u>Limitations of findings</u> No patient evaluation of satisfaction performed. Reviewed prior charts, if not documented assumed screening not performed.

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Miller, E., McCauley, H., Decker, M., Levenson, R., Zelazny, S., Jones, A., Anderson, H. & Silverman, J. G. (2017). Implementation of a family planning clinic–based partner violence and reproductive coercion intervention: Provider and patient perspectives. <i>Perspectives on</i> <i>Sexual and</i> <i>Reproductive</i> <i>Health</i> , 49(2), 85-93. <u>https://doi.org/10.13</u> <u>63/psrh.12021</u>	The purpose of this study is to evaluate if providing trauma informed education regarding IPV and reproductive coercion (RC) to healthcare staff improves provider competency and knowledge and patient self- efficacy.	 Sample All staff identified as women. 2/3 of staff had been working in reproductive health for 10 years. Each clinic had: N=18 providers N=23 medical assistants N=1 health educator N=8 administrators Patients Sample N=49 patients Setting 11 Family Planning clinics Western Pennsylvania 	 <u>Methods Design</u> Randomized control trial <u>Intervention</u> Addressing Reproductive Coercion in Health Setting (ARCHES): trauma informed education for clinicians Futures without Violence wallet sized card ARCHES has 3 key elements: education, harm reduction, support referral. All staff received ½ day training on ARCHES. <u>Measurement</u> Provider interviews reviewed by two members and coded transcripts 	 Patients 33% 18-21 years old 39% 22-26 years old Results All administrato rs found ARCHES easy to implement All providers reported training to be beneficial 17 of 18 providers reported increase in confidence in talking about IPV. 	 <u>Discussion</u> Move away from disclosure driven screening. Move closer to providing supportive care to women. Providers still report lack of time to discuss. <u>Interpretation</u> Increase women's self-efficacy. Decrease harm reduction behaviors. Increase awareness of available services Increase clinician competency and knowledge. <u>Limitations of findings</u> Almost all findings were positive results, concern for bias

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Stevens, N. R., Tirone, V., Lillis, T. A., Holmgreen, L., Chen-McCracken, A., & Hobfoll, S. E. (2016). Posttraumatic stress and depression may undermine abuse survivors' self- efficacy in the obstetric care setting. Journal of Psychosomatic Obstetrics & Gynecology, 38(2), 103–110. https://doi.org/10.10 80/0167482x.2016.1 266480	The purpose of this study is to investigate the detection of abuse by obstetricians and if abuse survivors experience psychological distress and change to self- efficacy when communication with providers.	 Sample Pregnant patients Sample size N=41 pregnant patients Setting Obstetrician clinic Outpatient Urban Socio-economically disadvantaged Chicago 	 Method Design Survey Design Intervention Medical records reviewed for examination and detection of abuse Patient survey Measurement Childhood Trauma Questionnaire (CTQ): assess for childhood abuse. Trauma History Questionnaire (THQ): evaluate the lifelong history of abuse and violence. PTSD Symptoms checklist (PLC-C): PTSD symptoms Patient Health Questionnaire (PHQ- 9): assess for depression. Pregnancy-related anxiety questionnaire: feelings of anxiety 	 <u>Results</u> 83% of patients reported at least one past episode of violence, Obstetrician s detected abuse in 22% of the cases. 46% of the participants received invasive exams during the study. Depression (p<0.01) and PTSD (p<0.05) were found to be associated with lower self-efficacy 	 <u>Discussion</u> The inability to communicate preferences to providers while undergoing invasive exams places patients who have experienced trauma at a high risk of re-traumatization. <u>Interpretation</u> This valuable study also provides recommendations for implementing TIC practices, such as clear communication, anticipatory guidance, stopping an exam, and discussing coping strategies with patients. <u>Limitations of Findings</u> Pregnant patient population only 93% of patients Medicaid <u>Future Considerations</u> Communication skills.

CITATION	PURPOSE	SAMPLE/SETTING	METHODS (Design, Interventions, Measures)	RESULTS	DISCUSSION, INTERPRETATION, LIMITATIONS
Walker, J., & Allan, H. T. (2013). Cervical screening and the aftermath of childhood sexual abuse: Are clinical staff trained to recognise and manage the effect this has on their patients? <i>Journal of</i> <i>Clinical Nursing</i> , <i>23</i> (13-14), 1857– 1865. https://doi.org/10.11 11/jocn.12390	The purpose of this study is to evaluate the training needs of clinical staff who perform cervical cancer screening in patients who have experienced CSA.	 Sample Nurses, general practitioners, nurse colposcopists, clinical nurse specialists Sample size N= 62 Setting Primary care London 	 <u>Method Design</u> Mixed methods evaluation Quantitative Qualitative <u>Intervention</u> Focus group. 2 hours in length Audio recorded & analyzed. <u>Measurement</u> Literature review Likert questionnaire Focus group 	 <u>Results</u> 50% of providers discussed CSA with patients. 50% of providers felt confident in performing gynecologic al exams of women who reported CSA. 66% felt confident in performing cervical cancer screening in women who reported CSA. 	 <u>Discussion</u> Nurses represented in the study. TIC can increase confidence and knowledge in healthcare staff. <u>Interpretation</u> Staff report a strong desire to learn more about TIC. Staff report concerns in possibly doing more harm than good. <u>Limitations of Findings</u> The focus of care is only on women who have experienced CSA. Performed in London, TIC training may be different. <u>Future Considerations</u> Studies regarding adult women who experience sexual assault

REFERENCES

- Abdoh, N., Bernardi, E., & McCarthy, A. (2017). Knowledge, attitudes and practices of trauma informed practice : A survey of health care professionals and support staff at alexander street community. <u>https://doi.org/10.14288/1.0343062</u>
- American Association of Colleges of Nursing. (2021). *The essentials: Competencies for professional nursing education* [PDF].

https://www.aacnnursing.org/Portals/0/PDFs/Publications/Essentials-2021.pdf

- American College of Obstetricians and Gynecologists. (2021). *Caring for patients who have experienced trauma*. <u>https://www.acog.org/clinical/clinical-guidance/committee-</u> <u>opinion/articles/2021/04/caring-for-patients-who-have-experienced-trauma</u>
- American Psychology Association. (2018, October). *Stress in America: Generation z* [PDF]. Retrieved July 27, 2023, from

https://www.apa.org/news/press/releases/stress/2018/stress-gen-z.pdf

- Bills, L. J., Hutchison, S. L., Snider, M. H., Skrzypek, B. E., Minnich, C. L., Korney, J. M., Taylor, R. M., & Herschell, A. D. (2023). Implementing a trauma-informed system of care: An analysis of learning collaborative outcomes. *Journal of Traumatic Stress*, *36*(2), 433–443. <u>https://doi.org/10.1002/jts.22931</u>
- Burge, R., Tickle, A., & Moghaddam, N. (2021). Evaluating trauma informed care training for services supporting individuals experiencing homelessness and multiple disadvantage.
 Housing, Care and Support, 24(1), 14–25. <u>https://doi.org/10.1108/hcs-01-2021-0002</u>
- Buysse, C. A., Bentley, B., Baer, L. G., & Feldman, H. M. (2022). Community echo (extension for community healthcare outcomes) project promotes cross-sector collaboration and

evidence-based trauma-informed care. *Maternal and Child Health Journal*, 26(3), 461–468. <u>https://doi.org/10.1007/s10995-021-03328-8</u>

- Choi, K. R., & Seng, J. S. (2015). Pilot for nurse-led, interprofessional in-service training on trauma-informed perinatal care. *The Journal of Continuing Education in Nursing*, 46(11), 515–521. <u>https://doi.org/10.3928/00220124-20151020-04</u>
- Dubay, L., Burton, R., & Epstein, M. (2018). Early_adopters_of_trauma-informed_careevaluation [PDF]. Urban Institute. https://www.chcs.org/media/early_adopters_of_trauma-informed_care-evaluation.pdf
- Elisseou, S., Puranam, S., & Nandi, M. (2019). A novel, trauma-informed physical examination curriculum for first-year medical students. *MedEdPORTAL*. <u>https://doi.org/10.15766/mep_2374-8265.10799</u>
- 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. *American Journal of Preventive Medicine*, 14(4), 245–258. <u>https://doi.org/10.1016/s0749-3797(98)00017-8</u>
- Field, B., Booth, A., Ilott, I., & Gerrish, K. (2014). Using the knowledge to action framework in practice: A citation analysis and systematic review. *Implementation Science*, 9(1). <u>https://doi.org/10.1186/s13012-014-0172-2</u>
- Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., & Robinson, N. (2006). Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*, 26(1), 13–24. <u>https://doi.org/10.1002/chp.47</u>

- Jeffery, A. D., Longo, M. A., & Nienaber, A. (2015). *Staff educator's guide to professional development: Assessing and enhancing nurse competency* (Reprint ed.). Sigma Theta Tau Intl.
- Kim, S., Kim, G.-U., & Park, J. (2023). Evaluation of internet-based training in trauma care for nurses in mental health welfare centers: A cluster randomized controlled trial. *Journal of Primary Care & Community Health*, 14. <u>https://doi.org/10.1177/21501319231181982</u>
- King, S., Chen, K.-L., & Chokshi, B. (2019). Becoming trauma informed: Validating a tool to assess health professional's knowledge, attitude, and practice. *Pediatric Quality & Safety*, 4(5), e215. <u>https://doi.org/10.1097/pq9.00000000000215</u>
- Kyle, J. R., Buranosky, R. A., Mutter, M., Rothenberger, S. D., Hamm, M. E., & McNeil, M. A. (2021). A multifaceted intimate partner violence communication skills curriculum increases screening among internal medicine residents. *Journal of Women's Health*, *30*(12), 1778–1787. <u>https://doi.org/10.1089/jwh.2020.8685</u>
- Menschner, C., & Maul, A. (2016). Key ingredients for successful trauma-informed care implementation [PDF]. Center for Health Care Stategies Inc.. <u>https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health</u> /atc-whitepaper-040616.pdf
- Miller, E., McCauley, H. L., Decker, M. R., Levenson, R., Zelazny, S., Jones, K. A., Anderson, H., & Silverman, J. G. (2017). Implementation of a family planning clinic-based partner violence and reproductive coercion intervention: Provider and patient perspectives. *Perspectives on Sexual and Reproductive Health*, 49(2), 85–93.
 https://doi.org/10.1363/psrh.12021

Racine, N., Killam, T., & Madigan, S. (2020). Trauma-informed care as a universal precaution. JAMA Pediatrics, 174(1), 5. <u>https://doi.org/10.1001/jamapediatrics.2019.3866</u>

Seidman, D. (2023). Integrating trauma-informed practices into reproductive health services [PDF]. <u>https://familypact.org/wp-content/uploads/2023/10/FPACT-Trauma-Informed-Care_Rebrand_FINAL_8.30.23_updated_w_housekeeping_remEQ.pdf</u>

- Sprague, S., Madden, K., Simunovic, N., Godin, K., Pham, N. K., Bhandari, M., & Goslings, J.
 C. (2012). Barriers to screening for intimate partner violence. *Women & Health*, 52(6), 587–605. <u>https://doi.org/10.1080/03630242.2012.690840</u>
- Stevens, N. R., Tirone, V., Lillis, T. A., Holmgreen, L., Chen-McCracken, A., & Hobfoll, S. E. (2016). Posttraumatic stress and depression may undermine abuse survivors' self-efficacy in the obstetric care setting. *Journal of Psychosomatic Obstetrics & Gynecology*, 38(2), 103–110. <u>https://doi.org/10.1080/0167482x.2016.1266480</u>
- Substance Abuse and Mental Health Service Administration. (2022). *National strategy for trauma-informed care operating plan* [PDF].

https://www.samhsa.gov/sites/default/files/trauma-informed-care-operating-plan.pdf

Substance Abuse and Mental Health Services Administration. (2014). Samhsa's concept of trauma and guidance for a trauma-informed approach [PDF]. <u>https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA_Trauma.pdf</u>

Walker, J., & Allan, H. T. (2013). Cervical screening and the aftermath of childhood sexual abuse: Are clinical staff trained to recognize and manage the effect this has on their patients? *Journal of Clinical Nursing*, 23(13-14), 1857–1865. https://doi.org/10.1111/jocn.12390 World Health Organization. (2023). *Reproductive health*. Retrieved November 7, 2023, from <u>https://www.who.int/westernpacific/health-topics/reproductive-health</u>