Abilene Christian University
Digital Commons @ ACU

Electronic Theses and Dissertations

Electronic Theses and Dissertations

5-2023

Healthcare Workers' Perceptions, Practices, and Knowledge of Trauma-Informed Care in the Hospital Setting

Emily Gayle Tippens egt17a@acu.edu

Follow this and additional works at: https://digitalcommons.acu.edu/etd

Part of the Social Work Commons

Recommended Citation

Tippens, Emily Gayle, "Healthcare Workers' Perceptions, Practices, and Knowledge of Trauma-Informed Care in the Hospital Setting" (2023). Digital Commons @ ACU, *Electronic Theses and Dissertations*. Paper 580.

This Thesis is brought to you for free and open access by the Electronic Theses and Dissertations at Digital Commons @ ACU. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ ACU.

ABSTRACT

Psychological trauma has become a pervasive term throughout the mental health field but has been slow to gain momentum in the healthcare field. Hospitals have always been a place where people with mental health concerns or psychosis seek help, but hospitals have historically not implemented a trauma-informed care (TIC) approach. As the mental health crisis continues to become more detrimental, trauma-informed care skills will become more valuable. This study measured the knowledge, opinions, perceptions healthcare professionals in West Texas have regarding trauma-informed care. This study hypothesized that healthcare workers in West Texas would benefit from TIC training. This study hypothesized that healthcare workers in West Texas would have lower levels of TIC knowledge and have negative perceptions of TIC, but instead the study found that workers have sufficient knowledge in TIC and perceive TIC positively. The study concluded that healthcare workers would benefit from more training. Due to scope of this study, further research is needed to determine a more accurate measure of knowledge, perceptions, and use of TIC. As seen with this study, there continues to be a need for research that focuses on different methods of training in TIC.

Healthcare Workers' Perceptions, Practices, and Knowledge of Trauma-Informed Care in the Hospital Setting

A Thesis

Presented to

The Faculty of the School of Social Work

Abilene Christian University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science

By

Emily Gayle Tippens

May 2023

This thesis, directed and approved by the committee for the thesis candidate Emily Tippens, has been accepted by the Office of Graduate Programs of Abilene Christian University in partial fulfillment of the requirements for the degree

Master of Science in Social Work

Assistant Provost for Residential Graduate Programs

Date **Apr 19, 2023**

Thesis Committee

Alan Lipps (Apr 19, 2023 13:31 CDT)

Dr. Alan Lipps, Chair

Erica Vasquez Erica Vasquez (Apr 19, 2023 13:41 CDT)

Erica Vasquez, Ph.D. Candidate, MSW

Dolores Flores Dolores Flores (Apr 19, 2023 13:48 CDT)

Dolores Flores, LMSW, ACM-SW

ACKNOWLEDGMENTS

I want to express my gratitude to Dr. Alan Lipps, my thesis chair, and the other members of my thesis committee - Erica Vasquez, LMSW, Dolores Flores, LMSW, ACM-SW, and Myra Wilson, LBSW, ACM-SW, for their unwavering support and understanding throughout the entire process. Dr. Lipps and Professor Vasquez were instrumental in teaching me important courses in my graduate program, and they have been exceptional mentors throughout my thesis process. Dolores Flores, my field supervisor and boss, generously agreed to serve on my thesis committee and taught me valuable lessons about social work and community involvement.

I would also like to take this opportunity to express my heartfelt gratitude to my family. My parents have been incredibly supportive of my education and my decision to pursue social work, and they have been my biggest cheerleaders throughout this process. My grandparents, Darryl and Anne, have also been incredibly invested in my education and have been a source of inspiration in my work. Thank you to my grandmother, Gayle, who has a special talent for reminding me to laugh and helping me not take myself too seriously. I truly could not have made it through this process without all of you. © Copyright by Emily Tippens (2023)

All Rights Reserved

TABLE OF CONTENTS

	LIST OF TABLESiv
I.	INTRODUCTION1
	Problem Statement1
	Previous Research2
	Research Gaps
	Current Literature Review4
II.	LITERATURE REVIEW5
	Methodology for Literature Search5
	History5
	Trauma Theory7
	Polyvagal Theory10
	Trauma-Informed Care (TIC) Methods12
	Screening for Trauma12
	Explanation of Procedures14
	TIC Training by Population14
	Elderly Populations14
	Pediatric Populations16
	Pregnant Populations17
	Outcomes of TIC

	Outcomes of TIC on Patients	18
	Outcomes of TIC Training for Healthcare Workers	19
	Economic Impact	20
	Effects of TIC on Healthcare Workers	21
	Summary of Literature	21
III.	METHODOLOGY	23
	Purpose	23
	Research Design	23
	Sampling	23
	Instrument	24
	Procedures	25
	Demographic Information	26
	Human Subjects Protection	26
	Data Analysis	27
	Validity and Reliability	27
IV.	RESULTS	28
	Participants	28
	Factors of TIC in the Healthcare Setting	30
V.	DISCUSSION	
	Knowledge	
	Opinions	40
	Competence	40
	Barriers	41

Recent Practice	42
Implications for Practice	42
Implications for Policy	43
Limitations	44
Future Research	45
REFERENCES	47
APPENDIX A: Institutional Review Board Approval Letter	57
APPENDIX B: Survey with Informed Consent	59
APPENDIX C: Solicitation Email	83

LIST OF TABLES

1. Characteristics of Sample $(N = 9)$	29
2. Providers' Knowledge, Opinions, Competence, Barriers, and Recent Practices	
According to Position $(N = 9)$	31
3. TIC Factors According to Education $(N = 9)$	32
4. Providers' Knowledge Regarding Injury-Related Posttraumatic Stress $(N=9)$	33
5. Providers' Opinion Regarding Trauma-Informed Care $(N = 9)$	34
6. Providers' Self-Rated Competence in Specific Aspects of Trauma-Informed Care	(N =
9)	36
7. Recent Trauma-Informed Practice, <i>n</i> (%)	38

CHAPTER I

INTRODUCTION

Problem Statement

The hospital environment is often overflowing with suffering, grief, and trauma. Trauma-informed care (TIC) has recently impacted practices within mental health and mental illness treatment facilities, but the use of TIC in acute care hospital environments is still in early development (Brown et al., 2022). The Substance Abuse and Mental Health Services Administration (SAMHSA) define *TIC* as having three main components: "(1) realizing the prevalence of trauma; (2) recognizing how trauma affects all individuals involved with the program, organization, or system, including its own workforce; and (3) responding by putting this knowledge into practice" (2014, p. 9). These three components of TIC describe how education on trauma is needed. TIC is then applied to systems and policies, and then implementation of the knowledge on trauma is rolled out.

Trauma has pervasive effects on the population, and healthcare workers will likely encounter patients who have been traumatized (Kessler et al., 2017). Individuals who have experienced trauma may respond to typical medical procedures by becoming aggravated and withdrawn (Stinson et al., 2016). TIC may be a tool for healthcare workers to better communicate with patients who have experienced trauma. Although psychiatric and mental health hospitals often use TIC, it is important to distinguish how

non-specialized hospitals use TIC because many people who experience difficult trauma are not admitted to a psychiatric facility.

Numerous studies of healthcare workers identify that they have not received enough training on TIC (e.g., Bruce et al., 2018; Ervin et al., 2021; Gerlach et al., 2021; Hamberger et al., 2019; Hoysted et al., 2019; Kassam-Adams et al., 2015; McNamara et al., 2021; Stevens et al., 2019). While some providers are knowledgeable and favorable toward the implementation of TIC practices, providers worry about retraumatizing patients and about time constraints associated with TIC (Bruce et al., 2018). One study showed that many medical care providers still lack familiarity with the impact that trauma can have on health (Gerlach et al., 2021). Hamberger et al. (2019) argue that medical practices require a basic change in orientation to ensure that traumatized patients are being adequately cared for. This literature review will seek to identify how training programs and specific interventions provided to patients are the most effective.

A psychiatric hospital is specially designed to provide care to those who require hospitalization due to a serious mental illness. In these environments, TIC may be more prevalent because the focus is mental healthcare. Those who have reached their greatest low have most likely experienced trauma, and at these facilities TIC likely will be used. It is important to provide TIC and other interventions before an individual has reached their lowest point.

Previous Research

Bruce et al. (2018) and Kassam-Adams et al. (2015) investigated the usefulness of a questionnaire designed to help understand the hospital environment and structure to see how TIC could be effectively implemented. The proposed research is based on the

procedures and the research completed by Bruce et al. (2018) and Kassam-Adams et al. (2015).

Additionally, some of the findings of the review included TIC training programs, questionnaires used to measure the level of competence of healthcare workers using TIC, and program evaluations that measured how TIC positively affects patients in the medical setting. For the literature review, it is important to review studies that focus on training programs for healthcare workers to ensure the questionnaire used will be based on accurate data from other studies (Ambuel et al., 2013; Bruce et al., 2018; Gallo-Silver et al., 2014; Gerlach et al., 2021; Hamberger et al., 2019; Kassam-Adams et al., 2015).

Research has found that the prevalence of post-traumatic stress disorder (PTSD) within the hospital system is high, and that these PTSD patients utilize more resources than others (Farley & Patsalides, 2001; Kartha et al., 2008; Liebschultz et al., 2007; Richmond et al., 2011). To reduce further traumatization and further utilization of resources, healthcare workers can implement TIC into their everyday practice (Brown et al., 2022; Forkey et al., 2022; Gallo-Silver et al., 2014; Green et al., 2016; Richmond et al., 2011). Additionally, healthcare workers who have been trained to use TIC tend to improve patient outcomes (Ambuel et al., 2013; McNamara et al., 2021; Stevens et al., 2019). This shows how research supports the argument to implement TIC into the medical field as much as possible.

Research Gaps

As seen with the previous research, healthcare workers can improve patient outcomes by implementing a TIC approach into their practice. Some of the barriers to using TIC include the limited amount of time healthcare workers have to implement these

strategies (Hoysted et al., 2019; Stevens et al., 2019; van den Berk-Clark et al., 2021). Some of these studies were conducted in more urban hospital settings, and the findings may not be representative of the perceptions and usage of TIC by rural healthcare workers.

The research available does not provide insight into how healthcare workers at the standard inpatient level view TIC. The two studies that used this same instrument only researched trauma centers located at large urban academic hospitals (Bruce et al., 2018; Kassam-Adams et al., 2015). Not much research has been done concerning more rural settings, non-academic hospitals, and religiously based hospitals. Likely, these settings are less accessible for researchers who are not already in close proximity to these environments.

Current Literature Review

The focus of the literature review will be on the following questions: (1) What aspects of TIC training are beneficial for healthcare workers? (2) How can TIC be implemented in a medium-sized hospital setting? These questions provide insight into how this literature review will cover and explain the reasoning for the structure of the methodology. Therefore, this literature review will explore the implementation of TIC in the hospital setting, healthcare workers' view on TIC, and the effects of trauma that the patient experiences in the hospital. This literature review will provide a basis for how the inpatient setting could influence patient outcomes as healthcare workers typically spend more time with patients when compared to emergency department staff. The study seeks to address how healthcare workers may view TIC differently in this setting and the unique barriers that arise from using TIC in this inpatient setting

CHAPTER II

LITERATURE REVIEW

Methodology for Literature Search

The articles in the literature review were all found using the search strategy: "trauma informed care or trauma informed practice or trauma informed approach," "inpatient or hospital or acute setting," and "not psychiatric." The studies meet the criteria mentioned as follows: (1) address TIC in the acute environment or how TIC could be incorporated; (2) peer-reviewed and published in an academic journal; and (3) published after 2007, apart from the foundational TIC studies (Farley & Patsalides, 2001; Felitti et al., 1998; Porges, 1995; Terr, 1979). The qualitative and quantitative studies included are from across the USA, Canada, Australia, and Türkiye. Many of the articles included in this literature review are program evaluations, which can be defined as assessing the implementation and outcomes of a specific program or intervention (Cations et al., 2021; Forkey et al., 2022; Shamaskin et al., 2020; Thompson-Lastad et al., 2017). The inclusion of program evaluations in this literature review helps examine best practices when implementing TIC in the hospital setting at the organizational level. A selection of published books and encyclopedia entries have also been included to further provide background to TIC in the hospital setting.

History

In the *Encyclopedia of Social Work*, Wilson et al. (2022) describe the history of TIC as one that has its roots in the 1970s feminist movement. During this time, domestic

violence and sexual assault were issues that lawmakers and advocates made public. In addition to TIC being implemented with battered women, TIC became more popular in the military sphere. The Vietnam War brought attention to veterans who experienced combat trauma. Herman (1992) discusses how many veterans returned from war with the inability to converge back into society. Still, some felt understood when participating in groups that would debrief their trauma from the war. Many veterans returned with unimaginable trauma and post-traumatic stress disorder (PTSD). Therefore, some practitioners began to focus on how TIC could be used with veterans to improve their livelihood and alleviate retraumatization.

The use of TIC has been quite prevalent in social work since the Substance Abuse and Mental Health Services Administration (SAMHSA) recognized the link between trauma and gender-specific interventions. The field of social work has acknowledged the great impact trauma has on our society, and various pieces of training have been implemented for social work in the past couple of decades (Mersky et al., 2019). As social workers start to be more employed in the hospital setting, it may be that social workers are moved to advocate for more TIC interventions.

In the medical setting, the TIC movement was born out of the Adverse Child Experience (ACE) study conducted in the late 1990s (Felitti et al., 1998). The ACE study showed that the more traumatic events a child experienced, the more likely they were to suffer from health issues, which resulted in a shorter life expectancy (Felitti et al., 1998). This study gave the medical community a greater awareness of trauma and heightened awareness on the deleterious cumulative effects of trauma. Additionally, the correlation between hospitalization and symptoms of PTSD has been found to be quite significant

(Danese & McEwen, 2012; Hamberger et al., 2014; McDonald, 2020; Richmond et al., 2011; van den Berk-Clark et al., 2021). This illustrates the need for hospitals to understand how trauma impacts a person's health and high amounts of trauma can impact a person's utilization of healthcare.

Trauma Theory

It was Jean-Martin Charcot who first studied the state of hysteria and hypnosis, concluding that both were psychologically rooted rather than caused by physical abnormalities (Ringel & Brandell, 2012). Charcot determined that hysteria was an aspect of dissociation which resulted from traumatic experiences (Ringel & Brandell, 2012; van der Kolk, 2015). A student of Charcot, Pierre Janet formulated his theory of trauma based on the idea that reintroducing a person to their trauma reduced their trauma symptoms (Ringel & Brandell, 2012; van der Kolk, 2015).

A development of trauma theory can be found in Sigmund Freud's work from the 1890s and his work with women who were experiencing "hysteria," which included various changes in behavior and physical symptoms (van der Kolk, 2015). Freud's "seduction theory" connected the women's poor mental health and physical symptoms with their history of sexual trauma (Herman, 1992). At first, Freud believed the trauma memories the women shared with him to be true but later recanted this due to the high prevalence of trauma present among his participants, including those in the upper classes (Herman, 1992). Freud then called the trauma memories "fantasies" that the women had created in their minds (Herman, 1992). This shows how Freud was silenced by those in the upper classes who wanted him to keep quiet about their violent crimes (Herman, 1992; Ringel & Brandell, 2012).

Women who had experienced sexual trauma or domestic violence were part of the foundational research that focused on the behaviors of those who were survivors of trauma. Many years later, feminist movements in the 1970s highlighted the salient issue of sexual trauma and established rape crisis centers (Herman, 1992; van der Kolk, 2015). Charcot, Janet, and Freud's work with women who had been traumatized provided the foundation for how people would view trauma and how best to work with people who have experienced trauma. These men uncovered how the physical and mental symptoms of women could be tied to their experiences of trauma, which is a key point of TIC. As a result of their discovery that physical symptoms are closely related to histories of trauma, most people would not be aware of the impacts of trauma as they are today, and strategies for TIC would not have been as developed as they are now.

Women who have experienced sexual trauma are at risk of poor health (Danese & McEwen, 2012; Farley & Patsalides; Gutowski et al., 2022). Their experience in the healthcare setting and future use of preventative healthcare may be impacted based on the healthcare worker's ability to implement TIC. If women are retraumatized in the healthcare setting, it is fair to assume they will avoid preventative services. This will put them at an elevated risk of more health issues. Trauma theory helps explain the logic behind trauma and how the history of trauma theory has impacted women in the past. This explains why the use and aspects of TIC need to be examined more thoroughly to provide better care to survivors of trauma.

During World War I, numerous soldiers complained of symptoms (e.g., fatigue, nightmares, etc.) that were originally called *shell shock* (Ringel & Brandell, 2012; van der Kolk, 2015). Many soldiers were blamed for symptoms, and the symptoms were

commonly attributed to weakness or lack of moral character. In World War II, soldiers were treated for their traumatic symptoms by hypnosis. Soldiers returning home from the Vietnam War heightened public awareness of posttraumatic stress as many Vietnam veterans faced difficulties in coping with daily living. Sometimes, these difficulties led to homelessness and occasional acts of violence (Herman 1992; Ringel & Brandell, 2012; van der Kolk, 2015). *Rap groups* became common spaces where veterans could open up and be vulnerable to others who could understand their trauma (Herman, 1992).

In 1942, trauma theory was expanded to include people who experienced collective trauma (Ringel & Brandell, 2012). One such collective trauma occurred during the Cocoanut Grove fire in Boston. In this tragedy, 493 people died in a nightclub, many of them violently crushed to death. Lindemann (1944) observed that survivors of this tragedy experienced common symptoms (e.g., disorganization, excessive guilt, hostility). Contemporary theories of trauma are shaped by acts of terrorism, gun violence, and political violence. Lenore Terr (1979) describes the effects of a school bus kidnapping on the children involved across four years and how the children's PTSD symptoms affected their daily life. Terr (1979) discovered that the children had repetitive dreams and flashbacks as defined in the PTSD criteria, regressive behaviors such as incontinence, and separation anxiety.

People who have been affected by violence and war often present symptoms related to PTSD. Healthcare workers may find it difficult to effectively work with patients who are easily agitated, on edge, and experience dissociation. Trauma theory identifies how a person's trauma experiences in the past may influence their reactions to seemingly normal activities in the hospital environment. Therefore, TIC becomes an

obvious method for creating the most effective and most safe interactions between the healthcare worker and patient.

Polyvagal Theory

Steven Porges (1995; 2011) introduced the polyvagal theory, which describes and explains how the vagus nerve is a key pathway for regulating two parasympathetic branches of the autonomic nervous system. The autonomic nervous system enhances the propensity for survival in times of danger and increases the ability for social engagement in times of safety. The theory posits that animals evolved three hierarchically organized systems to regulate body systems. Porges (2009) identified three main autonomic processes: 1) social engagement system (myelinated, ventral-vagus; safety), 2) sympathetic nervous system (danger), and 3) parasympathetic (unmyelinated vagus; lifethreatening danger, immobilization). The most primitive of these, the unmyelinated dorsal-vagal circuit, overrides the other circuits during life-threatening danger. The sympathetic branch of the autonomic nervous system overrides the ventral-vagal circuit during times of danger. The ventral-vagal circuit is operational during times of relative safety.

The vagus nerve is a bundle of nerve fibers making up two anatomically and functionally distinct branches. According to the theory, the most primitive, unmyelinated branch of the vagus nerve (i.e., dorsal-vagal branch) branches out of the medulla oblongata into the sub-diaphragmatic space (i.e., the abdominal cavity) where it connects with visceral organs to regulate digestive processes. In a normal, homeostatic, and regulated state, the two branches of the vagus nerve work in concert with the sympathetic (i.e., mobilization) branch of the autonomic nervous system to promote a balance

between stimulation and relaxation. In times of extreme, life-threatening danger, the dorsal-vagal branch can cause the body to shut down. Sometimes called death-feigning, this parasympathetic dominant state is responsible for immobilization, depression, and dissociation often experienced after a life-threatening traumatic event.

The autonomic-sympathetic branch enters the supra-diaphragmatic cavity connecting with the heart and lungs. This sympathetic branch can be thought of as the mobilization branch as it functions to mobilize the body to respond to danger (i.e., fight or flight). Normally, a homeostatic balance is struck between the ventral-vagal parasympathetic, the sympathetic, and the dorsal-vagal parasympathetic branches. Activating the sympathetic branch (i.e., mobilization) brings a sense of isolation and danger. The middle ear shifts to listen for sounds of danger instead of sounds of connection. In this heightened threat detection state, visual information (i.e., facial expressions) is often misinterpreted. Thus, neutral facial expressions can be experienced as dangerous or hostile. With chronic arousal, the sympathetic nervous system stays on high alert resulting in excess cortisol secretion. This excess cortisol secretion can damage the hippocampus and irritate the intestines (Porges, 2011; van der Kolk, 2015).

Felitti et al. (1998) discovered that people who experienced trauma in their childhood would later progress on to develop chronic health diseases. This study is considered one of the most renowned studies when it comes to how trauma has the potential to affect the physical body, as it collected data from over 17,000 participants. Healthcare workers have been found to have limited knowledge about the ACE study (Gerlach et al., 2021). Polyvagal theory provides more reasons for healthcare workers to take trauma theory seriously. Traumatized people often display behaviors that exhibit

these biological responses and are sometimes confusing and distressing to those who work with clients. With the rise of polyvagal theory, theories of trauma-informed care are more highly regarded due to the scientifically valid, neurobiological component.

The polyvagal theory is consistent with the idea that promoting a safe atmosphere is one of the most critical aspects of working with traumatized patients (Porges, 1995; van der Kolk, 2015). Polyvagal theory expands trauma theory to encapsulate a biological component and therefore produces strategies for individuals to incorporate self-soothing techniques and for workers and organizations to make environments more understanding of the pervasiveness of trauma. Trauma theory, with the addition of polyvagal theory, provides the framework through which the following literature will be presented and how the proposed study will be designed.

Trauma-Informed Care (TIC) Methods

Screening for Trauma

One large aspect of effective TIC is the screening process (SAMHSA, 2014; Thombs et al., 2007). It is imperative to ensure that conversations between the healthcare provider and the patient are happening because often the patient may not bring these concerns up if not prompted (McDonald, 2020; van den Berk-Clark, 2021) The impact of trauma on individuals sometimes leads to physical manifestations (Porges, 1995; SAMHSA, 2014; van der Kolk, 2015). Primary care providers (PCPs) often find that they are not trained to know whether to screen patients for trauma (van den Berk-Clark et al., 2021). PCPs tend not to have much time to interact with patients, which forces PCPs into a transactional role. This may create a space where the patient may not feel comfortable opening up about their experience. This is because the patient's scheduled visit does not allow room for this type of discussion. Thombs et al. (2007) discuss how a survey can be used to gauge patient experiences with trauma and how this survey technique is a reliable and valid measure of trauma. The use of surveys can dramatically change how healthcare providers view people who live with trauma and the behaviors they may exhibit due to trauma.

Liebschutz et al. (2007) found that patients in the primary care setting often meet the diagnostic criteria for PTSD. Still, it is extremely unlikely that the patient's medical record will reflect this. Kessler et al. (2017) found that PTSD is common in the general population. Others (e.g., Richmond, 2020) have noted the high prevalence of PTSD for those who have suffered from a physical injury and are more likely to utilize healthcare systems. Therefore, healthcare providers need to function in a way that assumes that each patient has trauma because healthcare providers may not diagnose every person who would meet the criteria for PTSD. This could often be due to a lack of screening tools available to providers. Because PCPs are not screening for trauma, it can negatively affect healthcare workers' effectiveness if they are unaware of the prevalence of trauma (SAMHSA, 2014; van den Berk-Clark et al., 2021).

Screening tools can be accessible to use in a variety of settings. The Veteran's Administration hosts the National Center for PTSD and provides various free screening tools (VA, 2018). Additionally, screening tools such as the Trauma Appraisal Questionnaire (TAQ) provide easy-to-use screening measures for settings such as the hospital (DePrince et al., 2010). There is a downside to screening tools in the healthcare setting because the results largely depend on the patient's ability to express their trauma experiences verbally (McDonald, 2020). However, this is why it is so critical to establish

rapport, make the client feel safe, and limit retraumatization so that patients feel comfortable sharing their trauma experiences (Couzner et al., 2022; Forkey et al., 2022; Gallo-Silver et al., 2014; Mantler et al., 2022; SAMHSA, 2014). In many hospital settings, nurses often perform an admission screen where various social issues can be assessed. A screening tool like the ones mentioned can be easily added to screen for trauma.

Explanation of Procedures

The process of TIC can seem overwhelming and unattainable when healthcare structures are constructed in a way that impedes the practice of TIC. Although organizational structures can take years to change, individuals can implement TIC and impact patients in a positive way (Ambuel et al., 2013; Gallo-Silver et al., 2014). The act of explaining to the patient a procedure that a healthcare worker is about to perform is in its very essence an example of TIC (Hamberger et al., 2019; Millar et al., 2021; Moss et al., 2019). Using this example shows that the healthcare worker is taking time to acknowledge the patient's feeling of vulnerability while also acknowledging their dignity.

TIC Training by Population

Elderly Populations

Patients in the healthcare system are often older than 65 years old (Couzner et al., 2022). As people age, they are more likely to experience dementia and altered mental status issues. For this population, in particular, it is paramount that careful consideration is given to older adults who are survivors of trauma (Cations et al., 2021; Couzner et al., 2022). Cations et al. (2021) suggest that online training modules can increase hospital

staff confidence in their abilities to incorporate TIC. Cations et al. evaluated the hospital's processes used to incorporate TIC into daily practice. One example discussed demonstrated staff members asking patients questions about their trauma history. This process was often called screening and happened within the standard assessment given to patients. The results of this study included that the staff was able to scale the amount of trauma an individual had experienced in their lifetime (Cations et al., 2021).

Due to memory loss, the inability to disclose traumatic experiences, and loss of autonomy increase with age, it can be difficult to assess trauma and provide TIC to elderly patients (Cations et al., 2021; Couzner et al., 2022). In highly clinical environments, patients may lose their ability to make their own decisions, and family members may be needed to step in to help with a patient's medical care (Cations et al., 2021; Couzner et al., 2022). By using a trauma lens, hospital workers can meet with families who may have greater insight into the patient's trauma experience, which then allows workers to individualize the patient's care concerning their trauma experience (Couzner et al., 2022).

For this specific population, the need for autonomy is of the utmost importance. Therefore, TIC focuses on options and the ability to say *no* to procedures if the patient chooses (Cations et al., 2021; Couzner et al., 2022). One of the main components of TIC, as defined by SAMHSA, is the component of autonomy and choice (2014). These evidence-based practices can be implemented in hospitals that often work with older populations by offering screening assessments for trauma, providing options and choices, and recognizing how a patient's history of trauma affects their behaviors in the hospital environment.

Pediatric Populations

Complex situations and emotions can arise when a child is hospitalized because of how involved the family system is expected to be. The pediatric population described in this section will be defined as those who are between the ages of zero and eighteen. In pediatric settings, medical professionals had trouble delivering TIC with patients for a variety of reasons. Some reasons included, a deficient understanding of who should provide TIC, a lack of realistic TIC strategies, and a lack of time to implement TIC (Moss et al., 2019; Simons et al., 2021). Moss et al. (2019) showed that many medical providers expressed concern about TIC because of the overwhelming emotional drain that weighs on medical providers. Additionally, according to Moss et al., trauma is more difficult to identify in the healthcare setting because clinical staff do not usually receive TIC training as part of their formal education (Moss et al., 2019; Simons et al., 2021). Although this might be true in some cases, participants in the Simons et al. (2021) study suggested that pediatric wings or hospitals excel in providing TIC to the patient and family and typically treat the patient in holistic ways compared to other hospital settings.

For pediatric populations, the complexities of the family system may include themes of trauma. It has been shown that curricula such as the Pediatric Approach to Trauma Treatment and Resilience (PATTeR) method can dramatically influence the knowledge and skills of healthcare providers in the pediatric field (Forkey et al., 2022). This study provided an educational curriculum to 327 pediatric providers across the nation and has its perspective rooted in the National Child Traumatic Stress Network and SAMHSA.

TIC in the pediatric setting means explaining procedures so the child and family can understand medical procedures according to their knowledge, orient the treatment process to be family-centered, and individualize care to the patient's needs (Moss et al., 2019; Simons et al., 2021). With this population, it appears that different aspects of TIC are stressed in relation to the patient's life stage. According to SAMHSA (2014), some identifying principles of TIC with pediatric populations are "trustworthiness and transparency" (p. 14). Additionally, the use of TIC heavily relies on being in tune with the family system and recognizing triggers (Moss et al., 2019; SAMHSA, 2014; Simons et al., 2021).

Pregnant Populations

Pregnant women can be considered a vulnerable population who could benefit from hospitals using TIC. One aspect of TIC is considering gender issues when working with a patient who identifies as a woman (SAMHSA, 2014). Women are more likely than their male counterparts to be victims of domestic violence or sexual violence; therefore, PTSD can be more prevalent in this population (Mantler et al., 2022; Millar et al., 2021). As shown in the Mantler et al. (2022) study, using trauma-informed approaches to counseling and case management has quite positive effects. In the study, TIC-style counseling was successful in assisting women to identify triggers during their pregnancy, develop adequate coping strategies, and advocate for themselves.

The screening process, a pillar of TIC, was found to be vitally relevant for pregnant women (Millar et al., 2021). Although the screening process has proven to be an effective tool of TIC, it was shown by Millar et al. (2021) that women preferred to discuss their trauma experience once rapport and trust had been built. Women who had

experienced trauma had felt retraumatized during their pregnancy. For example, words used by healthcare providers, such as "hold still" and "relax," triggered traumatic memories for the patient (Millar et al., 2021, p. 544). This research portrays the importance TIC training can yield to healthcare providers in avoiding the retraumatization experienced by the patient.

Outcomes of TIC

Outcomes of TIC on Patients

The scope of the literature that examines patient outcomes when they receive TIC compared to the standard treatment is relatively limited. Overall, TIC positively correlates with patient outcomes (Cations et al., 2021; Couzner et al., 2022; Mantler et al., 2022; Thompson-Lastad et al., 2017). Less has been studied when it comes to the comparison between TIC intervention outcomes and outcomes without TIC. Since TIC is sometimes difficult to identify as an independent intervention, it can be hard to tease out how impactful TIC truly is on patient outcomes. The Rawal et al. (2019) study sought to quantify the number of trauma incidents patients experienced while admitted to the hospital, and the researchers found 30% of participants experienced high amounts of trauma. This trauma was defined as disrupting patients' mobility, nutrition, sleep, and mood. Because basic needs are likely to be disrupted during a hospital stay, a patient's sense of safety is possibly in turmoil, and the use of TIC could mitigate the experience of additional trauma (Rawal et al., 2019; SAMHSA, 2014). An important finding of this study was that patients who experienced more trauma during their stay were 15% more likely to be readmitted to the hospital when compared to the patients who experienced low amounts of trauma during their stay (Rawal et al., 2019). As Felitti et al. (1998)

examined the detrimental effects of trauma in childhood, Rawal et al. (2019) have portrayed how trauma in adult life can negatively affect a person's quality of life.

Outcomes of TIC Training for Healthcare Workers

An important aspect of the literature is the impact of TIC training provided to medical professionals and how this is likely to impact processes within hospitals. Multiple studies have found that physicians are receptive to TIC training when they actively attend training sessions (Kokokyi et al., 2021; McNamara et al., 2021). In a study about attitudes toward TIC, the researchers concluded that physicians are quite open to receiving educational content regarding TIC to strengthen their understanding of TIC (Kokokyi et al., 2021). Physicians are often seen as the leader of the interprofessional care team; therefore, when trauma information is shared with them, they can directly influence patient outcomes (Couzner et al., 2022). Additionally, physicians who are more informed of their patient's trauma experiences can actively play an essential role in the referral process to outside agencies that use TIC (McNamara et al., 2022).

One method of improving TIC delivery in the hospital setting is to educate those in training. According to one study, students in training to be a physician or a nurse practitioner have an increased understanding of TIC when provided educational training during their schooling (Shamaskin et al., 2020). To expand on the literature, McNamara et al. (2022) found that medical students improved their understanding of TIC after attending a TIC workshop. Researchers have found that medical providers have limited formal education in TIC but often find themselves in situations filled with social complexities that require TIC (Kokokyi et al., 2021; Moss et al., 2019). Because research

has found that many medical providers lack the skills and knowledge to provide TIC, it could be beneficial to educate medical providers in order to have effective implementation of TIC (Couzner et al., 2022; Kokokyi et al., 2021; McNamara et al., 2022; Moss et al., 2019).

It has been found that medical professionals learn from online training, and the effect of the training has been shown to stick with the healthcare workers for at least a month after the training (Hoysted, 2019). One study found that medical professionals would likely benefit from training that incorporated case vignettes (Hoysted, 2019). By training medical professionals in TIC, the hospital care team can be further well-rounded in their ability to communicate trauma issues to one another (Couzner et al., 2022; Shamaskin et al., 2020). As mentioned above, communication between the care team is essential when providing TIC care (Couzner et al., 2022). Furthermore, the sharing of the trauma story among hospital staff of a patient can limit the retraumatization of the patient (Millar et al., 2021). Since survivors of trauma experience retraumatization when sharing their stories multiple times, a solution to minimizing the traumatic experience could be making staff aware of the patient's disclosure (Miller et al., 2021).

Economic Impact

There are high costs associated with trauma, and this includes financial costs. Patients who have PTSD tend to overutilize hospital systems and their resources (Gallo-Silver et al., 2014; Hamberger et al., 2019; Kartha et al., 2008; Lathan et al., 2021). As seen with the ACEs study (Felitti et al., 1998) and the Beattie et al. (2019) study, people who experience trauma are likely to have more health problems which causes more strain on hospital systems and insurances.

Trauma needs to be taken seriously as it affects hospital systems and social systems and consumers feel the burden of costs due to health conditions many will face due to adverse childhood experiences (Danese & McEwen, 2012; Felitti, 1998). If hospital administrations and staff can recognize the effects of trauma, then the patient experience can be elevated and produce better outcomes (Farley & Patsalides, 2001; Kartha et al., 2008).

Effects of TIC on Healthcare Workers

The hospital setting is not only a stressful environment for patients, but it can also be physically and mentally unsafe for medical professionals. The power of burnout and vicarious trauma may impact medical professionals' ability to use TIC effectively (Schulman & Menschner, 2018; Stevens et al., 2019). The overall hospital environment can be formatted to make workers and patients feel safer and at ease by using TIC (Beattie et al., 2019; SAMHSA, 2014; van der Kolk, 2015). Not only does TIC benefit the patients in the hospital, but TIC can transform work environments and make them safer and more comfortable environments for workers (Beattie et al., 2019; Brown et al., 2022; Schulman & Menschner, 2018).

Summary of Literature

TIC can effectively calm the anxiety, grief, and stress that often saturate the hospital environment. The literature supports the use of TIC in the hospital setting and is already used as common practice in some areas (Cations et al., 2021; Couzner et al., 2022; Kokokyi et al., 2021; Mantler et al., 2022; Moss et al., 2019; Simons et al., 2021; Thompson-Lastad et al., 2017). This literature review has uncovered how successful implementation of TIC can be done well, consumer and provider attitudes toward using

TIC, and how retraumatization trauma in the hospital setting can adversely affect a person's quality of life. As the federal agency setting the goal standard for TIC in communities, SAMHSA has identified how workers being aware of the presence of trauma, assessing for trauma, and responding in informed ways can provide better care to the whole person. There is a need for TIC to be widely implemented in all hospital systems in the U.S. as evidenced by the literature in this review.

The literature suggests that it is necessary to evaluate the existing knowledge of TIC in hospitals. To introduce a training program at a rural non-teaching hospital, it is important to first assess the strengths and weaknesses of the hospital's current understanding of TIC. This study aims to accomplish this by surveying healthcare workers in West Texas hospitals. It is appropriate and necessary to conduct prior research to gauge perceptions of TIC and ensure successful implementation of the training program.

CHAPTER III

METHODOLOGY

Purpose

The purpose of this study is to evaluate the knowledge, values, and perceptions of TIC in healthcare workers in a local hospital. The research questions presented for this study are (1) What knowledge, values, and perceptions of TIC do hospital personnel possess? (2) How necessary is TIC training within this medium-sized hospital setting? The proposed research has been approved by Abilene Christian University's Institutional Review Board as an exempt research study (see Appendix A for the approval letter).

Research Design

This was a quantitative, descriptive, observational, and cross-sectional questionnaire study. The study collected data at a single point in time. This study used the data to describe existing knowledge, values, and perceptions of TIC possessed by workers in a medium-sized hospital. The hospital is a non-teaching hospital surrounded by rural counties that may not have the knowledge or values that support TIC. The study utilized a reliable questionnaire that measures knowledge, values, and perceptions of TIC. A random sample of 200 participants, selected by the hospital's research department, was emailed this questionnaire.

Sampling

The study population is current employees at a specific West Texas healthcare system as of February 2023. The study used convenience sampling of healthcare workers in a healthcare system in West Texas. Additionally, the researcher sought to administer the questionnaire to as many healthcare workers as possible.

Instrument

The dependent variable of this study is knowledge, values, and perceptions of TIC, measured by the Trauma-Informed Care Provider Survey - version 2.0 (TIC Provider Survey) developed by Kassam-Adams et al. (2015). The development of the TIC Provider Survey, its functional way of scoring TIC understandings, and its use have implications for future research. This questionnaire will assist in measuring TIC use and in improving healthcare worker understanding (Bruce et al., 2018; Kassam-Adams et al., 2015). Using a single questionnaire, the TIC Provider Survey can provide insight into various perceptions of TIC and the employee's interaction with it. The TIC Provider Survey was created to capture data efficiently. Because this questionnaire is used as a needs assessment, it provides a clear picture of the barriers to using TIC.

The Center for Pediatric Traumatic Stress has created a questionnaire that can be used to understand healthcare providers' knowledge and views regarding traumainformed care (Bruce et al., 2018; Center for Pediatric Stress, 2021). This center is in Philadelphia at the Children's Hospital of Philadelphia and Nemours Children's Health and provides education for healthcare workers (Center for Pediatric Stress, 2021). This specific questionnaire yielded results when surveying healthcare providers in the Emergency Department (Bruce et al., 2018). This tool was developed to address a wide range of scales related to the use of TIC: knowledge, opinions, practices, competence, and barriers to providing TIC.

These factors are measured using 48 Likert scale questions measuring knowledge by providing knowledge-based statements and giving the options of "strongly disagree," "disagree," "agree," to "strongly agree." The 13 statements are all scored differently and are assigned various point values. In the second section, opinions related to TIC are measured using seven statements and options of "strongly disagree," "disagree," "agree" to "strongly agree." For the third section, competence is rated on a 3-point Likert scale with (0) "not competent," (1) "somewhat competent," and (2) "very competent." These are scored as indicated. In the fourth section, barriers present to using TIC are scored as (0) "not a barrier," (1) "somewhat of a barrier," (2) "significant barrier." Lastly, the fifth section measures current practices the healthcare worker is using with a (1) yes or (0) no scale. The full questionnaire used is included in Appendix B of this document.

Procedures

The participants were recruited through this specific healthcare system's human resources (HR) department. The questionnaire was distributed to a group of 200 employees' emails as potential participants. An email was sent with a link to the questionnaire for the participant to access. The questionnaire was distributed via email using Qualtrics. This questionnaire was completed only once by each participant and is estimated to take 10–15 minutes. Healthcare workers answered questions about their knowledge, beliefs, competency, barriers, and current use of TIC. The Research Department sent the solicitation email (Appendix C), generated by the researcher, to employee emails, acquired by the HR department. The email included a short description of the study, a hyperlink to the Qualtrics questionnaire, and a PDF of the informed consent that participants can keep.

Demographic Information

Participants were asked for basic demographic questions such as their age, gender, race, ethnicity. In addition, the questionnaire asked questions regarding what department they work in and their specific job position. To measure experience and patient interaction, they were asked the number of years in their position and the percentage of their work completed that involves direct patient care.

Because it could be assumed that participants with higher levels of patient interaction would have higher levels of TIC and more positive attitudes toward TIC, this study sought to analyze this factor. Some professions within the hospital setting may have varying perspectives on TIC and some may emphasize the importance of TIC compared to others. With this understanding, that is why much of the analysis was completed with the participant's position as the independent variable.

Human Subjects Protection

The data obtained through the questionnaire on Qualtrics were anonymous and were stored on a password-protected, encrypted computer. No identifiable data were collected from the healthcare workers who choose to participate in the study. Identifiable data were kept separate from the research data. The questionnaires were submitted anonymously, and the principal investigator cannot link who responded to the questionnaire and those who did not. Consent was documented by the participant clicking "I consent" on the first questionnaire question. If they click "I do not consent," then this will not allow the participant to go any farther in the questionnaire. If the participant consented to the questionnaire, this will be documented by showing their

answer to the consent question. As mentioned previously, Abilene Christian University's Institutional Review Board approved this exempt research study (Appendix A).

Data Analysis

The questionnaire was imported into the Qualtrics platform which will be used to collect data. No identifiable information was collected from the questionnaire. Then, the data obtained from Qualtrics were imported into Statistical Package for Social Sciences (SPSS), a computer software suitable for data manipulation and analysis. Descriptive statistics will be used, including mean, median, min/max, mode, and range. An example of what type of data analysis conducted is an analysis of variance. The survey data were manipulated to show differences in response among departments, education, and other demographic data.

Validity and Reliability

Because the type of study this will be is cross-sectional, it may be unable to confront threats to internal validity. Cronbach's alpha assisted in measuring the survey's reliability for the knowledge items, was found to be 0.49, for the opinions section it was determined to be .67, for competence .90, for recent practices .83, and barriers .70. Overall, competence and recent practices show strong reliability. The survey can be accessed for free and is located online (Center for Pediatric Traumatic Stress, 2021). This is an example of a sufficient tool when looking at its validity and reliability for identifying workers' perspectives and use of TIC (Bruce et al., 2018; Kassam-Adams et al., 2015).

CHAPTER IV

RESULTS

Participants

The survey had nine respondents who completed the questionnaire in its entirety. There was one participant who only completed the knowledge items within the questionnaire, therefore no demographic information can be concluded from this response and was not included in the analysis.

Those who did complete the full questionnaire identified themselves as nurses (n = 2), scheduling specialists (n = 1), therapists (n = 2), case managers (n = 1), patient relations specialists (n = 1, included in "Other"), and paramedics (n = 1, included in "Other"). Many of the participants identified as female (77.8%) and ranged from 25 to 64 years old. Most participants were within the 25–34-year-old range (44.4%). The overwhelming majority of participants identified themselves as white (88.9%). Some of the participants identified as Hispanic or Latino, represented 22.2% of the sample. The position most common within this sample is the Other category, with nursing and therapy coming in second most frequent as the most common job title. Within the Other category, the qualitative data provided is presented below. The majority of participants have a bachelor's degree (44.4%). Lastly, for the demographics, 55.6% of the sample expressed that their job includes direct patient care over 75%.

Characteristics	of Sample ($N = 9$)

Demographic Category	Count	%
Gender		
Male	2	22.20%
Female	7	77.80%
Age		
25 - 34	4	44.40%
35 - 44	1	11.10%
45 - 54	1	11.10%
55 - 64	3	33.30%
Race		
White	8	88.90%
Other	1	11.10%
Ethnicity		
Hispanic/Latino	2	22.20%
Non-Hispanic/Latino	7	77.80%
Position		
Nurse (RN, vocational)	2	22.22%
Therapist*	2	22.22%
Case Manager	1	11.11%
Scheduling Services	1	11.11 %
Other	3	33.33%
CV (included in other category)	1	11.11 %
Paramedic (included in other category)	1	11.11 %
Patient Relations Specialist (included in other category)	1	11.11 %
Highest Degree Obtained		
Diploma/Associates Degree	2	22.20%
Bachelor's	4	44.40%
Master's	2	22.20%
Other	1	11.10%
Percentage of Direct Care		
Less than 25%	1	11.10%
25-50%	2	22.20%
50-75%	1	11.10%
Greater than 75%	5	55.60%

Factors of TIC in the Healthcare Setting

Table 2 presents total subscale scores for each of the Trauma Informed Care Provider Survey (TICPS) subscales. This table shows these totals according to job position. As the table shows, knowledge scores ranged from a high of 77.88% to a low of 69.23%. The table displays how the therapist group scored the highest in the knowledge category. The opinions portrayed by the participants ranged from a high of 82.14% to a low of 71.43%. With the Opinions subscale, the "Other" group showed to score the highest while the Case Manager scored the lowest on the subscale. As far as Competence scores, the results ranged from a low of 52.78% to 85.19%. Nurses scored the lowest on the Competence subscale. The "Other" group scored the highest on the Competence subscale.

The Barriers subscale was kept in its original mean format. The lowest score on the Barriers subscale is 10 and a high being 17. The Nurses category scored the highest on the Barriers subscale, and Scheduling Services scoring the lowest. The mean range for Recent TIC Practices was from a low of 10 to a high of 13.5. The table represents how Case Manager had the lowest amount of TIC practices in the past six months, while the Therapists scored the highest on TIC practices in the past six months.

Providers' Knowledge, Opinions, Competence, Barriers, and Recent Practices According to Position (N = 9)

						Recent
Position or Department	п	Knowledge	Opinions	Competence	Barriers	Practices
Nurse (RN, vocational)	2	72.12	75	66.67	17	11.5
Therapist*	2	77.88	75	61.11	11.5	13.5
Case Manager	1	73.08	71.43	52.78	14	10
Scheduling Services	1	69.23	71.43	63.89	10	11
Other	3	75.64	82.14	85.19	12	13.3

*physical therapy, occupational therapy, speech therapy, respiratory therapy.

Table 3 displays the total subscale score of each TICPS subscale according to education. The Knowledge subscale ranged from a 71.6% to 77.9%. With the master's degree group scoring the highest and bachelor's degree group scoring the lowest. The Opinions subscale group ranged from 73.2% to 85.7%. The diploma/associate's degree group scored the highest on Opinions with the bachelor's group scoring the lowest. As far as the Competence subscale, the diploma/associate's group scored the highest and the master's group scoring the lowest.

The barriers subscale was kept in the mean format. The range for Barriers had a low of 8.5 to a high of 15.5. The diploma/associate's group identified the least barriers present, while the bachelor's level group identified the highest amount of barriers. The Recent Practices had a low of 9 to a high of 13.5. The diploma/associate's group and master's level group scored the highest on Recent Practices while the Other group had the lowest Recent Practices score.

		17 1 1	0		р :	Recent
Highest Degree Obtained	n	Knowledge	Opinions	Competence	Barriers	Practices
Diploma/Associates Degree	2	76.9	85.7	81.9	8.5	13.5
Bachelor's	4	71.6	73.2	66.7	15.5	12.0
Master's	2	77.9	75.0	61.1	11.5	13.5
Other	1	73.1	75.0	75.0	15.0	9.0

TIC Factors According to Education (N = 9)

Table 4 shows the correct responses (in percentages) of all providers and specific provider types (Nurse, Therapist, Case Manager, Scheduling Services, and Other) regarding each question in the Knowledge Category of the TICPS. The correct response rate for all knowledge items ranged from a low of 44.44% to 100%. Most providers correctly responded that "almost everyone who is seriously injured or ill has at least one traumatic stress reaction in the immediate aftermath of the event" (88.88%), "individuals who, at some point during the traumatic event, believe that they might die are at greater risk for posttraumatic stress reactions" (88.88%), and "there are things that providers can do to help prevent longer-term posttraumatic stress in ill and injured patients" (100%).

On the other hand, the least correctly answered knowledge item was "Individuals with significant posttraumatic stress reactions usually show obvious signs of distress" (33.33%). For each provider type, the percentage of correct responses varied, with nurse and therapist having the highest percentage of correct responses for most of the knowledge items. However, it is important to note that the sample sizes for each provider type are small, ranging from 1 to 3.

Providers' Knowledge Regarding Injury-Related Posttraumatic Stress (N = 9)

Correct Responses, n (%)

Knowledge Items	All Providers (N=9)	Nurse (RN, vocational) (n = 2)	Therapist* $(n=2)$	Case Manager (n=1)	Scheduling Services (n = 1)	Other $(n = 3)$
Almost everyone who is seriously injured or ill has at least one traumatic stress reaction in the immediate aftermath of the event.	8 (88.88)	2 (100)	1 (50)	1 (100)	1 (100)	3 (100)
It is inevitable that most individuals who experience a life-threatening illness or injury will go on to develop significant posttraumatic stress or PTSD.	4 (44.44)	1 (50)		1 (100)		2 (66.7)
Individuals who are more severely injured or ill generally have more serious traumatic stress reactions than those who are less severely injured or ill.	6 (66.66)	2 (100)	1 (50)	1 (100)		2 (66.7)
Individuals who, at some point during the traumatic event, believe that they might die are at greater risk for posttraumatic stress reactions.	8 (88.88)	2 (100)	2 (100)	1 (100)		3 (100)
Many individuals cope well on their own after experiencing serious illness or injury.	4 (44.44)	1 (50)			1 (100)	2 (66.7)
The psychological effects of an injury or illness often last longer than the physical symptoms.	8 (88.88)	2 (100)	2 (100)	1 (100)	1 (100)	2 (66.7)
Individuals with significant posttraumatic stress reactions usually show obvious signs of distress.	3 (33.33)	1 (50)		1 (100)		1 (33.3)
I know the common signs and symptoms of traumatic stress in ill or injured patients.	7 (77.77)	2 (100)	2 (100)	1 (100)		2 (66.7)
Some early traumatic stress reactions in patients can be part of a healthy emotional recovery process.	8 (88.88)	2 (100)	2 (100)	1 (100)	1 (100)	2 (66.7)
There are things that providers can do to help prevent longer-term posttraumatic stress in ill and injured patients.	9 (100)	2 (100)	2 (100)	1 (100)	1 (100)	3 (100)
There are effective screening measures for assessing traumatic stress that providers can use in practice.	8 (88.88)	2 (100)	2 (100)	1 (100)		3 (100)
Healthcare staff can themselves experience signs of physical and/or emotional distress related to their work.	9 (100)	2 (100)	2 (100)	1 (100)	1 (100)	3 (100)
The risk for staff distress is strongly influenced by both personal and work-place factors.	9 (100)	2 (100)	2 (100)	1 (100)	1 (100)	3 (100)

*physical therapy, occupational therapy, speech therapy, respiratory therapy.

Table 5 displays the questions in the Opinions subscale, and overall, participants mostly agreed with statements that support TIC. However, there were three questions where not all participants agreed. These questions are: "Medical care can be made less stressful for patients by changing the way it is provided", "Providers can teach patients how to cope with trauma", and "I have colleagues whom I can seek help from for a patient experiencing significant traumatic stress."

Participants responded more strongly to one question, indicating "strongly agree" rather than just "agree". This question was "It is necessary for providers to have mental health information about their patients in order to provide appropriate medical care."

Table 5

Providers Ratings, n (%)						
Statement About Trauma- Informed Care	Strongly disagree	Disagree	Agree	Strongly agree		
Providers should focus on	disagiee	Disagree	Agiec	agree		
medical care for hospitalized patients as opposed to patients' mental health.			8 (88.9)	1 (11.1)		
The way that medical care is provided can be changed to make it less stressful for patients.		1 (11.1)	7 (77.8)	1 (11.1)		
Providers can teach patients how to cope with trauma.		1 (11.1)	7 (77.8)	1 (11.1)		
Health care professionals should regularly assess for symptoms of traumatic stress.			8 (88.9)	1 (11.1)		
It is necessary for providers to have mental health information about their patients in order to provide appropriate medical care.			7 (77.8)	2 (22.2)		
I have colleagues I can turn to for help with a patient experiencing significant traumatic stress.		2 (22.2)	6 (66.7)	1 (11.1)		
Healthcare organizations should address how working with patients and families impacts staff.			8 (88.9)	1 (11.1)		

Providers' Opinion Regarding Trauma-Informed Care (N = 9)

This table, Table 6 shows the self-rated competence of healthcare providers in specific aspects of trauma-informed care. The providers were asked to rate themselves as "not competent," "somewhat competent," or "very competent."

In general, the providers rated themselves as at least somewhat competent in most aspects of trauma-informed care. The highest levels of competence were reported for engaging with traumatized patients, responding calmly without judgment to a patient's distress, educating patients, responding to a patient's question about whether they will die, responding to colleagues' needs, and managing your own work-related stress.

However, some aspects of trauma-informed care were rated as less competent. For example, eliciting details of a traumatic event from a patient without retraumatizing them was rated as not competent by 33.3% of providers, and understanding the scientific or empirical basis behind assessment and intervention for traumatic stress was rated not competent by 55.6% of providers.

	Provider Ratings, n (%)				
Specific Aspect of Trauma-Informed Care	Not competent	Somewhat competent	Very competent		
Engaging with traumatized patients so that they feel comfortable talking to you/ comforted by you.		6 (66.7)	3 (33.3)		
Responding calmly and without judgment to a patient's strong emotional distress.		5 (55.6%)	4 (44.4)		
Eliciting details of a traumatic event from a patient without retraumatizing them.	3 (33.3)	3 (33.3)	3 (33.3)		
Educating patients about common traumatic stress reactions and symptoms.	•	7 (77.8)	2 (22.2)		
Changing or altering situations within the hospital that a patient might experience as traumatic.	1 (11.1)	7 (77.8)	1 (11.1)		
Responding to a patient's question about whether he/she will die.	•	7 (77.8)	2 (22.2)		
Assessing a patient's distress, emotional needs, and support systems soon after a traumatic event.	1 (11.1)	7 (77.8)	1 (11.1)		
Providing basic trauma-focused interventions (assessing symptoms, normalizing, providing anticipatory guidance, coping assistance).	2 (22.2)	6 (66.7)	1 (11.1)		
Understanding how traumatic stress may present itself differently in patients of different ages, gender, or cultures.	2 (22.2)	6 (66.7)	1 (11.1)		
Understanding the scientific or empirical basis behind assessment and intervention for traumatic stress.	5 (55.6)	3 (33.3)	1 (11.1)		
Responding to colleagues' distress, emotional needs, and need for support.		6 (66.7)	3 (33.3)		
Managing your own work-related stress or distress.		7 (77.8)	2 (22.2)		

Providers' Self-Rated Competence in Specific Aspects of Trauma-Informed Care (N = 9)

Table 7 presents the recent trauma-informed practices of healthcare providers within the past 6 months, broken down by specific practice and type of provider. Of the

nine providers surveyed, the majority (55.5%) reported asking patients questions to assess their symptoms of distress. Two therapists and two Other positions reported performing this practice. Three providers (33.3%) reported asking questions to assess distress among patients' family members. Four providers (44.4%) reported teaching patients specific ways to manage pain and anxiety during procedures or to cope with upsetting experiences. The majority of providers (77.7%) reported encouraging patients to make use of their own social support system, and two therapists and one nurses reported performing this practice. None of the providers reported teaching families what to say to their family member after a difficult or painful experience, or providing information to families about emotional or behavioral reactions that may indicate their family member needs help. Over half of the providers surveyed (55.5%) reported assessing and caring for their own emotional and physical health. Two therapists and one nurse reported utilizing support for themselves or their team available from their organization.

Recent Trauma-Informed Practice, n (%)

Succific Turner Informed Duration	All Providers	Case Manager $(n = 1)$	Scheduling Services	Nurse $(n = 2)$	Therapist*	Other $(n = 2)$
Specific Trauma-Informed Practice	(n = 9)	(<i>n</i> = 1)	(n = 1)	(n = 2)	(n = 2)	(n = 3)
Ask a patient questions to assess his/her symptoms of distress	5 (55.5)	•	1 (100)		2 (100)	2 (66.7)
Ask patients' family members questions to assess their symptoms of distress	3 (33.3)			·	1 (50)	2 (66.7)
Teach a patient specific ways to manage pain and anxiety during a procedure	4 (44.4)			1 (50)	1 (50)	2 (66.7)
Teach a patient specific ways to cope with upsetting experiences	4 (44.4)	•		1 (50)	1 (50)	2 (66.7)
Encourage patients to make use of their own social support system (family, friends, etc.)	7 (77.7)	1 (100)	1 (100)	1 (50)	2 (100)	2 (66.7)
Teach family what to say to their family member after a difficult/painful/scary experience						
Provide information to family about emotional or behavioral reactions that indicate their family member may need help						
Assess and care for your personal emotional and physical health	5 (55.5)	1 (100)	•	1 (50)	2 (100)	1 (33.3)
Utilize support for yourself / your team available from your organization	3 (33.3)			1 (50)		2 (66.7)

Have Done this in the Past 6 Months

*physical therapy, occupational therapy, speech therapy, respiratory therapy.

CHAPTER V

DISCUSSION

In this chapter, I will discuss how the research question presented at the beginning can be answered by interpreting the results of this study. The results display the level of TIC practice, understanding, and opinions hospital employees have at this current point in time. To address the second question about the need for TIC training, the participants completed a mini-quiz about TIC and were given a score on a 100-point scale. From scoring the knowledge responses, the data shows that TIC training is needed for this particular sample.

Knowledge

This study was carried out with participants who worked in healthcare settings located in West Texas. The participants were healthcare workers, including nurses, case managers, therapists, and other direct care providers. The majority of the participants showed to have a general knowledge of TIC and hold positive feelings regarding the concept of TIC and its application. Because the values were converted to a 100-point scale in Table 2 and Table 3, a letter grade was assigned to the knowledge, opinions, and competence portion.

Because the sample size is extremely small, the generalizability of this study is quite low. The demographics, in terms of race, lack diversity and the participants mostly identify as white. This could impact the type of responses to the questionnaire. The mean scores were calculated, and it is clear that those with less patient care scored lower on the amount of knowledge one has regarding TIC. For example, the scheduling services employee scored the lowest on the knowledge portion with a 69.23%, or a D+. Those employed within scheduling services likely experience the least amount of direct patient care.

Education and training on TIC could be very beneficial for this hospital system. This sample scored somewhat low with no group scoring over 77.9% on the knowledge portion. The therapists scored the highest on the knowledge portion and this could be due to their profession emphasizing home environments, social supports, and a person's physical environment as well.

Opinions

The setting in which this study was conducted was assumed to be much more conservative and to hold more negative views of TIC compared to previous research. From the results, it appears most participants hold positive views and perceptions of TIC. The "Other" category scored the highest out of the various job roles at 82.14%, or a B-. Those who provided qualitative data identified themselves as paramedics or hold a cardiovascular role within the hospital. As seen in the literature review, first responders like paramedics may encounter situations where TIC is needed or required to interact successfully with patients. Regarding education, it appears that those with less formal education have more positive perceptions of TIC. Those with higher education are not within professional circles where TIC is emphasized.

Competence

Interestingly enough, the case manager scored the lowest on competence, receiving 52% or a letter F grade, and this could be due to a variety of factors. The duties

of the case manager may not involve the assessment of trauma and manipulating the space to be more trauma-informed. In this particular hospital setting, the case manager functions alongside a social worker. It could be that the social worker works with more patients that require an emphasis on TIC when compared to the case manager. Unfortunately, social workers who were sent this questionnaire did not participate in the survey.

Table 6 illustrates how over 50% of the respondents did not feel competent in understanding the empirical reasoning behind TIC. Informational brochures or trainings could increase healthcare professionals' understanding of the scientific evidence behind TIC. There is a plethora of educational material, books, and trainings that discuss the scientific evidence behind TIC which have been discussed in the literature review. Open discussion of these different educational sources could drastically improve these scores.

Barriers

There can be many barriers present within a system that is not educated on all things related to TIC. The instrument used in this study provided statements that related to barriers within the system. The highest possible score for barriers was 21, which this indicates the highest number of barriers present in a system. The highest mean score within this study was 17. This study found that nurses encountered the highest number of barriers. Likely, they see the need for TIC and do not feel supported by the structures of the health system. Over the past couple of years, COVID has dramatically affected the nursing profession and how many nurses perceive the healthcare systems. Healthcare workers may perceive the whole organization to push workers to focus so much on productivity that the implementation of TIC is impossible.

Recent Practice

From Table 7, healthcare workers do not report having provided information about the signs and symptoms of trauma after a traumatic experience within the last six months. This could become more common practice for healthcare workers if formal material was available to print out and provide to patients about the signs and symptoms of psychological trauma. It appears that the "Other" category practices the most TIC actions as seen in Table 7.

The most common practice among providers is the act of encouraging patients to make use of their social support system. In the hospital setting, the success of the patient's recovery or health is dependent on the patient's support. Healthcare workers may encourage the utilization of social supports so that the patient can receive the care they need and will be successful in their environment.

Implications for Practice

People in leadership positions in hospital administration need to understand how the results of this study illustrate the need for more TIC training and how TIC training can be a resource for healthcare providers to provide more quality care. The shift to focus on TIC can only be done if workers think positively and have a basic knowledge of its components. As seen in the results, the participants were limited to only nine which shows how workers lack TIC awareness or do not think positively of TIC. The lack of participant response in this study shows disengagement and lack of interest in TIC at this particular hospital system.

If patients' trauma is understood more fully, then more appropriate care can be provided and reduce conflict in the workplace setting. By using TIC, it means that

healthcare workers have the knowledge and tools to grasp the whole picture of the patient they are serving. If one does not consider how a person's trauma and history impacts the patient's current behavior, then the services provided will be substandard. Healthcare professionals need to take TIC seriously as their knowledge and practice could be improved if they consider the prevalence of trauma and the strategies to avoid retraumatization.

The results of this study proved to be somewhat different than expected. Because of the rural setting in which this study took place, negative views and poor knowledge of TIC were expected. The opposite proved to be true, and participants showed to have satisfactory knowledge or the minimum amount to consider their scores as passing a TIC "course." It is important for managers within these hospital departments to encourage an environment where the affect trauma is acknowledged as having an influence on a person's livelihood.

Implications for Policy

As discussed in the literature review, SAMHSA, a government agency, spearheaded the TIC movement. Funding for programs related to TIC is likely dependent on which party is in power and the focus of the legislation. Even though the practice of TIC is not political, in some areas the topic may be politicized to the point where the implementation of TIC is viewed as being "overly sensitive." TIC is not some buzzword but describes a process of being informed about science and how trauma has a real biological, psychological, and emotional effect on all individuals. This study has emphasized how there is a need for funding, and therefore research, in this area. As

presidents change, the funding toward SAMHSA may change as seen in the 2024 fiscal year budget (SAMHSA, 2023).

In 2001, many individuals were impacted directly by 9/11 and the collective U.S. experienced the trauma of this event through media. 9/11 had a large impact on the American psyche and is an example of how there became a larger focus on trauma and its effects. Many people in the U.S. were stunned to see the devasting destruction and lacked the ability to see a way forward amidst such grief and pain.

The Coronavirus-19 (COVID-19) pandemic has impacted how healthcare systems operate and the attitudes of workers within these systems. Healthcare workers were stretched thin throughout the pandemic, so systemic burnout in the healthcare field can now be seen. This could be contributed to the failure of the government response or hospital systems themselves. The trauma endured by many workers has left them feeling exhausted and lacking motivation to learn new evidence-based tools, like TIC. Workers can begin to recognize and process their own trauma through TIC and begin seeing patients through a trauma lens as well.

Limitations

The design of this study created significant limitations in the findings because the study is cross-sectional in nature. The cross-sectional design only measures the factors at one single point in time and there is no additional reference to compare if these experiences have changed due to environmental factors.

As mentioned previously, a major limitation of this study is the sample size. The HR department at this particular hospital gathered 200 employee emails across this hospital's network of three different campuses. The questionnaire was sent out, and

responses were collected for three weeks and then analyzed. From the 200 employees provided the option to take the survey, only nine participants fully completed the questionnaire. This response rate is extremely low and limits the ability of this study to generalize any results.

Future Research

There still is a barrier between the medical field and fields like social work which creates a gap in the research. The amount of research conducted is limited in terms of studies showing the effectiveness of TIC in the general hospital setting. As TIC becomes more widespread in the healthcare setting, there is more opportunity for researchers to investigate how TIC can affect the workplace and outcomes for consumers. The type of information gathered from this study concludes that further research is still needed to address what type of training is the most effective in reducing traumatic stress in patients.

In social work, TIC is quite common, yet some fields, like the medical field, are slower to incorporate TIC into practice. For possible future research, it would be important to see how social workers could spearhead research about TIC in the hospital field. In order to improve research regarding the impact of TIC and how it can make hospitals a safer and more welcoming environment, longitudinal studies are needed with larger sample sizes.

This study provided a small glimpse into how providers in this geographical context view TIC and how accurately they can use TIC in practice. TIC is not easily defined, and practitioners may use TIC without even realizing it. Therefore, studies that identify attitudes and training of medical professionals may fall short of accurately calculating the effectiveness of TIC in the hospital setting. From this study, more pre- and

post-test studies need to be conducted to measure the change in outcomes once TIC training is provided to healthcare workers.

REFERENCES

- Ambuel, B., Hamberger, L. K., Guse, C. E., Melzer-Lange, M., Phelan, M. B., & Kistner,
 A. (2013). Healthcare can change from within: Sustained improvement in the
 healthcare response to intimate partner violence. *Journal of Family Violence*,
 28(8), 833–847. https://doi.org/10.1007/s10896-013-9550-9
- Beattie, J., Griffiths, D., Innes, K., & Morphet, J. (2019). Workplace violence perpetrated by clients of health care: A need for safety and trauma-informed care. *Journal of Clinical Nursing*, 28(1–2), 116–124. https://doi.org/10.1111/jocn.14683
- Brown, T., Ashworth, H., Bass, M., Rittenberg, E., Levy-Carrick, N., Grossman, S.,
 Lewis-O'Connor, A., & Stoklosa, H. (2022). Trauma-informed care interventions in emergency medicine: A systematic review. *Western Journal of Emergency Medicine*, 23(3), 334–344. https://doi.org/10.5811/westjem.2022.1.53674
- Bruce, M. M., Kassam-Adams, N., Rogers, M., Anderson, K. M., Sluys, K. P., & Richmond, T. S. (2018). Trauma providers' knowledge, views, and practice of trauma-informed care. *Journal of Trauma Nursing*, 25(2), 131–138. https://doi.org/10.1097/JTN.00000000000356
- Cations, M., Laver, K., Couzner, L., Flatman, S., Bierer, P., Ames, C., Huo, Y., & Whitehead, C. (2021). Trauma-informed care in geriatric inpatient units to improve staff skills and reduce patient distress: A co-designed study protocol. *BMC Geriatrics*, *21*(1), 492. https://doi.org/10.1186/s12877-021-02441-1

- Center for Pediatric Traumatic Stress (2021). www.HealthCareToolbox.org (Website, Accessed October 14, 2022).
- Couzner, L., Spence, N., Fausto, K., Huo, Y., Vale, L., Elkins, S., Saltis, J., & Cations,
 M. (2022). Delivering trauma-informed care in a hospital ward for older adults
 with dementia: An illustrative case series. *Frontiers in Rehabilitation Sciences*, *3*.
 https://doi.org/10.3389/fresc.2022.934099
- Danese, A., & McEwen, B. S. (2012). Adverse childhood experiences, allostasis, allostatic load, and age-related disease. *Physiology & Behavior*, 106(1), 29–39. https://doi.org/10.1016/j.physbeh.2011.08.019
- DePrince, A., Zurbriggen, E., Chu, A., & Smart, L. (2010). Development of the trauma appraisal questionnaire. *Journal of Aggression, Maltreatment, and Trauma, 19*, 275–299. https://doi.org/10.1080/10926771003705072
- Ervin, K., Reid, C., Podubinski, T., & Phillips, J. (2021). Trauma-informed knowledge, awareness, practice, competence and confidence of rural health staff: A descriptive study. *Journal of Nursing Education and Practice*, 11(9), 1. https://doi.org/10.5430/jnep.v11n9p1
- Farley, M., & Patsalides, B. M. (2001). Physical symptoms, posttraumatic stress disorder, and healthcare utilization of women with and without childhood physical and sexual abuse. *Psychological Reports*, 89(3), 595.

- 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
- Forkey, H., Inkelas, M., Ocampo, A., Lopez, N., Vizueta, N., Griffin, J. L., Crane, M. A., Hurley, T. P., Balaban, Z., Shah, A., & Szilagyi, M. A. (2022). Pediatric approach to trauma treatment and resilience—A novel relationship-based curriculum and approach to train pediatric professionals to provide trauma-informed care. *Academic Pediatrics*, 22(2), 342–345. https://doi.org/10.1016/j.acap.2021.07.023
- Gallo-Silver, L., Anderson, C. M., & Romo, J. (2014). Best clinical practices for male adult survivors of childhood sexual abuse: "Do no harm." *The Permanente Journal*, 18(3), 82–87. https://doi.org/10.7812/TPP/14-009
- Gerlach, B., LaBrenz, C. A., Barczyk, A. N., Larkin, H., Van Diest, H., Morris, M., & Faulkner, M. (2021). ACE-informed responses in Central Texas: Findings from a needs assessment. *Social Work in Public Health*, *36*(7–8), 820–831. https://doi.org/10.1080/19371918.2021.1958118
- Green, B. L., Saunders, P. A., Power, E., Dass-Brailsford, P., Schelbert, K. B., Giller, E., Wissow, L., Hurtado de Mendoza, A., & Mete, M. (2016). Trauma-informed medical care: Patient response to a primary care provider communication Training. *Journal of Loss and Trauma*, *21*(2), 147–159. https://doi.org/10.1080/15325024.2015.1084854

- Gutowski, E. R., Badio, K. S., & Kaslow, N. J. (2022). Trauma-informed inpatient care for marginalized women. *Psychotherapy*. https://doi.org/10.1037/pst0000456
- Hamberger, L. K., Barry, C., & Franco, Z. (2019). Implementing trauma-informed care in primary medical settings: Evidence-based rationale and approaches. *Journal of Aggression, Maltreatment & Trauma*, 28(4), 425–444.
 https://doi.org/10.1080/10926771.2019.1572399
- Herman, J. L. (1992). Trauma and recovery. Basic Books.
- Hoysted, C., Jobson, L., & Alisic, E. (2019). A pilot randomized controlled trial evaluating a web-based training program on pediatric medical traumatic stress and trauma-informed care for emergency department staff. *Psychological Services*, *16*(1), 38–47. https://doi.org/10.1037/ser0000247
- Kartha, A., Brower, V., Saitz, R., Samet, J. H., Keane, T. M., & Liebschutz, J. (2008).
 The impact of trauma exposure and post-traumatic stress disorder on healthcare utilization among primary care patients. *Medical Care*, 46(4), 388–393.
 https://doi.org/10.1097/MLR.0b013e31815dc5d2
- Kassam-Adams, N., Rzucidlo, S., Campbell, M., Good, G., Bonifacio, E., Slouf, K., Schneider, S., McKenna, C., Hanson, C. A., & Grather, D. (2015). Nurses' views and current practice of trauma-informed pediatric nursing care. *Journal of Pediatric Nursing*, 30(3), 478–484. <u>https://doi.org/10.1016/j.pedn.2014.11.008</u>

- Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Benjet, C., Bromet, E. J., Cardoso, G.,
 Degenhardt, L., de Girolamo, G., Dinolova, R. V., Ferry, F., Florescu, S., Gureje,
 O., Haro, J. M., Huang, Y., Karam, E. G., Kawakami, N., Lee, S., Lepine, J.-P.,
 Levinson, D., ... Koenen, K. C. (2017). Trauma and PTSD in the WHO world
 mental health surveys. *European Journal of Psychotraumatology*, 8(sup5),
 1353383. https://doi.org/10.1080/20008198.2017.1353383
- Kokokyi, S., Klest, B., & Anstey, H. (2021). A patient-oriented research approach to assessing patients' and primary care physicians' opinions on trauma-informed care. *PLoS ONE*, *16*(7), e0254266. https://doi.org/10.1371/journal.pone.0254266
- Lathan, E. C., Selwyn, C. N., & Langhinrichsen-Rohling, J. (2021). The "3 Es" of trauma-informed care in a federally qualified health center: Traumatic *event* and *experience* -related predictors of physical and mental health *effects* among female patients. *Journal of Community Psychology*, 49(2), 703–724. https://doi.org/10.1002/jcop.22488
- Liebschutz, J., Saitz, R., Brower, V., Keane, T. M., Lloyd-Travaglini, C., Averbuch, T., & Samet, J. H. (2007). PTSD in urban primary care: High prevalence and low physician recognition. *Journal of General Internal Medicine*, 22(6), 719–726. https://doi.org/10.1007/s11606-007-0161-0
- Lindemann, E. (1944). Symptomatology and management of acute grief. *The American Journal of Psychiatry*, *101*, 141–148.

https://doi-org.acu.idm.oclc.org/10.1176/ajp.101.2.141

- Mantler, T., Jackson, K. T., Walsh, E. J., Jackson, B., Baer, J. R., Davidson, C. A.,
 Shillington, K. J., & Parkinson, S. (2022). Promoting attachment through healing (PATH): Results of a retrospective feasibility study providing trauma-and-violence-informed care to pregnant women. *Journal of Advanced Nursing (John Wiley & Sons, Inc.)*, 78(2), 557–568. https://doi.org/10.1111/jan.15117
- McDonald, J. (2020). "It's fine; I'm fine": Considerations for trauma-informed healthcare practices. *Journal of Aggression, Maltreatment & Trauma*, 29(4), 385–399. https://doi.org/10.1080/10926771.2019.1710641
- McNamara, M., Cane, R., Hoffman, Y., Reese, C., Schwartz, A., & Stolbach, B. (2021).
 Training hospital personnel in trauma-informed care: Assessing an interprofessional workshop with patients as teachers. *Academic Pediatrics*, 21(1), 158–164. https://doi.org/10.1016/j.acap.2020.05.019
- Mersky, J. P., Topitzes, J., & Britz, L. (2019). Promoting Evidence-Based, Trauma-Informed Social Work Practice. *Journal of Social Work Education*, 55(4), 645– 657. https://doi.org/10.1080/10437797.2019.1627261
- Millar, H. C., Lorber, S., Vandermorris, A., Thompson, G., Thompson, M., Allen, L.,
 Aggarwal, A., & Spitzer, R. F. (2021). "No, you need to explain what you are doing": Obstetric care experiences and preferences of adolescent mothers with a history of childhood trauma. *Journal of Pediatric and Adolescent Gynecology*, 34(4), 538–545. https://doi.org/10.1016/j.jpag.2021.01.006

- Moss, K. M., Healy, K. L., Montague, G., Kenardy, J., Ziviani, J., Newcombe, P.,
 Cobham, V. E., & McCutcheon, H. (2019). Trauma-informed care in practice:
 Observed use of psychosocial care practices with children and families in a large pediatric hospital. *Psychological Services*, *16*(1), 16–28.
 https://doi.org/10.1037/ser0000270
- Porges, S. W. (1995). Orienting in a defensive world: Mammalian modifications of our evolutionary heritage. A polyvagal theory. *Psychophysiology*, 32(4), 301–318.
- Porges, S. W. (2009). The polyvagal theory: New insights into adaptive reactions of the autonomic nervous system. *Cleveland Clinic journal of medicine*, 76 Suppl 2(Suppl 2), S86–S90. https://doi.org/10.3949/ccjm.76.s2.17
- Porges, S. W. (2011). *The polyvagal theory: Neurophysiological foundations of emotions, attachment, communication, and self-regulation.* New York: WW Norton.
- Rawal, S., Kwan, J. L., Razak, F., Detsky, A. S., Guo, Y., Lapointe-Shaw, L., Tang, T., Weinerman, A., Laupacis, A., Subramanian, S. V., & Verma, A. A. (2019).
 Association of the trauma of hospitalization with 30-day readmission or emergency department visit. *JAMA Internal Medicine*, *179*(1), 38. https://doi.org/10.1001/jamainternmed.2018.5100

Richmond, T. S., Ruzek, J., Ackerson, T., Wiebe, D. J., Winston, F., & Kassam-Adams,
N. (2011). Predicting the future development of depression or PTSD after injury. *General Hospital Psychiatry*, 33(4), 327–335.
https://doi.org/10.1016/j.genhosppsych.2011.05.003

- Ringel, S., & Brandell, J. R. (2012). *Trauma: Contemporary directions in theory,* practice, and research. SAGE Publications, Inc.
- Schulman, M., & Menschner, C. (2018, January). *Laying The Groundwork for Trauma-Informed Care*. Hamilton, NJ: Center for Healthcare Strategies, Inc. Retrieved from https://www.chcs.org/media/Brief-Laying-the-Groundwork-for-TIC.pdf
- Shamaskin, G. A. M., McLaughlin, E. A., Quinn, N., & Buono, F. D. (2020). Traumainformed primary care for medical residents. *Clinical Teacher*, 17(2), 200–204. https://doi.org/10.1111/tct.13082
- Simons, M., Kimble, R., & Tyack, Z. (2021). Understanding the meaning of traumainformed care for burns health care professionals in a pediatric hospital: A qualitative study using interpretive phenomenological analysis. *Burns*. https://doi.org/10.1016/j.burns.2021.10.015
- Stevens, N. R., Ziadni, M. S., Lillis, T. A., Gerhart, J., Baker, C., & Hobfoll, S. E. (2019). Perceived lack of training moderates relationship between healthcare providers' personality and sense of efficacy in trauma-informed care. *Anxiety, Stress, & Coping, 32*(6), 679–693. https://doi.org/10.1080/10615806.2019.1645835
- Stinson, J. D., Quinn, M. A., & Levenson, J. S. (2016). The impact of trauma on the onset of mental health symptoms, aggression, and criminal behavior in an inpatient psychiatric sample. *Child Abuse & Neglect*, 61, 13–22. https://doiorg.acu.idm.oclc.org/10.1016/j.chiabu.2016.09.005

Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach*. HHS Publication No. (SMA)14-4884. Rockville, MD: Substance Abuse and Mental Health Services Administration.

- Substance Abuse and Mental Health Services Administration. (2023). Department of Health and Human Services Fiscal Year 2024. https://www.samhsa.gov/sites/default/files/samhsa-fy-2024-cj.pdf
- Terr, L. (1979). Children of Chowchilla: A study of psychic trauma. *Psychoanalytic Study of the Child*, 34, 552–623.

Thombs, B. D., Bernstein, D. P., Ziegelstein, R. C., Bennett, W., & Walker, E. A. (2007).
A brief two-item screener for detecting a history of physical or sexual abuse in childhood. *General Hospital Psychiatry*, 29(1), 8–13.
https://doi.org/10.1016/j.genhosppsych.2006.10.013

Thompson-Lastad, A., Yen, I. H., Fleming, M. D., Van Natta, M., Rubin, S., Shim, J. K., & Burke, N. J. (2017). Defining trauma in complex care management: Safety-net providers' perspectives on structural vulnerability and time. *Social Science & Medicine*, 186, 104–112. https://doi.org/10.1016/j.socscimed.2017.06.003

Va.gov: Veterans Affairs. Trauma and stressor exposure measures. (2018, September 24). Retrieved October 25, 2022, from

https://www.ptsd.va.gov/professional/assessment/te-measures/index.asp

- van den Berk-Clark, C., Gallamore, R., Barnes, J., Oberle, A., Meyer, D., Schneider, F.
 D., & Ambulatory Research Community Health Network (ARCHNet). (2021).
 Identifying and overcoming barriers to trauma screening in the primary care
 setting. *Families, Systems, & Health*, 39(2), 177–187.
 https://doi.org/10.1037/fsh0000593
- van der Kolk, B. A. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, New York, Penguin Books.

Wilson, C., Pence, D., & Conradi, L. (2013). Trauma-informed care. *Encyclopedia of Social Work*.

https://oxfordre.com/socialwork/view/10.1093/acrefore/9780199975839.001.000 1/acrefo re-9780199975839-e-1063.

APPENDIX A

Institutional Review Board Approval Letter

Date: October 26, 2022

PI: Emily Tippens

Department: 2027-School of Social Work, 20531-Masters in Social Work

Re: Initial - IRB-2022-45

Health Care Workers' Perceptions, Practices, and Knowledge of Trauma-informed Care in the Hospital Setting

The Abilene Christian University Institutional Review Board has rendered the decision below for *Health Care Workers' Perceptions, Practices, and Knowledge of Trauma-informed Care in the Hospital Setting*. The administrative check-in date is --.

Decision: Exempt

Category: Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

Research Notes:

Additional Approvals/Instructions:

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable. All approval letters and study documents are located within the Study Details in Cayuse IRB.

The following are all responsibilities of the Primary Investigator (PI). Violation of these responsibilities may result in suspension or termination of research by the Institutional Review Board. If the Primary Investigator is a student and fails to fulfil any of these responsibilities, the Faculty Advisor then becomes responsible for completing or upholding any and all of the following:

When the research is completed, inform the Office of Research and Sponsored Programs. If your study is Exempt, Non-Research, or Non-Human Research, email orsp@acu.edu to indicate that the research has finished.
According to ACU policy, research data must be stored on ACU campus (or electronically) for 3 years from inactivation of the study, in a manner that is secure but accessible should the IRB request access.

• It is the Investigator's responsibility to maintain a general environment of safety for all research participants and all

members of the research team. All risks to physical, mental, and emotional well-being as well as any risks to confidentiality should be minimized.

For additional information on the policies and procedures above, please visit the IRB website http://www.acu.edu/community/offices/academic/orsp... or email orsp@acu.edu with your questions.

Sincerely,

Abilene Christian University Institutional Review Board

APPENDIX B

Survey with Informed Consent

You may be able to take part in a research study. This form provides important information about that study, including the risks and benefits to you as a potential participant. Please read this form carefully and ask the researcher any questions that you may have about the study. You can ask about research activities and any risks or benefits you may experience. You may also wish to discuss your participation with other people, such as your family doctor or a family member.

Your participation in this research is entirely voluntary. You may refuse to participate or stop your participation at any time and for any reason without any penalty or loss of benefits to which you are otherwise entitled.

PURPOSE AND DESCRIPTION:

By, participating in the study you will be presented with:

A survey 48-question survey that gauges your knowledge, perceptions, and practices of trauma-informed care. The purpose is to gain insight into how healthcare workers view trauma-informed care, their understanding of it, and values associated with it. This research is being conducted to see how employees at Hendrick view trauma-informed care and what type of training would be beneficial for workers, given the results of this study.

You will be asked to complete a 48-question survey that will take about 10-15 minutes.

RISKS & BENEFITS: There are risks to taking part in this research study. Below is a list of the foreseeable risks, including the seriousness of those risks and how likely they are to occur:

•Some questions may be personal or upsetting. This risk is minimal. You can skip them or quit the survey at any time.

• Online data being hacked or intercepted: Anytime you share information online there are risks. We're using a secure system to collect this data, but we can't completely eliminate this risk.

•Breach of confidentiality: There is a chance your data could be seen by someone who shouldn't have access to it. We're minimizing this risk in the following ways:

o Data is anonymous.

o We'll store all electronic data on a password-protected, encrypted computer.

o We'll keep your identifying information separate from your research data, but we will be able to link it to you. We'll destroy this link after we finish collecting and analyzing the data.

Benefits: There are potential benefits to participating in this study. Such benefits may include the improvement of care and contribute to the research of health care workers' understanding of trauma-informed care. The researchers cannot guarantee that you will experience any personal benefits from participating in this study.

PRIVACY & CONFIDENTIALITY: Any information you provide will be confidential to the extent allowable by law. Some identifiable data may have to be shared with individuals outside of the study team, such as members of the ACU Institutional Review Board. Otherwise, your confidentiality will be protected by the data being anonymous, on a password protected database, and on a password protected computer.

The primary risk with this study is breach of confidentiality. However we have taken steps to minimize this risk. We will not be collecting any personal identification data during the survey. However, Qualtrics may collect information from your computer. You may read their privacy statements here: https://www.qualtrics.com/privacy-statement/.

CONTACTS: If you have questions about the research study, the lead researcher is Emily Tippens, BSW, LBSW and may be contacted at egt17a@acu.edu. If you are unable to reach the lead researcher, or wish to speak to someone other than the lead researcher, you may contact Alan Lipps, PhD at ajl07a@acu.edu. If you have concerns about this study, believe you may have been injured because of this study, or have general questions about your rights as a research participant, you may contact ACU's Chair of the Institutional Review Board and Executive Director of Research, Qi Hang, Ph.D. Dr. Hang may be reached at (325) 674-2885 Qi.hang@acu.edu 328 Hardin Administration Bldg, ACU Box 29145 Abilene, TX 79699

Please click the button below if you voluntarily agree to participate in this study. Click

only after you have read all of the information provided and your questions have been answered to your satisfaction. If you wish to have a copy of this consent form, you may print it now. You do not waive any legal rights by consenting to this study.

Agree (1)Disagree (2)

Skip To: End of Survey If You may be able to take part in a research study. This form provides important information about... = Disagree

End of Block: Consent

Start of Block: Demographics

Gender

\bigcirc	Male	(1)

• Female (2)

• Non-binary / third gender (3)

62

Age

O Under 18 (1)
O 18 - 24 (2)
O 25 - 34 (3)
O 35 - 44 (4)
O 45 - 54 (5)
O 55 - 64 (6)
0 65 - 74 (7)
O 75 - 84 (8)
○ 85 or older (9)

Race

O White (1)
O Black or African American (2)
O American Indian or Alaska Native (3)
O Asian (4)
\bigcirc Native Hawaiian or Pacific Islander (5)
Other (6)

_ _ _ _ _ _

Ethnicity

O Hispanic/Latino (1)
O Non-Hispanic/Latino (2)
O Prefer not to say (3)

Position

- O Nurse (1)
- Nurse Practitioner/Physician Assistant (2)
- Therapist (PT/OT/SP) (3)
- O Surgeon (4)
- O Physician (5)
- O Case Manager (6)
- O Social Worker (7)
- O Administrative (8)
- O Environmental (9)
- CNA/PCT (10)
- Other (11)_____

Number of years in role

	1		2		3		4		5		6		7		8		9		1
0		0		0		0		0		0		0		0		0		00	

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _

# years ()	
Highest degree obtained	
O Diploma/Associates Degree (1)	
O Bachelor's (2)	
O Master's (3)	
O Doctorate (4)	
Other (5)	

End of Block: Demographics

Start of Block: Default Question Block

Based on your understanding and experience, indicate whether you more strongly agree or disagree with the following:

Almost everyone who is seriously injured or ill has at least one traumatic stress reaction in the immediate aftermath of the event.

O Strongly disagree	(1)
O Disagree (2)	
O Agree (3)	
○ Strongly agree (4	1)

It is inevitable that most individuals who experience a lifethreatening illness or injury will go on to develop significant posttraumatic stress or PTSD.

Strongly disagree (1)
Disagree (2)
Agree (3)
Strongly agree (4)

Individuals who are more severely injured or ill generally have more serious traumatic stress reactions than those who are less severely injured or ill.

Strongly disagree (1)
Disagree (2)
Agree (3)

 \bigcirc Strongly agree (4)

.

Individuals who, at some point during the traumatic event, believe that they might die are at greater risk for posttraumatic stress reactions.

O Strongly disagree	(1)
O Disagree (2)	
O Agree (3)	
O Strongly agree (4)	

Many individuals cope well on their own after experiencing serious illness or injury.

\bigcirc	Strongly	disagree	(1)
------------	----------	----------	-----

- O Disagree (2)
- O Agree (3)
- \bigcirc Strongly agree (4)

The psychological effects of an injury or illness often last longer than the physical symptoms.

○ Strongly disagree (1)
O Disagree (2)
O Agree (3)
O Strongly agree (4)

Individuals with significant posttraumatic stress reactions usually show obvious signs of distress.

Strongly disagree (1)
Disagree (2)
Agree (3)
Strongly agree (4)

I know the common signs and symptoms of traumatic stress in ill or injured patients.

Strongly disagree (1)
Disagree (2)
Agree (3)
Strongly agree (4)

Some early traumatic stress reactions in patients can be part of a healthy emotional recovery process.

Strongly disagree (1)
Disagree (2)
Agree (3)
Strongly agree (4)

There are things that providers can do to help prevent longer-term posttraumatic stress in ill and injured patients.

Strongly disagree (1)
Disagree (2)
Agree (3)
Strongly agree (4)

There are effective screening measures for assessing traumatic stress that providers can use in practice.

○ Strongly disa	gree (1)	
O Disagree (2)		
O Agree (3)		
Strongly agree	ee (4)	

Healthcare staff can themselves experience signs of physical and/or emotional distress related to their work.

 Strongly disagree (1)
O Disagree (2)
O Agree (3)
O Strongly agree (4)

The risk for staff distress is strongly influenced by both personal and work-place factors.

0	Strongly disagree	(1)	
0	Disagree (2)		
\bigcirc	Agree (3)		

 \bigcirc Strongly agree (4)

End of Block: Default Question Block

Start of Block: Block 1

Please indicate whether you more strongly agree or disagree with the following statements:

Providers should focus on medical care for hospitalized patients as opposed to patients' mental health.

Strongly disagree (1)
Disagree (2)
Agree (3)
Strongly Agree (4)

The way that medical care is provided can be changed to make it less stressful for patients.

\bigcirc	Strongly disagree	(1)
\bigcirc	Disagree (2)	

O Agree (3)

O Strongly Agree (4)

Providers can teach patients how to cope with trauma.

O Strongly disagree (1)
O Disagree (2)
O Agree (3)
O Strongly Agree (4)

Health care professionals should regularly assess for symptoms of traumatic stress.

\bigcirc Strongly disagree (1)
O Disagree (2)
O Agree (3)
O Strongly Agree (4)

It is necessary for providers to have mental health information about their patients in order to provide appropriate medical care.

Strongly disagree (1)

- O Disagree (2)
- O Agree (3)
- O Strongly Agree (4)

I have colleagues I can turn to for help with a patient experiencing significant traumatic stress.

O Strongly disagree (1)
O Disagree (2)
O Agree (3)
O Strongly Agree (4)

Healthcare organizations should address how working with patients and families impacts staff.

0	Strongly disagree (1)
0	Disagree (2)
0	Agree (3)
0	Strongly Agree (4)

End of Block: Block 1

Start of Block: How would you rate your competence and comfort in...

How would you rate your competence and comfort in...

Engaging with traumatized patients so that they feel comfortable talking to you/ comforted by you.

Not competent (1)
 Somewhat competent (2)
 Very competent (3)
 Responding calmly and without judgment to a patient's strong emotional distress.
 Not competent (1)
 Somewhat competent (2)
 Very competent (3)

Eliciting details of a traumatic event from a patient without retraumatizing them.

O Not competent (1)

O Somewhat competent (2)

• Very competent (3)

Educating patients about common traumatic stress reactions and symptoms.

Not competent (1)
 Somewhat competent (2)
 Very competent (3)

Changing or altering situations within the hospital that a patient might experience as traumatic.

O Not competent (1)

Somewhat competent (2)

 \bigcirc Very competent (3)

Responding to a patient's question about whether he/she will die.

O Not competent (1)

O Somewhat competent (2)

O Very competent (3)

Assessing a patient's distress, emotional needs, and support systems soon after a traumatic event.

O Not competent (1)

Somewhat competent (2)

O Very competent (3)

Providing basic trauma-focused interventions (assessing symptoms, normalizing, providing anticipatory guidance, coping assistance).

O Not competent (1)

Somewhat competent (2)

• Very competent (3)

Understanding how traumatic stress may present itself differently in patients of different ages, gender, or cultures.

O Not competent (1)

Somewhat competent (2)

• Very competent (3)

Understanding the scientific or empirical basis behind assessment and intervention for traumatic stress.

Not competent (1)
 Somewhat competent (2)
 Very competent (3)
 Responding to colleagues' distress, emotional needs, and need for support.
 Not competent (1)
 Somewhat competent (2)
 Very competent (3)
 Managing your own work-related stress or distress.
 Not competent (1)

O Somewhat competent (2)

 \bigcirc Very competent (3)

End of Block: How would you rate your competence and comfort in...

Start of Block: Block 3

Please indicate whether any of the following is a barrier for you in providing basic trauma-informed assessment / intervention:

Time constraints

- O Not a barrier (1)
- Somewhat of a barrier (2)
- O Significant barrier (3)

Scope of practice constraints

- O Not a barrier (1)
- Somewhat of a barrier (2)
- O Significant barrier (3)

Lack of training

- Not a barrier (1)
- Somewhat of a barrier (2)
- O Significant barrier (3)

Confusing or unclear information on trauma informed care

○ N	ot a barrier (1)	
⊖ so	omewhat of a barrie	r (2)
🔿 Si	gnificant barrier (3)	1

Worry about further upsetting or traumatizing patients

O Not a barrier (1)

Somewhat of a barrier (2)

O Significant barrier (3)

Lack of organizational support

O Not a barrier (1)

Somewhat of a barrier (2)

O Significant barrier (3)

Level of personal stress/distress

O Not a barrier (1)

Somewhat of a barrier (2)

O Significant barrier (3)

End of Block: Block 3

Start of Block: Block 4

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

In the past SIX (6) months, have you done the following basic trauma-informed interventions?
Ask a patient questions to assess his/her symptoms of distress
O No (1)
○ Yes (2)
Ask patients' family members questions to assess their symptoms of distress
O No (1)
○ Yes (2)
Teach a patient specific ways to manage pain and anxiety during a procedure
O No (1)
○ Yes (2)

Teach a patient specific ways to cope with upsetting experiences

○ No (1)		
○ Yes (2)		

Encourage patients to make use of their own social support system (family,

friends, etc.)

🔾 No (1)	
○ Yes (2)	

Teach family what to say to their family member after a difficult/painful/scary experience

0	No	(1)
0	Yes	(2)

Provide information to family about emotional or behavioral reactions that indicate their family member may need help

0	No	(1)
\bigcirc	Yes	(2)

Assess and care for your personal emotional and physical health

O No (1)	
Yes (2)	
Utilize support for yourself / your team available from your organization	
O No (1)	
Yes (2)	
End of Block: Block 4	

APPENDIX C

Solicitation Email

Greetings,

My name is Emily Tippens. I am a graduate student at Abilene Christian University currently completing my field placement in the Case Management Department at Hendrick Medical Center. I am currently working on some research for my thesis: **Health Care Workers' Perceptions, Practices, and Knowledge of Trauma-informed Care in the Hospital Setting**. In order to conduct this research for my thesis, I need to collect some data. I am hoping to solicit participation in this study from health care workers currently employed by the Hendrick hospital system.

This survey will be conducted using Qualtrics. This study will be a one-time survey that may take 10-15 minutes to complete.

PARTICIPATION IN THIS STUDY IS COMPLETELY VOLUNTARY.

Anyone who chooses not to participate in the study will in no way be penalized. The researcher will not be able to see who has/has not responded to the survey as all information collected will be <u>completely anonymous</u>. No names or email addresses will be collected for the purpose of this study. Attached to this email is the Informed Consent you may read through it and save it for your personal records. Contact information for myself along with my ACU faculty advisor is included in this form. Informed consent is also included as part of the survey. You will be asked to consent to this study before being allowed to proceed to the survey. If you feel inclined to participate in this study, please click on the following link or scan the QR code with your smart device:

I appreciate you taking the time and energy to read this email. Thank you for all you do as a health care worker for your patients, their families, and for the Abilene community.

Sincerely, Emily Tippens, LBSW egt17a@acu.edu