Saudi Journal of Medicine and Public Health

https://saudijmph.com/index.php/pub

https://doi.org/10.64483/202412498

Beyond the Physical Wound: The Effectiveness of Trauma-Informed Care Models in Nursing Across Healthcare Settings—A Scoping Review of Patient and Staff Outcomes

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Abstract

Background: Trauma, both physical and psychological, represents a pervasive public health crisis with profound implications for healthcare utilization. Trauma-Informed Care (TIC) has emerged as a systemic, organizational framework that recognizes the pervasive impact of trauma and promotes environments of healing and safety for all.

Aim: This scoping review aims to map the breadth and effectiveness of TIC models as implemented and led by nursing professionals across the care continuum, from high-acuity settings like the Emergency Room to community-based Primary Care.

Methods: A scoping review methodology following the Joanna Briggs Institute (JBI) framework was conducted. Five electronic databases (PubMed, CINAHL, PsycINFO, Scopus, Web of Science) were systematically searched for literature published between 2010 and 2024.

Results: Findings are categorized across four key settings: Emergency/Trauma, Inpatient, Mental Health/Substance Use, and Primary Care. For nursing staff, TIC implementation is associated with decreased burnout, reduced secondary traumatic stress, increased professional self-efficacy, and improved perceived safety. Key implementation success factors include universal education, environmental modifications, and organizational leadership commitment.

Conclusion: TIC is a potent, effective framework that transforms clinical encounters and workplace culture. Widespread adoption requires sustained investment in training, policy reform, and a fundamental shift toward a culture of safety and collaboration in all healthcare settings.

Keywords: Trauma-Informed Care; Nursing; Secondary Traumatic Stress; Patient Outcomes; Workforce Safety; Implementation Science.

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Introduction

Trauma, defined as an event or series of events experienced as physically or emotionally harmful or life-threatening, casts a long and pervasive shadow over global health. Its effects are not confined to the mental health domain; they profoundly shape physical health, health-seeking behaviors, and the trajectory of care for countless individuals (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). Epidemiological data consistently demonstrate that adverse childhood experiences (ACEs) and other traumatic exposures are significant risk factors for chronic diseases, substance use disorders, mental illness, and premature mortality (Forster et al., 2019). In healthcare settings, patients with trauma histories often present with complex needs, but traditional, biomedical models of care—characterized by impersonal procedures, power imbalances, and a focus on rapid symptom management—can

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Receive Date: 19 December 2024, Revise Date: 30 December 2024, Accept Date: 31 December 2024

inadvertently mimic dynamics of abuse and control, leading to retraumatization, disengagement from care, and iatrogenic harm (Greenwald et al., 2023).

The nursing profession, positioned at the frontline of patient interaction across all healthcare settings, holds a unique and critical role in either mitigating or exacerbating this cycle. Nurses in the Emergency Room (ER) encounter individuals at their most vulnerable, often amid fresh trauma (Kendall-Tackett & Beck, 2022). Inpatient nurses manage extended, intimate care where triggers may abound. Primary care nurses build longitudinal relationships where trauma disclosure and healing can begin (Rushforth et al., 2023). However, without a structured framework, even well-intentioned nurses can contribute to distress through routine practices perceived as invasive or coercive. Furthermore, nurses themselves are at high risk for vicarious or secondary traumatic stress (STS) and burnout from constant exposure to patient suffering and system pressures (Beck, 2011).

In response to this dual challenge—preventing patient retraumatization and supporting the clinical workforce—Trauma-Informed Care (TIC) has emerged as an essential, transformative paradigm. Moving beyond a set of therapeutic techniques for treating trauma, TIC is a universal, organizational approach grounded in four key assumptions and six guiding principles: safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice, and choice; and cultural, historical, and gender sensitivity (SAMHSA, 2014). It requires a fundamental shift from asking, "What's wrong with you?" to "What happened to you?" (Hales et al., 2017). This scoping review seeks to map the landscape of evidence regarding the effectiveness of TIC models specifically within the domain of nursing practice. Its purpose is threefold: to synthesize the application and adaptation of TIC across the acuity spectrum, from the high-stakes ER to the longitudinal setting of primary care; to evaluate the documented outcomes of these models for patient health, engagement, and experience; and to critically examine the impact of TIC implementation on nursing staff wellbeing, resilience, and professional practice. By integrating these perspectives, this review argues that TIC is not merely a clinical nicety but a foundational component of ethical, effective, and sustainable nursing care (Hartinger-Saunders et al., 2019).

Conceptual Foundations of Defining Trauma-Informed Care and Its Core Components for Nursing Practice

To evaluate effectiveness, one must first establish a clear conceptualization of Trauma-Informed Care within nursing. TIC is not a discrete intervention but a meta-framework that infuses all aspects of organizational culture and clinical operations. For nursing, this translates into a practice model that operationalizes SAMHSA's principles into daily actions and environmental designs. The core components can be distilled into three interconnected domains: philosophical underpinnings, clinical practice modifications, and organizational/environmental changes (Amateau et al., 2022).

Philosophically, TIC requires a paradigmatic shift in nursing epistemology. It involves recognizing the ubiquity of trauma, understanding its neurobiological, social, and psychological impacts on health and behavior, and actively resisting re-enactments of power and control (Galvin et al.,2022). This mindset moves away from pathologizing "difficult" or "non-compliant" patients towards understanding behavior as adaptive survival strategies. For the nurse, this means cultivating curiosity over judgment and viewing the nurse-patient relationship as a central vehicle for healing (Bloom & Farragher, 2013).

In clinical practice, this philosophy manifests through specific, teachable skills. Communication shifts to prioritize transparency, collaboration, and choice. Nurses are trained to provide clear, step-by-step explanations before any procedure ("I'm going to touch your arm now to take your blood pressure. Is that okay?"), offer predictable choices whenever possible, and use de-escalation techniques that emphasize emotional regulation over coercion (Maguire & Taylor, 2019). Screening for trauma history, if conducted, is done with extreme sensitivity and clear purpose, following a policy of "universal precautions"—treating every patient and colleague as if they may have a trauma history, thereby eliminating the need for universal disclosure (Rousseau, 2021).

Finally, the organizational environment must reflect these values. This includes physical modifications (e.g., creating quiet, private spaces; avoiding seclusion rooms; ensuring safe, welcoming waiting areas), policy reforms (e.g., eliminating or strictly regulating restraint and seclusion; revising visitation policies), and most critically, the systematic support of staff. An organization cannot be trauma-informed for its patients if it is not simultaneously trauma-informed for its employees (Bendall et al., 2022). This necessitates providing nurses with regular supervision, access to debriefing, training in self-care, and leadership that models the principles of safety, trust, and empowerment. These three domains—mindset, skillset, and system—form the essential infrastructure for evaluating TIC effectiveness in nursing (Dunkerley et al., 2021).

TIC Applications in High-Acuity Settings

The Emergency Department (ED) represents a critical frontier for TIC implementation. It is an environment inherently prone to retraumatization: chaotic, sensory-overloaded, involving frequent loss of autonomy, and often necessitating rapid, invasive interventions. For patients with trauma histories, especially from sexual assault, violence, or medical

trauma, the ED can feel terrifyingly similar to the original traumatic event. Nursing-led TIC models in this setting focus on creating islands of safety and control amidst the chaos. Evidence from ED implementations demonstrates significant positive outcomes. A quasi-experimental study by Reeves (2015) evaluated a comprehensive ED TIC training program for nurses and technicians, which included modules on trauma biology, de-escalation, and patient-centered communication. Post-implementation, patient satisfaction scores related to "being treated with respect" and "involvement in decisions" increased significantly. Furthermore, the use of chemical and physical restraints for behavioral emergencies decreased by over 30%, indicating a shift from containment to engagement.

Similar outcomes are documented in dedicated trauma centers. A program integrating TIC principles into the workflow of trauma resuscitation and post-surgical care reported not only improved patient recall of care and reduced acute stress symptoms but also noted a marked decrease in nursing staff turnover on the trauma unit (Iverson et al., 2020). Key nursing interventions in these high-acuity settings include: sensory modifications (offering headphones, dimming lights when possible), narrative control (allowing patients to tell their story in their own time, not demanding a linear history under duress), collaborative procedures, and transparent communication about wait times and next steps (Reynolds et al., 2023). The effectiveness of TIC here is measured not just in patient satisfaction, but in concrete clinical metrics: reduced elopement (leaving against medical advice), decreased use of coercive measures, improved adherence to discharge instructions, and lower rates of staff injury during patient interactions (Phung, 2022).

TIC in Inpatient Medical, Surgical, and Psychiatric Nursing

Beyond the ED, inpatient units—whether medical, surgical, or psychiatric—present a different but equally vital context for TIC. Here, the nurse-patient relationship is prolonged, intimate, and involves repeated interactions that can build trust or compound distress (Tabone et al., 2022). In psychiatric and behavioral health settings, where the legacy of coercive practices is particularly stark, TIC has been a catalyst for radical change. Systematic reviews, such as that by Sweeney et al. (2018), conclude that hospital-wide TIC transformation, with nursing at its core, is consistently associated with dramatic and sustained reductions in the use of seclusion and restraint (S/R). This is achieved by replacing containment-based models with collaborative crisis planning, sensory modulation rooms, and "comfort cart" initiatives led by nursing staff. Patient outcomes in these settings show improvements in self-reported feelings of safety, increased participation in treatment planning, and reductions in aggressive incidents (Azeem et al., 2017).

On medical-surgical units, TIC is applied to populations with chronic illnesses often linked to ACEs, such as chronic pain, obesity, and autoimmune disorders. Nursing practices informed by TIC can transform challenging interactions. For example, with a patient labeled as "non-compliant" with wound care, a trauma-informed nurse explores potential triggers (pain, memories of past abuse during touching) and collaborates to find a solution (having a family member assist, using a different type of dressing) (Weiss et al., 2017). Studies in medical inpatient settings report that TIC training for nurses leads to increased patient trust in the care team, improved nurse-patient communication ratings, and a decrease in patient-initiated call lights related to anxiety and distress (Menschner & Maul, 2016). The inpatient setting underscores that TIC effectiveness relies heavily on unit culture. Success is most pronounced when all staff—from nurses and physicians to environmental services and security—receive consistent training and when policies (e.g., visitation, pain management) are aligned with TIC principles, creating a coherent, predictable environment for healing (Table 1). Figure 1 synthesizes evidence from the scoping review demonstrating the effects of Trauma-Informed Care (TIC) on patient outcomes across four healthcare settings: Emergency/Trauma Care, Inpatient Care, Mental Health and Substance Use Services, and Primary Care

Table 1: Core Trauma-Informed Nursing Practices and Their Rationale Across Settings

TIC Principle (SAMHSA)	Key Nursing Practice Modifications	Rationale & Mechanism of Action	Example in Practice
Safety	Environmental scans for triggers; predictable routines; clear, consistent boundaries.	Creates physiological and psychological safety, reducing hypervigilance and allowing engagement with care.	Nurse orients a new patient to the unit, showing them the quiet room and explaining shift change routines to reduce unpredictability.
Trustworthiness & Transparency	Explaining the "why" behind all tasks; acknowledging system limitations (e.g., wait times); following through on promises.	Builds therapeutic alliance by reducing power differentials and preventing perceptions of deception or arbitrariness.	Before starting an IV: "I need to give you this antibiotic. This will involve a pinch. I'll talk you through each step. You can look away if you prefer."

Peer Support & Mutuality	Facilitating patient support groups; emphasizing shared goals; using self-disclosure judiciously to normalize.	Reduces isolation and shame, fosters hope, and positions the nurse as a collaborator rather than an authoritarian figure.	A nurse on a substance use unit shares, "Many people feel anxious in this situation. Let's work together on a plan for your cravings."
Collaboration & Choice	Offering authentic choices in care ("Would you like your bath now or after lunch?"); involving patients in shift handoffs.	Restores a sense of autonomy and control, which are often stripped in healthcare and by trauma itself.	"For your pain, we have a few options. We can try medication X, a heating pad, or some gentle stretching. What do you think might work best for you right now?"
Empowerment, Voice & Choice	Prioritizing patient priorities in care planning; using motivational interviewing; validating strengths.	Focuses on skill-building and resilience, moving the patient from a passive recipient to an active participant in their health.	"I hear that getting back to work is your top goal. Let's map out what you need to achieve that and how our team can help."
Cultural, Historical, and Gender Issues	Using inclusive language, acknowledging historical trauma (e.g., in Indigenous populations); respecting family structures.	Ensures care is relevant and respectful, preventing care that is itself a microaggression or trigger.	A nurse asks for a patient's preferred pronouns and name, and ensures it is reflected in the chart and used by all staff.

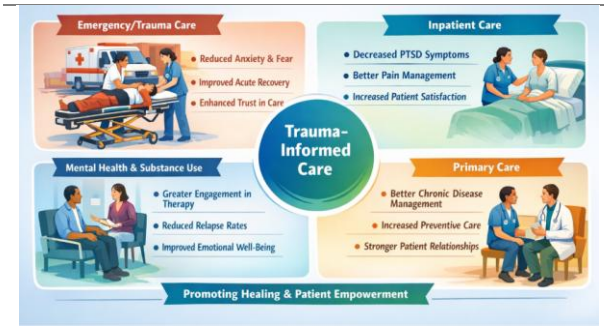

Figure 1. Impact of Trauma-Informed Care on Patient Outcomes Across Healthcare Settings

TIC in Mental Health, Substance Use, and Primary Care Nursing

In settings dedicated to mental health and substance use disorder (SUD) treatment, TIC is increasingly recognized not as an adjunct but as the foundational standard of care. The correlation between trauma and these conditions is exceedingly high; thus, treatment that is not trauma-informed is often ineffective or harmful (Han et al., 2021). Nursing in these contexts utilizes TIC to manage crises, build therapeutic rapport, and support long-term recovery. In residential SUD treatment, TIC models led by nursing have shown improved retention in treatment, greater engagement in therapy, and reductions in patient aggression (Nizum et al., 2020). Nurses apply TIC by understanding substance use as a coping mechanism, avoiding punitive responses to relapse, and creating "harm reduction" oriented safety plans with patients.

Perhaps the most promising and expanding frontier for TIC is in Primary Care. The nurse in a family practice or pediatric clinic is uniquely positioned for early identification, prevention, and healing. Pediatric TIC models, like the one described by Forkey et al. (2021), train nurses and providers to recognize behavioral manifestations of trauma, conduct safe ACEs screenings, and provide anticipatory guidance to parents. This proactive, universal approach in primary care has demonstrated a reduction in unnecessary referrals to specialty mental health, improved child behavior ratings, and increased caregiver sense of competency. In adult primary care, TIC transforms the management of chronic conditions. A patient with poorly controlled diabetes and a history of trauma may miss appointments not due to "non-compliance," but because appointments trigger anxiety. A trauma-informed primary care nurse might schedule longer appointments, ensure continuity with the same nurse, and collaborate on a graduated exposure plan to build comfort with care (Weiss et al., 2017). Outcomes include improved chronic disease biomarkers, increased preventative service utilization, and higher rates of disclosure of sensitive issues like intimate partner violence, enabling appropriate intervention.

Impact of TIC on Nursing Staff Wellbeing and Professional Efficacy

The effectiveness of TIC cannot be fully assessed without examining its impact on the implementers: the nursing staff. The "second victim" phenomenon and epidemic levels of burnout highlight the traumatic nature of healthcare work itself (Yatchmenoff et al., 2017). A core premise of organizational TIC is that staff must be well to provide healing care. Emerging evidence strongly suggests that TIC implementation has a profoundly positive effect on the nursing workforce. Studies report significant outcomes, reductions in self-reported burnout (as measured by the Maslach Burnout Inventory) and secondary traumatic stress (Beattie et al., 2019). By providing a framework that makes sense of challenging patient behaviors, TIC

reduces nurses' moral distress and feelings of inefficacy. It replaces a cycle of conflict with a toolkit for connection.

Furthermore, TIC training enhances professional self-efficacy and satisfaction. Nurses report feeling more skilled, confident, and purposeful in their interactions (Miller et al., 2022). The organizational changes that accompany TIC—such as flattened hierarchies, peer support programs for staff, and leadership that encourages open discussion of stress—contribute to a perceived culture of psychological safety. This, in turn, leads to tangible organizational benefits: lower nurse turnover, decreased use of sick leave, and reduced costs associated with recruitment and training (Berliner & Kolko, 2016). In this way, investing in TIC is a direct investment in nursing workforce stability and resilience, creating a virtuous cycle where supported nurses provide better, more sustainable care.

Table 2: Documented Outcomes of Trauma-Informed Care Models in Nursing by Setting

Healthcare Setting	Exemplary Patient Outcomes	Exemplary Nursing/Staff Outcomes	Key Implementation Strategies Studied
Emergency Department/Trauma	↑ Patient satisfaction (respect, communication). ↓ Use of physical/chemical restraints. ↓ Rates of leaving AMA. ↓ Acute stress symptoms post-visit.	↓ Staff injuries from patient interactions. ↑ Self-efficacy in managing behavioral crises. ↓ Turnover on trauma units.	Universal TIC training for all ED staff. Environmental modifications (quiet rooms). Trauma-sensitive triage protocols.
Inpatient Psychiatric/Behavioral Health	↓ Seclusion & restraint rates by 50-90%. ↑ Self-reported feelings of safety. ↑ Participation in treatment planning. ↓ Aggressive incidents.	↓ Nurse burnout & moral distress. ↑ Job satisfaction & therapeutic optimism. ↑ Skills in de-escalation without coercion.	System-wide policy change (S/R reduction). Sensory modulation tools & comfort carts. Nursing-led collaborative crisis planning.
Medical-Surgical Inpatient	↑ Trust in the healthcare team. ↑ Adherence to treatment plans. ↓ Anxiety-related call lights. ↑ Satisfaction with pain management.	↓ Conflict & adversarial interactions with patients. ↑ Communication competency ratings. ↑ A sense of providing holistic care.	TIC integration into chronic illness management. Communication skills training for nurses. Creating patient empowerment plans.
Primary Care (Pediatric & Adult)	↑ Disclosure of ACEs/ trauma. ↑ Adherence to preventative care. ↑ Management of chronic disease metrics. ↓ Unnecessary specialty referrals. ↑ Patient activation & self-efficacy.	↓ Burnout in high-volume clinics. ↑ Therapeutic alliance with complex patients. ↑ Competency in addressing social determinants.	Universal trauma precautions. Nurse-led ACEs screening with support resources. Longer, more frequent appointments for complex patients.
Substance Use Disorder Treatment	↑ Retention in treatment programs. ↑ Engagement in therapeutic activities. ↓ Patient aggression. ↑ Development of healthy coping skills.	↓ Stigmatizing attitudes towards patients with SUD. ↑ Compassion satisfaction. ↑ Understanding of addictive behaviors as coping.	Harm reduction training for nurses. Integration of TIC with SUD treatment models. Creation of peer support roles for nurses.

Implementation Science and Barriers

Despite compelling evidence, the widespread, high-fidelity implementation of TIC in nursing faces significant barriers. Implementation science provides a lens to understand these challenges (Borders et al., 2023). First, TIC is often misconstrued as a simple training program rather than a deep, organizational culture change. One-off seminars without follow-up coaching, supportive supervision, and aligned policy changes are ineffective and can breed cynicism (Berger & Quiros, 2014). Second, structural and financial barriers are substantial. Implementing TIC requires initial investment in training, potentially redesigning physical spaces, and changing staffing models to allow for longer patient interactions—a challenge in productivity-driven healthcare systems. Third, resistance can emerge from staff accustomed to traditional, control-oriented models, who may perceive TIC as "coddling" or unsafe until they experience its efficacy (O'Dwyer et al., 2021).

Successful implementation models, as synthesized by Timmer et al. (2022), emphasize a phased, participatory approach. It begins with engaging leadership and forming a multidisciplinary implementation team inclusive of direct-care nurses. A thorough organizational assessment gauges readiness and identifies specific areas for change. Universal, mandatory training is just the starting point, followed by the development of unit-based "champions" who provide peer coaching and feedback. Crucially, policies and protocols must be audited and revised to align with TIC principles (e.g., rewriting restraint policies, revising performance metrics). Continuous measurement of both clinical/staff outcomes and process fidelity is essential for sustaining momentum and demonstrating return on investment.

Conclusion

This scoping review elucidates a robust and growing evidence base for the effectiveness of Trauma-Informed Care models within nursing practice. From the high-stakes, time-pressured environment of the Emergency Department to the longitudinal, relationship-based context of Primary Care, TIC provides a coherent, compassionate, and effective framework for engaging some of healthcare's most complex and vulnerable patients. The outcomes are significant and dual-faceted: patients experience care that is safer, more respectful, and more empowering, leading to improved health engagement and outcomes. Simultaneously, nurses experience reduced burnout and secondary trauma, increased professional efficacy, and greater job satisfaction, contributing to workforce stability.

The conclusion is unequivocal. Integrating TIC is not merely an added competency for modern nursing; it is a fundamental reorientation toward the ethical and practical realities of healing in the shadow of widespread trauma. It aligns seamlessly with nursing's core values of holistic, patient-centered care. The path forward requires committed leadership, dedicated resources for sustained implementation, and ongoing research to refine models and demonstrate long-term health and economic impacts. By embracing trauma-informed principles, nursing can fulfill its promise as a profession that heals not only bodies and minds, but also the very experience of seeking care, while safeguarding the well-being of its own indispensable workforce.

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