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The Role of Nursing in Implementing Trauma-Informed Care Approaches for Survivors of Abuse in Emergency Department Settings: A Comprehensive Review

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Abstract

Background: Trauma exposure is prevalent in emergency departments (EDs), impacting both patients and healthcare providers. Trauma-informed care (TIC) is a framework designed to mitigate re-traumatization and foster resilience among trauma survivors, yet its implementation in EDs remains limited despite the high incidence of trauma-related cases.

Methods: This review systematically examined peer-reviewed literature on TIC interventions in emergency medicine. A comprehensive search was conducted across multiple databases, including PubMed, EMBASE, and CINAHL, using keywords related to trauma-informed care, emergency department practices, and the clinical environment. The review aimed to identify existing TIC interventions, their benefits for patients and healthcare providers, and gaps in current research.

Results: The analysis identified ten relevant studies demonstrating the operationalization of TIC in ED settings. Interventions primarily focused on clinician education and procedural adjustments to address the needs of marginalized patient populations. Findings indicated that TIC approaches improved patient care quality, enhanced clinician confidence, and facilitated better follow-up rates for outpatient referrals. However, the studies highlighted significant gaps, including the lack of standardized TIC practices and insufficient outcome data to support broader implementation.

Conclusion: The findings underscore the need for further research to develop and evaluate trauma-informed care models in emergency departments. By adopting TIC principles, EDs can transform into healing environments that support both patients and healthcare professionals. Enhanced focus on educational initiatives and universal precautions in TIC will be essential for addressing the complex needs of trauma survivors in emergency settings.

Keywords: Trauma-Informed Care, Emergency Department, Patient Outcomes, Healthcare Providers, Systematic Review.

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1. Introduction

Exposure to trauma is a common occurrence in the emergency department (ED) for both patients and healthcare professionals [1-6]. The Substance Abuse and Mental Health Services Administration (SAMHSA) characterizes trauma as "an event, series of events, or circumstances perceived by an individual as physically or emotionally detrimental or life-threatening, resulting in enduring negative impacts on the individual's functioning and mental, physical, social, emotional, or spiritual well-being." [7] This concept of trauma includes experiences that vary from individual (e.g., vehicular accidents, bereavement), to interpersonal (e.g., intimate partner violence, discrimination, abuse), to societal (e.g., natural disasters, pandemics, terrorist incidents). Recent articles have broadened this term to clearly include systemic trauma, such as racism and sexism [8].

Patients often arrive at the emergency department with the aforementioned categories of trauma: individual (medical traumas/injuries), intimate partner violence (IPV), and social traumas (gun violence and communal violence). In the United States, the annual occurrence of these occurrences varies from 1.7 million emergency department visits for assault-related injuries to 88,000 for firearm-related injuries, and over 28,000 emergency department visits due to intimate partner violence [3]. Patients with acute trauma often have a history of prior traumatic events; a study of community violence survivors engaged in a hospital-based violence intervention program revealed that all participants had at least one bad childhood experience [9]. Previous traumatic experiences are not uniformly distributed, as those identifying as female, American Indian/Alaskan Native, and Black are more likely to encounter various forms of bad childhood events compared to those identifying as male or White [10].

For some trauma survivors, the experience of the emergency department may be re-traumatizing or evoke prior events [11]. Individuals who have endured trauma may exhibit emotional dysregulation, characterized by difficulty in managing intense emotions, or hypervigilance, marked by heightened danger perception and responsiveness. The intricate relationship between executive functioning and emotional regulation may influence the interactions of both the patient and the care team throughout the encounter [12]. Likewise, hypervigilance may exacerbate the already tumultuous atmosphere of the emergency department and complicate interventional treatments [12].

The emergency department, due to its provision of urgent treatment, offers several potential sources of both direct and secondary trauma (indirect exposure to traumatic events) for physicians and non-clinical personnel. The COVID-19 pandemic illustrated the impact of secondary trauma exposure on frontline healthcare personnel and staff [4]. Personnel in the emergency department also encounter elevated instances of workplace violence (i.e., direct trauma) [5,6]. The interplay of direct trauma and secondary trauma likely leads to the elevated prevalence of post-traumatic stress disorder (PTSD) and secondary traumatic stress (STS) among emergency doctors [13-18]. Approximately 11.9–16.8% of emergency doctors exhibit positive screenings for PTSD and STS symptoms at any one moment, but these percentages may be significantly elevated among emergency nurses, with 33–64% of nursing personnel screening positive for at least one symptom of STS [19-21]. Evidence indicates that non-clinical personnel also suffer secondary traumatic stress from seeing acute care situations [22].

2. Significance

Trauma-informed care (TIC) is a concept designed to avert re-traumatization within healthcare environments and foster resilience in both patients and practitioners [23]. It is founded on six principles: Safety; Trustworthiness and transparency; Peer support; Collaboration and mutuality; Empowerment, voice, and choice; Cultural, historical, and gender considerations [7]. Trauma-informed care is progressively being used as a methodology in clinical practice throughout both general and specialist care, including emergency medicine (EM) [23-28]. In 2012, the US Attorney General's National Task Force on Children Exposed to Violence advocated for all emergency departments to implement trauma-informed care and for all physicians engaging with trauma-affected patients to get training in trauma-informed care [29]. Trauma-informed care has shown cost-effectiveness, yielding therapeutic advantages for patients and enhancing work satisfaction for staff [30-33]. Nonetheless, despite the significant burden of trauma seen in the emergency department and the advantages of trauma-informed care for patients and physicians, trauma-informed care remains an emerging discipline within emergency medicine.

This review will consolidate evidence on Trauma-Informed Care (TIC) interventions in Emergency Medicine (EM) to delineate the following research objectives: the scope of TIC interventions being implemented in the physical Emergency Department (ED) setting; the prospective advantages for patients associated with TIC interventions in the ED; the potential benefits for clinicians and non-clinical personnel from TIC interventions in the ED; and to pinpoint deficiencies in the existing research regarding the implementation of TIC interventions in the ED.

3. Methods

We searched for peer-reviewed publications and abstracts using the databases PubMed, EMBASE (Elsevier), PsycINFO (EBSCO), Social Services Abstract (ProQuest), and CINAHL (EBSCO). The searches used keywords and controlled language phrases about the following concepts: the physical environment of the emergency department; clinicians and personnel inside the emergency department; and trauma-informed care.

4. Trauma-informed treatment

Trauma-informed treatment is an evolving domain in emergency medicine, with little implementation despite favorable attitudes among emergency clinicians. The ideas explicitly examined in relation to TIC have shown advantages based on preliminary, if restricted, evidence [34-38]. Our research identified 10 papers that specifically operationalized a trauma-informed care paradigm in emergency department treatments. The predominant interventions focused on clinician education and care procedures for historically marginalized groups (e.g., those affected by institutional racism and oppression). Although the evidence remains early, all trials included demonstrated a beneficial effect of TIC on either patients or physicians. Patients indicated enhanced quality of treatment and elevated outpatient referral follow-up rates, and during mental health emergencies, they spent less time in restrictions [39]. Clinicians indicated enhanced clinical expertise and confidence in delivering treatment to historically marginalized patient groups [40-47].

A plethora of recommendations and best practices for TIC in the ED environment have been established. Nonetheless, the implementation of these best practices and outcomes data is still constrained. The research may be under progress. The educational interventions examined in this research were published from 2014 to 2023. The majority of studies included just level 1 and level 2 Kirkpatrick evaluations (i.e., changes in attitudes and knowledge acquisition), whereas only two encompassed level 3 and level 4 outcomes (i.e., alterations in clinical practice and patient results) [48-50]. The timeframe of our evaluation may have been inadequate for most organizations to gather patient-centered outcomes. Further research is required to determine clinician and patient outcomes associated with educational TIC interventions in emergency medicine.

Our study revealed many deficiencies in the existing strategies: absence of universal precautionary education; absence of outcomes data; absence of staff-centered interventions; and absence of cost-

effectiveness analysis. Throughout all interventions, whether educational or protocol-based, there was little to no implementation of Trauma-Informed Care (TIC) as a uniform precaution for all patients. All interventions documented in our analysis are predicated on a population-specific methodology (i.e., human trafficking, sexual assault, community violence survivors). This technique may enhance doctors' awareness of trauma in some groups, but it fails to address the needs of patients who do not exhibit "red flags" or trauma-related problems.

Clinicians are often unable to ascertain whether patients have had adversity; hence, forthcoming educational and programmatic initiatives should prioritize Trauma-Informed Care (TIC) as a universal precaution for all individuals [23]. Education should highlight that TIC has the potential to mitigate trauma associated with medical treatment and interventions [23]. Moreover, just a single intervention focused on the explicit application of TIC concepts to emergency department personnel [42]. As noted in the introduction, both clinical and non-clinical ED personnel are at significant risk for trauma and re-traumatization due to their work environment [4,5,22]. This continues to be a crucial domain for the implementation of the TIC framework inside EM. A pressing research need is emerging in the aftermath of the COVID-19 epidemic. Subsequent research with TIC staff-centered therapies would be enhanced by outcome data, including validated assessments of burnout, PTSD, and STS screening instruments.

This evaluation revealed an absence of process and environmental study of the ED itself. Only two interventions assessed how the physical environment of the emergency department may be examined and enhanced using a trauma-informed care paradigm [35,37]. No interventions assessed the cost-effectiveness or return on investment of TIC models, highlighting a research need. The first research that developed TIC indicated no extra costs associated with the implementation of the strategy [32]. To effectively support TIC interventions, particularly operational ones, next research must include a cost-effectiveness analysis.

The SAMHSA recommendations on Trauma-Informed Care include procedures for establishing trauma-informed institutions and organizations [12]. Numerous industries have embraced these recommendations, including social work, basic education, and juvenile justice [50]. Future research is required to examine the Emergency Department from an operational perspective using a Trauma-Informed Care paradigm. This research should also include non-clinical emergency department personnel.

5. Constraints

This study has several shortcomings that need debate. By mandating a clear reference to TIC, we rejected treatments that used TIC principles without formally identifying the theory. Cheng et al. outline a peer support-based intervention program for ED violence in their 2008 publication. Despite peer support being one of the six principles of Trauma-Informed Care (TIC), we excluded this research from our evaluation since it did not specifically reference TIC as a guiding framework. Other violent intervention programs were also excluded, despite being referenced in the literature as “trauma-informed,” because to the absence of TIC in their original papers. Furthermore, other studies were rejected owing to insufficient operationalization of TIC. Numerous papers delineated ideal practices without detailing remedies. Guidelines and best practices for trauma-informed treatment of emergency department patients undergoing mental health crises, sexual assault survivors, survivors of communal violence, victims of human trafficking, and pediatric patients suffering trauma were excluded owing to insufficient operationalization. Ultimately, our search omitted research in languages other than English. Consequently, we did not do a manual search; thus, we may not have identified all potential therapies.

6. Conclusion

This document is the first systematic evaluation of trauma-informed care approaches within the emergency department context. The review findings indicate that TIC is a modest although expanding domain within the clinical practice of EM. Nevertheless, there exists an urgent need for more research to assess possible advantages for patients and clinicians in the domain of emergency medicine. The broader use of TIC treatments may transform the ED into a healing environment for both patients and physicians.

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دور التمريض في تنفيذ نهج الرعاية المستندة إلى الصدمات للناجين من الاعتداء في بيئات أقسام الطوارئ: مراجعة شاملة

الملخص

خلفية :التعرض للصدمات شائع في أقسام الطوارئ(EDs) ، مما يؤثر على كل من المرضى ومقدمي الرعاية الصحية. تعتبر الرعاية المستندة إلى الصدمات (TIC) إطارًا مصممًا لتخفيف إعادة الصدمة وتعزيز المرونة بين الناجين من الصدمات، ومع ذلك، لا تزال عملية تنفيذها في أقسام الطوارئ محدودة على الرغم من ارتفاع حالات الصدمات.

طريقة البحث :قامت هذه المراجعة بفحص منهجي للأدبيات التي تمت مراجعتها من قبل الأقران حول تدخلات الرعاية المستندة إلى الصدمات في طب الطوارئ. تم إجراء بحث شامل عبر قواعد بيانات متعددة، بما في ذلك PubMed و EMBASEوCINAHL، باستخدام كلمات مفتاحية تتعلق بالرعاية المستندة إلى الصدمات وممارسات قسم الطوارئ والبيئة السريرية. كانت أهداف المراجعة تحديد التدخلات الحالية للرعاية المستندة إلى الصدمات، وفوائدها للمرضى ومقدمي الرعاية الصحية، والفجوات في الأبحاث الحالية.

النتائج :حددت التحليلات عشرة دراسات ذات صلة تظهر كيفية تطبيق الرعاية المستندة إلى الصدمات في بيئات أقسام الطوارئ. كانت التدخلات تركز بشكل أساسي على تعليم الأطباء وإجراء تعديلات في الإجراءات لتلبية احتياجات الفئات السكانية المهمشة. أشارت النتائج إلى أن نهج الرعاية المستندة إلى الصدمات يحسن جودة رعاية المرضى، ويعزز ثقة الأطباء، ويسهل معدلات متابعة أفضل للإحالات الخارجية. ومع ذلك، سلطت الدراسات الضوء على فجوات كبيرة، بما في ذلك نقص الممارسات القياسية للرعاية المستندة إلى الصدمات ونقص بيانات النتائج لدعم التنفيذ الأوسع.

الخلاصة :تؤكد النتائج على الحاجة إلى مزيد من البحث لتطوير وتقييم نماذج الرعاية المستندة إلى الصدمات في أقسام الطوارئ. من خلال اعتماد مبادئ الرعاية المستندة إلى الصدمات، يمكن لأقسام الطوارئ أن تتحول إلى بيئات شفاء تدعم كل من المرضى ومقدمي الرعاية الصحية. سيكون التركيز المعزز على المبادرات التعليمية والاحتياطات العالمية في الرعاية المستندة إلى الصدمات ضروريًا لمعالجة الاحتياجات المعقدة للناجين من الصدمات في بيئات الطوارئ.

الكلمات المفتاحية :الرعاية المستندة إلى الصدمات، قسم الطوارئ، نتائج المرضى، مقدمو الرعاية الصحية، مراجعة منهجية.