

Trauma-Informed Care Is the Best Clinical Practice in Rehabilitation Nursing

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Abstract

Purpose: This clinical article explores how trauma-informed care (TIC) can be used by rehabilitation nurses with patients who have experienced pervasive adverse childhood experiences (ACEs).

Method (Intervention Strategies): This clinical article gives suggestions for using the five guiding principles of TIC: safety, trustworthiness, choice, collaboration, and empowerment, as the best clinical practice.

Conclusion: Implementing TIC promotes successful rehabilitation, improves patient outcomes, and reduces costs. For every \$1 spent on TIC, \$5 is saved in lifetime costs.

Clinical Relevance: ACEs cause physiological changes in the brain, leading to antisocial and risky behaviors, which may result in head injuries, spinal cord injuries, amputations, and multiple traumas with subsequent rehabilitation admissions, as well as obesity, and chronic illnesses. TIC is a cultural shift: We as providers must ask ourselves “What happened to this person?” instead of “What is wrong with this person?” Nurses are beginning to develop our literature and practice of TIC.

Keywords: Team care; psychosocial issues; trauma-informed care.

Introduction

The trauma of abuse and violence can impair a person’s social, emotional, and cognitive development and lead to the adoption of risky behaviors that result in disability (Felitti & Anda, 2014; Williamson & Qureshi, 2015). Rehabilitation nurses frequently encounter patients who have been traumatized by abuse and violence and for whom providing nursing care can be challenging. In response to the specific needs of patients with a history of traumatizing abuse and violence, trauma-informed care (TIC) is a structured treatment and organizational framework that focuses on recognizing, understanding, and responding to the effects of all types of trauma. The emphasis of care is on the physical, psychological, and emotional well-being of trauma survivors to rebuild a sense of empowerment and control (Williamson & Qureshi, 2015). Nurses using

TIC focus on “what has happened to this person over time?” rather than “what is wrong with this person?”—a common response to difficult patients who may be acting out or uncooperative. Although TIC is an accepted model of care in medicine, social work, and education, nursing has yet to develop its literature and practice of TIC. With few TIC-trained nurses, TIC has largely been ignored in the rehabilitation nursing literature, despite the high likelihood that rehabilitation nurses will encounter patients with a history of abuse and violence. This is illustrated in the following patient scenario.

John (pseudonym) was a 33-year-old man admitted to inpatient rehabilitation after a motor vehicle accident with a thoracic level 6 incomplete spinal cord injury (SCI). John’s medical and social histories were complex. An obese man with a BMI of 35, he had a history of back pain, migraine headaches, depression with outbursts of anger, and had attempted suicide via overdose once. On admission to the emergency department, his urine tested positive for cocaine, which he reported using occasionally; he reported drinking alcohol daily, and his driver’s license was suspended for driving while intoxicated. John lived in his mother’s house, although she was unable to assist in his care due to her own health problems. He was estranged from his father who had been imprisoned for physical abuse of John’s mother when John was a child. John himself had recently been jailed for assault. On the inpatient rehabilitation unit, he demanded increasing

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Accepted September 15, 2016.

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Cite this article as:

Freeman Williamson, L., & Kautz, D. D. (2018). Trauma-informed care is the best clinical practice in rehabilitation nursing. *Rehabilitation Nursing*, 43(2), 73–80. doi: 10.1002/rnj.311

doses of narcotics and because of migraine pain refused to participate in therapy. He resisted all teaching from nurses, physical and occupational therapists, and dietitians. When a nurse approached John about discontinuing his indwelling catheter and initiating a bladder and bowel program, John screamed obscenities. When John tried to transfer himself without assistance, a nurse concerned about John's safety set the bed alarm and left the door open for safety checks, resulting in an irate outburst.

Over time, John continued to be challenging. He only agreed to participate in his treatments or therapies hours after they were scheduled. He had bowel incontinence because he had refused to participate in a bowel program despite several attempts by nurses to initiate it. Yet, he made comments to his occupational and physical therapists claiming the nursing staff had not set appropriate boundaries when implementing bowel care. He effectively created a schism between nurses and therapists. Each began to question the care other disciplines were providing. Finally, John's primary physician involved a TIC nurse in his care in the hope that John would feel empowered to participate in the rehabilitation program.

The TIC nurse met with John to create an hour-by-hour plan of care that would remain consistent throughout his rehabilitation. John agreed to and led the decisions around this plan of care. In the weekly interdisciplinary rehabilitation team rounds, the TIC nurse discussed the plan. Team members responded with frustration, reporting that they had already tried similar approaches and therefore expected the plan to work only briefly or to fail altogether. The TIC nurse reminded them, however, to consider John's adverse childhood experiences (ACEs), asking, "What has happened to this person?" to explain his manipulative behaviors, acting out, or psychological withdrawal in adulthood. She explained the possible changes in the brain that could be prompting aggression, lack of insight, poor judgment, poor mental flexibility, and impaired understanding. A consistent, patient-led plan of care and recognition of the influence of John's traumatic history combined to create hope in the team that they could help John. This purpose of this study was to describe TIC that can be used to help patients like John who have experienced trauma that must inform nurses' approach to care of these people.

Trauma-Informed Care—Reaching Patients Affected by Abuse or Violence

Rehabilitation is patient-centered, structured, expert care delivered by an interdisciplinary team that generally results in patients' successful adaptation to rehabilitation routines. People who have experienced violence or abuse,

however, may have special needs that respond to TIC. To provide effective TIC, rehabilitation team members need a basic understanding of the psychological, neurological, biological, and social effects that a history of pervasive trauma and violence have on many of the adult patients (Williamson & Qureshi, 2015). For people with a pervasive, long-standing childhood violence, abuse, neglect, family dysfunction, or traumatic events, the toxic stress leads to physiologic changes in brain development and physiologic disruptions in the cortex and the limbic system that persist into adulthood (Centers for Disease Control and Prevention [CDC] Division of Violence Prevention, 2016). These events, called ACEs, include neglect or abuse of the child, witnessing repeated violence of family members, drug and alcohol use among family members, family members dying, or otherwise abandoning the child. Changes in the limbic system can trigger autoimmune diseases in adulthood. Changes in these areas of the brain affect emotional reactions, processing social cues, development of language, memory, proficiency in math, thinking, judgment, executive function, mental health and movement. These physiologic changes in the brain also impair social, emotional, and cognitive development and may lead to the adoption of risky health behaviors, difficulty coping, smoking, alcohol and drug abuse, poor dietary choices, leading to chronic diseases in adolescence and adulthood. ACEs also lead to relationship issues, promiscuity, early pregnancy, work absenteeism, and aggressive tendencies. Antisocial behaviors and impaired emotional development combined with risky behaviors can in turn result in illness, disability, and death. Felitti and Anda (2014) point out that time does not heal and that many patients want healthcare team members to ask about damaging life experiences. They point out that asking, listening, and accepting the patient is a major intervention.

The basic premise of TIC is that when confronted with a patient who has become disabled or develops a chronic illness at an early age providers ask themselves, "What happened to this person?" instead of "What is wrong with this person?" The results of childhood trauma vary greatly. For example, one may be morbidly obese, with diabetes and fibromyalgia, and be very cooperative with therapy. Another patient who has an SCI may have a history of drug abuse, risky and antisocial behaviors, and not cooperate with therapy. Another patient may have multiple comorbidities. Another, a conversion disorder. All of these patients need "universal precautions" of TIC. The Substance Abuse and Mental Health Services Administration (SAMHSA) (2014) adopted the term "universal precaution" to describe the cultural shift needed in health care to address the possibility that a patient has a history of traumatic violence or abuse. "Universal precaution"

was originally used in health care to describe the protective physical measures implemented with all patients to prevent the spread of infectious diseases, reflecting a cultural shift in practice that reflected the need to protect providers and patients from the spread of HIV and hepatitis, among others. The universal precaution of TIC is a parallel orientation in which every person in a treatment setting is presumed to have a history of exposure to abuse, violence, neglect, or other trauma (SAMHSA, 2014). TIC thus recognizes that adverse experiences accumulate over a lifetime.

The ACE study is a continuing collaboration of Anda and Felitti that begun in 1995. Of the 17,337 participants in the ACE study, 63% have experienced violence, abuse, neglect, or household dysfunction (CDC, 2014). Resulting changes in the brain include electrophysiological abnormalities in the left frontal-temporal region and increased prevalence of ictal temporal lobe epilepsy-like symptoms, limbic dysregulation, among others. These changes may lead to what has been referred to as COLEVA: Consequences of Lifetime Exposure to Violence and Abuse (coleva.net, 2011). The coleva.net website shows a diagram of the body illustrating how a lifetime of pervasive trauma and abuse can cause changes in every body system. The COLEVA website has not been updated since 2011. We reference it here because it is a great visual tool.

Implementing Interventions in Trauma-Informed Care

Five principles—safety, trustworthiness, choice, collaboration, and empowerment—are the foundation for interventions in TIC (Table 1). Patients who have experienced trauma may present with numerous challenges, including fear, anxiety, anger, decreased sleep, defensiveness, and physiological changes (Williamson & Qureshi, 2015). Interventions addressing these challenges can be as simple as clarifying what concerns the patient has and addressing those concerns by asking the patient what he or she would need to feel comfortable and safe. Also, ensuring the patient is informed about the environment and upcoming treatments and procedures increases the patient's awareness, sense of control, as well as feeling comfortable and safe, goals that may require repeating the instructions often, which can also foster trust. During the initial assessment, the nurse needs to assess what specific behaviors and circumstances trigger discomfort in the patient, how to identify when a patient feels threatened, and what strategies the patient uses to minimize reactions to circumstances that trigger negative responses. The nurse can thus implement strategies to assist the patient avoid or cope with events that may result in hypervigilance, fear, or anxiety. A nurse with a strong understanding of TIC focuses on

Table 1 Five guiding principles of trauma-informed care

Safety: Ensure the patient's emotional and physical safety by determining what the patient experiences as safe.
Open or closed door.
Use of light, even while sleeping.
Usefulness of distractions during painful procedures.
Asking "How do you cope best?" and "How are you coping?"
Trustworthiness: Recognize that traumatized patients may misinterpret nurses' actions. To establish trust:
Set and maintain clear professional boundaries.
Understand that basic nursing care may pose a threat.
Expect questioning by the patient.
Seek permission and explain each action to the patient's satisfaction before proceeding with care.
Every action must be approved by the patient before initiating it.
Choice: Traumatized patients need choices that lead to informed decisions.
Respond respectfully to patients' questions and concerns about choices.
Clarify any information that they may seek.
Small choices allow for control by the patient.
Collaboration: The plan of care must be implemented collaboratively with the patient and with all disciplines of the rehabilitation team.
In sharing power with the patient, recognize that the final decision in care is that of the patient; it is his or her body.
The plan of care must be implemented consistently by all providers.
Excellent communication is a key because it illuminates meanings of patients' actions, minimizes frustration, and allows proactive care.
Empowerment: Empowerment provides patients with opportunities to use their skills and to become accountable and responsible for their health.
Acknowledge the patient's experience and give positive feedback for even small efforts. This validates their struggles.
By acknowledging their struggles, patients are validated for their contributions to their healing.
This can decrease their dependence and sense of victimization by their circumstances. (SAMHSA, 2014)

patient reactions and considers how to minimize future triggering events. Patient responses may be subtle, requiring careful assessment to acknowledge and address to prevent the repetition of the triggering event, thereby increasing the patient's sense of safety and trust of the nurse and rehabilitation team.

It is important to distinguish typical "excellent" nursing care from TIC. A rehabilitation unit and rehabilitation care is designed to provide individualized, compassionate care. Yet, if the patient cannot cope effectively, the nurse can provide choices for actions that may reduce the patient's responses to a triggering event. Current recommendations for caring for all patients include asking permission before touching the patient, informing the patient of what is coming yet, and ensuring patients understand. Yet, for a patient who has experienced repeated exposure to trauma, extra steps need to be taken. For example, if a patient has anxiety related to an intrusive test or procedure, the nurse can offer interventions to reduce anxiety such as offering to sit silently with the patient, allowing time for prayer, providing

positive distractions to relieve stress, promoting sleep, giving massage for relaxation, heat and ice for pain, or healing music for meditation. Nurses must assess the response of the patient to the intervention. A treatment plan should allow flexibility, with expectations to try several approaches before the patient is comfortable, or to stop at any time the patient requests. Activities that reduce responses to triggering events should be shared collaboratively with the rest of the rehabilitation team. The patient is thus empowered by the consistency of care of his or her team, and trust is created in a safe physical and emotional environment.

Training Rehabilitation Nurses and the Rehabilitation Team to Provide Trauma-Informed Care

Implementing TIC requires that healthcare providers across disciplines involved in rehabilitation care have training and resources to change the culture of an institution to address the universal precaution that patients may have a history of traumatic violence or abuse. Using “Trauma-Informed Care Training” as a search term in a search engine (e.g., Google, Yahoo), numerous well-developed, referenced, evidence-based training presentations and resources from state and national organizations resources are available on the Internet to assist healthcare facilities implement TIC. These resources can be used as models for the development of an individualized TIC program for a facility. “Trauma Informed & Trauma Sensitive... the only way to do business” developed by Pat Davis-Salyer, MEd for the Department of Health Services—Oregon State Hospital (<http://www.oregon.gov/OHA/amh/trauma-policy/trauma-its.pdf>) is an excellent resource. Table 2 contains objectives

Table 2 Objectives and content outline of monthly trauma-informed care (TIC) training classes

The objectives for the participants are:

1. Identify one's own adverse experiences via the 10-question version of the Adverse Childhood Experiences Questionnaire (see Table 3).
2. Describe how behaviors affected by adverse childhood experiences (ACEs) increase risk for adult health issues.
3. Describe how adult health is affected due to biological changes from ACEs.
4. Describe the universal precaution and the principles of TIC.

Brief Content Outline of the monthly training classes:

Risk factors for acute trauma
 Adverse Childhood Experiences Study (ACEs)
 Demographic characteristics, categories of trauma, becoming Trauma Informed
 Performing a self-assessment of ACEs
 Structural and physiological changes in the brain from childhood trauma
 Normal physiological responses to a threat; alterations in responses in those with ACEs
 Linking ACEs and chronic illness, disability, and early death principles of TIC and the universal precaution of TIC

and a content outline for educational classes for organizations planning to implement TIC as a part of their practice.

Gallo-Silver, Anderson, and Romo (2014) noted that one in six men is a survivor of childhood sexual abuse. They provided vignettes of patients illustrating effective communication strategies, ways to ensure that patients maintain control at all times during their care, and guidelines for getting permission from patients during each step of an exam or procedure. Gallo-Silver and colleagues provided guidelines for empathic communication that have been adapted for use with any patient who discloses a history of childhood sexual abuse or ACEs (Table 3). LoGiudice and Douglas (2016) successfully incorporated a sexual violence case study using a trauma-informed lens into their nursing curricula. Sharing these articles in a journal club format may be an effective educational technique to develop and maintain TIC practice.

Green et al. (2015) developed a 6-hour Continuing Medical Education (CME) course on trauma-informed medical care and conducted a randomized controlled trial to determine whether it was effective. Providers rate taped visits between primary care providers and standardized patients, and those who were trained showed significantly greater patient-centeredness after training, suggesting that this is a promising approach.

Perform a Self-Assessment

Nurses and other members of the rehabilitation team may have had their own ACEs. We recommend that all members of the rehabilitation team complete a self-assessment using the short, 10-question version of the Adverse Childhood Experiences questionnaire (Table 4; World Health Organization [WHO], 2016). Understanding their own challenges helps nurses recognize when their beliefs are negatively affecting the care they give and thus improve patient care and—importantly for the nurse—self-care. Self-awareness permits nurses to monitor their reactions to patients and implement self-care when needed. This is a key concept for rehabilitation team members to provide TIC. All team members have had past experiences that trigger responses to particular patients, and to perform care, we must learn to not react to what we are encountering. After exerting substantial energy and effort on behalf of a patient, the nurse may feel that the patient should respond in the way that the nurse perceives is appropriate. This notion can be a barrier to good patient care since it places the nurse's expectations over those of the patient. Nurses need to educate patients on risks and benefits of treatment options, but when a nurse becomes frustrated due to personal triggers when patients do not choose the treatment options presented, the nurse is not

Table 3 Empathic communication techniques with patients disclosing histories of adverse childhood experiences

1. Speaking with compassion and soft voice tones conveys empathy.
2. Reflect back using the words the patient has used to convey empathy and to ensure understanding.
3. Avoid saying "OK," "I see," "Got it," or "I understand," as these can sound callous or insincere.
4. Empower patients by asking them to tell you how you should best move forward. Example: "Thank you for sharing with me. How can I and the rehabilitation team work differently with you, given what you have shared?"
5. Avoid the urge for physical contact (i.e., hugs, touching the patient's arm) with the patient immediately after disclosure. Well-intentioned contact can be triggering and upsetting to the patient.

Note. Adapted from Gallo-Silver et al. (2014).

asking, "What has happened to this patient?" If a nurse has self-awareness he or she will be able to quickly recognize which patients are personal triggers to his or her own issues. If a nurse's issues are triggered by a patient event at work, the best practice is to ask for assistance or to change patient assignments if possible. Self-awareness of relative strengths is the hallmark of a nurse demonstrating a high level of professionalism.

Returning to John: Helping Him Through TIC

John was assessed by the TIC nurse who used the universal precaution of TIC, that is, presuming that John had been exposed to either abuse, violence, neglect, or other traumatic experiences, such as being abandoned by a parent or witnessing a family member being abused. The nurse immediately initiated safety, the first principle of TIC, focusing on John as a whole person rather than focusing on his SCI. She set aside time to ask John how he was coping in rehabilitation and to learn how he typically coped when stressed. Then, the nurse used the second principle of TIC by building a sense of trustworthiness: She provided clear detailed information to John about his SCI. Next, recognizing choice and collaboration as the third and fourth steps of TIC, the nurse provided choices regarding John's care and schedule and responded to his questions and concerns. This allowed John to feel empowered, the last of the five guiding principles. He began to feel safe, respected, and informed, demonstrating his ability to work with the team in creating his care plan. Subsequently, he began participating in therapy.

John agreed to a slow introduction to in-and-out catheterizations but declined digital stimulation of his bowels. He chose to use only a suppository at night, administered by female nurses only, and he wore an incontinence brief during the day. He agreed to a bed alarm, but his door was to remain closed during hours of sleep. John's pain was addressed by the team; they provided information

as his pain regimen was adjusted, collaborated with John as changes were made, and continued to use the five guiding principles of TIC. As John's pain began to be controlled, his level of trust increased. Feeling safe and empowered, his anger decreased, and he began to trust some of the rehabilitation team members with small pieces of information. He eventually revealed that he had been in foster care during childhood because his father went to prison and his mother experienced severe depression. In foster care, John had had a series of traumatizing experiences including physical abuse and sexual abuse that involved enemas. His depression and migraines began while in foster care, during which he starting binge eating. The team continued to adapt John's care to ensure that he continued to feel safe and comfortable.

John's inpatient rehabilitation stay was a success because the TIC nurse, and then the rest of the rehabilitation team, used the universal precaution—presuming that his ACEs were affecting his adult health and actions, and followed the guiding principles of safety, trustworthiness, choice, collaboration, and empowerment. The nurse

Table 4 Adverse Childhood Experiences - International Questionnaire (ACE-IQ) 10 question version. (The original tool was developed by Felitti & Anda in the 1990s)

Finding Your ACE Score	
While you were growing up, during your first 18 years of life:	
1. Did a parent or other adult in the household often or very often ... Swear at you, insult you, put you down, or humiliate you? or Act in a way that made you afraid that you might be physically hurt? Yes No If yes enter 1 _____	
2. Did a parent or other adult in the household often or very often ... Push, grab, slap, or throw something at you? or Ever hit you so hard that you had marks or were injured? Yes No If yes enter 1 _____	
3. Did an adult or person at least 5 years older than you ever ... Touch or fondle you or have you touch their body in a sexual way? or Attempt or actually have oral, anal, or vaginal intercourse with you? Yes No If yes enter 1 _____	
4. Did you often or very often feel that ... No one in your family loved you or thought you were important or special? or Your family didn't look out for each other, feel close to each other, or support each other? Yes No If yes enter 1 _____	
5. Did you often or very often feel that ... You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it? Yes No If yes enter 1 _____	
6. Were your parents ever separated or divorced? Yes No If yes enter 1 _____	
7. Was your mother or stepmother: Often or very often pushed, grabbed, slapped, or had something thrown at her? or Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard? or Ever repeatedly hit at least a few minutes or threatened with a gun or knife? Yes No If yes enter 1 _____	
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs? Yes No If yes enter 1 _____	
9. Was a household member depressed or mentally ill, or did a household member attempt suicide? Yes No If yes enter 1 _____	
10. Did a household member go to prison? Yes No If yes enter 1 _____	
Now add up your "Yes" answers: _____ This is your ACE Score. Available from the World Health Organization (2016).	

understood that to ensure John's safety, she needed to understand his physical and emotional needs. She did not think, "What's wrong with him?" but asked herself "What has happened to him?" This question helped her to understand that trustworthiness was the key to a successful rehabilitation stay. She provided clear, detailed information and maintained appropriate boundaries. John clearly tested boundaries during the day-to-day social interactions and implementation of his treatment plan, including acting out during therapy, occasionally shouting at a staff member, and not following through on agreements he made with the team. The team modeled healthy behavior using professional language that empathized without becoming overly involved. The team also assisted the patient in making healthy choices by empowering John to adhere to the treatment plan he had actively created.

Rehabilitation nursing is complex and may require repeated education and consistent boundaries to move a patient one step forward. Using TIC reduces frustration when progress is slow. From the outset, the nurse recognized that she needed to implement TIC: Each day, John continued to challenge the staff, and each day, the nurse worked compassionately with John to confirm both his and the team's expectations from the treatment plan he had created. The nurse would enter John's room an hour before therapy to discuss the upcoming treatment and John would repeat his same behaviors and patterns. At every encounter with him, the nurses used TIC consistently, recognizing that John finally began to feel a sense of stability in his environment. Well-informed and given choices, John was empowered by his rehabilitation team. His traumatic history was acknowledged and respected, and he was able to maintain his dignity. Eventually, these clear detailed explanations and boundaries led to a successful outcome. John participated in therapy and completed his SCI goals. He was discharged to a friend's home until wheelchair accessible public housing was available.

To be consistent in John's care, the nurses provided factual, clear, concise information to the entire rehabilitation team. In team rounds, TIC was addressed, barriers to effective care were identified, and discharge planning was initiated. John faced significant health issues during inpatient rehabilitation including neurogenic bowel and bladder, pain, muscle spasms, and depression, in addition to the risk of skin breakdown. His care plan and orders included SCI bowel and bladder protocol, time-released oxycodone for pain, baclofen for muscle spasms, and sertraline for depression. His social situation posed numerous challenges, including financial problems. He did not have health insurance coverage and his Medicaid application was still pending. Recognizing that many patients with ACEs have few resources and their economic burden is heavy, the nurse

discussed John's concerns with the team's social worker, who worked to provide John with resources for catheters, medication assistance, and community support. John also began treatment for alcohol and substance abuse while he was on the rehabilitation unit, with plans to continue treatment after discharge. His successful return to the community depended on continued TIC as an outpatient. He was scheduled to return 3 weeks after discharge to see a psychiatrist.

By working with John, the team was able to implement TIC successfully, and although his stay was not always smooth, John became an active participant in his own care. Not all patients in an inpatient rehabilitation program, however, are able to participate in their care the way that John did because the usual routines of rehabilitation care can have significant numbers of activities and interventions that work to trigger distressing responses in people with a history of violence or abuse. When this is the case, the rehabilitation team may need to find an alternative means to provide effective care, which may include long-term psychiatric care and/or treatment for addiction. Despite the challenges posed by patients with a history of violence or abuse, "what happened to this person?" must always be the key orienting principle guiding their care to provide the most compassionate, holistic, individualized rehabilitation that meets the patient's needs.

Trauma-Informed Care Is Cost-Effective, Efficient Care

Implementing "universal precautions" of TIC may appear to increase healthcare costs; however, although the costs related to rehabilitation care have yet to be documented, studies in primary care and behavioral health have shown that, when the entire healthcare team is trained to provide TIC, the cost of care declines sharply (SAMHSA, 2014). The use of TIC from the time of John's admission, for example, could have avoided several "lost" days of rehabilitation where no progress in his physical care was made. The costs of violence, abuse, and neglect are staggering, at an estimated cost of more than \$90,000,000,000 (\$90 billion) per year (SAMHSA, 2014). Table 5 details the catastrophic

Table 5 Costs of childhood trauma

Fang, Brown, Florence, and Mercy (2012) estimated the lifetime cost per child victim of nonfatal child maltreatment as \$210,000, which includes:
\$32,648 in childhood healthcare costs
\$10,530 in adult medical costs
\$144,360 in productivity losses
\$7,728 in child welfare costs
\$6,747 in criminal justice costs, and
\$7,999 in special education costs.

Note. The estimated average lifetime cost per death is \$1,272,900. The total lifetime economic burden in the United States is approximately \$124 billion.

Key Practice Points

- The prevalence of adverse childhood experiences and trauma in our patients necessitates that all rehabilitation team members approach care from a trauma-informed framework.
- The total life experiences of patients impact their beliefs, coping mechanisms, reactions, and health, which may lead to adverse “consequences of lifetime exposure to violence and abuse” (COLEVA).
- The basic premise of trauma-informed care (TIC) is that we, as providers, ask ourselves “What happened to this person?” instead of “What is wrong with this person?” The five guiding principles of TIC and the primary goals of rehabilitation nursing are safety, trustworthiness, choice, collaboration, and empowerment.
- Trauma-informed care results in better patient outcomes, increased team effectiveness, and reduced costs of care. The Substance Abuse and Mental Health Services Administration (SAMHSA) estimates that for every \$1 spent on TIC, \$5 is saved in lifetime costs.

economic costs of childhood trauma. Community programs implementing TIC in schools, primary care, and with families estimate that, for every \$1 spent on TIC, \$5 is saved in lifetime costs (SAMHSA, 2014). When TIC becomes the universal approach to care in rehabilitation, similar returns on investment should be realized.

Conclusion

Nurses are educated to consider the patient through a holistic lens, and although some may question how TIC differs from accepted standards of nursing care, it is important to recognize that TIC focuses on how childhood adversities affect adult health and behavior. TIC is not just a holistic approach; it is about the science behind the approach. The science of TIC validates the need to increase nursing time to implement treatments or to decrease the patients assigned to a nurse when a particular patient has a complex situation requiring increased time, effort, energy, and coordination to facilitate the patient's successful reentry into the community. The more knowledge a nurse has about a patient, the more specific and individualized a treatment plan can become. A TIC nurse will recognize subtle changes in the patient's actions or demeanor that assist in identifying events that trigger anxiety,

fear, and hypervigilance and will respond to decrease the number of those triggering events. Many patients with ACEs have multiple primary and acute care admissions. John and others with similar experiences are at elevated risk of return admission to the hospital; however, with implementation of TIC by the inpatient rehabilitation team, John and others like him can gain a collaborative and supportive network with resources that improve their chances of leading productive and healthier lives, which ultimately is the goal of all our rehabilitation efforts.

Acknowledgments

The authors gratefully acknowledge the vision, inspiration, and editorial assistance of the late Ms. Elizabeth Tornquist, MA, FAAN, and the wonderful assistance of Mrs. Dawn Wyrick, Administration Specialist, The University of North Carolina, Greensboro with this manuscript.

References

- Centers for Disease Control and Prevention (CDC) Division of Violence Prevention. (2016). *Adverse childhood experiences study*. Retrieved from <http://www.cdc.gov/violenceprevention/acestudy>
- coleva.net. (2011). *Consequences of Lifetime Exposure to Violence and Abuse (COLEVA)*. Retrieved from <http://www.coleva.net/COLEVA-Main-2-2-2011-v2/.html>
- Fang, X., Brown, D. S., Florence, C. S., & Mercy, J. A. (2012). The economic burden of child maltreatment in the United States and implications for prevention. *Child Abuse & Neglect*, 36, 156–165.
- Felitti, V. J., & Anda, R. F. (2014). The lifelong effects of adverse childhood experiences. In D. L. Chadwick, A. P. Giardino, R. Alexander, J. D. Thackeray, & D. Esemio-Jenssen, (Eds.), *Chadwick's child maltreatment: Sexual abuse and psychological maltreatment*, (Vol 2, pp. 203–215). St Louis, MO: STM Learning.
- 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.
- Green, B. L., Saunders, P. A., Power, E., Dass-Brailsford, P., Schelbert, K. B., Giller, E., & Mete, M. (2015). Trauma-informed medical care: A CME communication training for primary care providers. *Family Medicine*, 47(1), 7–14.
- LoGiudice, J. A., & Douglas, S. (2016). Incorporation of sexual violence in nursing curricula using trauma-informed care: A case study. *Journal of Nursing Education*, 55, 215–219.
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). *Guiding principles of trauma-informed care*. Retrieved from <http://newsletter.samhsa.gov/2014/04/guiding-principles-trauma-informed-care/>
- Williamson, L. F., & Qureshi, A. Z. (2015). Trauma informed care and disability: The complexity of pervasive experiences. *International Journal of Physical Medicine & Rehabilitation*, 3(2), 1–3.
- World Health Organization (WHO). (2016). *Adverse Childhood Experiences International Questionnaire (ACEIQ)*. Retrieved from http://www.who.int/violence_injury_prevention/violence/activities/adverse_childhood_experiences/en/

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The authors and planners have disclosed that they have no financial relationships related to this article.

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