

# Trauma-Informed Care Addressing the Mental and Emotional Needs of Patients With Cancer

Elizabeth Archer-Nanda, DNP, APRN, PMHCNS-BC, and Meagan L. Dwyer, PhD



**BACKGROUND:** The oncology care environment includes a wide range of traumatic physical and emotional experiences that can be challenging for patients and healthcare providers.

**OBJECTIVES:** This article aims to establish a knowledge base about the trauma-informed care (TIC) approach in oncology care.

**METHODS:** This article provides a literature-based overview of TIC as a model of care for patients with cancer, informed by definitions of trauma, post-traumatic stress disorder, and adverse childhood experiences. This review is based on clinical studies, expertise, and evidence-based guidelines.

**FINDINGS:** Based on a foundation of care for patients with cancer, nurses can apply TIC to clinical oncology practice. To illustrate TIC in practice, this article includes a case study, nursing approaches, implications, the TIC model of care, and resources. When applied to care, TIC benefits patients, staff, and organizations.

## KEYWORDS

trauma; trauma-informed care; models of care; adverse childhood experiences

## DIGITAL OBJECT IDENTIFIER

10.1188/24.CJON.372-379

**TRAUMA IS PRESENT IN THE LIVES OF ALMOST ALL PATIENTS** and staff, requiring recognition and management to develop effective and collaborative treatment relationships (Litam & Balkin, 2021; Schein et al., 2021). Implementing trauma-informed care (TIC) at macro and micro levels can have lasting improvements on the health and well-being of patients and care team members (Dowdell & Speck, 2022). Although many systems adopt the definition developed by the Substance Abuse and Mental Health Services Administration (2024), there are no operational manuals guiding the implementation of TIC into clinical oncology practice (Davidson et al., 2023). However, TIC can serve as a framework to provide clinical oncology care. Healthcare providers and systems working together create safe environments for delivering TIC, which maximizes positive regard while enhancing meaning and purpose to address the drivers of burnout (e.g., lack of resources, increased demands, reduced autonomy, poor work-life integration, isolation/lack of support, misaligned organizational-personal values) (Swensen & Shanafelt, 2020). Integrating TIC into standard care can help patients with cancer, oncology clinicians, and organizations. Applying TIC can result in the following: (a) patients' increased satisfaction, treatment adherence and retention, and safety, as well as decreased use of restraints; (b) increased staff autonomy, satisfaction, and retention; and (c) improved organizational policies and procedures, decreased turnover rates and related costs, and increased organizational transparency.

## Background

### Trauma Defined

In the past, a discussion about trauma may have been considered taboo; however, trauma as a concept is now widely discussed and disseminated in published literature and social media, and is more broadly accepted (Pandell, 2022). Although concepts of trauma range from highly volatile and life-threatening peak events to more emotionally toxic, insidious, and eroding experiences, there is a growing consensus that individual and collective experiences of trauma have lasting effects (Dye, 2018). The American Psychiatric Association (2013) defines trauma somewhat more strictly as “the emotional response to a terrible event in which one experiences or is exposed to actual threat or threatened death, serious injury, or sexual violence” (p. 271). This includes experiencing these events firsthand, witnessing these events occurring to another person, learning about the traumatic experience of someone close, and having “repeated or extreme exposure to aversive details of the traumatic event” (American Psychiatric Association, 2013, pp. 271–272). Recognition and discussion of the traumatic

event is not central to TIC; instead, TIC focuses on the emotional effects or responses to the event. Maté and Maté (2022) noted that “trauma is not what happens to you. Trauma is what happens inside you when something happens to you” (p. 20).

### Post-Traumatic Stress Disorder

Despite ongoing discussions that highlight and dilute trauma terminology, trauma as a concept has a strong foundation in research. Although aspects of trauma were initially recognized and studied in veterans of war dating back centuries, it was not until symptoms of post-traumatic stress disorder became more apparent in veteran generations following World War II and the Vietnam War that psychological and medical providers began studying trauma (Briere, 1997). The focus then broadened to include nonmilitary trauma, such as intimate-partner violence, rape or sexual assault, child abuse and neglect, community violence, severe injury, medical crises, and more (Ballenger et al., 2000). Researchers now suggest that as much as 80% of the U.S. population will be exposed to at least one trauma in their lifetime (Barzilay et al., 2019). Although a small proportion will develop and need treatment for post-traumatic stress disorder, for many people, the emotional and physical sequelae of their traumatic experiences will manifest in other mental illnesses, substance misuse, chronic physical illnesses, and social and financial problems (Bürging et al., 2020).

### Trauma in Patients With Cancer

Clinical oncology providers have expertise in the physically, emotionally, and even spiritually challenging aspects of a cancer diagnosis and subsequent treatment (Lee & Ramaswamy, 2020). Despite advances in medical science and increasing survival rates for previously incurable cancers, nearly every person diagnosed with cancer will receive this news as a threat to their lives and/or their hopes (National Cancer Institute, 2023; Rahib et al., 2021). A person diagnosed with cancer acknowledges the threat to their livelihood well before they undergo the multitude of required tests and procedures, receive challenging news, and experience illness-associated isolation. A patient experiences several adverse effects; body changes; and financial, social, and interpersonal changes, creating risk for retraumatization (Abrams et al., 2021). Every aspect of life could be touched by a cancer diagnosis and its related illnesses. If, with treatment, a patient survives relatively unscathed, or at least not permanently disabled, they may be expected to resume life as if nothing life-altering just happened to them (Cesaneck, 2022). Despite being traumatized, the patient may be expected to overcome their diagnosis and provide hope to their loved ones. Oncology providers have to be active in the support of the patient (Hlubocky et al., 2016). A meta-analysis showed that studies have contributed to an understanding of trauma, clarifying common sources of trauma and acknowledging that aspects of oncology and medical care are traumatic (Shand et al., 2015). As a

foundation for care, clinicians can apply the TIC framework to aid the patient and respect the humanity of providers (Reeves, 2015).

### Adverse Childhood Experiences and Health Outcomes

To explore a broader scope of trauma and understanding of adverse experiences, social scientists have studied how all people, including those in historically marginalized or underrepresented communities, could be affected over time by adverse childhood experiences (ACEs). For example, in the late 1990s, Kaiser Permanente published a longitudinal study about ACEs, which highlighted the consequences of trauma experienced in early childhood (Felitti et al., 1998). ACEs are conceptualized across domains of abuse, neglect, and relational or household dysfunction (see Table 1).

Higher ACEs scores have been associated with an increased risk of a variety of potential health outcomes (Crandall et al., 2019). Although there is extensive academic and clinical support for ACEs, critics suggest that a lack of focus on community and interpersonal identities may also create risk (Matlin et al., 2019; Rides At The Door & Shaw, 2023). Another research area has focused on the effects of trauma associated with weathering. Geronimus (1991) termed, researched, and advocated around the concept of *weathering*, defined as when Black adults (later expanded to include other underrepresented racial groups) experience negative health outcomes caused by the cumulative effects of political marginalization or social or economic adversity (Geronimus, 2023; Geronimus et al., 2023; Hampton-Anderson et al., 2021).

Although early work by Geronimus (1991) was highly controversial, more recent data have confirmed what researchers also refer to as *allostatic load* on members of marginalized communities including Black, Indigenous, and people of color, as well as lesbian, gay, bisexual, transgender, queer/questioning, intersex, or asexual

**TABLE 1.**  
ADVERSE CHILDHOOD EXPERIENCES:  
DOMAINS AND EXAMPLES

DOMAIN	EXAMPLES
Abuse	<ul style="list-style-type: none"> <li>■ Physical abuse</li> <li>■ Verbal abuse</li> <li>■ Sexual abuse</li> </ul>
Neglect	<ul style="list-style-type: none"> <li>■ Unmet physical or emotional needs</li> <li>■ Lack of adequate food or shelter</li> <li>■ Lack of emotional or educational support</li> </ul>
Relational or household dysfunction	<ul style="list-style-type: none"> <li>■ Parent or guardian with substance misuse</li> <li>■ Parental divorce or domestic violence</li> <li>■ Parent/guardian with mental illness or legal problems/incarceration</li> </ul>

**Note.** Adverse childhood experiences are potentially harmful or traumatic events that occurred during childhood and can have lasting effects on physical and emotional health and wellness later in life.

**Note.** Based on information from Centers for Disease Control and Prevention, 2024.

people (Levenson et al., 2023; Meléndez Guevara et al., 2021; Rides At The Door & Shaw, 2023). The theory of allostatic load proposes a slow and steady wear and tear on the body or damage to biologic systems caused by the effects of chronic stress. Allostatic load can negatively affect many health outcomes (Guidi et al., 2021; Parker & Johnson-Lawrence, 2022). Much like ACEs, the effects of weathering and allostatic load have been linked to economic and health outcomes, including cancer (Shen et al., 2022), cardiovascular disease (Borrell et al., 2020), chronic pain (Mickle et al., 2022), diabetes (Macit & Acar-Tek, 2020), maternal and fetal mortality (Riggan et al., 2021), obesity (Cullin, 2023), anxiety (Finlay et al., 2022), depression (Beydoun et al., 2023), post-traumatic stress disorder (Carbone et al., 2022), and increased risk of suicide (Valderrama et al., 2022). In addition, trauma has been associated with social outcomes, including alcohol and drug use (Rogers et al., 2021), tobacco use (Wiggert et al., 2016), educational attainment challenges (Gilmore et al., 2022), legal issues/incarceration (Gibbons et al., 2020), and poverty (Ribeiro et al., 2018).

**Purpose and Methods**

This article provides a literature-based overview of using TIC when caring for people with cancer based on clinical studies, expertise, and data-based guidelines. Relevant literature in psychological and nursing sciences were reviewed, with the inclusion of published and seminal works. To support and illustrate TIC applied to clinical oncology practice, this article reviews the TIC model created by the Centers for Disease Control and Prevention and the Substance Abuse and Mental Health Services Administration; the value of TIC to patients,

**“Shifting care from a paternalistic, medical approach to a more collaborative process can establish a foundation for shared decision-making.”**

staff, and organizations; a patient case study; nursing approaches to TIC and implications; and TIC resources.

**Results**

**TIC**

Based on a more inclusive definition of trauma that incorporates resilience and effective coping, the TIC model aims to better understand the lived experiences of individuals who have experienced a variety of traumas, recognize the effects of these experiences, and limit retraumatization (Dowdell & Speck, 2022; Erickson & Harvey, 2023; Goddard et al., 2022). This model is nonhierarchical. By approaching the patient’s trauma and ensuring respect for

**FIGURE 1.**  
TRAUMA-INFORMED CARE MODEL



**Note.** Based on information from Centers for Disease Control and Prevention, 2018; Hales et al., 2019; Mahon, 2022.

their individual experience, TIC can be experienced equally by the patient and the provider or care team member, in contrast to a top-down approach that affects only the patient. Rather than solely focusing on what experiences the patient may bring to the interaction, providers are aware of their own traumatic experiences, too, informing the clinical space and their relationship with the patient (Menschner & Maul, 2016). Trauma is associated with a patient's perceived absence of safety, and TIC can establish a sense of physical and emotional safety (Parker & Johnson-Lawrence, 2022). Figure 1 illustrates the TIC model.

### Applying TIC in Oncology Care

Studies have demonstrated the value of TIC in a variety of settings and populations, including schools, mental health facilities, and medical settings (Centers for Disease Control and Prevention, 2018). When applied in the oncology setting, this approach can enhance patient-provider collaboration, including more transparent discussion of disease, treatments, side effects, adherence, quality of life, and end-of-life concerns (Mahon, 2022). Oncology providers can apply an assumption of historical trauma or a universal precautions approach to effectively connect with the patient's needs and provide appropriate care (Goddard et al., 2022). This approach assumes that each patient has a wealth of challenging prior experiences and traumas, as well as strategies and adaptive skills to bolster their resilience (Hales et al., 2019; Mahon, 2022). To build a healthier workplace culture, this approach can also validate the experiences of providers and their colleagues, recognizing their need for support (Menschner & Maul, 2016).

### Discussion

Individuals with a history of trauma may experience feelings of powerlessness, helplessness, and fear. Authoritarian communication may further exacerbate these feelings, highlighting the importance of collaborative communication, and fostering partnership and cooperation (Roberts et al., 2019). When nurses allow patients to set the agenda and fully engage in their health care through patient-centered communication, they empower and support the patient's resilience (Roberts et al., 2019).

For providers to avoid retraumatizing patients, they can create a safe environment, thoroughly educating patients about what to expect with procedures, appointments, and examinations (Roberts et al., 2019). Nurse-patient communication based on cultural and historical sensitivity honors a person's identity, including their race, ethnicity, gender identity, sexual orientation, age, religion, experiences, and relationships (Dowdell & Speck, 2022). TIC strives to empower patients by giving them a more central voice, respecting their choices, and building a sense of safety, health literacy, and understanding of the health-care environment (Dowdell & Speck, 2022). Understanding that uncertainty is associated with subjective and physiologic measures of stress, nurses applying a TIC approach to oncology care

can foster understanding and trust. Figure 2 includes resources that support TIC in clinical care.

Thorough implementation of TIC requires a trauma-informed culture at the macro level (Fleishman et al., 2019). Efforts to ensure that an organization's culture, policies, and procedures are trauma informed can take tremendous time; however, nurses can apply a trauma-informed lens to their care at the micro level by showing awareness, sensitivity, and responsiveness, one patient at a time (Fleishman et al., 2019). Aligning with the guiding principles of TIC does not require expertise in the treatment of trauma; rather, a TIC approach underscores that provider

### FIGURE 2. TRAUMA-INFORMED CARE RESOURCES

#### ACEs AWARE

*Trauma-Informed Care*

- <https://bit.ly/4c4gsYS>

#### ADMINISTRATION FOR CHILDREN AND FAMILIES

*Resource Guide to Trauma-Informed Human Services*

- [www.acf.hhs.gov/trauma-toolkit](http://www.acf.hhs.gov/trauma-toolkit)

#### AMERICAN ASSOCIATION OF COLLEGES OF NURSING

*Compassionate Care*

- [www.aacnnursing.org/5b-tool-kit/themes/compassionate-care](http://www.aacnnursing.org/5b-tool-kit/themes/compassionate-care)

*Trauma-Informed Care*

- [www.aacnnursing.org/5b-tool-kit/themes/trauma-informed-care](http://www.aacnnursing.org/5b-tool-kit/themes/trauma-informed-care)

#### CRISIS PREVENTION INSTITUTE

*Top 10 Trauma Resources: Online Informed Care*

- <https://bit.ly/4c6ZwkE>

#### NATIONAL CHILD TRAUMATIC STRESS NETWORK

*Trauma-Informed Care*

- [www.nctsn.org/trauma-informed-care](http://www.nctsn.org/trauma-informed-care)

#### SAMHSA

*SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach*

- [www.store.samhsa.gov/sites/default/files/d7/priv/sma14-4884.pdf](http://www.store.samhsa.gov/sites/default/files/d7/priv/sma14-4884.pdf)

#### TRAUMA-INFORMED CARE IMPLEMENTATION RESOURCE CENTER

*What Is Trauma-Informed Care?*

- [www.traumainformedcare.chcs.org](http://www.traumainformedcare.chcs.org)

ACEs—adverse childhood experiences; SAMHSA—Substance Abuse and Mental Health Services Administration

interactions with patients are within a context of previous trauma (Andrejko & Katrichis, 2022) (see Figure 3). Shifting care from a paternalistic, medical approach to a more collaborative process can establish a foundation for shared decision-making (Dhawan & LeBlanc, 2022). To shift as a profession, healthcare providers must operationalize policies and procedures and build resources for nurses to deliver this care (Foli, 2022). TIC provides care that can be mutually respectful and collaborative. Fleishman et al. (2019) reported that nurses are using trauma-informed principles, with correlations to this practice in action (see Table 2).

### Implications for Nursing

Nurses are recognized as the most trusted professionals in health care (American Nurses Association, 2024) and are uniquely positioned to influence patient experiences and act as advocates within the healthcare system. Rooted in Watson's (2011) theory of human caring, nurses are able to practice loving kindness,

build trusting relationships, and allow space for each individual to share their story and experience. The healthcare system is populated by trauma survivors (Fleishman et al., 2019). A survey by Fleishman et al. (2019) estimated that 73% of respondents had at least one ACE, and an additional 14% experienced trauma caused by various factors, such as community violence or racism. Nurses can recognize the effect that trauma has on patients, as well as the potential effects it can have on healthcare professionals. Patients and healthcare workers can contribute to a foundation of trust and respect toward effective patient-provider relationships. Caring for patients requires nurses to be honest about their own emotional experiences when working with patients and to rely on their team when feeling personally triggered or needing to step away. In addition, acknowledging trauma can contribute to an understanding about patterns of healthcare utilization and adherence, as well as employee turnover and absenteeism (Fleishman et al., 2019).

#### FIGURE 3. TIC CASE STUDY

##### BACKGROUND

Cher was a woman aged 56 years who was receiving care for acute myeloid leukemia. The psychiatric-oncology consultation liaison service saw her at the onset of her inpatient admission. Although she was initially referred for supportive care, she was guarded about her psychiatric and trauma history. Estranged from her children, Cher relied on her partner, who was her only source of support. First treated during this admission for depressive symptoms and nicotine withdrawal, she began to develop post-traumatic symptoms, including hyperarousal, hypervigilance, and re-experiencing.

##### TIC APPROACH

Cher's clinical team openly shared clear and accurate information with Cher about her health, the unit's processes, and her anticipated procedures. Her care team continually reinforced her safety when they asked permission to engage with her, including at the time of care interventions. Cher was encouraged to choose when the team could perform certain aspects of care; this contributed to her feeling that she could regain control of her physical environment. Although her trauma history was not initially shared with all members of the care team, as a standard best practice strategy to provide care, the care team applied universal precautions to establish rapport. Through consistent interactions, Cher began to trust the staff and believed they were committed to caring for her in a non-threatening way. Because the care team built trust with her, Cher, in turn, grew to verbalize her needs, seeking support rather than trying to isolate and avoid.

##### BENEFITS TO THE PATIENT AND NURSES

TIC allows nurses and patients to move toward mutual care goals. Although there were periods of significant distress for Cher, the nursing staff allowed her

to establish agency about her care and decision-making. Therefore, staff members were able to understand when Cher needed additional support or space to allow her to process her distress. By allowing Cher space, she was less likely to resort to fight or flight, a response brought on by her feelings of panic and fear. As Cher began to feel safe enough to openly share her psychiatric symptoms, the team more effectively tailored her treatment. Her paranoia, anxiety, and depression began to ease. As members of the oncology care team, Cher's nurses advanced their understanding of TIC and Cher's unique needs, so their ability to support her was enhanced. Manifested by that understanding, nurses leaned on one another, developing a process for peer support. They were also able to step back with a sense of inquiry and consider how care delivery could be modified.

##### OUTCOMES

Cher was able to reestablish relationships with her children. Her suspicion of her health team and family dissipated, and she grew more comfortable in the demands of her leukemia treatments.

For nearly 2 years, Cher received clinical care for leukemia. She became an active participant in life decisions and her own care. Cher was able to contribute to decisions about her care as she approached the end of her life. She died with the support of her significant other, her children, and her care team. As evidenced by Cher's words and behavior, she died without fear and was able to articulate gratitude for rebuilt trust, restored relationships, and the ability to experience what she considered a good death.

TIC—trauma-informed care

**Note.** This real case includes modified and aggregate details to protect patient privacy.

TIC and mitigating factors associated with burnout prompt the following strategies to be applied in clinical oncology care: Create safe environments with adequate resources; encourage trust and psychological safety; provide space for peer support to limit isolation around challenging cases; foster collaboration, flexibility, and control; empower team members to voice concerns; and align individual and system values, honoring cultural concerns (Dowdell & Speck, 2022). When care is based on poorly functioning systems without a context for trauma or a lens toward well-being, patients and employees can feel detached, cynical, and opposed to adhering to policies (Elisseou, 2023). When applying TIC or using mitigation strategies to reduce burnout,

**TABLE 2.**  
TRAUMA-INFORMED CARE NURSING APPROACHES

NURSING INTERVENTION	RATIONALE
Provide clear introductions.	Patients need to understand who the members of the team are, what each member's role is, and how they can anticipate interacting with each member.
Be aware of nonverbal communication.	Use of open, nonthreatening body language is helpful for establishing safety. When possible, sit at eye level or slightly below eye level with the patient. When possible, ensure that all parties have access to leave the room so no one feels trapped.
Provide patient education.	Understanding what to expect helps to empower patients and alleviate anxiety from uncertainty, which can be triggering. Use teach-back education to give patients opportunities to clarify their understanding.
Ask permission.	Ensuring patients are OK with being touched, even during simple procedures (e.g., moving a patient in bed), can help to establish choice and control over the patient's own body and environment.
Protect the patient's privacy.	Let patients know that the care team may be asking them private information, and, when doing so, ask guests or visitors to leave while those sensitive aspects of the interaction are covered. Patients may not feel comfortable asking their guest to leave; the healthcare team can ensure and enable privacy.
Be transparent.	Trust is earned when patients perceive members of their team to be dependable, reliable, and consistent. Openly sharing limitations to role and system constraints is important to minimize unrealistic expectations.
Be clear and concise.	Use simple terms and avoid medical jargon to help with information processing. Teach-back methods are helpful for ensuring understanding.
Use universal precautions.	Application of trauma-informed care approaches universally helps to limit the risk of retraumatization that can happen unintentionally if screening has not occurred.

**Note.** Based on information from Lewis-O'Connor et al., 2019; Lewis-O'Connor & Rittenberg, 2019.

### IMPLICATIONS FOR PRACTICE

- Focus on patient strengths to allow for greater collaboration between patients and healthcare teams by using a trauma-informed approach.
- Provide patients with a safe environment that honors their unique experiences to allow for proactive engagement with the healthcare system that is focused toward illness prevention rather than treatment of diseases.
- Use respectful language when talking to or about patients because it is important for building mutual trust and providing equitable, unbiased, and safe health care.

patients and providers can become more engaged and dedicated. When applying TIC to clinical oncology practice, nurses can ask whether this approach to care does the following:

- Make the patient and others feel safe.
- Promote respect.
- Foster trust.
- Offer paths to support.
- Provide the patient with choices.
- Allow the patient's perspective.
- Honor the individual in the context of how they live.

### Conclusion

Trauma affects all patients. Providers can approach clinical care of patients with cancer using TIC. By applying TIC to clinical oncology care, patients and healthcare providers build a clinical care environment that values emotional space for safety, transparency, collaboration, and hope. This environment allows patients to feel supported and respected. In addition, healthcare providers who apply TIC to clinical oncology care can work collaboratively, which can reduce burnout and support professional fulfillment.

**Elizabeth Archer-Nanda, DNP, APRN, PMHCNS-BC**, is an advanced practice clinical director with the Norton Healthcare Office of Advanced Practice and the founding provider and manager of the Behavioral Oncology Program at Norton Cancer Institute, both in Louisville, KY; and **Meagan L. Dwyer, PhD**, is a licensed psychologist at Starboard Therapy and Coaching in Kansas City, MO. Archer-Nanda can be reached at elizabeth.archer-nanda@nortonhealthcare.org, with copy to CJONEditor@ons.org. (Submitted November 2023. Accepted February 17, 2024.)

The authors take full responsibility for this content and did not receive honoraria or disclose any relevant financial relationships. The article has been reviewed by independent peer reviewers to ensure that it is objective and free from bias.

### REFERENCES

- Abrams, H.R., Durbin, S., Huang, C.X., Johnson, S.F., Nayak, R.K., Zahner, G.J., & Peppercorn, J. (2021). Financial toxicity in cancer care: Origins, impact, and solutions. *Translational Behavioral Medicine, 11*(11), 2043–2054. <https://doi.org/10.1093/tbm/ibab091>
- American Nurses Association. (2024). *America's most trusted: Nurses continue to rank the highest*. <https://bit.ly/4bH4Aeu>

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>

Andrejko, M.L., & Katrichis, A. (2022). Psychosocial barriers to care: Recognizing and responding through a trauma-informed care approach. *Clinical Journal of Oncology Nursing, 26*(1), 11–13. <https://doi.org/10.1188/22.CJON.11-13>

Ballenger, J.C., Davidson, J.R., Lecrubier, Y., Nutt, D.J., Foa, E.B., Kessler, R.C., . . . Shalev, A.Y. (2000). Consensus statement on posttraumatic stress disorder from the international consensus group on depression and anxiety. *Journal of Clinical Psychiatry, 61*(Suppl. 5), 60–66.

Barzilay, R., Calkins, M.E., Moore, T.M., Wolf, D.H., Satterthwaite, T.D., Scott, J.C., . . . Gur, R.E. (2019). Association between traumatic stress load, psychopathology, and cognition in the Philadelphia neurodevelopmental cohort. *Psychological Medicine, 49*(2), 325–334.

Beydoun, H.A., Beydoun, M.A., Kwon, E., Hossain, S., Fanelli-Kuczmariski, M.T., Maldonado, A., . . . Zonderman, A.B. (2023). Longitudinal association of allostatic load with depressive symptoms among urban adults: Healthy aging in neighborhoods of diversity across the life span study. *Psychoneuroendocrinology, 149*, 106022. <https://doi.org/10.1016/j.psyneuen.2022.106022>

Borrell, L.N., Rodriguez-Álvarez, E., & Dallo, F.J. (2020). Racial/ethnic inequities in the associations of allostatic load with all-cause and cardiovascular-specific mortality risk in U.S. adults. *PLOS ONE, 15*(2), e0228336. <https://doi.org/10.1371/journal.pone.0228336>

Briere, J. (1997). *Psychological assessment of adult post-traumatic states*. American Psychological Association. <https://doi.org/10.1037/10267-000>

Bürgin, D., Boonmann, C., Schmid, M., Tripp, P., & O'Donovan, A. (2020). Fact or artefact? Childhood adversity and adulthood trauma in the U.S. population-based health and retirement study. *European Journal of Psychotraumatology, 11*(1), 1721146.

Carbone, J.T., Dell, N.A., Issa, M., & Watkins, M.A. (2022). Associations between allostatic load and post-traumatic stress disorder: A scoping review. *Health and Social Work, 47*(2), 132–142.

Centers for Disease Control and Prevention. (2018). *Six guiding principles to a trauma-informed approach*. <https://stacks.cdc.gov/view/cdc/56843>

Centers for Disease Control and Prevention. (2024). *Adverse childhood experiences (ACEs)*. <https://www.cdc.gov/aces/about/index.html>

Cesaneck, J. (2022). 'Life is never the same again': Cancer survivors describe the most difficult elements of survivorship. *Cure*. <https://www.curetoday.com/view/-life-is-never-the-same-again-cancer-survivors-describe-the-most-difficult-elements-of-survivorship>

Crandall, A., Miller, J.R., Cheung, A., Novilla, L.K., Glade, R., Novilla, M.L.B., . . . Hanson, C.L. (2019). ACEs and counter-ACEs: How positive and negative childhood experiences influence adult health. *Child Abuse and Neglect, 96*, 104089. <https://doi.org/10.1016/j.chiabu.2019.104089>

Cullin, J.M. (2023). Biological normalcy and body fat: Obesity prevalence, fat stigma, and allostatic load among late adolescents and young adults. *American Journal of Biological Anthropology, 181*(4), 575–587. <https://doi.org/10.1002/ajpa.24752>

Davidson, C.A., Kennedy, K., & Jackson, K.T. (2023). Trauma-informed approaches in the context of cancer care in Canada and the United States: A scoping review. *Trauma, Violence and Abuse, 24*(5), 2983–2996. <https://doi.org/10.1177/15248380221120836>

Dhawan, N., & LeBlanc, T.W. (2022). Lean into the uncomfortable: Using trauma-informed care to engage in shared decision-making with racial minorities with hematologic malignancies. *American Journal of Hospice and Palliative Care, 39*(1), 4–8.

Dowdell, E.B., & Speck, P.M. (2022). CE: Trauma-informed care in nursing practice. *American Journal of Nursing, 122*(4), 30–38. <https://doi.org/10.1097/01.NAJ.0000827328.25341.1f>

Dye, H. (2018). The impact and long-term effects of childhood trauma. *Journal of Human Behavior in the Social Environment, 28*(3), 381–392.

Elisseou, S. (2023). Trauma-informed care: A missing link in addressing burnout. *Journal of Healthcare Leadership, 15*, 169–173. <https://doi.org/10.2147/JHL.S389271>

Erickson, M., & Harvey, T. (2023). A framework for a structured approach for formulating a trauma-informed environment. *Journal of Education, 203*(3), 666–677. <https://doi.org/10.1177/00220574211046811>

Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., . . . Marks, J.S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine, 14*(4), 245–258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)

Finlay, S., Rudd, D., McDermott, B., & Sarnyai, Z. (2022). Allostatic load and systemic comorbidities in psychiatric disorders. *Psychoneuroendocrinology, 140*, 105726.

Fleishman, J., Kamasky, H., & Sundborg, S. (2019). Trauma-informed nursing practice. *Online Journal of Issues in Nursing, 24*(2), 3. <https://doi.org/10.3912/OJIN.Vol24No02Man03>

Foli, K.J. (2022). A middle-range theory of nurses' psychological trauma. *Advances in Nursing Science, 45*(1), 86–98. <https://doi.org/10.1097/ANS.0000000000000388>

Geronimus, A.T. (1991). Teenage childbearing and social and reproductive disadvantage: The evolution of complex questions and the demise of simple answers. *Family Relations, 40*(4), 463–471. <https://doi.org/10.2307/584905>

Geronimus, A.T. (2023). *Weathering: The extraordinary stress of ordinary life in an unjust society*. Little, Brown Spark.

Geronimus, A.T., Bound, J., & Hughes, L. (2023). Trend toward older maternal age contributed to growing racial inequity in very-low-birthweight infants in the US. *Health Affairs, 42*(5), 674–682. <https://doi.org/10.1377/hlthaff.2022.01066>

Gibbons, F.X., Fleischli, M.E., Gerrard, M., Simons, R.L., Weng, C.-Y., & Gibson, L.P. (2020). The impact of early racial discrimination on illegal behavior, arrest, and incarceration among African Americans. *American Psychologist, 75*(7), 952–968.

Gilmore, D.R., Carreño, T.M., Zare, H., Moore, J.X., Rogers, C.R., Brooks, E., . . . Thorpe, R.J., Jr. (2022). Investigating racial differences in allostatic load by educational attainment among non-Hispanic Black and White men. *International Journal of Environmental Research and Public Health, 19*(9), 5486. <https://doi.org/10.3390/ijerph19095486>

Goddard, A., Jones, R., & Etcher, L. (2022). Trauma informed care in nursing: A concept analysis. *Nursing Outlook, 70*(3), 429–439. <https://doi.org/10.1016/j.outlook.2021.12.010>

Guidi, J., Lucente, M., Sonino, N., & Fava, G.A. (2021). Allostatic load and its impact on health: A systematic review. *Psychotherapy and Psychosomatics, 90*(1), 11–27.

Hales, T.W., Green, S.A., Bissonette, S., Warden, A., Diebold, J., Koury, S.P., & Nochajski, T.H. (2019). Trauma-informed care outcome study. *Research on Social Work Practice, 29*(5), 529–539.

Hampton-Anderson, J.N., Carter, S., Fani, N., Gillespie, C.F., Henry, T.L., Holmes, E., . . . Kaslow, N.J. (2021). Adverse childhood experiences in African Americans: Framework, practice, and policy. *American Psychologist, 76*(2), 314–325.

Hlubocky, F.J., Back, A.L., & Shanafelt, T.D. (2016). Addressing burnout in oncology: Why cancer care clinicians are at risk, what individuals can do, and how organizations can respond. *American Society of Clinical Oncology Educational Book, 36*, 271–279.

Lee, G.L., & Ramaswamy, A. (2020). Physical, psychological, social, and spiritual aspects of end-of-life trajectory among patients with advanced cancer: A phenomenological inquiry. *Death Studies, 44*(5), 292–302. <https://doi.org/10.1080/07481187.2018.1541944>

Levenson, J.S., Craig, S.L., & Austin, A. (2023). Trauma-informed and affirmative mental health practices with LGBTQ+ clients. *Psychological Services, 20*(Suppl. 1), 134–144.

Lewis-O'Connor, A., & Rittenberg, E. (2019). *What is trauma-informed care?* American Hospital Association. <https://www.aha.org/system/files/media/file/2019/07/what-is-trauma-informed-care-6-11-2019-.pdf>

Lewis-O'Connor, A., Warren, A., Lee, J.V., Levy-Carrick, N., Grossman, S., Chadwick, M., . . . Rittenberg, E. (2019). The state of the science on trauma inquiry. *Women's Health, 15*, 1745506519861234.

- Litam, S.D.A., & Balkin, R.S. (2021). Moral injury in health-care workers during COVID-19 pandemic. *Traumatology*, 27(1), 14–19. <https://doi.org/10.1037/trm0000290>
- Macit, M.S., & Acar-Tek, N. (2020). Evaluation of nutritional status and allostatic load in adult patients with type 2 diabetes. *Canadian Journal of Diabetes*, 44(2), 156–161.
- Mahon, D. (2022). Implementing trauma informed care in human services: An ecological scoping review. *Behavioral Sciences*, 12(11), 431. <https://doi.org/10.3390/bs12110431>
- Maté, G., & Maté, D. (2022). *The myth of normal: Trauma, illness and healing in a toxic culture*. Avery.
- Matlin, S.L., Champine, R.B., Strambler, M.J., O'Brien, C., Hoffman, E., Whitson, M., . . . Tebes, J.K. (2019). A community's response to adverse childhood experiences: Building a resilient, trauma-informed community. *American Journal of Community Psychology*, 64(3–4), 451–466.
- Meléndez Guevara, A.M., Lindstrom Johnson, S., Elam, K., Hillel, C., Mcintire, C., & Morris, K. (2021). Culturally responsive trauma-informed services: A multilevel perspective from practitioners serving Latinx children and families. *Community Mental Health Journal*, 57(2), 325–339.
- Menschner, C., & Maul, A. (2016). *Key ingredients for successful trauma-informed care implementation*. Center for Health Care Strategies. <https://bit.ly/3VPpmUr>
- Mickle, A.M., Garvan, C.S., Bartley, E., Brooks, A.K., Vincent, H.K., Goodin, B.R., . . . Sibille, K.T. (2022). Exploring the allostatic load of pain, interference, and the buffering of resilience. *Journal of Pain*, 23(5), 30. <https://doi.org/10.1016/j.jpain.2022.03.118>
- National Cancer Institute. (2023). *Common cancer myths and misconceptions*. U.S. Department of Health and Human Services. <https://www.cancer.gov/about-cancer/causes-prevention/risk/myths>
- Pandell, L. (2022). *How trauma became the word of the decade*. Vox. <https://bit.ly/3Y0bTuD>
- Parker, S., & Johnson-Lawrence, V. (2022). Addressing trauma-informed principles in public health through training and practice. *International Journal of Environmental Research and Public Health*, 19(14), 8437. <https://doi.org/10.3390/ijerph19148437>
- Rahib, L., Wehner, M.R., Matrisian, L.M., & Nead, K.T. (2021). Estimated projection of US cancer incidence and death to 2040. *JAMA Network Open*, 4(4), 214708.
- Reeves, E. (2015). A synthesis of the literature on trauma-informed care. *Issues in Mental Health Nursing*, 36(9), 698–709. <https://doi.org/10.3109/01612840.2015.1025319>
- Ribeiro, A.I., Amaro, J., Lisi, C., & Fraga, S. (2018). Neighborhood socioeconomic deprivation and allostatic load: A scoping review. *International Journal of Environmental Research and Public Health*, 15(6), 1092. <https://doi.org/10.3390/ijerph15061092>
- Rides At The Door, M., & Shaw, S. (2023). The other side of the ACEs pyramid: A healing framework for indigenous communities. *International Journal of Environmental Research and Public Health*, 20(5), 4108. <https://doi.org/10.3390/ijerph20054108>
- Riggan, K.A., Gilbert, A., & Allyse, M.A. (2021). Acknowledging and addressing allostatic load in pregnancy care. *Journal of Racial and Ethnic Health Disparities*, 8(1), 69–79.
- Roberts, S.J., Chandler, G.E., & Kalmakis, K. (2019). A model for trauma-informed primary care. *Journal of the American Association of Nurse Practitioners*, 31(2), 139–144.
- Rogers, J.M., Epstein D.H., Phillips, K., Strickland, J.C., & Preston, K.L. (2021). Exploring the relationship between substance use and allostatic load in a treatment/research cohort and in a US probability sample (NHANES 2009–2016). *Frontiers in Psychiatry*, 12, 630195.
- Schein, J., Houle, C., Urganus, A., Cloutier, M., Patterson-Lomba, O., Wang, Y., . . . Davis, L.L. (2021). Prevalence of post-traumatic stress disorder in the United States: A systematic literature review. *Current Medical Research and Opinion*, 37(12), 2151–2161.
- Shand, L.K., Cowlshaw, S., Brooker, J.E., Burney, S., & Ricciardelli, L.A. (2015). Correlates of post-traumatic stress symptoms and growth in cancer patients: A systematic review and meta-analysis. *Psycho-Oncology*, 24(6), 624–634. <https://doi.org/10.1002/pon.3719>
- Shen, J., Fuemmeler, B.F., Guan, Y., & Zhao, H. (2022). Association of allostatic load and all cancer risk in the SWAN cohort. *Cancers*, 14(13), 3044.
- 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]. U.S. Department of Health and Human Services. [https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA\\_Trauma.pdf](https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA_Trauma.pdf)
- Swensen, S., & Shanafelt, T. (2020). *Mayo Clinic strategies to reduce burnout: 12 actions to create the ideal workplace*. Oxford University Press, Mayo Clinic Scientific Press.
- Valderrama, J., Macrynikola, N., & Miranda, R. (2022). Early life trauma, suicide ideation, and suicide attempts: The role of rumination and impulsivity. *Archives of Suicide Research*, 26(2), 731–747. <https://doi.org/10.1080/13811118.2020.1828208>
- Watson, J. (2011). *Human caring science: A theory of nursing* (2nd ed.). Jones and Bartlett Learning.
- Wiggert, N., Wilhelm, F.H., Nakajima, M., & al'Absi, M. (2016). Chronic smoking, trait anxiety, and the physiological response to stress. *Substance Use and Misuse*, 51(12), 1619–1628. <https://doi.org/10.1080/10826084.2016.1191511>

## PROFESSIONAL DEVELOPMENT ACTIVITY EARN 1 CONTACT HOUR



ONS members can earn free nursing continuing professional development (NCPD) for reading this article and completing an evaluation online. To do so, visit [ons.org/cjon/ncpd](https://ons.org/cjon/ncpd) to link to this article and then access its evaluation link after logging in.

Certified nurses can claim no more than 1 total ILNA point for this program. Up to 1 ILNA point may be applied to Care Continuum OR Psychosocial Dimensions of Care OR Quality of Life OR Symptom Management, Palliative Care, Supportive Care. See [www.oncc.org](https://www.oncc.org) for complete details on certification.

## QUESTIONS FOR DISCUSSION USE THIS ARTICLE FOR JOURNAL CLUB



Journal club programs can help to increase your ability to evaluate the literature and translate those research findings to clinical practice, education, administration, and research. Use the following questions to start the discussion at your next journal club meeting.

- What did this article reveal to you about trauma-informed care in the oncology setting?
- What trauma-informed care interventions do you currently use in your nursing practice? Where do you have opportunities to incorporate trauma-informed care into your practice?
- What practical next steps can you take to incorporate evidence from this article into practice?

If you implement practice changes as a result of this journal club article, visit <https://bit.ly/3VZTewi> to share those with the *Clinical Journal of Oncology Nursing* editor and ONS members (must be logged into ONS account to access). Visit <http://bit.ly/1vUqbVj> for details on creating and participating in a journal club. Photocopying of this article for discussion purposes is permitted.