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MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

Undoing Institutional and Racial Trauma Through Interprofessional, Trauma-Informed Education

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Abstract

Trauma-informed care is a transdisciplinary framework that existed well before 2020, but it is now more imperative to teach it and incorporate it into medical education. This paper describes a novel interprofessional curriculum and its focus on trauma-informed care—notably, including institutional and racial trauma—that was implemented by Yale University for medical, physician associate, and advanced practice registered nursing students.

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Need for Trauma-Informed Care

Trauma is ubiquitous, with nearly 90% of people living in the United States experiencing a traumatic event in their lifetime.[1] A traumatic event is anything experienced as harmful or life-threatening and has lasting adverse effects on functioning and well-being.[2] In 1998, Felitti[3] published a landmark study on how adverse childhood experiences affect adult health. Recently, the nation has experienced unprecedented trauma from 2 simultaneous pandemics: COVID-19 and what Manning describes as the "acute decompensation of ... chronic racism."[4] Mental health symptoms and substance use rates are soaring[5] as we witness hardship in our own lives and in patients, coworkers, and health care systems.

Trauma-informed care (TIC) is a framework that existed before these concurrent pandemics but is now more important than ever to health professional education. TIC "realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization."[2] In this paper, we describe a novel interprofessional curriculum and its focus on TIC—notably, including institutional and racial trauma—that was implemented

by the Yale Schools of Medicine and Nursing for medical, physician associate (PA), and advanced practice registered nursing (APRN) students. **The Yale Interprofessional**

Longitudinal Clinical Experience

TIC is transdisciplinary, with programs and resources implemented in school settings, mental health care, and community organizations. Literature supports the value of trauma-informed health care,[6,7,8] with various curricula incorporated in residency[9] and other educational settings,[10] and the American Medical Association House of Delegates recently adopted a policy recognizing TIC.[11] Within medicine, interprofessional collaboration is a critical component of providing TIC[12] that supports continuity of care and promotes key principles of safety, trustworthiness, and transparency for patients.[2]

Many trainings on TIC focus on patient-centered communication and care and the health effects of trauma, with only 53% of 17 curricula identified in one scoping review addressing interprofessional collaboration.[10] Nonetheless, interprofessional training helps learners develop their professional identity while gaining understanding of others' roles in the health care team.[13] Furthermore, managing complex patient needs requires interprofessional collaboration to provide biopsychosocial, team-based care.[14] With the growing awareness of trauma's prevalence and impact, a coordinated approach to team care is essential to navigate our increasingly complex health care system. In 2020, interdisciplinary Yale educators identified a clear need for more interprofessional training to help learners develop the collaborative skills needed to provide comprehensive, trauma-informed health care.

The Interprofessional Longitudinal Clinical Experience (ILCE) at Yale, a required component of the curriculum for medical, PA, and APRN students, prepares early health professional students to function effectively in the team-based clinical environment. The 7-month course brings students together for 2 to 3 hours a week in small-group clinical experiences, simulation sessions, and large-group didactic experiences. Student feedback is sought after each didactic session and at the end of the course. The content of the ILCE curriculum is organized into a large, comprehensive handbook for course facilitators; an overview of the syllabus of the ILCE curriculum can be found in the Table. Based on student feedback and in recognition of the importance of TIC for interprofessional learners, the ILCE faculty elected to add a large-group didactic session on this topic in the academic year 2020-2021.

Table. Yale Interprofessional Longitudinal Clinical Experience Curriculum Summary

Method	Fall semester	Spring semester
Clinical experiences	6 sessions	7 sessions
Team simulations	1 session	1 session
Didactic topics	• Race in the clinical encounter • Oral presentation skills • Taking a substance use history	• Trauma-informed care • Listening to heart, lung, and bowel sounds • Diagnostic reasoning

ILCE Trauma-Informed Care Curriculum

ILCE course leaders sought out internal and external faculty with expertise in TIC to guide curriculum development and deliver the content to students. We aimed not only to teach students basic concepts but also to provide them with sample language and

behavior that would allow them to practice TIC with patients in all their clinical experiences. Three interprofessional faculty members originally delivered the 2-hour session via presession readings, a lecture, and the interactive use of images and videos. As the session took place via Zoom, students were encouraged to participate by using the chat function to identify TIC practices in the shared images and videos.

We framed the overall session as moving from "What is wrong with this person?" to "What has happened to this person?"[15] The lecture began by providing the Substance Abuse and Mental Health Services Administration's definition of trauma,[2] basic epidemiological statistics about the prevalence of trauma, and an introduction to childhood trauma by reviewing the 1998 Felitti study on adverse childhood events.[3] Learners were then taught how to identify signs of trauma that might occur in various routine physical examinations,[16] such as persons avoiding certain procedures or becoming visibly anxious during a portion of a physical exam. Learners were then instructed to assume that the patient had a trauma history and ask about any impacts of past traumas through open-ended questions.

In the last part of the introductory ILCE session on TIC, learners watched a video of a shoulder exam without any audio so that participants were drawn uniquely to the large amounts of touching that a health care practitioner often performs without the patient being able to anticipate what is coming next or why. Learners appropriately identified how jarring certain aspects of physical exams can be to survivors of sexual or physical abuse. Learners were then taken through a series of trauma-sensitive practices to perform before, during, and after the physical exam—such as knocking, draping, using verbal cues to let patients know where they must physically touch them during the exam and why, intentionally checking in with patients throughout the exam, and using simple clinical language that avoids potentially problematic language, such as using "butt" to refer to a patient's buttocks or saying "Don't let me move you" during strength testing in the musculoskeletal exam.

Student feedback from the 2020-2021 academic year curriculum was gathered as free-text responses to questions asking learners to evaluate what they felt (1) worked well in the session, (2) could be improved upon for the next year, and (3) would be incorporated in their independent learning and clinical practice. Of the 70 respondents, 36% were PA students (n = 25), 20% were MD students (n = 14), and 44% were APRN students (n = 31). Learners noted that the lecture provided important insight into and a platform for a topic that has otherwise not been explicitly discussed in their education. Learners also found the presentation engaging and felt that the interactive aspects, although limited by Zoom, still allowed for open dialogue with presenters. Feedback indicated that learners wanted more case examples demonstrating the functional application of these tools, especially in relation to their preclinical exposures. Furthermore, given the national outcry against the murders of unarmed Black Americans and racialized health inequity manifested by the COVID-19 pandemic, learners voiced a desire to know more about systemic and racial trauma, which was absent from the original ILCE introductory lecture on TIC. Thus, revisions were made for the following 2021-2022 academic year, and expertise was acquired to teach about institutional and racial trauma.

ILCE Explores Institutional and Racial Trauma

Faculty leading the Social Justice and Health Equity Curriculum for the Yale Department of Psychiatry were sought out to expand the ILCE's Trauma-Informed Care Curriculum and teach learners how to avoid and dismantle institutional and racial trauma in real-

time clinical practice. The introductory session began with an introduction to adverse childhood experiences, which intentionally noted the limited generalizability of the original studies performed in a disproportionately White American population. Students were then taught how racism and societal prejudice increase the likelihood of racially minoritized children enduring childhood trauma and discrimination, which in turn lead to increased lifelong physical and mental illness in adulthood and, ultimately, to premature death.[17] Given the unfortunate prevalence of police violence against unarmed Black Americans, studies were also presented that quantified the mental health harms that police trauma inflicts upon racially minoritized populations.[18,19]

Learners were also presented with the viewpoint that medical racism and racialized health care disparities are forms of health care iatrogenesis, whereby avoidable bias embedded within health care clinicians' behaviors and institutions itself causes harm to minoritized patients that would not have otherwise occurred.[20] Furthermore, learners were taught (1) that metal detectors and armed security are disproportionately prevalent at health care institutions serving urban, racially minoritized populations, despite there being no evidence that hospital policing truly reduces hospital violence and (2) that hospital policing may be a form of institutional trauma by perpetuating police and security brutality against racially minoritized persons and anyone experiencing a behavioral emergency.[21,22] Lastly, in response to the prior year's feedback for more case-based learning, a fictional case was presented about complex trauma that showed the intersectionality of childhood, sexual, police, racial, and institutional trauma.

Student feedback from the 2021-2022 TIC session was solicited in the form of free-text prompts. Prompts included the following questions: (1) What worked well in this session, (2) What would you suggest for improvement, and (3) How will you continue to learn about or practice trauma-informed care? A total of 30 respondents (15 PA students and 15 MD students) wrote a total of 79 free-text evaluation responses. Due to a conflict in curriculum scheduling, APRN students were unfortunately unable to attend the session.

Student feedback on what worked well during this session was phenomenally positive. Of the 28 students who responded to this question (some made multiple observations), 18 praised panelists for diversity of identity, expertise, and presentation style; 7 expressed that they felt they had acquired practical skills in conducting a trauma-informed medical encounter and physical exam; and 6 expressed that the videos and case examples were helpful. The following are specific comments included in the feedback.

- "This panel was amazing.... As a survivor of sexual violence myself, I appreciate that Yale School of Medicine recognizes the importance of teaching this topic to every student."
- "I appreciated this session very much as it addressed a lot of topics that are not normally discussed in typical medical courses."
- "The case study at the end really illustrated an example of how far our society still has to go with respect to creating a society that does not traumatize vulnerable populations over and over and over again."
- "The portion about the importance of communication with patients, especially when performing a physical exam, were of great benefit and likely something that providers often forget over time."

- "There was a good variety of exercises that elicited student participation from feedback on videos and provider behavior to storytelling and instructional language introduction."
- "The practical and concrete tips, ie, about appropriate touch and language substitutions, helped me think about some things that could be triggering that I would not have otherwise thought about. I also liked the inclusion of video modalities."

The 26 comments regarding ways to improve the session included specific requests for further content about the traumas faced by the lesbian, gay, bisexual, transgender, and queer community; having more breakout rooms and interactive sessions; and including real case scenarios in addition to the fictional one. Of the 25 comments regarding how students would incorporate newly acquired skills into their practice (some comments had multiple parts coded as separate topics), 12 acknowledged a need to stay engaged with health equity literature and training, 9 expressed a desire to seek further mentorship from diverse colleagues and faculty, 7 expressed being more open to exploring personal biases and inequities within their clinical environment, and 7 identified a need for language self-monitoring and asking patients more explicitly about their comfort during physical examinations.

Conclusion

In conclusion, it is important to note that not all learners embraced education about institutional and racial trauma, as one student expressed concerns about presenters putting "their own spin or bias onto students." As a unified body of interdisciplinary health care educators, we wholeheartedly believe that such pushback is a sign of successfully challenging the status quo of common biases in health care.[23] These challenges will not be without some level of controversy, and we believe that comments like the one above demonstrate how much more work remains to be done in medical education to dismantle patient trauma perpetuated by health care clinicians and institutions. We are excited to share Yale's interprofessional TIC curriculum with a national audience, and we hope to continue improving the education of our learners for years to come.

References

1. Kartha A, Brower V, Saitz R, Samet JH, Keane TM, Liebschutz J. The impact of trauma exposure and post-traumatic stress disorder on healthcare utilization among primary care patients. *Med Care.* 2008;46(4):388-393.
2. Huang LN, Flatow R, Biggs T, et al; Trauma and Justice Strategic Initiative. SAMHSA's concept of trauma and guidance for a trauma-informed approach. HHS publication (SMA) 14-4884. Substance Abuse and Mental Health Services Administration; 2014. Accessed November 7, 2022. https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA_Trauma.pdf
3. Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med.* 1998;14(4):245-258.
4. Manning KD. When grief and crises intersect: perspectives of a Black physician in the time of two pandemics. *J Hosp Med.* 2020;15(9):566-567.
5. Czeisler MÉ , Lane RI, Petrosky E, et al. Mental health, substance use, and suicidal ideation during the COVID-19 pandemic—United States, June 24-30, 2020. *Morb Mortal Wkly Rep*. 2020;69(32):1049-1057.

6. Racine N, Killam T, Madigan S. Trauma-informed care as a universal precaution: beyond the adverse childhood experiences questionnaire. *JAMA Pediatr.* 2020;174(1):5-6.
7. Portelli Tremont JN, Klausner B, Udekwu PO. Embracing a trauma-informed approach to patient care-in with the new. *JAMA Surg.* 2021;156(12):1083-1084.
8. Kuehn BM. Trauma-informed care may ease patient fear, clinician burnout. *JAMA.* 2020;323(7):595-597.
9. Dichter ME, Teitelman A, Klusaritz H, Maurer DM, Cronholm PF, Doubeni CA. Trauma-informed care training in family medicine residency programs results from a CERA survey. *Fam Med.* 2018;50(8):617-622.
10. Gundacker C, Barry C, Laurent E, Sieracki R. A scoping review of trauma-informed curricula for primary care providers. *Fam Med.* 2021;53(10):843-856.
11. *Prioritizing Equity* video series. American Medical Association. Updated December 6, 2022. Accessed January 25, 2023. https://www.ama-assn.org/delivering-care/health-equity/prioritizing-equity-video-series
12. Raja S, Hasnain M, Hoersch M, Gove-Yin S, Rajagopalan C. Trauma informed care in medicine: current knowledge and future research directions. *Fam Community Health.* 2015;38(3):216-226.
13. Bridges DR, Davidson RA, Odegard PS, Maki IV, Tomkowiak J. Interprofessional collaboration: three best practice models of interprofessional education. *Med Educ Online.* 2011;16:10.3402/meo.v16i0.6035.
14. Winterbottom F, Seoane L. Crossing the quality chasm: it takes a team to build the bridge. *Ochsner J.* 2012;12(4):389-393.
15. Harris M, Fallot RD, eds. *Using Trauma Theory to Design Service Systems. New Directions for Mental Health Services*. Jossey-Bass; 2001.
16. Ravi A, Little V. Providing trauma-informed care. *Am Fam Physician.* 2017;95(10):655-657.
17. Racism is an adverse childhood experience (ACE). North Carolina Center for Health and Wellness. Accessed June 29, 2022. https://ncchw.unca.edu/racism-is-an-adverse-childhood-experience-ace/
18. Thomas MD, Jewell NP, Allen AM. Black and unarmed: statistical interaction between age, perceived mental illness, and geographic region among males fatally shot by police using case-only design. *Ann Epidemiol.* 2021;53:42-49.e3.
19. Bor J, Venkataramani AS, Williams DR, Tsai AC. Police killings and their spillover effects on the mental health of black Americans: a population-based, quasi-experimental study. *Lancet.* 2018;392(10144):302-310.
20. Black C, Calhoun A. How biased and carceral responses to persons with mental illness in acute medical care settings constitute iatrogenic harms. *AMA J Ethics.* 2022;24(8):E781-E787.
21. Black C, Lo E, Gallagher K. Community mental health centers' roles in depolicing medicine. *AMA J Ethics.* 2022;24(3):E218-E225.
22. Parker CB, Calhoun A, Wong AH, Davidson L, Dike C. A call for behavioral emergency response teams in inpatient hospital settings. *AMA J Ethics.* 2020;22(11):E956-E964.
23. Murray-Garcia JL, Harrell S, Garcia JA, Gizzi E, Simms-Mackey P. Self-reflection in multicultural training: be careful what you ask for. *Acad Med.* 2005;80(7):694-701.

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Editor's Note

The collection and reporting of student feedback for the Yale ILCE curriculum was deemed exempt from annual review by the Yale University Institutional Review Board.

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