Trauma and Addiction

Dr. Rutland, author of this educational activity, has no relevant financial relationship(s) with ineligible companies to disclose.

If you treat patients with substance use disorders (SUDs), it won’t surprise you to learn that many of them also have posttraumatic stress disorder (PTSD). Among US adults, the lifetime prevalence of PTSD is over 7%, but among your patients with SUD, that number could jump as high as 49% (Kessler RC et al, Int J Methods Psychiatr Res 2012;21(3):169–184; Gielen N et al, Eur J Psychotraumatol 2012;3:17734). The relationship between trauma and addiction is complex and can vary widely between patients. For example, a history of trauma is associated with an increased prevalence of substance use, while conversely, patients who use substances may find themselves in dangerous situations that can lead to trauma,
model of universal precautions for the prevention of infectious diseases: It's something we do for all clients that come through our doors. We don't actually need to know everyone's trauma history in order to practice in a trauma-informed way.

**CATR: How is TIC different from trauma-focused therapy?**

**Dr. Bartholow:** The term trauma-focused therapy refers to a specific group of protocols that treat PTSD, such as cognitive processing therapy or prolonged exposure. In contrast, TIC is a more generalized approach. It's not about treating a specific diagnosis such as PTSD. A common mistake in organizations trying to build TIC into their systems is that they start screening more intensely for PTSD. Having a clinical practice that is aligned with the principles of TIC doesn't preclude trauma-based therapy, but instead accommodates all patients, whether or not they have a PTSD diagnosis. Ideally, a trauma-informed system would be set up to easily make internal referrals to trauma-based therapy when needed, but we miss the point of TIC if we are solely focusing on PTSD interventions. It is also important to note that prior adverse experiences don't necessarily equal PTSD. Many people have difficult experiences yet don't develop diagnosable PTSD that meets all the DSM criteria—but they can still benefit from a TIC approach. Trauma is associated with increased rates of other disorders, like depression and anxiety, so simply screening for PTSD or increasing access solely to trauma-focused therapy misses these patients.

**CATR: Why is it important to provide TIC to patients with addiction? What sort of evidence base is there?**

**Dr. Bartholow:** TIC is a patient-centered approach, and it's important that we empower patients and include them in treatment planning. Rigorous data, meaning high-powered randomized controlled trials, don't really exist in this area. Part of the difficulty is that we are not looking at an intervention, but instead we are considering an entire treatment model for how to think through clinical interventions and system designs. Similarly, the outcomes that we are most interested in, like degree of collaboration and feeling safe during treatment, are difficult to quantify. But we do have some observational studies that show that adopting this model can lead to improvement in patient engagement, measures of substance use, patient experience of care, and even work satisfaction among staff who practice TIC (Hales TW et al, *Research on Social Work Practice* 2019;29(5):529–539). It can re-enliven our work, and this is so important in a post-COVID-19 context regarding burnout among health care workers.

**CATR: And there is a large comorbidity between trauma and addiction.**

**Dr. Bartholow:** Yes, that's true. It makes the trauma-informed model especially relevant for this patient population. There are some really impressive associational data between adverse childhood experiences (ACEs) and the subsequent development of SUDs in adulthood. One study found that patients who had experienced more than six ACEs had a 46-fold increased likelihood of developing an SUD in adulthood (Felitti VJ, *Prax Kinderpsychol Kinderpsychiatr* 2003;52(8):547–559). That's an astounding finding, and the strength of the association is at a level we rarely see in public health.

**CATR: I'd like to talk a bit about the framework of TIC. It is sometimes presented as adhering to specific guiding principles. Can you explain what those are?**

**Dr. Bartholow:** There are six core principles of TIC: 1) safety; 2) trustworthiness and transparency; 3) peer support; 4) collaboration and mutuality; 5) empowerment, voice, and choice; and 6) cultural, historical, and gender issues. (Editor's note: See “Principles of Trauma-Informed Care” table on page 3.)

**CATR: Could you walk us through the care of a patient, starting with their first visit, to illustrate how TIC can be applied to clinical practice?**

**Dr. Bartholow:** Sure, but I'd like to go even one step back from there, because there are some basic changes to the physical clinic that can help create a trauma-informed environment before a patient even walks in the door. One place for easy changes is clinical signage. One of the core principles I mentioned is collaboration and mutuality. This means we try to avoid highlighting that there's a power imbalance in the patient-provider relationship. A common signage issue are posters on the wall depicting all the negative impacts of substances on the body, as if patients who use substances don't already know that they can be harmful. I don't think patients need...
shaming reminders every time they walk into the clinic. It's easy and meaningful to remove that sort of thing and replace it with something warm and welcoming instead.

**CATR: Any other changes that can be made to the clinic?**

**Dr. Bartholow:** Furniture arrangement is a big one. Historically, we have prioritized provider safety in our offices, which means being closest to the door. But if we think about the neurobiology of a person who has experienced trauma, we know how close to the surface their fight-or-flight response is. This means ensuring that the patient has easy access to the door. That being said, certain providers may only feel comfortable if they are also close to the door. This translates into giving both patient and provider equal access and should be the default when possible. My personal office setup has the patient closer to the door than me; I have direct access, but the patient is closest. And the very first thing I’ll say to a new patient is, “This is your chair; it’s right next to the door. Would you like the door to be slightly ajar or fully closed?” We should let the patient know that they will have an easy escape if they feel it is necessary and allow them to set their own priority between privacy and the potential discomfort of being closed in a room with a stranger. I believe patients feeling safer can translate into staff safety.

**CATR: Once we have a proper clinic set up, then what?**

**Dr. Bartholow:** Then comes the intake process. And in many clinics, that means loads of paperwork. Nobody likes filling out tedious forms, so I try to keep them to a minimum, especially on a patient's first day. But any time patients are filling out forms, it’s useful to think of that paperwork through the lens of TIC. This is especially true when it comes to controlled substance agreements, which are common in addiction treatment settings. These can be very paternalistic documents, dictating what a patient must do to receive treatment: “You’re not going to share this medicine. You’re not going to sell this medicine. You’re not going to snort this medicine.” But in TIC, we aim to create collaborative language and eliminate language that is shaming or judgmental. I always start with my part of the agreement: “I agree to provide timely refills. I agree to not stigmatize you based on your history of addiction.” And I ask, “Is there anything else that you’d like me to include so that we can be as collaborative as possible?” You can see a sample of my own trauma-informed controlled substance agreement here: www.tinyurl.com/yn78m9we

**CATR: It’s emphasizing that the clinician has responsibilities to ensure the success of the treatment as well as the patient.**

**Dr. Bartholow:** Yes, exactly. And those language shifts can be applied to other aspects of clinical encounters. Let's say I need to talk to a patient about the potential risks of methamphetamine use. Instead of saying, “You're not going to share this medicine. You're not going to sell this medicine. You're not going to snort this medicine,” I'll say, “If you resume methamphetamine, your methylphenidate will be stopped immediately.” Instead, I leave space to see what the patient thinks might be the best course of action. I’ll ask, “What do you think I should do if you return to using methamphetamine?” You can see a sample of my own trauma-informed controlled substance agreement here: www.tinyurl.com/w2ptvb4h

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**Principles of Trauma-Informed Care**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Meaning</th>
<th>Clinical Examples in Addiction Medicine &amp; Addiction Psychiatry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safety</strong></td>
<td>• Patients and staff should feel physically and psychologically safe in clinical spaces&lt;br&gt;• Treatment prioritizes safety rather than abstinence</td>
<td>• Focusing on &quot;safety&quot; when declining controlled medication requests, explicitly not focusing on addiction/misuse&lt;br&gt;• Revising clinical documents, such as treatment contracts, that may relay stigmatizing messages</td>
</tr>
<tr>
<td>Trustworthiness and Transparency</td>
<td>• Rationale behind clinical and organizational decisions is explained to patient&lt;br&gt;• Care is provided in a timely and reliable manner</td>
<td>• Making every effort to keep punctual appointments and maintain timely access to medication&lt;br&gt;• Reviewing the reasoning behind urine drug screens and explaining how a screen's results are utilized</td>
</tr>
<tr>
<td>Peer Support</td>
<td>• Clinical team members with experience are included&lt;br&gt;• The expertise of those with experience is acknowledged</td>
<td>• Inviting peer participation in patient engagement efforts and in clinical decision making&lt;br&gt;• Writing clinical policy to include a peer voice</td>
</tr>
<tr>
<td>Collaboration and Mutuality</td>
<td>• Staff should strive to build non-paternalistic therapeutic relationships&lt;br&gt;• Clinical treatment plans are decided upon jointly (shared decision making)</td>
<td>• Working with patient on goal of decreasing substance use as opposed to completely stopping, if that is the patient's wish&lt;br&gt;• Creating controlled substance agreements that include obligations/roles for both patient and provider</td>
</tr>
<tr>
<td>Empowerment, Voice, and Choice</td>
<td>• Emphasis is placed on patient strengths, abilities, and resilience&lt;br&gt;• Treatment incorporates what patients, staff, and communities have to offer</td>
<td>• Allowing patients to have autonomy over direction of care if return to use occurs&lt;br&gt;• Offering harm reduction supplies regardless of use</td>
</tr>
<tr>
<td>Cultural, Historical, and Gender Issues</td>
<td>• Staff recognize that cultural stereotypes and biases, such as racism, sexism, homophobia, and transphobia (collectively also called “structural violence”), affect clinical care</td>
<td>• Collaboratively reviewing urine drug screens for trans and gender-nonconforming patients&lt;br&gt;• Incorporating traditional cultural practices into treatment plan</td>
</tr>
</tbody>
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Source: www.tinyurl.com/w2ptvb4h
methamphetamine use? Almost universally, clients suggest the best course of action. I’ve never had anyone say, “Oh, just continue my stimulant.” What they say is, “Well, we should probably stop the methylphenidate, and I want you to encourage me to go back to withdrawal management.” Importantly, we have this conversation at the start of treatment. The clinician and patient document this agreement collaboratively, so if methamphetamine use does occur, we can refer to the prior agreement.

**CATR: Isn't this just good patient-centered care?**

**Dr. Bartholow:** Well, it certainly is good patient-centered care, but in this example, we’re explicitly rooting the conversation in the principles we discussed earlier. TIC is not about always explicitly referencing or calling out trauma; it is about returning to and incorporating TIC principles into these high-stakes clinical moments. In this case we are building our interaction around collaboration and mutuality, and around empowerment, voice, and choice. Again, these are universal precautions, and we use these techniques and approaches for all patients.

**CATR: How else can TIC shape clinical encounters?**

**Dr. Bartholow:** Urine drug screens are a good example. Let’s look at a urine drug screen from the perspective of someone who has experienced trauma. They are being told to go into a room, take off part of their clothing, and urinate into a cup, sometimes with a stranger watching. Forcing a patient to do that, especially as a requirement to receive proper medical treatment, can be incredibly activating for someone who has experienced trauma (Scoglio AAJ et al., *J Dual Diagn* 2020;16(3):347–356).

**CATR: I can see how that can be triggering, but how can we get around it?**

**Dr. Bartholow:** First, start by asking yourself if the test is necessary. Many clinicians in the worlds of TIC and harm reduction are moving away from routine urine toxicology. There may be times when testing is useful, but there isn’t compelling evidence that having urine drug screens at every visit improves outcomes—and yet these screens are standard practice in many settings. At one time, urine toxicology was a method for learning whether the “heroin” someone was using contained fentanyl. But now that fentanyl and its analogues have nearly fully infiltrated the opioid supply, screening hardly seems useful for that purpose.

**CATR: But drug screens can help monitor treatment response. And there are times it’s clinically necessary, like waiting for a negative opioid screen to start injectable naltrexone.**

**Dr. Bartholow:** Yes, that’s true. And different clinics and providers have their own views and policies on the matter. It’s an area that is actively evolving. But there are ways to make the process consistent with TIC when you do collect a sample. Usually patients are handed a cup and instructed, “Go urinate in this cup.” That’s pretty much it. Depending on the clinical circumstance, there might be someone observing. Instead, we should inform clients about what to expect, hear their concerns, and adjust accordingly whenever possible.

**CATR: Can you run us through what that looks like?**

**Dr. Bartholow:** Sure. There is a mnemonic originally developed for collecting urine drug screens in veterans with co-occurring PTSD (Scoglio et al., 2020). The mnemonic is GLAPE: Giving—give detailed instructions to the patient before you hand them a cup; explain what needs to be done and why. Listening—elicit and listen to any concerns the patient might have about the procedure. Articulating—verbalize options and accommodate the needs of the patient, to the extent possible; for example, if the patient has expressed concerns about being observed, perhaps the sample can be provided unobserved. Permission—allow the patient to express concerns at any time during the procedure. Evaluating—ask about the patient’s experience afterwards. What went well? What didn’t go well? What could be adjusted for next time? (Editor’s note: See “GLAPE Mnemonic for Urine Screening” table.)

**CATR: This is a useful example and seems like it isn’t specific to urine drug screens.**

**Dr. Bartholow:** That’s right; the framework can be applied to all sorts of clinical circumstances.

**CATR: We’ve spoken a lot about ensuring patient comfort, but how do we ensure that we aren’t being overly accommodating?**

We don’t want to fragilize a patient, meaning we actually underestimate their resilience.

**Dr. Bartholow:** It’s important not to conflate re-traumatization with fragilizing, particularly in SUD care where we know that stigma and poor treatment from medical providers prohibit positive patient experience and engagement. While we don’t want to treat patients like fine china, we do want to avoid shaming and re-traumatizing. When done poorly, any treatment approach, TIC included, can prohibit a belief in recovery and thus stifle it. For example, I have worked with clinics that, in efforts to be trauma informed, require all patients to be screened for ACEs at intake. Unfortunately, this only serves to hyperfocus on trauma history as a way of defining what the patient needs, as opposed to collaborating with the patient—which would be the essence of TIC.

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### GLAPE Mnemonic for Urine Screening

<table>
<thead>
<tr>
<th>Description</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give detailed instructions before giving the cup to the patient</td>
<td><strong>Giving</strong></td>
</tr>
<tr>
<td>Explain what needs to be done and why</td>
<td>• Provide detailed instructions before giving the cup to the patient</td>
</tr>
<tr>
<td>Listen to any concerns the patient might have about the procedure</td>
<td>• Explain what needs to be done and why</td>
</tr>
<tr>
<td>Verbalize options and accommodate the needs of the patient when possible</td>
<td><strong>Listening</strong></td>
</tr>
<tr>
<td>Allow the patient to express concerns at any time during the procedure</td>
<td>• Listen to any concerns the patient might have about the procedure</td>
</tr>
<tr>
<td>Ask about the patient’s experience:</td>
<td><strong>Articulating</strong></td>
</tr>
<tr>
<td>- What went well?</td>
<td>• Verbalize options and accommodate the needs of the patient when possible</td>
</tr>
<tr>
<td>- What didn’t go well?</td>
<td></td>
</tr>
<tr>
<td>- What could be adjusted next time?</td>
<td></td>
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</tbody>
</table>


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### Trauma-Informed Care Resources for Clinicians

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance Abuse and Mental Health Services Administration (SAMHSA)</td>
<td>Trauma-informed care review manual with information on patient assessment and treatment strategies: <a href="http://www.tinyurl.com/mtn2ux6">www.tinyurl.com/mtn2ux6</a></td>
</tr>
<tr>
<td>Trauma Informed Oregon</td>
<td>Information, resources, and implementation strategies for trauma-informed efforts in clinical practice: <a href="http://www.traumainformedoregon.org">www.traumainformedoregon.org</a></td>
</tr>
<tr>
<td>Thomas Jefferson University Introduction to Harm Reduction Video Series</td>
<td>Video series on how to engage people who use substances: <a href="http://www.tinyurl.com/3fyefbdy">www.tinyurl.com/3fyefbdy</a></td>
</tr>
</tbody>
</table>
CATR: Thank you for your time, Dr. Bartholow.

**Expert Interview**

**CATR: Where can providers go to learn more about TIC?**

**Dr. Bartholow:** The SAMHSA Treatment Improvement Protocol (TIP) series is excellent, and TIP 57 is a good TIC review. I also really like Trauma Informed Oregon, which is an organization that has done great work around operationalizing TIC into clinical practice. For example, they have straightforward tips on improving urine drug screens to be more trauma informed. Finally, Thomas Jefferson University has videos on their website about engaging people who use substances. They never mention TIC by name, yet what they’re outlining is TIC. They have examples of how to discuss urine drug screen results and perform blood draws on people with a history of IV drug use. *(Editor’s note: See “Trauma-Informed Care Resources for Clinicians” table on page 4 for links to these resources.)*

**CATR: Thank you for your time, Dr. Bartholow.**

**Trauma and Addiction**

Continued from page 1

which in turn can cause PTSD. In this article, we’ll give you some practical advice on how to assess and treat these complicated patients.

**Diagnosing PTSD in patients with SUD**

Ask all patients with SUD if they have a history of trauma, which the DSM defines as exposure to actual or threatened death, serious injury, or sexual violence. Giving examples of specific traumas can be helpful, and be sure to ask whether they have witnessed violence towards others or seen a drug overdose.

For patients who do report a history of trauma, a quick screen can indicate whether to further pursue a PTSD diagnosis. You can start by asking about cardinal symptoms such as intrusive memories, nightmares, or hypervigilance. Alternatively, you can use a validated screening questionnaire like the Primary Care PTSD Screen for DSM-5 (www.tinyurl.com/2p42dxwz) or the self-report PTSD Checklist (www.tinyurl.com/any92sh8). Anybody with a history of trauma who reports experiencing symptoms consistent with PTSD, or who screens positive, warrants further diagnostic investigation.

Like all psychiatric disorders, a diagnosis of PTSD is established with a thorough psychiatric interview. In order to qualify for a diagnosis, patients who have experienced trauma must have symptoms in each of four clusters: 1) intrusive symptoms (recurrent thoughts, nightmares, dissociations, or flashbacks); 2) avoidance of memories or reminders of the traumatic event; 3) negative alterations in cognition or mood (amnesia, negative beliefs about oneself, cognitive distortions); and 4) hyperarousal (irritability, hypervigilance, exaggerated startle). These clusters can be explored in the context of either a standard psychiatric interview or a structured interview such as the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5; www.tinyurl.com/32m2jwah). The intricacies of PTSD diagnosis are beyond the scope of this article, but there are some excellent resources that review this topic in depth (Shalev A et al, *N Engl J Med* 2017;376(25):2459–2469). You can find further information about complex PTSD, which arises from exposure to trauma or stress over time, in the December 2017 issue of *TCPR*.

**Treating patients with PTSD and SUD**

All the evidence indicates that if your patient presents with both PTSD and SUD, you should simply treat both conditions—maybe because the chicken-and-egg relationship between them is so difficult to untangle. Your general approach need not vary much from if you were treating each condition independently. Conventional wisdom used to suggest that a patient needed to be free of substance use before tackling trauma symptoms, but studies have not found evidence to back up this assertion.

**Therapeutic approaches to PTSD**

Psychotherapy is a mainstay of PTSD treatment, with trauma-based therapies such as cognitive processing therapy (CPT) and prolonged exposure (PE) having the most evidence behind them. These therapies can be effective in reducing PTSD symptoms, even for those with comorbid addiction. For example, CPT has been shown to be equally effective at reducing PTSD symptoms among veterans regardless of whether they carry an alcohol use disorder (AUD) diagnosis (Kayes D et al, *Addict Behav* 2014;39(2):420–427). Similarly, PE is effective in treating PTSD in veterans with comorbid PTSD and AUD, and it might be helpful in reducing drinking as well (Back SE et al, *Addict Behav* 2019;90:369–377).

Does this mean we can plunge any patient with SUD headlong into trauma therapy? Not quite. Research has not found evidence that trauma therapy worsens addiction per se, but it stands to reason that stress and anxiety evoked during therapy could drive a patient to use substances. Research trials typically pair trauma therapy with some other form of substance use treatment, and many exclude patients with severe or complex presentations (Roberts NP et al, *Cochrane Database Syst Rev* 2016;4(4):CD010204). So, while total sobriety should not be a prerequisite for trauma therapy, it is prudent to reserve this therapy for patients who are already in SUD treatment and have adequate supports.

As a quick review, there are only two medications with FDA approval for PTSD: paroxetine and sertraline. Other serotoninergic agents like fluoxetine and venlafaxine also show clinical benefit, although this use is technically off label. These established treatments should be your first-line go-tos. Evidence for other medications such as atypical antidepressants, antipsychotics, and antihypertensives is quite mixed, and they should be considered only after the serotoninergic stalwarts have been given a fair trial (Charney ME et al, *Harv Rev Psychiatry* 2018;26(3):99–115). Other experimental treatments, like psychedelics, show promise but are not well researched enough to recommend.

Does the presence of SUD change how you should prescribe for a patient? Not really. These medications are effective for treating PTSD in patients with and without comorbid addiction, and no evidence suggests that the presence of an SUD should affect the choice of PTSD medication. Use clinical judgment in choosing the best PTSD medication for your patient, regardless of whether they have comorbid addiction.
Research Updates

**OPIOID USE DISORDER**

Office-Based Opioid Treatment

Joshua Blum, MD. Dr. Blum, author of this educational activity, has no relevant financial relationship(s) with ineligible companies to disclose.


STUDY TYPE: Retrospective review

There is a belief that patients taking medications for opioid use disorder (MOUD) are “complicated.” As a result, outpatient providers might be reluctant to prescribe MOUD, fearing that their practice will fill up with difficult patients. But are these patients actually more complicated? A recent study suggests that the answer is no, at least in some respects.

Much has been written about office-based opioid treatment (OBOT) with buprenorphine, mostly in primary care, but less is known about the medical and psychiatric comorbidities of the patients who receive this treatment. Researchers conducted a retrospective chart review to determine the needs of patients enrolled in a community-based nonprofit OBOT clinic that provides primary care services. They reviewed the most recent clinic note and the last three months of urine toxicology results for all patients actively enrolled in the clinic on or before April 2019. Patients did not have to be enrolled for a given length of time to be included. Charts were excluded if patients had not received medical care at the clinic or were not prescribed buprenorphine.

A total of 355 charts were included in the analysis. Study participants were mostly male (71.2%) and White (89%). A third (33.7%) were 250 years old, and two-thirds (66.1%) had been in treatment for at least one year. Common comorbidities were substance use disorders (54.8%), psychiatric conditions (38.5%), and chronic pain (24.5%). Many (82.3%) were taking at least one medication in addition to buprenorphine, most commonly psychotropics (59.4%), particularly antidepressants (36.6%), cardiovascular medications (36.6%), and nonopioid analgesics (22.5%). The percentage of patients receiving five or more prescriptions was higher than the general US adult population (40.3% vs 15%); however, the clinical indications and types of medications were similar (Kantor ED et al, *JAMA* 2015;314(17):1818–1831).

As a group, the participants were remarkably adherent, with 99.4% testing positive for prescribed buprenorphine and just 7.8% testing positive for nonprescribed opioids. Patients were not more likely to test positive for other opioids even if they had chronic pain, had psychiatric disease, or were younger. Rates of transmissible infections were low—no participants were diagnosed with HIV, and only 7.04% were diagnosed with viral hepatitis. The only factor associated with treatment retention of less than one year was a history of having an opioid-positive urine.

The study was limited to the medical record of this specific clinic, so some medical data may not have been adequately captured. Likewise, some important outcomes were not reported, including rate of overdose, discharge from the clinic, transition to methadone, and overall patient mortality.

CARLAT TAKE

The medical comorbidities of patients receiving OBOT in this study were similar to those of the general US adult population and within the scope of most primary care providers. Patients with high-risk features such as younger age, psychiatric comorbidity, and chronic pain did just as well with buprenorphine OBOT as anyone else. The study was limited to an addiction treatment facility with embedded primary care services, so how this patient population compares to the inverse—a general primary care facility that offers OBOT—is unknown.

ALCOHOL WITHDRAWAL

Phenobarbital vs Lorazepam in Alcohol Withdrawal

Clayton Barnes, MD. Dr. Barnes, author of this educational activity, has no relevant financial relationship(s) with ineligible companies to disclose.


TYPE OF STUDY: Multisite retrospective cohort study

Benzodiazepines such as lorazepam (Ativan) and chlordiazepoxide (Librium) have long been considered the gold standard treatment for alcohol withdrawal syndrome (AWS). However, phenobarbital may have advantages over benzodiazepines. Phenobarbital’s gradual time of onset minimizes reinforcing effects; its very long half-life (100 hours) prevents breakthrough withdrawal symptoms between doses; and it is generally safe in liver disease. Prior trials have shown that benzos and barbiturates are both effective for AWS management, but how does phenobarbital actually compare with benzos in clinical settings when it comes to length of stay (LOS)?

This three-site, retrospective cohort study compared outcomes between patients with AWS who were treated with lorazepam versus phenobarbital. Investigators pooled 606 patients admitted for alcohol intoxication or withdrawal across three sites. The primary outcome was LOS, and secondary outcomes were 30-day readmissions (all-cause and alcohol-related), 30-day emergency department visits, and need for ICU transfer.

543 lorazepam-treated patients and 63 phenobarbital-treated patients were included in the analysis. The two groups were similar in terms of demographics and in their medical and psychiatric comorbidities. Investigators found that the phenobarbital group had a statistically significant decrease in LOS relative to the lorazepam group (2.8 vs 3.6 days, p<0.001). The phenobarbital cohort also demonstrated a statistically significant reduction in 30-day all-cause readmissions (11% vs 14%), 30-day alcohol-related readmissions (10% vs 12%), and 30-day emergency department visits (11% vs 19%).

Continued on page 8
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These questions are intended as a study guide. Please complete the test online at www.carlataddictiontreatment.com. Learning objectives are listed on page 1.

1. Which of the following contains at least one symptom from each of the four posttraumatic stress disorder (PTSD) symptom clusters (LO #1)?
   [ ] a. Recurrent thoughts, cognitive distortions, irritability, and flashbacks
   [ ] b. Negative beliefs about oneself, nightmares, avoidance of memories, and hypervigilance
   [ ] c. Avoidance of reminders of the traumatic event, amnesia, cognitive distortions, and nightmares
   [ ] d. Dissociations, amnesia, exaggerated startle, and hypervigilance

2. According to a 2019 study, what effect can implementing trauma-informed care have on a practice (LO #2)?
   [ ] a. Moderate decrease in workplace satisfaction
   [ ] b. Improvement in client satisfaction
   [ ] c. Improvement in both workplace and client satisfaction
   [ ] d. No effect

3. A 2022 review found that patients with opioid use disorder receiving office-based opioid treatment were adherent to buprenorphine and had similar medical comorbidities to that of the general US adult population (LO #3).
   [ ] a. True
   [ ] b. False

4. In recent studies, what has been concluded about the treatment of comorbid PTSD and substance use disorder (SUD) (LO #1)?
   [ ] a. PTSD treatment is only effective in patients with SUD after six months of sobriety
   [ ] b. Cannabis is an effective treatment for comorbid PTSD and SUD
   [ ] c. Pharmacotherapies for PTSD should be discontinued before initiating treatment for SUD
   [ ] d. Comorbid PTSD and SUD should be treated separately as neither treatment alone worsens the other condition

5. According to Dr. Barthow, which change to a clinic reflects a trauma-informed practice (LO #2)?
   [ ] a. Updating signage and forms
   [ ] b. Adding floral arrangements
   [ ] c. Offering refreshments
   [ ] d. Universally screening for prior traumatic experiences

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Therapeutic approaches to SUD

Analogously, the presence of comorbid PTSD should not change the way that a patient’s addiction is treated. There is no evidence that SUD medication can worsen symptoms of PTSD, and likewise, no SUD medication has been shown to also treat PTSD. Clinicians should therefore simply pick the agent most appropriate to the SUD in question.

Accordingly, if you are treating AUD, pick naltrexone (oral or injectable), acamprosate, disulfiram, or off-label medications with high-quality clinical evidence (gabapentin, topiramate), without regard for any effect on trauma. In opioid use disorder, choose buprenorphine (with or without naloxone), methadone, or injectable naltrexone. If your patient struggles with cocaine or amphetamine use, consider off-label use of topiramate, bupropion paired with injectable naltrexone, or mirtazapine. Contingency management can be helpful if it is available. (For more on treating stimulant use disorder, see CATR May/June 2021.)

In all cases, practice brief motivational interviewing techniques to draw out your patient’s ambivalence, and consider referring to colleagues who can help with specialized therapies like cognitive behavioral therapy for SUD, motivational enhancement therapy, or—if you are lucky—contingency management.

A word on cannabis

Many areas of the country have legalized cannabis for the treatment of PTSD (34 states, several territories, and the District of Columbia, at the time of this writing). Unfortunately, these decisions were made in the absence of solid medical evidence. While some small open-label trials have reported temporary subjective symptom improvement, the long-term effects of cannabis on PTSD are not at all clear. The only randomized controlled trial to date failed to show any clinical benefit, and patients with PTSD are more likely to develop cannabis use disorder than their PTSD-free counterparts (Bedard-Gilligan M et al, Curr Addict Rep 2022;9:203–216). Moreover, some studies have found that cannabis is associated with worse PTSD symptom severity, violent behavior, and substance use (Wilkinson ST et al, J Clin Psych 2015;76(9):1174–1180).

For these reasons, you should not prescribe cannabis as a treatment for PTSD, whether it is for a patient with comorbid SUD or not. There’s a lot of misinformation out there, so be sure to explain the risks to your patients and recommend treatments that have a firm evidence base. For those patients who insist on using cannabis despite your recommendation against it, consider having them switch to strains with lower THC content and a high CBD:THC ratio, and have them avoid methods of use that utilize THC concentrates. (See CATR September/October 2022 for more on cannabis formulations.)
Research Updates

There were several limitations to this study. First, there were many more patients in the lorazepam group, creating potential for systematic statistical error. The retrospective nature of the study meant that investigators could not control for preferences and biases. Severely ill patients were not included in the analysis; those requiring ICU care or addiction medicine consultation were excluded, potentially limiting the study findings to milder AWS cases. And finally, the skewed demographics (68% of the patients were male and 93% were White) might limit the generalizability of the results.

CARLAT TAKE
This study suggests that phenobarbital is a reasonable alternative to lorazepam for AWS, with an added possible advantage of shorter LOS and lower 30-day readmission rates. As an already established treatment, using phenobarbital for AWS management is a reasonable consideration for inpatient settings, as long as it is managed by someone familiar with its use.