Rethinking "First-line" Treatments for Adolescents with Substance Use Disorders: Why a Trauma-focused Approach is Effective and Necessary

Background

According to a 2022 article by Kirsch & Lippard, 53% of adults have experienced childhood maltreatment and/or household dysfunction by the age of 18; these types of Early Childhood Traumas (ECTs) are commonly referred to as Adverse Childhood Experiences (ACEs). In this same article, ACEs were linked to 65% of nearly 20,000 individuals' attributable risk for substance abuse (Kirsch & Lippard, 2022). More specifically, ECT and ACEs are associated with a substantially increased risk for Substance Use Disorder (SUD) in adolescence (Cabanis et al., 2021). In order to critically evaluate and effectively treat the substantial population of adolescents struggling with substance misuse, it is crucial to explore a range of contributing factors. However, in treating adolescents with SUD, healthcare systems often neglect to take the effects of ECT and ACEs into account (Cabanis et al., 2021). Instead, other "first-line" treatments are used, such as Cognitive Behavior Therapy (CBT), Motivational Interviewing (MI), and Contingency Management (CM) which are geared more towards abstinence and addiction (Hogue et al., 2018). Research suggests that the "gap" in treatment (not being trauma-focused) has a negative impact on treatment outcomes for adolescents with trauma histories, while evidence-based treatment options exist that combine substance use and trauma-informed care (Cole et al., 2018). Given the empirically supported and multitudinous effects of ECT on substance use in adolescents, these youth would benefit most from trauma-focused substance use treatments as opposed to traditional "first-line" treatments that are often focused on treating addiction to achieve abstinence.

Literature Review

Throughout discussions regarding the treatment of adolescent SUD, scholars' opinions on the favorable types of treatments vary greatly. While many support the efficacy of "first-line" treatments for adolescent SUD, such as CM and MI, an opposing stance has more recently implored scholars to consider the effects of ECT on adolescent SUD and the use of trauma-focused treatments. Those who support the "first-line stance" argue that treatments, such as CM and MI, are effective to promote behavior change in adolescents with SUD, measuring success by the length of abstinence (Hogue et al., 2018). The "trauma-focused stance" bases its opinion on the notion that substance use in adolescents may arise from a desire to cope with factors such as childhood adversity or victimization that contribute to the development of early addiction (Cabanis et al., 2021). This stance argues that in order to compensate for the significant number of adolescents with SUD and ECT, evidence-based and trauma-focused treatment frameworks should be utilized to improve functioning, reduce trauma symptoms, and lead to positive behavioral change in relation to addiction (Cole et al., 2018).

The "first-line stance" received support that proved the statistically significant efficacy of CM and MI (Hogue et al., 2018). The 2014 meta-analysis also concludes that MI is an effective form of intervention for adolescents with SUD based on significant and sustained positive effects. While the effects of MI treatment were studied across an average of 5.6 sessions, the results showed that positive effects were notable after only 3 sessions, showing that MI is quick to produce "meaningful change" (Cushing et al., 2014). Further, in combining CM into MI treatment (utilizing urine screening as a measurement of treatment progress) researchers quantified and predicted progress. The study found that adolescents with a negative intake urine screening had an increased likelihood to report at least one week of abstinence after receiving both therapies (Hogue et al., 2018). While these studies support the efficacy of "first-line" treatments, they fail to acknowledge the significant portion of these adolescents impacted by ECT and how it may inform MI and CM as effective interventions.

Those who support the "trauma-focused stance" often reinforce their argument's importance with a 2021 study of the interconnection between ECT and SUD, finding that 70% of adolescents being treated for SUD self-reported histories of trauma (Cabanis et al., 2021). Additionally, both the behavioral and biological factors attributed to the development of SUD amongst adolescents who have experienced ECT help to support the idea that their treatment should not solely be addiction and abstinence focused. Between the use of substances as a coping strategy to deal with the effects and memories of trauma, to the changes in the brain, HPA Axis, and gene expression, ECT is seen to act as a catalyst for adolescent substance use (Cabanis et al., 2021). With these causal factors and the prevalence of adolescents with ECT and SUD in mind, the "trauma-focused stance" can be more easily understood.

Analysis & Critique of Research

One study, Cole et al., 2018, analyzed the different types of trauma exposures in adolescents through outpatient substance abuse treatment to determine the potential relationship to the severity of SUD. During intake, almost 200 adolescents between the ages of 12 and 19 began outpatient and evidence-based substance abuse treatment and self-reported traumatic stress symptoms for monitoring throughout the treatment process. These were based on the DSM-5 diagnostic criteria for SUDs in alignment with the Child PTSD Symptom Scale (Cole et al., 2018). Participants experienced high rates of interpersonal trauma exposure; with no significant gender differences, 71.5% of the youth reported at least one type of trauma exposure within criterion A of PTSD and over half reported more than one type. The article shares that the "extent and severity" of youth's substance misuse can be considered a function of greater types of traumatic experiences (Cole et al., 2018).

The findings heavily emphasize that clinical remedies to treat SUD in adolescents are more efficacious when symptoms, progression, and maintenance are understood from a trauma-focused lens; recovery potential is impaired when treatments solely emphasize addiction and abstinence (Cole et al., 2018). Based on the established population of youth affected by SUD and trauma, a large population of youth with SUD are *not* receiving the most effective type of treatment possible. This argument is also supported by the fact that the severity of SUD was also linked to higher self-reported internalizing problems (Cole et al., 2018). The comorbidity of SUD and trauma symptoms in adolescents creates a tricky cycle; youth use substances to counteract the emotional and biological effects of trauma, further exacerbating their negative mood states (Cole et al., 2018). While these findings shed light on an important issue within adolescent SUD treatment, it is important to keep the lack of diversity in the participant/youth sample in mind: a limitation that may appear general, but is especially significant. When discussing trauma exposure and SUD, gender, race, and ethnicity carry associations to characteristics like socioeconomic status and family dynamics: factors that can have major effects on trauma exposure and risk of substance use initiation. Another limitation is that the discussion does not address the ways in which "first-line" interventions may implement some trauma-focused care. Although mainly addiction and abstinence centered, the study ignores that there is potential for "first-line" interventions to discuss trauma, even if it is not outlined in the treatment approach.

Future Directions

The habituating cycle caused by the comorbidity of substance use and trauma requires interventions that tackle both disturbances simultaneously. Looking towards the future, the evidence-based framework, called The Integrated Dual Disorder Treatment (IDDT) model, can be employed to ameliorate the exclusion of trauma lenses in treatments (Cole et al., 2018). This approach intertwines the standard qualities of "first-line" SUD treatments with empirically established methods to reduce trauma symptoms and promote ongoing recovery (as opposed to strict abstinence) from addiction. Clinicians working frequently with adolescent SUD should regularly screen for patients' trauma histories throughout treatment to inform initial methods as well as adjustments in treatment that may be needed as a result of new traumatic experiences (Cole et al., 2018). Overall, researchers and clinicians mustn't ignore the population of youth struggling with SUD and trauma, as the acknowledgement of this relationship may inform and improve treatment approaches, leading to enhanced recovery progress for adolescents with SUDs.

References

Cabanis, M., Outadi, A., & Choi, F. (2021). Early childhood trauma, substance use and complex concurrent disorders among adolescents. *Current Opinion in Psychiatry*, *34*(4), 393–399. https://doi.org/10.1097/yco.0000000000000718

Cole, J., Sprang, G., & Silman, M. (2018). Interpersonal trauma exposure, trauma symptoms, and severity of substance use disorder among youth entering outpatient substance abuse treatment. *Journal of Child & Adolescent Trauma*, *12*(3), 341–349. https://doi.org/10.1007/s40653-018-0239-3

Cushing, C. C., Jensen, C. D., Miller, M. B., & Leffingwell, T. R. (2014). Meta-analysis of motivational interviewing for adolescent health behavior: Efficacy beyond substance use. *Journal of Consulting and Clinical Psychology*, *82*(6), 1212–1218. https://doi.org/10.1037/a0036912

Hogue, A., Henderson, C. E., Becker, S. J., & Knight, D. K. (2018). Evidence base on outpatient behavioral treatments for adolescent substance use, 2014–2017: Outcomes, treatment delivery, and Promising Horizons. *Journal of Clinical Child & Adolescent Psychology*, *47*(4), 499–526. https://doi.org/10.1080/15374416.2018.1466307

Kirsch, D. E., & Lippard, E. T. C. (2022). Early life stress and substance use disorders: The critical role of adolescent substance use. *Pharmacology Biochemistry and Behavior*, *215*, 173360. https://doi.org/10.1016/j.pbb.2022.173360