The Brown University Child and Adolescent Behavior Letter

CABL

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Bradley Hospital
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Published in cooperation with Bradley Hospital

September 2021

Vol. 37, No. 9 • ISSN 1058-1073
Online ISSN 1556-7575

Highlights...

Our page 1 stories look at racial discrimination in restraints and seclusions, and connection between cannabis and alcohol use screeners in ED in youth.

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Free Parent Handout...
- Parenting styles: Where do you fall?

Monthly reports on the problems of children and adolescents growing up

Restraints

Considering trends of restraints and seclusions by patient race

By Colleen Victor, M.D. with contributions from Elizabeth Brannan, M.D., Jeffrey Hunt, M.D., and Jennifer Wolff, Ph.D.

Many children are sensitive to the feeling of tags in their clothes, seek out swinging on the swing set at the playground, or refuse to try certain textures of foods."

When working with severely ill children and adolescents in psychiatric inpatient settings, many clinicians can recall a feeling of unease and discomfort in remembering restraints that we have witnessed and/or participated in, especially those involving younger children. When patients are imminently at risk of or actively harming themselves in a hospital setting, restraints and seclusions may be used to maintain patient and unit staff safety after all other measures of de-escalation have failed.

Restraints are methods that physically interrupt or impede patient movement, including physically guiding a patient to another location, physically holding a patient, or utilizing a mechanical restraint (such as a chair or specialized board).

Seclusion is the involuntary confinement of a patient in a room, often locked, held shut, or with a physical barrier that prevents patients from leaving until they have been able to calm themselves. In some instances, medication may be given orally or intramuscularly in order to assist in de-escalation, often in addition to the physical restraint or seclusion.

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Substance use disorder

Predicting future CUD using the NIAAA screener in EDs

By Alison Knopf

Alcohol and cannabis use by teens both occur, often in tandem, legal or not. Problems can include alcohol use disorder (AUD), cannabis use disorder (CUD), as well as social and academic impairment.

The emergency department (ED) is a good place to screen teens for alcohol misuse and conduct a brief intervention, but time and other constraints may prevent assessing other substances, and because alcohol plays a major role in injury, it is often the only substance assessed.

Even low levels of alcohol use by adolescents predict cannabis use disorder (CUD) 1, 2, and 3 years later compared to adolescents who don't drink at all, based on a study using the two-question alcohol screener from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) in emergency departments (EDs). High risk alcohol use was also associated with increased levels of subsequent CUD.

The earlier studies

Researchers used the two-question NIAAA screen that was collected from medically and behaviorally stable 12- to 17-year-olds being treated in 16 EDs for non-life-threatening injury, illness, or mental health conditions. The questions were answered by the teens via tablet

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Restraints

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Case study

The following is a case that highlights several complex challenges when utilizing seclusion and restraint. The case has been de-identified and involves a Black 16-year-old girl with an extensive trauma history. She had a history of multiple prior psychiatric admissions, was admitted to the hospital following a suicide attempt, and continued to engage in unsafe behavior while in the hospital. She seemed to become increasingly dysregulated with the presence of additional staff members in her room. Multiple calls for staff support were called the day she was admitted for self-injurious behavior, and during one of these events, a hospital staff member was unfortunately injured by the patient. Discussions with front-line clinical staff after this particular event occurred revealed that many felt fearful of this patient. The staff had to balance their awareness that the patient often had a positive response when given increased time and space during dysregulated periods with their understandable concerns about the patient potentially injuring herself or someone else on the unit.

During the periods of escalation, the patient would receive various medications, including multiple different antipsychotics, on an as-need basis in hopes of maintaining safety. Because of this challenging situation, the staff requested to transfer her to an adult psychiatry service and also considered calling the police.

One question that surfaced regarding the events during the admission is whether these events may have unfolded differently if the patient had been White, although there was no expression of "overt" racism toward the patient. How could we fight the unconscious bias that led to the "adultification" of this patient? How could we better consider the role that security's presence played in a child's escalation given a history of extensive trauma and DCYF involvement? At what point does the removal of staff members from the patient's room in hopes of mitigating the further trauma of a physical restraint outweigh the potential risk of the patient injuring herself? What was the true role of ordering various medications in this child's case? What studies have already been done to investigate these questions?

Previous studies

Studies in adult populations have demonstrated significant associations between Black race and an increased risk of being physically restrained in an emergency department setting (Wong et al., 2020). This association between race and restraint usage has also been shown in adult emergency settings, even when controlling for sex, insurance, age, diagnosis, homelessness, and history of violence (Schnitzer et al., 2020). Data is limited in pediatric settings, though some recent studies have found associations between restraint/seclusion usage and race as well as gender and psychiatric diagnosis in inpatient and residential settings (Vidal et al., 2020; Braun et al., 2020; Donovan et al., 2003).

Similarly, Black race has been demonstrated to be associated with pharmacologic restraint use in pediatric emergency settings (Foster et al., 2021).

The 2002 *Journal of the American Academy of Child and Adolescent Psychiatry* states, "patients should not be assumed to be dangerous or aggressive because of their race or culture. Approaches to aggression management training also need to consider cultural and peer influences in the child or adolescent's home environment." This guideline only begins to acknowledge the consideration of race as a factor in agitation management and does not provide a proposed method for such consideration.

Recent news from Seattle Children's Hospital (Fields, 2021) demonstrates that despite an institution becoming aware of health care practice disparities, such as security staff being more than twice as likely to be called on a Black patient compared to a White patient, years may go by without these disparities being acted on.

Addressing institutional gaps

Within The Warren Alpert Medical School of Brown University, there have been efforts to address these institutional gaps. The Brown Advocates of Social Change and Equity (BASCE) fellowship, through the Office of Diversity and Multicultural Affairs, was created to foster the development of health care leaders with a passion for engaging peers in dialogue around issues of racism, cultural diversity, inclusion, social justice, and health equity. Fellows complete training sessions throughout the year under close mentorship in order to design an initiative to promote a more diverse and/or inclusive community.

The author, in collaboration with Drs. Brannan, Hunt, and Wolff, developed an initiative to investigate how race impacts the care that adolescents might receive in an inpatient unit, specifically looking at de-escalation, seclusion, and restraint practices. This study is designed and rooted in the BASCE sessions that have been completed by the author and Dr. Brannan, including those focused on structural racism, the use of race in research, and mentorship in creating anti-racist organizations.

We hope to investigate whether patients' self-identified race is related to various factors occurring during their admission. Specifically, we aim to examine the potential relationship between race and restraints, seclusions, and as-needed medications administered to all patients admitted to an adolescent inpatient unit over a 3-year period.

To examine this, we will further compare variables such as length of restraint, type of restraint, class of medication used, route of medication administration, discharge diagnosis, as well as others. Our hope is that through ongoing study of the relationship of race with usage of restraints, seclusions, and as-needed medications for agitation, we may begin to identify areas of tangible improvement in caring for youth of color within our own institution. In the process of developing this study, we first learned through an ongoing study that there are often discrepancies between a patient's recorded race in the electronic medical record and in self-report measures being collected. Once the patient's race is recorded into the medical record, it is usually not revisited during further encounters, so the information often goes uncorrected.

Staff feelings

We recognize that staff working in these acute care psychiatric programs most often do not consciously use race as a measure in determining need for agitation management. We also recognize that the staff members physically performing restraints and seclusions may be more

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likely to identify as a member of a marginalized group than those placing orders for restraints, seclusions, and medications.

Our hope in obtaining this data, which may show a relationship between race and these interventions, is that we can continue to explore systemic factors contributing to such a potential relationship. Throughout this exploration, we will hold focus groups to incorporate staff members' opinions on their perceptions of contributing factors should a relationship exist and will be mindful of centering at the margins (emphasizing the experiences of those who identify in groups of lesser power within the hospital system) to gather insight into factors that may be contributing to increased use of restraints, seclusions, and medications on patients of color. We hope to continue to operate with transparency, and to release findings in an accessible and public way to promote meaningful change within our hospital system.

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self-report, and follow-up surveys were completed via telephone or internet.

The NIAAA screener differentiates responses into nondrinker, low-risk, moderate-risk, and high-risk drinker. Here are the two questions, sent to us by Anthony Spirito, Ph.D., corresponding author on the study.

For Middle School (11-14 years)

- Do you have any friends who drank beer, wine or any drink containing alcohol in the past year?
- How about you – in the past year, on how many days have you had more than a few sips of beer, wine or any drink containing alcohol?

For High School (14-18 years)

- In the past year, on how many days have you had more than a few sips of beer, wine or any drink containing alcohol?
- If your friends drink, how many drinks do they usually drink on an occasion?

Participants were enrolled from 2013–2015 and the last follow-up was conducted in 2018. Adolescents were asked at baseline about the NIAAA two questions, measures of other substance use, and other risk behaviors. Assessments occurred in the adolescents' hospital room on a tablet computer and parents were told the information would be kept confidential.

At baseline there were 4,834 participants who completed the alcohol screen during the ED visit, of which 4,714 completed the cannabis use DISK questions.

A subsample of these participants was randomly selected for long-term follow-up; 2,147 adolescents were randomized to receive the assessment battery again at 1- and 2-year follow-up. At the 2-year follow-up, participants were given the option of taking part in a 3-year follow-up.

Participants received a $10 gift card for the baseline survey and a $25 gift card for each follow-up survey. Of the 2,147 selected, 1,511 (70%) were successfully contacted at 1-year follow-up and completed the DISK questions related to cannabis use. At 2- and 3-year follow-up, the numbers completing cannabis follow-up assessments were 1,485 (69%) and 1,286 (60%), respectively. In total, 1,689 (79%) participants completed the DISK cannabis questions for at least one of the follow-up times.

The purpose of the current study was to determine whether alcohol use in adolescence could predict future cannabis use. So, they looked at the data to see if self-reported alcohol use on the NIAAA screener at an initial ED visit would predict CUDs at 1, 2, and 3 years after the visit.

Results

Researchers found that CUD rates increased throughout the follow-up period from 6% at 1-year follow-up to 7.6% at 2-year follow-up, and 10.3% at 3-year follow-up. The odds ratios for CUD diagnosis at 1-, 2-, and 3-year follow-ups as a function of baseline alcohol risk category showed that rates of CUD were significantly higher in those with low alcohol risk compared to nondrinkers. Similarly, CUD rates were higher in those with high alcohol risk compared to those with moderate risk. There was no difference in CUDs between those with low and moderate alcohol risk.

Implications

The findings strongly suggest a relationship between alcohol and cannabis use along the adolescent trajectory.

But why would low alcohol risk transitioning to moderate alcohol risk not predict a change in the odds of CUD? Why would someone at low risk for an AUD not also be at low risk for a CUD? The researchers suggest that a combination of a specific cannabis-use question with an alcohol-use question would be better able to predict subsequent cannabis use than either a cannabis- or alcohol-use question alone.