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Addiction and Mental Health: The New Norm

Cornel N. Stanciu, M.D.

As a current addiction psychiatry fellow and editorial board member for several addiction-focused journals, I am thrilled to have the opportunity to serve as this month's Guest Editor for the *American Journal of Psychiatry Resident's Journal*. The aim of this special issue is to shine light on the impact of substance abuse on our health care system. As we have seen throughout training, substance use disorders are highly prevalent and morbid conditions that result in significant social, financial, and human costs. Their prevalence is highest in clinical populations, especially among those with mental illnesses. It is estimated that 25% of the U.S. hospital beds are occupied by individuals with active substance use disorders (1). Ongoing use of substances and lack of properly addressing behaviors that lead to substance abuse impede upon our ability to treat substance use disorders from psychiatric and medical standpoints.

By 2020, substance use disorders are expected to surpass all physical diseases as the major cause of disability (2). Tobacco use is the current number-one worldwide cause of preventable death (3), with many of our patients with mental health conditions being tobacco users. To make matters worse, we as physicians tend to avoid implementing pharmacotherapies for tobacco use and alcohol use disorder, despite strong supportive evidence of the efficacy of such therapies. Looking at the broader picture, for the first time in history the average life expectancy in the United States is decreasing (4, 5), and the conditions responsible for this epidemic of earlier deaths are directly or indirectly related to addiction (for example, chronic obstructive pulmonary disease, lung cancer, hepatitis C,

It is imperative for us and our health care system to start addressing addiction as a top priority.

cirrhosis, and fatal overdoses) (4, 5). It is imperative for us and our health care system to start addressing addiction as a top priority. Early intervention following first identification of substance use targets such disorders at a less advanced phase and hence prevents progression. A report published in 2009 showed a significant cost-benefit ratio for early detection and treatment interventions (6). These reduced costs relate to health care, the adult and juvenile criminal justice systems, education, and work productivity (6).

To date, significant emphasis has been placed on the need for more physicians trained in substance abuse to alleviate the treatment gap and increase system capacity (7). There is also an effort to increase the capacity of general mental health care providers to identify and treat high-risk individuals earlier, before referring them for specialty health care (7). This would reduce patients' health risks associated with substance use much sooner while at the same time reducing the burden placed on more costly health care specialties (7). It is in this latter role that trainees and general mental health providers can best have an impact on the care of patients with substance use disorders.

Dr. Stanciu is an Addiction Psychiatry Fellow in the Department of Psychiatric Medicine, Geisel School of Medicine, Dartmouth-Hitchcock Medical Center, Lebanon, N.H. He is also the Guest Editor for this issue of the *Residents' Journal*.

REFERENCES

1. Murphy MK, Chabon B, Delgado A, et al: Development of a substance abuse consultation and referral service in an academic medical center: challenges, achievements and dissemination. *J Clin Psychol Med Settings* 2009; 16:77
2. Substance Abuse and Mental Health Services Administration: Prevention of Substance Abuse and Mental Illness. Rockville, Md, Substance Abuse and Mental Health Services Administration, 2016. <http://www.samhsa.gov/prevention>
3. World Health Organization. WHO Report on the Global Tobacco Epidemic. Geneva, Switzerland, World Health Organization, 2017
4. Case A, Deaton A: Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. *PNAS* 2015; 112(49):15078–15083
5. Xu J, Murphy SL, Kochanek KD, et al: Mortality in the United States, 2015. National Center for Health Statistics Data Brief. Atlanta, Centers for Disease Control and Prevention, 2016. <https://www.cdc.gov/nchs/products/databriefs.htm>
6. National Academies of Sciences, Engineering, and Medicine: Preventing mental, emotional, and behavioral disorders among young people. Washington, DC, The National Academies of Sciences, Engineering, and Medicine, 2009. <https://www.nap.edu/catalog/12480/preventing-mental-emotional-and-behavioral-disorders-among-young-people-progress>
7. American Medical Association: Screening and brief interventions for alcohol problems, American Medical Association policy H-30.942. Chicago, American Medical Association, 2004. https://www.ama-assn.org/sites/default/files/media-browser/public/hod/all-csaph-reports_0.pdf

Addiction and Suicide: An Unmet Public Health Crisis

Saeed Ahmed, M.D., Cornel N. Stanciu M.D.

Suicide is the tenth leading cause of death in the United States, with 44,193 suicides occurring each year, or 121 completed suicides per day. Approximately 494,169 individuals present to hospitals each year because of self-harm (1). Globally, it is estimated that about one million people die annually from suicide, equivalent to one death every 40 seconds. Suicide is a complex phenomenon caused by neurobiological, sociocultural, and genetic factors. This complexity is linked to risk factors such as chronic substance abuse, concomitant mental illness, personal stressors, family breakdown, previous suicide attempts, access to firearms, and history of lifetime physical or sexual abuse. These risk factors can interrelate with each other, be a product of each other, or operate independently.

There is a strong association between suicide and psychiatric disorders, and it has been estimated that up to 90% of people who commit suicide have one or more psychiatric comorbidities. Among these, affective disorders and posttraumatic stress disorder (PTSD) are associated with the strongest risk. Risk increases further among individuals who use alcohol. It is estimated that alcohol dependence alone carries a 7%-lifetime risk of suicide, compared with a 6% risk for affective disorders (2). Vulnerability is significantly increased and risk doubles with concomitant mental illness and substance use disorders, compared with affective disorders or alcohol misuse alone (3). Relative to the general population, individuals with substance use disorders are 10–14 times more likely to commit suicide (4).

SUBSTANCE USE DISORDERS AND SUICIDE

There is an established association between substance use disorders and sui-

cide, but little is known about the underlying psychological mechanisms. The dysregulation of the neurotransmitter serotonin has been linked to depression, suicidal behavior, and substance abuse (5). Particularly, lower levels of 5-hydroxyindoleacetic acid, a principal metabolite of serotonin, have been associated with increased suicide and suicidal behavior (6). Although researchers are examining many other potential neurobiological and genetic mechanisms of suicide, such discussion is beyond the focus of this article. Drug use increases the risk of suicidal behavior through both acute and chronic effects. Acutely, drug use distorts judgment, weakens impulse control, and interrupts neurotransmitter pathways (5). With longer periods of use, cognitive and behavioral control is impaired, subsequently leading to an increase in impulsive and aggressive behaviors. Physiological and metabolic stress resulting from use of substances can also lead to neurotoxic damage and severe medical consequences, especially among elderly individuals (7). Additionally, addiction induces negative emotional states, since it causes financial strain, social stigma, isolation, and difficulties at school.

ALCOHOL USE DISORDER AND SUICIDE

A recent national survey showed that 139.7 million individuals aged 12 and older consumed alcohol in the past month or longer, with 23% classified as binge drinkers and 6.2% as heavy drinkers (8). Lifetime prevalence of suicide attempts among individuals with alcohol use disorder is high, with heavy drinkers having a five-fold greater risk than social drinkers (9). About 40% of those seeking treatment for alcohol use disorder report at least one suicide attempt

during their lifetime (10). Associations between alcohol use disorder and suicidality are further supported by an analytic review of retrospective and autopsy studies, which reported cases of completed suicide (10%–69%) and suicide attempts (10%–73%) that involved a positive toxicology screen for alcohol (11). Acute intoxication increases the risk for suicidal behavior through disinhibition, increased impulsivity, aggression, psychological distress, and impaired cognition (12). Chronic use may lead to neuroplastic brain changes, which may cause persistently negative mood states and deterioration of social relationships (13).

Although there are medications approved by the Food and Drug Administration for relapse prevention (disulfiram, acamprosate, and naltrexone), they are greatly underutilized, with only 3% of individuals with alcohol use disorder being prescribed any of these medications (14). Despite small-to-medium effect sizes, these medications have proven efficacy in improving relapse rates and have utility in reducing alcohol use disorder-related suicide risk.

OPIOID USE DISORDER AND SUICIDE

The number of opioid prescriptions currently active in pharmacies equals our adult population. The correlation between opioid use and suicide has doubled in strength over the past decade. This is highlighted by a massive increase in overdose deaths, particularly those involving prescription opioids. Postmortem reports show that prescription painkillers are involved in 97.7% of opioid-related suicides (15). Despite a smaller percentage being attributed to opioid use, when involved, the risk of suicide increases 13.5 times (4). The literature supports that individuals with chronic

TABLE 1. Suicide Risk Assessment and Risk and Protective Factors

Risk Factors	Deterrent (Protective) Factors
Dynamic Preoccupation with death/suicide Hopelessness or despair Isolation, rejection by spouse and/or partner, or feelings of shame Access to weapons Family disruptions/conflict or stress Alcohol, tobacco, opioid, or cocaine use Barriers to accessing mental health Unwillingness to seek help due to stigma associated with mental health Aggression, impulsiveness, agitation Unemployment or decline in socioeconomic status Insomnia Widowed, divorced, or single (especially among males) Living alone Rural population	Dynamic Absence of weapons from the household Strongly held religious and cultural beliefs Realistic life goals and future plans Academic achievement Does not blame self for stress Community engagement Family connection/support and sense of responsibility to family Positive problem-solving skills Positive coping skills Fear of actual act of killing Fear of the unknown Good rapport with treatment team
Static Chronic physical illness History of physical, emotional, or sexual abuse Stressful life event or loss Family history of suicidal behavior, psychiatric conditions, or substance abuse Previous suicide attempt Psychiatric diagnosis Local cluster of suicides with contagious influence Severe pain Anniversary of important losses Freedom from responsibility for children <18 years old Male Caucasian Adolescents and young adults (aged 10–24) or elderly individuals (aged >65) Native American Indian/Alaskan Native Closed mindedness/thought polarization History of panic attacks or anxiety One week after hospital admission; 1 month after discharge, or during early stages of recovery from mental illness Knowledge of and/or exposure to another person's suicide Active duty or retired military	Static African American Children in the home aged <18 Expectant mother

pain are at higher risk for long-term opioid regimens, suicide, and development of psychiatric illnesses.

Individuals with histories of depression, PTSD, substance use disorders, and borderline personality disorder are more likely to be prescribed opioids for longer durations, which significantly increases the vulnerability of this population for unintentional opioid overdose deaths (16). The more lethal co-prescribing of opioids and benzodiazepine sedatives is also more common in these populations. One study found that after emergency department presentations for overdoses, subsequently filled prescriptions for opioids decreased by only 3.5%, while the rate of individuals engaging in postdischarge treatment increased by only 3.6% (17).

The crisis of opioid overdoses and deaths has been declared a public health

crisis. Several approaches to address this crisis are underway. Emphasis is on public education, deployment of naloxone-overdose rescue kits, and improved access to medication-assisted treatment (methadone, buprenorphine, and naltrexone). Increased access to opioid agonist treatment is associated with a reduction in overdose deaths (18). The role buprenorphine plays in improving overall mood through the endogenous opioid system is well validated (19). Opioid users often receive medical attention in emergency departments, and this presents a golden opportunity to perform brief interventions, initiate medications, and facilitate outpatient treatment referral (20). An emergency department-initiated buprenorphine treatment regimen significantly increases engagement in long-term addiction treatment, decreases

self-reported use of illicit substances, and decreases the burden on inpatient addiction treatment services (20).

OTHER SUBSTANCES AND SUICIDAL BEHAVIOR

Cocaine use has been linked to increased risk of suicide. This risk is higher if individuals who use cocaine are prescribed antidepressants, use alcohol, or have a history of childhood psychological abuse (21).

Tobacco use is one of the main preventable causes of death and contributes to an increased suicide risk proportional to the number of cigarettes smoked per day. Cessation has a positive impact, although former smokers will always carry a suicide risk higher than that of non-smokers (22). There has been great re-

luctance on the part of physicians to treat tobacco use aggressively (e.g., with bupropion or varenicline), despite strong support for medication efficacy and patient motivation (23–25). In an effort to evaluate potential neuropsychiatric risks of varenicline, bupropion, and nicotine patches, the recent EAGLES [Evaluating Adverse Events in a Global Smoking Cessation Study] trial provided reassurance with regard to lack of moderate-to-severe neuropsychiatric adverse events, even in psychiatrically ill populations (26).

RISK ASSESSMENT AND MANAGEMENT

A suicide assessment identifies static (unchangeable) and dynamic (modifiable or treatable) risk and protective factors that facilitate diagnosis, treatment, and safety management. To our knowledge, no single assessment method has been tested for reliability and validity; thus, emphasis should be placed on identifying and modifying dynamic risks (Table 1) (27, 28).

Common modifiable risk factors are medical illness, psychiatric symptoms, active substance abuse, current life crises, unemployment, lack of social support, and access to firearms. Static risk factors help stratify the level of risk but are typically of little use in treatment. A provider should competently review dynamic and static factors for risk assessment before establishing a comprehensive management plan that includes an accurate diagnosis (29). Dual diagnoses are often overlooked but should be identified due to an association with poor prognosis. Patients with dual diagnoses are at greater risk for a suicide attempt than those with a single diagnosis. Therefore, a comprehensive plan of preventive interventions and appropriate screening for substance use should be performed to confirm dual-diagnoses status.

In facilitating diagnosis, screening is the mainstay in today's preventive health care practices, allowing for early identification of those at risk for developing substance use disorders. Research has demonstrated that screening and brief intervention can promote significant reductions in alcohol and tobacco

KEY POINTS/CLINICAL PEARLS

- There is a strong positive correlation between the use of illicit substances and suicide risk.
- The use of evidence-based pharmacotherapy in addressing relapse prevention for individuals with substance use disorders can decrease the risk of suicide.
- The use of screening tools can help identify at-risk individuals, targeting the disease at an early stage.
- In addressing suicide risk, a comprehensive assessment with the goal of targeting modifiable risk factors and strengthening protective factors is needed.

use. Screening not only assesses whether an individual has substance use disorder but also whether he or she is engaging in risky patterns of use. Early screening tools for alcohol use disorder, such as the Michigan Alcoholism Screening Test and the CAGE [cut-annoyed-guilty-eye] Questionnaire, were developed to detect alcohol dependence. Over time, instruments, such as the Alcohol Use Disorders Identification Test, were introduced to assist with identification of risky and hazardous use.

CONCLUSIONS

Comorbid substance use increases the risk of suicide, especially in clinical populations already at increased risk. As clinicians, we should implement screening tools to better identify individuals at greater risk. Additionally, we should implement pharmacotherapies with evidence for efficacy in addressing substance use and provide quality relapse-prevention strategies for our patients. All individuals who abuse substances should receive a thorough suicide risk assessment in order to determine the level of care that is needed.

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REFERENCES

- Centers for Disease Control and Prevention: www.cdc.gov/injury/wisqars/index.html
- Inskip HM, Harris EC, Barraclough B, et al: Lifetime risk of suicide for affective disorder, alcoholism and schizophrenia. *Br J Psychiatry* 1998; 172(1):35–37

3. Oquendo MA, Currier D, Liu S, et al: Increased risk for suicidal behavior in comorbid bipolar disorder and alcohol use disorders. *J Clin Psychiatry* 2010; 71(7):902
4. Wilcox HC, Conner KR, Caine ED, et al: Association of alcohol and drug use disorders and completed suicide: an empirical review of cohort studies. *Drug Alcohol Depend* 2004; 76(Suppl):S11–S19
5. Mann JJ: Neurobiology of suicidal behaviour. *Nat Rev Neurosci* 2003; 4(10):819
6. Beskow J, Gottfries C, Roos B, et al: Determination of monoamine and monoamine metabolites in the human brain: post mortem studies in a group of suicides and in a control group. *Acta Psychiatr Scand* 1976; 53(1):7–20
7. Dowling GJ, Weiss SR, Condon TP, et al: Drugs of abuse and the aging brain. *Neuropsychopharmacology* 2008; 33(2):209–218
8. Hedden SL: Behavioral health trends in the United States: results from the 2014 National Survey on Drug Use and Health. Washington, DC, Substance Abuse and Mental Health Services Administration, Department of Health and Human Services, 2015
9. Darvishi N, Farhadi M, Haghtalab T, et al: Alcohol-related risk of suicidal ideation, suicide attempt, and completed suicide: a meta-analysis. *PLoS One* 2015; 10(5):e0126870
10. Pompili M, Serafini G, Innamorati M, et al: Suicidal behavior and alcohol abuse. *Int J Environ Res Public Health* 2010; 7(4):1392–1431
11. Cherpitel CJ, Borges GL, Wilcox HC, et al: Acute alcohol use and suicidal behavior: a review of the literature. *Alcohol Clin Exp Res* 2004; 28(s1)
12. Hufford MR: Alcohol and suicidal behavior. *Clin Psychol Rev* 2001; 21(5):797–811
13. Volkow ND, Koob GF, McLellan AT, et al: Neurobiologic advances from the brain disease model of addiction. *N Engl J Med* 2016; 374(4):363–371
14. Results from the 2012 National Survey on Drug Use and Health: summary of national findings (NSDUH series H-46, HHS publication no. (SMA) 13-4795). Rockville, Md,

- Substance Abuse and Mental Health Services Administration, 2013
15. Braden JB, Edlund MJ, Sullivan MD, et al: Suicide deaths with opioid poisoning in the United States: 1999–2014. *Am J Public Health* 2017; 107(3):421–426
 16. Warner M, Chen LH, Makuc DM, et al: Drug poisoning deaths in the United States, 1980–2008. *NCHS Data Brief* 2011; 81:1–8
 17. Frazier W, Cochran G, Lo-Ciganic W-H, et al: Medication-assisted treatment and opioid use before and after overdose in Pennsylvania Medicaid. *JAMA* 2017; 318(8):750–752
 18. Schwartz RP, Gryczynski J, O'Grady KE, et al: Opioid agonist treatments and heroin overdose deaths in Baltimore, Maryland, 1995–2009. *Am J Public Health* 2013; 103(5):917–922
 19. Stanciu CN, Glass OM, Penders TM, et al: Use of buprenorphine in treatment of refractory depression: a review of current literature. *Asian J Psychiatr* 2017; 26:94–98
 20. D'Onofrio G, O'Connor PG, Pantalon MV, et al: Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. *JAMA* 2015; 313(16):1636–1644
 21. Roy A: Characteristics of cocaine dependent patients who attempt suicide. *Arch Suicide Res* 2009; 13(1):46–51
 22. Poorolajal J, Darvishi N: Smoking and suicide: a meta-analysis. *PLoS One* 2016; 11(7):e0156348
 23. Weiner E, Ahmed S: Smoking cessation in schizophrenia. *Curr Psychiatry Rev* 2013; 9(2):164–172
 24. Prochaska JJ: Smoking and mental illness: breaking the link. *N Engl J Med* 2011; 365(3):196–198
 25. Evins AE: Reassessing the safety of varenicline. *Am J Psychiatry* 2013; 170:1385–1387
 26. Anthenelli RM, Benowitz NL, West R, et al: Neuropsychiatric safety and efficacy of varenicline, bupropion, and nicotine patch in smokers with and without psychiatric disorders (EAGLES): a double-blind, randomised, placebo-controlled clinical trial. *Lancet* 2016; 387(10037):2507–2520
 27. Simon RI: Suicide risk: assessing the unpredictable, in *The American Psychiatric Publishing Textbook of Suicide Assessment and Management*, 1st ed. Washington, DC, American Psychiatric Publishing, 2006, pp 1–32
 28. Resnick PJ: Suicide and violence risk assessment. <http://www.fmhac.net/Assets/Documents/2007/Resnick%20Suicide%20and%20Violence%202007.pdf>
 29. Caton CL, Drake RE, Hasin DS, et al: Differences between early-phase primary psychotic disorders with concurrent substance use and substance-induced psychoses. *Arch Gen Psychiatry* 2005; 62(2):137–145

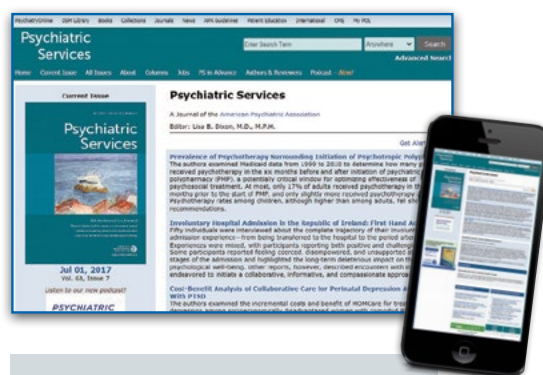
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Strange Routes of Administration for Substances of Abuse

Jessica Rivers Allen, M.D., William Bridge, M.D.

Nearly 20% of patients with psychiatric disorders have a comorbid substance use disorder (1). Stereotyped beliefs of only oral, intravenous, and intranasal use of substances are antiquated. Creativity and innovation abound in the techniques and routes chosen to abuse substances. Most substances of abuse can be consumed via two or more routes of administration (2). The acute and chronic physiological effects of substance abuse vary based on the type of substance abused and the route of administration utilized. Each of the various routes of administration carries unique and acute medical risks (3). Clinicians should be prepared to educate patients about the acute and long-term risks associated with routes of administration.

The objective of the present study was to assess practitioner attitudes and practices with regard to collecting data on the routes of administration of substances of abuse, as well as to provide information on current APA guidelines regarding practitioner evaluation of patients' use of illicit substances.

METHOD

A survey was distributed via Qualtrics Survey Software (<https://qualtrics.com>) to 63 members of the faculty and academic residency program in the Department of Psychiatry and Behavioral Medicine at East Carolina University, Greenville, N.C. The survey was also sent to 13 third-year medical students rotating with the department. The design of the survey was aimed to characterize practices in substance abuse history taking in the clinical setting, specifically relating to inquiry about the routes of administration of substances of abuse. The study was exempt from institutional review board inspection.

In addition to medical students, the targeted participants included therapists, psychologists, residents, fellows, and attending physicians treating both adults and adolescents in both inpatient and outpatient settings. Various demographic characteristics with respect to age and level of expertise were included in the survey. Initial distribution of the survey took place on May 9, 2017, and was available for 1 month, with three weekly reminders. Responses were completely anonymous, with no Internet protocol addresses or identifiers collected. Data were gathered and further analyzed with Qualtrics. The response rate was 54%. All participants answered the same number of questions. Complete confidentiality was maintained in the survey, and the surveyors remained blinded.

Rectal Administration

Literature on substance abuse involving the rectum as a route of administration is sparse. Slang terms for this practice include "boofing" (4) and, if alcohol is involved, "butt chugging" (5). Dissolved substances are inserted into the rectum, and fabric or tampons are inserted to prevent leakage (6). The rich vasculature in the rectum leads to rapid onset of euphoria. There are several acute risk factors associated with "boofing." The substances most commonly used during "boofing" (stimulants and psychoactive synthetic drugs) can be potent vasoconstrictors of rectal and colonic vasculature. Vasoconstriction can trigger mesenteric ischemia. Nontreatment of mesenteric ischemia can lead to tissue necrosis, necessitation of colostomy, or death. Possible mucosal damage caused by "boofing" can increase the risk of contracting sexually transmitted infections. Because the bioavailability of illicit sub-

stances in the rectal vasculature is unknown, there is no well-defined dosage to recommend to avoid overdosing (7). Nontherapeutic placement of substances in the rectum may also cause hematochezia, tenesmus, colonic perforation, and fecal incontinence (8). For survey results pertaining to practitioner knowledge of substances abused rectally, see Figure 1.

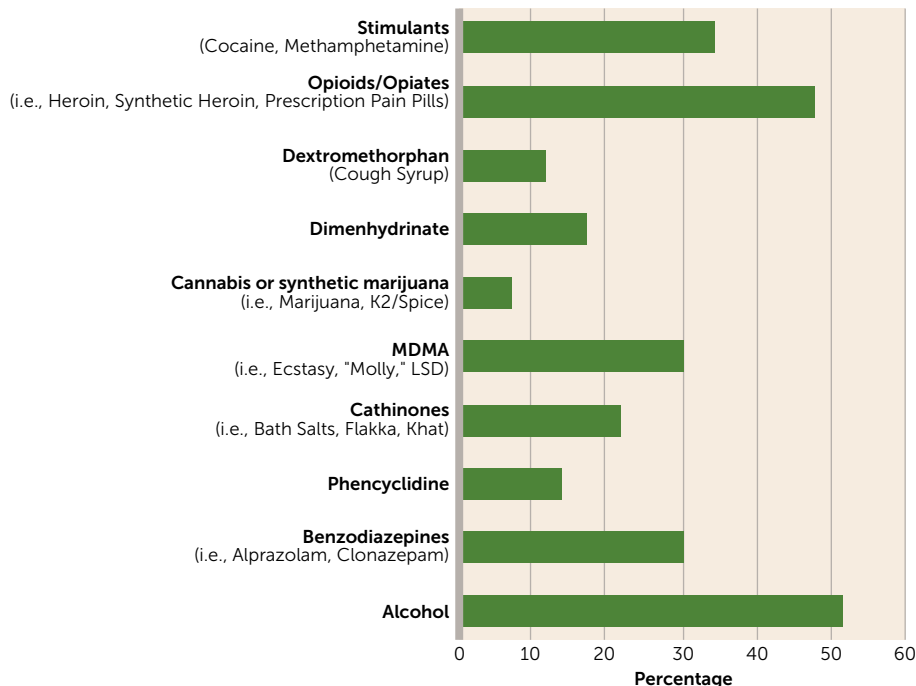
Skin Popping

Another method used is "skin popping," which involves the user pulling the skin upward then injecting the drug subcutaneously or intradermally, usually in the arms or legs (9). Water-soluble substances can be injected through skin popping. Common drugs abused using this method are opiates, cocaine, and barbiturates. Individuals who use drugs intravenously often choose this alternative method of administration after their veins become damaged from repeated intravenous drug use (10). Psychiatrists should caution patients that skin abscesses are a common complication of skin popping. Skin abscesses can result from any combination of factors, including needle-induced local trauma, infectious contaminants, or lack of sterile technique. Abscesses usually contain *Staphylococcus*, *Streptococcus*, *Clostridium botulinum*, or tetanus (11). Early-stage treatment for skin abscesses involves antibiotics. Treatment escalation requires surgical incision and drainage. Untreated abscesses evolve to bacteremia or osteomyelitis (12).

Insufflation

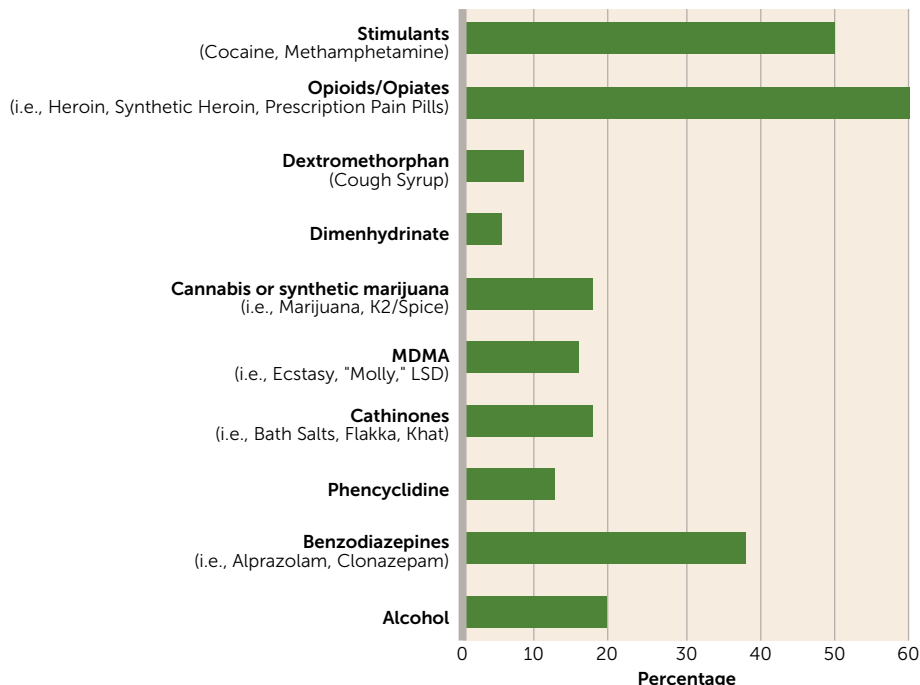
Prescription-stimulant medication abuse is not limited to the oral route. Insufflation as a route of administration is rising in popularity. Insufflation, colloquially referred to as "snorting," is the act

FIGURE 1. Provider Self-Reported Knowledge of Substances Abused Rectally^a



^a MDMA=3,4-Methylenedioxymethamphetamine.

FIGURE 2. Provider Self-Reported Education on Routes of Administration of Drugs of Abuse^a



^a MDMA=3,4-Methylenedioxymethamphetamine.

nostrils, acute hypertensive crisis, myocardial infarction, and ischemic or hemorrhagic cerebrovascular accidents (14).

RESULTS

Conducting an assessment of the routes of administration of drugs of abuse allows for practitioners to apply a more effectively tailored treatment plan and better patient education. The interpretation of our results suggests that current substance abuse education within medical training is highly variable and, as it applies to routes of administration, largely insufficient. Stimulants (50%), opioids (75%), and benzodiazepines (37.5%) were the only substance of abuse categories for which more than 25% of respondents reported receiving education (Figure 2). Respondents inquired more about routes of administration for substances they had received education about during some point in their training. Participants frequently or always inquired about the route of administration for two substance classes: stimulants (57%) and opiates (71%) (Figure 3). For survey results on practitioner beliefs regarding the importance of screening for the routes of administration of substances of abuse, see Figure 4.

These results suggest that there would be a potential benefit for a consistent and comprehensive medical curriculum that includes education on the importance of inquiring about the routes of administration of substances of abuse. An established curriculum would enable practitioners to be better equipped to meet the health needs of patients with substance use disorders.

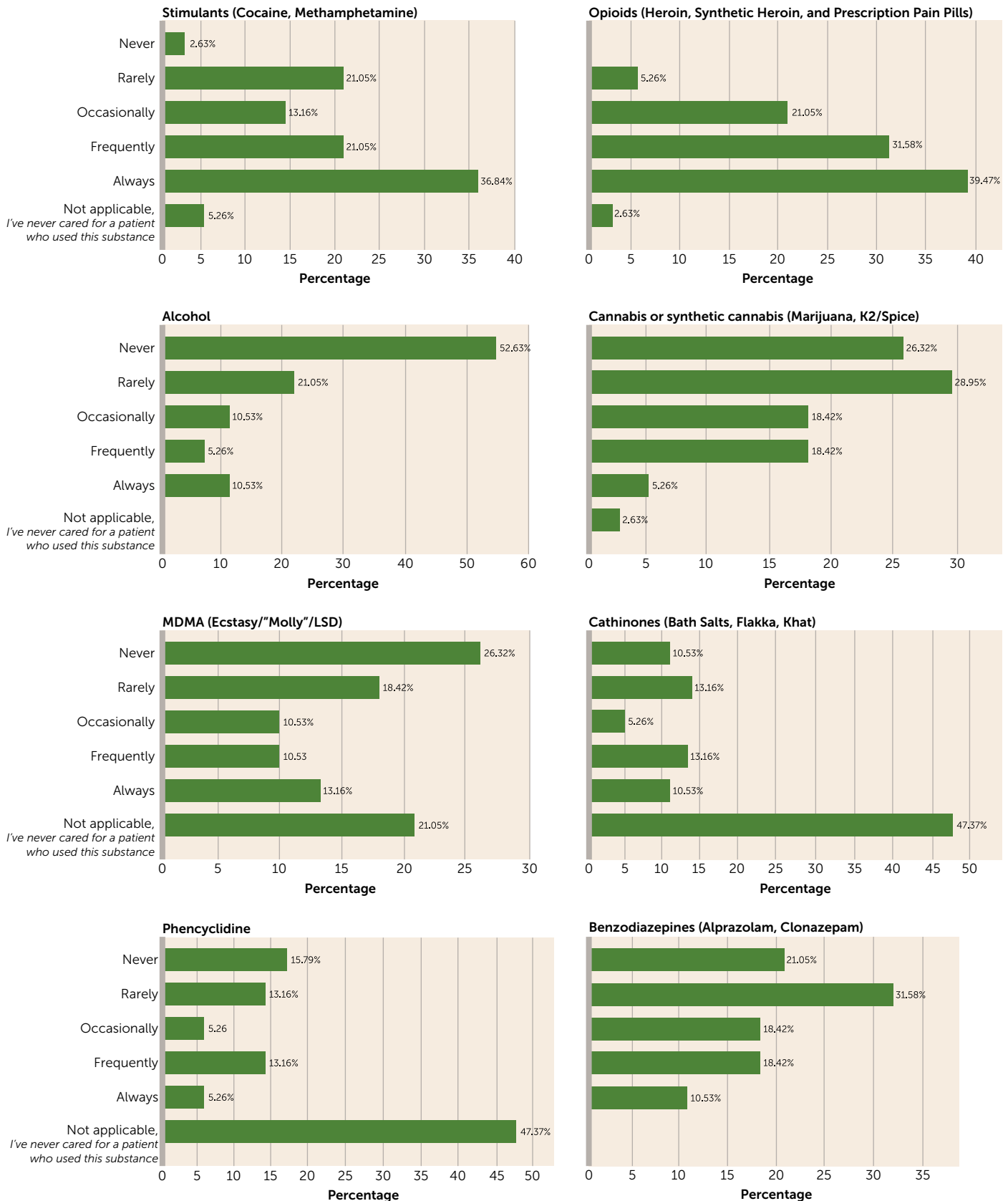
APA GUIDELINES

Current APA guidelines recommend that the initial psychiatric evaluation include a review of the patient's use of illicit substances, tobacco, and alcohol and misuse of prescription medications. The APA does not delineate which substances for which a route of administration should be investigated but does make clear that the route of administration should be determined for a category of drugs (15). Treatment planning can be influenced by medical conditions that frequently

of inhaling either a gas, powder, or vapor into the nostrils (13). When stimulants are snorted, the vascular-rich areas of the intranasal cavity and pulmonary network become dilated, thus increasing

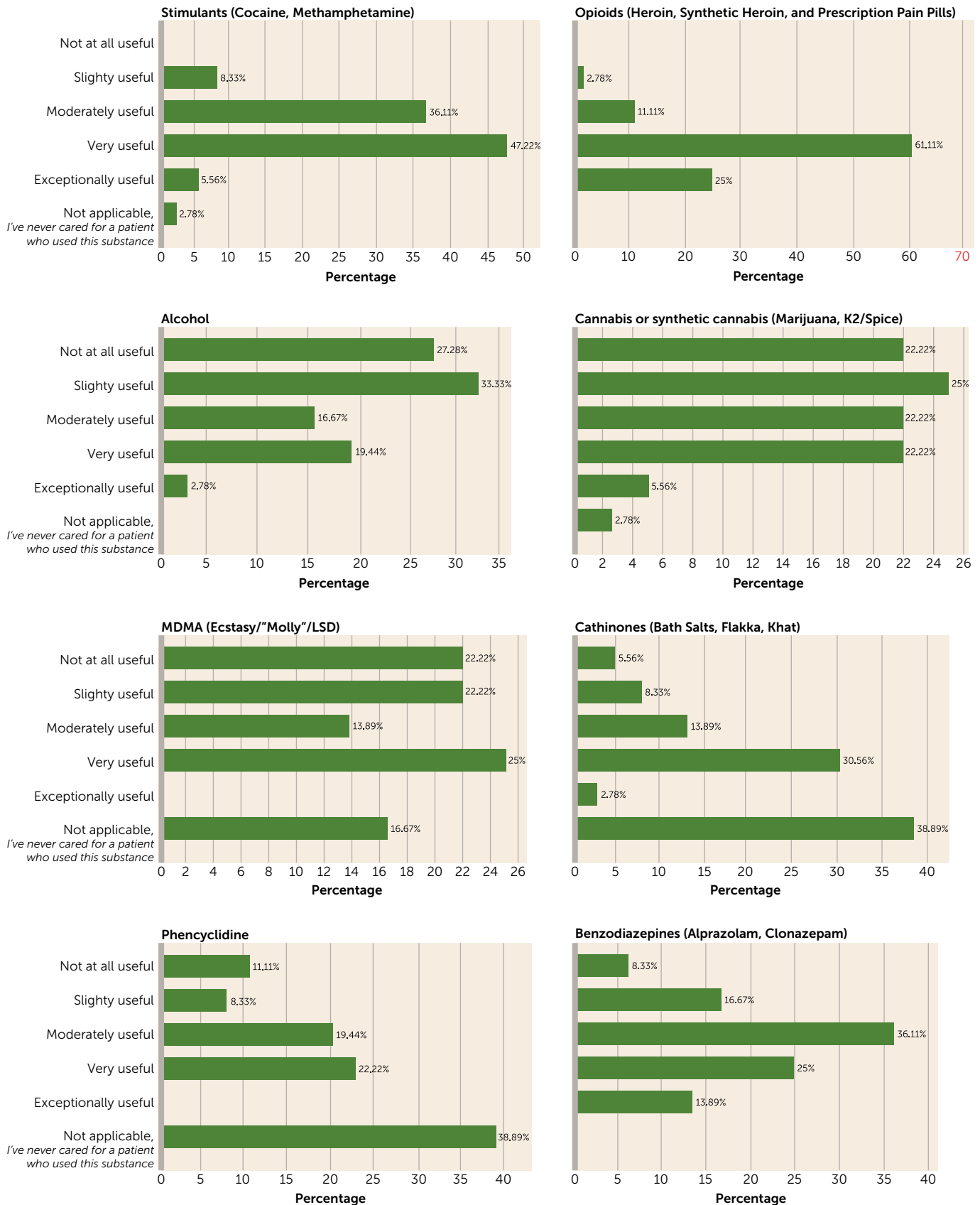
the absorptive surface area and allowing for more rapid entry of the drug into the bloodstream. Potential acute medical complications after insufflating stimulants include local tissue damage to the

FIGURE 3. Provider Self-Reported Inquiry About Routes of Administration^a



^a MDMA=3,4-Methylenedioxymethamphetamine.

FIGURE 4. Provider Self-Reported Beliefs on the Importance of Screening for Routes of Administration of Drugs of Abuse^a



^a MDMA=3,4-Methylenedioxymethamphetamine.

KEY POINTS/CLINICAL PEARLS

- Most substances of abuse are abused by two or more routes of administration.
- The rectal abuse of drugs has the potential to lead to vasoconstriction of the colonic vasculature, “skin popping” can lead to abscess formation, and insufflation can lead to local tissue damage of the nostrils and systemic vasodilation.
- Practitioners should develop appropriate methods of implementing health education when substance abuse is associated with specific routes of administration.

coincide with substance use. The benefits of conducting a thorough substance-abuse evaluation include lessening the morbidity and mortality associated with drug use (16).

DISCUSSION

Practitioners should be aware of all routes used for administration of substances of abuse, have a system to gauge which routes of administration patients use, and know the health consequences associated with each route. Stimulants, opiates, synthetic drugs, prescription drugs, 3,4-methylenedioxymethamphetamine, and phencyclidine are all substances that can be abused by using more than three routes of administration. Although APA guidelines do not delineate which drugs are most important with regard to investigation of routes of administration, we suggest routinely inquiring about the route of administration for patients who abuse any of the aforementioned drugs.

CONCLUSIONS

Presently, there is no standardized formulation for conducting the substance abuse portion of a psychiatric evalua-

tion. Furthermore, there is no recommendation for categorizing the severity of abuse using factors that include the route of administration. Future APA guidelines should consider screening questions pertaining to the route of administration of specific illicit substances, as this could potentially affect follow-up and recommended treatment.

Drs. Rivers Allen and Bridge are both fourth-year residents in the Department of Psychiatry and Behavioral Medicine, Brody School of Medicine, Vidant Medical School, Greenville, N.C.

REFERENCES

1. Priester M, Browne T, Iachini A, et al: Treatment access barriers and disparities among individuals with co-occurring mental health and substance use disorders: an integrative literature review. *J Subst Abuse Treat* 2016; 61:47–59
2. Onyeka I, Basnet S, Beynon C, et al: Association between routes of drug administration and all-cause mortality among drug users. *J Subst Use* 2016; 21:559–565
3. Jarlais D, Arasteh K, Feelemyer J, et al: From long-term injecting to long-term non-injecting heroin and cocaine use: the persistence of changed drug habits. *J Subst Abuse Treat* 2016; 71:48–53
4. Frost E: *The Complete Drug Slang Dictionary: Over 3000 Drug Slangs*. San Francisco, Heliographica, 2004
5. Mazloun R, Snenghi R, Barbieri S, et al: “Butt-chugging” a new way of alcohol assumption in young people. *Eur J Public Health* 2015; 25:119
6. Gupta M, Bailey S, Lovato L: Bottoms up: methamphetamine toxicity from an unusual route. *West J Emerg Med* 2009; 10:58–60
7. Schaper A, Hofmann R, Bargain P, et al: Surgical treatment in cocaine body packers and body pushers. *Int J Colorectal Dis* 2007; 22:1531–1535
8. Pizzute C: Self-administered alcohol (vodka) enema causing severe colitis: case report and review. *Gastrointest Endosc* 2006; 63:1087–1088
9. Santoiemma P, Dinwiddie S, Angarone M: Infectious disease complications in people who inject drugs. *Psychiatr Ann* 2017; 47:33–37
10. Canales M, Gerhard J, Younce E: Lower extremity manifestations of “skin-popping” an illicit drug use technique: a report of two cases. *Foot* 2015; 25:114–119
11. Ebright J, Pieper B: Skin and soft tissue infections in injection drug users. *Infect Dis Clin North Am* 2002; 16:697–712
12. Baranska-Rybak W, Blazewicz I, Kakol M, et al: Cutaneous manifestations of injectable drug use: hidden secrets. *Cutis* 2014; 93:185–187
13. Teter C, McCabe S, Lagrange K, et al: Illicit use of specific prescription stimulants among college students: prevalence, motives, and routes of administration. *Pharmacotherapy* 2006; 26:1501–1510
14. Wilens T, Adler L, Adams J, et al: Misuse and diversion of stimulants prescribed for ADHD: a systematic review of the literature. *J Am Acad Child Adolesc Psychiatry* 2008; 47:21–31
15. Silverman J, Galanter G, Jackson-Triche M, et al: *The American Psychiatric Association Practice Guidelines for the Psychiatric Evaluation of Adults*. Washington, DC, American Psychiatric Publishing, 2016, pp 9–44
16. Greenfield S: Assessment of the patient, in *The American Psychiatric Publishing Textbook of Substance Abuse Treatment*. Edited by Galanter M, Kleber H. Washington, DC, American Psychiatric Publishing, 2015, pp 81–98

JobCentral

Job opportunities for graduating residents and fellows are listed on JobCentral, a free service provided by APA for its members (jobs.psychiatry.org). Browse over 2,000 job postings based on location, work setting and position type, create an account and set up job alerts.

Amphetamine-Induced Delusional Infestation

Alec H. Fisher, B.A., Cornel N. Stanciu, M.D.

Delusional parasitosis is a rare syndrome characterized by a fixed, false belief that one is infested with parasites. Individuals with the disorder are preoccupied with this idea and sometimes interpret skin markings, such as veins, old scars, skin pigmentation, or hairs, as evidence (1). The perception of tactile hallucinations experienced as “insects crawling on the skin,” referred to as formication, may be endorsed. Individuals with the disorder often cause skin damage in attempts to extract the perceived organisms. In many cases, individuals will compulsively bring “evidence” and display it to medical professionals. This is referred to as the “baggie sign” (1). Patients tend to avoid contact with mental health professionals and prefer to bring themselves to primary care, dermatology, or the emergency department for medical treatment of the perceived parasites (1). The underlying ideology for this condition can be primary, seen in some cases of schizophrenia and neurocognitive disorders, or secondary to medical conditions and substance use (2). Some medical conditions in which this may be seen include endocrine, renal, hepatic, malignant, rheumatoid, and neurological disorders (2). Substances documented to cause delusional parasitosis include cocaine, amphetamines, cannabinoids, and any medication that enhances dopamine signaling, such as pridedil, ropinidrol, carbegoline, and paramipexol (2).

We present a case (below) of delusional infestation following initiation of methamphetamine use in a patient with a distant history of chronic cocaine use in sustained remission. The delusional belief of infestation remitted rapidly and completely after withdrawal of methamphetamine and administration of an antipsychotic agent.

Methamphetamine (also known as “meth,” “speed,” “crank,” and “ice”) is a

strong CNS stimulant that has become an increasingly popular illicit substance of abuse. It can be smoked, snorted, or injected. Use of the drug leads to experiences of prolonged euphoria, increased alertness and energy, and decreased food intake and sleep. The effects are long-lasting, especially when compared with other stimulants such as cocaine. Although the prevalence of amphetamine use has recently decreased, the most current reports reveal that 6.7% of 12th graders have used an amphetamine in the past year, with 0.8% endorsing crystal methamphetamine (3). The use of methamphetamine has also been shown to lead to psychiatric sequelae, such as anxiety, aggression, psychosis, insomnia, and hyperactivity (4).

CASE

“Mr. L” is a 55-year old man with a past medical history of hypertension. He has a psychiatric history of posttraumatic stress disorder and an extensive substance use history, going back to his late 20s, of cocaine. He presented to the emergency department with the complaint of having worms under his skin. He was agitated, and his hands were covered in multiple excoriations. The patient’s vital signs were unremarkable except for his blood pressure, which was 182 mmHg/121 mmHg, and pulse, which was 110 beats per minute. He was breathing at a rate of 22 breaths per minute, with an oxygen saturation of 97% on room air. His urine drug screen was positive for cocaine and amphetamines.

The patient carried a plastic bag containing blood, which he claimed was full of worms he picked out with a scalpel. He also brought the scalpel, two knives, and a methamphetamine pipe in his personal bag. Medical staff was unable to visualize worms in the plastic bag or on

the patient’s body. His physical examination was unremarkable except for excoriations on the dorsum of his hands. The patient was alert and oriented to person, place, and time, and he denied auditory, visual, and tactile hallucinations. Review of his medical record revealed that he had a presentation for a similar complaint 3 weeks prior and was prescribed pyrantal pamoate for a possible hookworm infestation. At that time, he related a history of having washed his dog in an inflatable pool, and the worms crawled from the dog and inside of him through his toenails, which were recently trimmed and bleeding. A psychiatric consult was ordered due to the ongoing questionable complaint, not validated by others, as well as his history of mental illness, his high level of distress and agitation, and his drug screen results. The patient was ultimately admitted to an involuntary inpatient unit.

On initial encounter with the team, the patient attempted to point out worms under his skin. He picked off pieces of skin and scabs and screamed, “See these are the worms, this isn’t skin, I know skin!” He angrily denied all psychiatric review of system questions, was not prescribed any home medications, and remained focused on his dermatological complaint.

On further interview, the patient revealed an extensive substance use history, particularly cocaine (smoked) and, most recently, methamphetamine (smoked). He reported that his first cocaine use was 26 years ago, with intermittent episodes of use, in much smaller amounts, throughout the years. A month prior to admission, he started smoking methamphetamine, an illicit substance he had not used in several years. He reported smoking, on average, 2 grams of methamphetamine every other day, with his most recent use on the day of his admission.

The patient was initially very distressed and would not cooperate with treatment until his dermatological condition was addressed. He was amenable to taking one dose of albendazole (400 mg) and initiating treatment with risperidone (2 mg twice daily). The following day, he was irritable and drowsy but maintained compliance with risperidone. The morning of the second day, he displayed complete resolution of his worm preoccupation. He was discharged on risperidone, with a plan to taper off while being monitored for recurrence of symptoms. At discharge, the patient was calm, cooperative, and free of obsessional preoccupations. He was diagnosed with stimulant-induced perceptual disorder, with onset during intoxication.

DISCUSSION

Delusions of infestation involve preoccupations with the existence of organisms under the skin, which can result in self-inflicted excoriations, distress, and potential infection. Pathogenesis of delusional parasitosis involves dysregulation of striatal dopamine systems, which normally regulate attention, reward, and motor coordination (5). Amphetamine compounds increase levels of dopamine in these circuits and thus have the potential to precipitate symptoms. Psychotic symptoms in general are common with repeated use of amphetamines, as well as cocaine. With repeated use of cocaine, sensitization to amphetamine can occur, making the psychotic symptoms more likely, as in the above case. Most reported cases of delusional parasitosis are primary, in which the delusions present without an associated medical or substance use disorder (6). However, there is some literature supporting the existence of secondary causes (such as in the above case) induced by stimulants (7).

Historically, pimozide was a first-line treatment for delusional parasitosis. Due to concerns about QTc prolongation and extrapyramidal side effects, second-generation antipsychotics, such as olanzapine, quetiapine, and risperidone, have replaced pimozide, with good side-effect profile and efficacy (8, 9). Among these second-generation antipsychotics, the greatest body of support lies with risperidone (8, 10). Beyond the use of antipsychotic medications, building a therapeutic alliance with the patient and avoiding confrontation about the existence of organisms are two techniques proven to be beneficial in the treatment of delusional parasitosis (9). In our discussion with the patient in the above case, we began with the following statement, "Although we cannot see the worms, we are willing to try an antiworm medication." Following that discussion, the patient was amenable to taking risperidone, along with albendazole. Albendazole is a relatively safe medication with a low side-effect profile in patients without cirrhosis. It was a medication critical to building a therapeutic alliance with our patient in order to promote medication compliance.

KEY POINTS/CLINICAL PEARLS

- Delusional parasitosis can occur as a consequence of psychostimulant use.
- A previous history of cocaine use can predispose individuals to delusional parasitosis due to dopamine receptor desensitization.
- Low-dose, short-term antipsychotics can lead to rapid resolution of symptoms.
- Conjunctive use of low-risk antihelminthic agents can help establish a therapeutic alliance.

idone (8, 10). Beyond the use of antipsychotic medications, building a therapeutic alliance with the patient and avoiding confrontation about the existence of organisms are two techniques proven to be beneficial in the treatment of delusional parasitosis (9). In our discussion with the patient in the above case, we began with the following statement, "Although we cannot see the worms, we are willing to try an antiworm medication." Following that discussion, the patient was amenable to taking risperidone, along with albendazole. Albendazole is a relatively safe medication with a low side-effect profile in patients without cirrhosis. It was a medication critical to building a therapeutic alliance with our patient in order to promote medication compliance.

CONCLUSIONS

This case demonstrates delusional parasitosis following psychostimulant use. Similar to a recent case report describing mixed amphetamine-induced delusional parasitosis, our patient had a rapid dissolution of perceived infection and distress (10). A short-term course of risperidone was effective in complete remission of his delusions. Given that methamphetamine continues to be a widely abused drug, clinicians should be mindful that there is potential for the drug to induce delusions of infestation in some users. Individuals with previous exposure to stimulant compounds are especially predisposed. In our patient, discontinuation of use and a low-dose, short-term antipsychotic led to rapid and complete remission.

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REFERENCES

1. Mercan S, Altunay IK, Taskintuna N, et al: Atypical antipsychotic drugs in the treatment of delusional parasitosis. *Int J Psychiatry Med* 2007; 37:29–37
2. Vulink C: Delusional infestation: state of the art. *Acta Derm Venereol* 2016; 217:58–63
3. Miech R, Johnston L, O'Malley P, et al: The Monitoring the Future Study. Ann Arbor, Mich, University of Michigan Press, 2016
4. Nordahl TE, Salo R, Leamon M: Neuropsychological effects of chronic methamphetamine use on neurotransmitters and cognition: a review. *J Neuropsych Clin Neurosci* 2003; 15:317–25
5. Huber M, Karner M, Kircher E, et al: Striatal lesions in delusional parasitosis revealed in magnetic resonance imaging. *Prog Neuropsychopharmacol Biol Psychiatry* 2008; 32:1967–1971
6. Scharif-Alhoseini M, Rahimi-Movaghar V, Vaccaro AR: Underlying causes of paresthesia, in Paresthesia. Edited by Imbelloni LE. InTechOpen, 2012
7. Beach S, Kroshinsky D, Kontos N: A 35-year-old woman with suspected mite infestation. *NEJM* 371; 22:2115–2123
8. Elmer KB, George RM, Peterson K: Therapeutic update: use of risperidone for the treatment of monosymptomatic hypochondriacal psychosis. *J Am Acad Dermatol* 2000; 43:683–686
9. Lepping P, Russell I, Freudenmann RW: Antipsychotic treatment of primary delusional parasitosis: systematic review. *Br J Psychiatry* 2007; 191:198–205
10. Stanciu C, Penders T, Oxentime H: Delusional infestation following misuse of prescription stimulants. *Psychosomatics* 2015; 56:210–212

Beautiful Boy: A Father's Journey Through His Son's Addiction

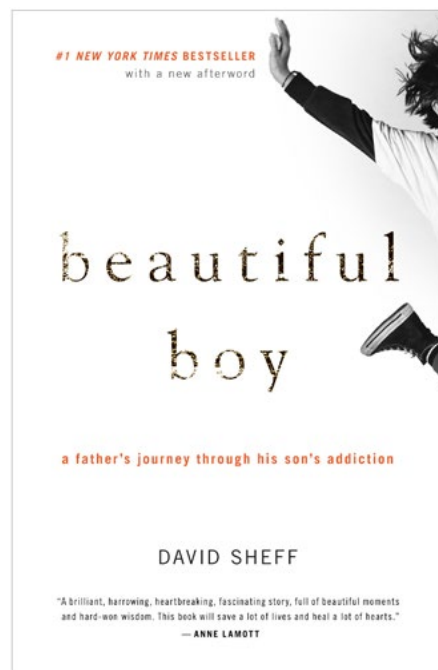
Reviewed by Anna Kim, M.D.

You did not cause it, you can't control it, you cannot cure it.

—David Sheff

In his memoir *Beautiful Boy*, author David Sheff poignantly describes the insidious development of his son's addiction, from alcohol and marijuana to, later, methamphetamines, cocaine, and heroin. The book starts with loving vignettes about Nic as a child—sensitive, artistic, smart—and events that Sheff shared with the younger Nic, such as attending the Nirvana concert. These scenes are notably happy and light. As Nic begins to experiment with drugs, Sheff explores another range of feelings many parents of children with addiction disorders experience: guilt, shame, and anger. Readers of *Beautiful Boy* will likely become keenly aware of “the litany” of thoughts of parents of individuals with addiction disorders. Multiple times throughout the book Sheff expresses wondering whether he could have prevented his son's addiction, perhaps by avoiding divorce, or not telling Nic of his own past substance use, or not smoking a joint with Nic, or, more generally, not acting as an enabler. His mind becomes preoccupied, and, as he states, he becomes “addicted to [his] son's addiction.”

Beautiful Boy narrates how addiction affects entire families and, ultimately, society. The constant and consuming unpredictability of relapse, the accompanying emotional rollercoaster, the loss of control, the feelings of helplessness, the tiring tides of hopes with suc-



By David Sheff. Boston, Houghton Mifflin, 2009, pp. 352, \$15.99 (paper).

cesses and devastation with relapse—all of these are struggles of family members and society. Sheff also speaks of his own personal experience: constant anxiety and sleepless nights, hypervigilance that his son will break into his home again, worry and intrusive thoughts of his son out on the streets, being kidnapped, or dead. Love and vigilance, he concludes, are not enough.

What worked was attending support groups and understanding the neurobiology of addiction. Social support provided connection, as well as realization that addiction is a societal concern, not

a personal or moralistic one. Sheff relates stories of a surgeon operating while high and another doctor getting into an automobile accident while under the influence. Shared responsibility encourages compassion and empathy, as well as discussion and change. Additionally, diagnosing addiction and understanding its mechanisms provided Sheff with a different understanding of his son. He writes: “My sense is that the psychologist and psychiatrists who saw Nic over the years gave me useful advice and support, and possibly helped him, too, but in spite of their impeccable credentials and obvious devotion to their work, almost every professional we consulted was inexperienced with drug addiction and failed to diagnose it” (p. 131). It was not until Dr. Edythe London, a psychiatrist at the University of California, Los Angeles, pointed out parts of the brain, via imaging, affected by methamphetamine addiction that Sheff saw addiction as a “brain disease.” Rather than the addicted individual being “unwilling” to abstain, he or she is “unable” and has a predisposition toward addiction. This externalization, as well as increased understanding, Sheff notes, alleviated some of his distress. Through his narration, we are reminded of the powerful impact support, education, and explanation can have on societal understanding of addiction.

Dr. Kim is a third-year psychiatry resident at Mount Sinai Hospital, New York, and Deputy Editor of the *Residents' Journal*.

Call for Applications to Join the 2018 Editorial Board

The *American Journal of Psychiatry—Residents' Journal* is now accepting applications to join the 2018–2019 Editorial Board for the following positions:

SENIOR DEPUTY EDITOR (SDE) POSITION

Job Description/Responsibilities

- Frequent correspondence with *AJP-Residents' Journal* Editorial Board and *AJP* editorial staff, including conference calls.
- Frequent correspondence with authors.
- Peer review manuscripts on a weekly basis.
- Make decisions regarding manuscript acceptance.
- Work with *AJP* editorial staff to prepare accepted manuscripts for publication to ensure clarity, conciseness, and conformity with *AJP* style guidelines.
- Coordinate selection of book review authors and distribution of books with *AJP* editorial staff.
- Recruit authors and guest editors for the journal.
- Manage the *Test Your Knowledge* questions on the *Residents' Journal* Facebook and Twitter pages and work closely with authors in developing Board-style review questions for the *Test Your Knowledge* section.
- Fulfill the responsibilities of the Editor-in-Chief when called upon, including forming issue lineup.
- Collaborate with the Editor-in-Chief in selecting the 2019 SDE, Deputy Editor, and Associate Editors.
- Attend and present at the APA Annual Meeting.
- Commitment averages 10–15 hours per week.

Requirements

- Must be an APA resident-fellow member.
- Must be starting as a PGY-3 in July 2018, or a PGY-4 in July 2018 with plans to enter an ACGME fellowship in July 2019.
- Must be in a U.S. residency program.

Selected candidate will be considered for a 2-year position, including advancement to Editor-in-Chief in 2019.

DEPUTY EDITOR (DE) POSITION

Job Description/Responsibilities

- Frequent correspondence with *Residents' Journal* Editorial Board and *AJP* editorial staff, including conference calls.
- Frequent correspondence with authors.
- Peer review manuscripts on a weekly basis.
- Make decisions regarding manuscript acceptance.
- Work with *AJP* editorial staff to prepare accepted manuscripts for publication to ensure

clarity, conciseness, and conformity with *AJP* style guidelines.

- Prepare a monthly *Residents' Resources* section for the journal that highlights upcoming national opportunities for medical students and trainees.
- Recruit authors and guest editors for the journal.
- Collaborate with the Editor-in-Chief in selecting the 2019–2020 Editorial Board.
- Attend and present at the APA Annual Meeting.
- Commitment averages 10 hours per week.

Requirements

- Must be an APA resident-fellow member.
- Must be a PGY-2, PGY-3, or PGY-4 resident starting in July 2018, or a fellow in an ACGME fellowship in July 2018.
- Must be in a U.S. residency program or fellowship.

This is a 1-year position only, with no automatic advancement to the SDE position in 2019. If the selected candidate is interested in serving as SDE in 2019, he or she would need to formally apply for the position at that time.

ASSOCIATE EDITOR (AE) POSITIONS (two positions available)

Job Description/Responsibilities

- Peer review manuscripts on a weekly basis.
- Make decisions regarding manuscript acceptance.
- Recruit authors and guest editors for the journal.
- Collaborate with the SDE, DE, and Editor-in-Chief to develop innovative ideas for the journal.
- Attend and present at the APA Annual Meeting.
- Commitment averages 5 hours per week.

Requirements

- Must be an APA resident-fellow member
- Must be a PGY-2, PGY-3, or PGY-4 resident in July 2018, or a fellow in an ACGME fellowship in July 2018.
- Must be in a U.S. residency program or fellowship

This is a 1-year position only, with no automatic advancement to the DE or SDE position in 2019. If the selected candidate is interested in serving as DE or SDE in 2019, he or she would need to formally apply for the position at that time.

MEDIA EDITOR (ME) POSITION

Job Description/Responsibilities

- Manage the *Residents' Journal* Twitter and Facebook accounts.
- Oversee podcasts.
- Collaborate with the AEs to decide on content
- Collaborate with SDE, DE, and Editor-in-Chief to develop innovative ideas for the journal.
- Attend and present at the APA Annual Meeting.
- Commitment averages 5 hours per week.

Requirements

- Must be an APA resident-fellow member.
- Must be an upcoming PGY-2, PGY-3, or PGY-4 resident in July 2018, or a fellow in an ACGME fellowship in July 2018.
- Must be in a U.S. residency program or fellowship.

This is a 1-year position only, with no automatic advancement to the Deputy Editor or Senior Deputy Editor position in 2019. If the selected candidate is interested in serving as Deputy Editor or Senior Deputy Editor in 2019, he or she would need to formally apply for the position at that time.

CULTURE EDITOR (CE) POSITION

- Collaborate with SDE, DE, and Editor-in-Chief to develop innovative ideas for the journal.
- Attend and present at the APA Annual Meeting.
- Commitment averages 5 hours per week.

Requirements

- Must be an APA resident-fellow member.
- Must be an upcoming PGY-2, PGY-3, or PGY-4 resident in July 2018, or a fellow in an ACGME fellowship in July 2018.
- Must be in a U.S. residency program or fellowship.

This is a 1-year position only, with no automatic advancement to the DE or SDE position in 2019. If the selected candidate is interested in serving as DE or SDE in 2019, he or she would need to formally apply for the position at that time.

For all positions, applicants should e-mail a CV and personal statement of up to 750 words describing themselves, their reasons for applying, and any ideas for journal development to oliver.glass@emory.edu. The deadline for applications is March 2, 2018.

Residents' Resources

Here we highlight upcoming national opportunities for medical students and trainees to be recognized for their hard work, dedication, and scholarship.

To contribute to the Residents' Resources feature, contact Anna Kim, M.D., Deputy Editor (anna.kim@mountsinai.org).

JANUARY DEADLINES

All deadlines are **January 31, 2018**, and the sponsoring organization is APA, unless otherwise noted.

Fellowship/Award	Jeanne Spurlock Congressional Fellowship
Brief Description	The aim of the fellowship is to provide an opportunity for a psychiatry resident or early-career psychiatrist with significant interest in child and/or minority mental health advocacy to work in a congressional office. The recipient will serve a 10-month fellowship in Washington, DC, during which he or she will be introduced to the structure and development of federal and congressional health policy focused on mental health issues affecting minorities and underserved populations, including children.
Eligibility	Must be an APA member, U.S. citizen or permanent resident, and psychiatry resident, fellow, or early-career psychiatrist.
Contact and Website	E-mail: congressional@psych.org • Web: https://www.psychiatry.org/residents-medical-students/residents/fellowships
Fellowship/Award	APA Psychiatric Research Fellowship
Brief Description	The fellowship provides funding for a post-graduate psychiatry trainee, under the supervision and guidance of his or her mentor, to design and conduct a research study on a major research topic.
Eligibility	Must be an M.D. or D.O. and APA member who completed residency training prior to the time the fellowship commences.
Contact and Website	E-mail: kbarber@psych.org • Web: https://www.psychiatry.org/residents-medical-students/residents/fellowships
Fellowship/Award	APA/American Psychiatric Association Foundation (APAF) Leadership Fellowship
Organization	APA Foundation
Brief Description	This fellowship provides opportunities for a psychiatry trainee to engage, interact, and participate at a national level and further develop his or her professional leadership skills, networks, and psychiatric experience. The program creates opportunities to expand relationships with peers and national thought-leaders in the field of psychiatry.
Eligibility	Must be an APA-resident member and enrolled as a PGY-2 at an accredited psychiatric residency training program.
Contact and Website	E-mail: psychleadership@psych.org • Web: https://www.psychiatry.org/residents-medical-students/residents/fellowships
Fellowship/Award	APA Child and Adolescent Psychiatry Fellowship
Brief Description	This 2-year fellowship is designed to promote interest and a career in child and adolescent psychiatry; offers travel support for two APA Annual Meetings and two APA September Components Meetings.
Eligibility	Must be an APA-resident member and enrolled as a PGY-2 at an accredited psychiatric residency training program.
Contact and Website	Email: tclaridad@psych.org • Web: http://www.americanpsychiatricfoundation.org/get-involved/fellowships/child-and-adolescent-psychiatry-fellowship
Fellowship/Award	APA Public Psychiatry Fellowship
Brief Description	This is a 2-year fellowship that provides experiences that will contribute to the professional development of residents who will play future leadership roles within the public-sector psychiatry and heighten awareness of the public psychiatry activities and career opportunities. Offers funding to attend two APA Institute on Psychiatric Services (IPS) meetings and two September Components Meetings.
Eligibility	Must be an APA member and enrolled as a PGY-1 or PGY-2 in an accredited U.S. or Canadian psychiatry residency program with 2 remaining years of training.
Contact and Website	Email: publicpsych@psych.org • Web: https://www.psychiatry.org/residents-medical-students/residents/fellowships
Fellowship/Award	Substance Abuse and Mental Health Services Administration (SAMHSA)
Organization	SAMHSA Minority Fellowship
Brief Description	To enhance the knowledge and capabilities of racial and ethnic minority psychiatry residents to teach, administer, conduct services research, and provide culturally competent, evidence-based mental health services to minority and or underserved populations.
Eligibility	Must be an APA-resident member and enrolled as a PGY-2 at an accredited psychiatric residency training program.
Contact and Website	Email: mfp@psych.org • Web: https://www.samhsa.gov/minority-fellowship-program
Fellowship/Award	APA Diversity Leadership Fellowship
Brief Description	To develop leadership to improve the quality of mental health care for the following (not limited to) minority groups at risk and underrepresented in psychiatry: American Indians/Native Alaskans, Asian Americans/Native Hawaiians/Native Pacific Islanders, Blacks/African Americans, Hispanics/Latinos, and the LGBTQ community.
Eligibility	Must be an APA-resident member and enrolled as a PGY-2 at an accredited psychiatric residency training program.
Contact and Website	Email: mfp@psych.org • Web: https://www.psychiatry.org/residents-medical-students/residents/fellowships

Author Information for *The Residents' Journal* Submissions

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Rachel Katz, M.D.
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Senior Deputy Editor

Oliver Glass, M.D.
(Emory University)

Deputy Editor

Anna Kim, M.D.
(Mount Sinai)

The Residents' Journal accepts manuscripts authored by medical students, resident physicians, and fellows; attending physicians and other members of faculty cannot be included as authors.

To submit a manuscript, please visit http://ajp.psychiatryonline.org/ajp_authors_reviewers, and select a manuscript type for *AJP Residents' Journal*.

- 1. Commentary:** Generally includes descriptions of recent events, opinion pieces, or narratives. Limited to 500 words and five references.
- 2. History of Psychiatry:** Provides a historical perspective on a topic relevant to psychiatry. Limited to 500 words and five references.
- 3. Treatment in Psychiatry:** This article type begins with a brief, common clinical vignette and involves a description of the evaluation and management of a clinical scenario that house officers frequently encounter. This article type should also include 2–4 multiple-choice questions based on the article's content. Limited to 1,500 words, 15 references, and one figure. This article type should also include a table of Key Points/Clinical Pearls with 3–4 teaching points.

- 4. Clinical Case Conference:** A presentation and discussion of an unusual clinical event. Limited to 1,250 words, 10 references, and one figure. This article type should also include a table of Key Points/Clinical Pearls with 3–4 teaching points.
- 5. Original Research:** Reports of novel observations and research. Limited to 1,250 words, 10 references, and two figures. This article type should also include a table of Key Points/Clinical Pearls with 3–4 teaching points.
- 6. Review Article:** A clinically relevant review focused on educating the resident physician. Limited to 1,500 words, 20 references, and one figure. This article type should also include a table of Key Points/Clinical Pearls with 3–4 teaching points.
- 7. Drug Review:** A review of a pharmacological agent that highlights mechanism of action, efficacy, side-effects and drug-interactions. Limited to 1,500 words, 20 references, and one figure. This article type should also include a table of Key Points/Clinical Pearls with 3–4 teaching points.

- 8. Perspectives in Global Mental Health:** This article type should begin with a representative case or study on psychiatric health delivery internationally, rooted in scholarly projects that involve travel outside of the United States; a discussion of clinical issues and future directions for research or scholarly work should follow. Limited to 1,500 words and 20 references.
- 9. Arts and Culture:** Creative, nonfiction pieces that represent the introspections of authors generally informed by a patient encounter, an unexpected cause of personal reflection and/or growth, or elements of personal experience in relation to one's culture that are relevant to the field of psychiatry. Limited to 500 words.
- 10. Letters to the Editor:** Limited to 250 words (including 3 references) and three authors. Comments on articles published in the *Residents' Journal* will be considered for publication if received within 1 month of publication of the original article.
- 11. Book and Movie Forum:** Book and movie reviews with a focus on their relevance to the field of psychiatry. Limited to 500 words and 3 references.

Upcoming Themes

If you have a submission related to the themes shown, contact the Section Editor listed below the topic. **Please note that we will consider articles outside of the theme.**

If you are interested in serving as a **Guest Section Editor** for the *Residents' Journal*, please send your CV, and include your ideas for topics, to Rachel Katz, M.D., Editor-in-Chief (rachel.katz@yale.edu).

Forensic Psychiatry

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