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COMPLEX MEDICAL-PSYCHIATRIC ISSUES (MB RIBA, SECTION EDITOR)

Recovering in Place: Creating Campus Models of Care for the High-Risk College Student

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Abstract

Purpose of Review Over the last decade, the number and severity of mental health problems among college students has continued to rise. Universities are struggling to dedicate enough resources to meet the mental health needs of students. In this article, we review on-campus innovative programs designed to promote recovery in high-risk college students.

Recent Findings Colleges respond in a variety of ways to students on campus with serious mental health problems, from encouraging or requiring students to take a leave of absence, to creating treatment programs and reducing course loads to treat in place. On-campus programs that address the needs of high-risk students can include post-hospitalization programs, intensive outpatient groups, and specialized treatment for diverse populations such as athletes.

Summary Some universities are developing unique programs that enable high-risk college students to recover on campus. More research is needed to determine how best to deliver this care.

Keywords College mental health · High-risk college student · Campus models of care · College suicide · Post-psychiatric hospitalization · Recovery

Introduction

Although it is common to hear of the favorable aspects of aging in place for our elderly, creating a community of support so that they can continue their life in a comfortable and familiar setting, researchers and university providers talk less about the idea of "recovering in place" for college students with mental health crises. This is despite the fact that college students often prefer to remain in school and receive services on campus [1••]. In their 2017 report, "Mental Health on College Campuses: Investments, Accommodations Needed to Address Student Needs," The National Council on Disability supports offering students comprehensive mental health services on campus, including those students with mental health disabilities and higher risk presentations [1••]. This report proposes greater state and federal funding for increasing college mental health services, financial aid accommodations for students with mental health disabilities, and campus anti-stigma programs. It also cites evidence showing benefits of campus mental health treatment, including an improved GPA, less substance abuse, a reduction in suicidal behaviors, and improved financial outcomes for the student and the university. The majority of students surveyed for the report believed greater access to campus mental health services for students

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with mental health disabilities would improve inclusion, retention, and graduation.

The students' preferences to stay in school and receive services on campus have at times come into conflict with university administration practices. There have been reports of universities either requiring mandatory leave for students with suicidal behaviors or making it extremely difficult for these students to return to school by taking away housing. As a result, students have filed complaints with the Office of Civil Rights under the Americans with Disabilities Act or have sued the schools and some have received settlements [2]. The Americans with Disabilities Act (ADA) can make it difficult for campus administration to require mandatory leave for students who are suicidal, but the law is not completely clear on this matter [1••, 2]. The National Council on Disability, in their report, proposes clarification of this law to better understand students' rights [1••].

From a clinician's point of view, there is no easy answer to whether high-risk college students would benefit most from receiving treatment while at school versus returning home for care. Sometimes comprehensive treatment at home, if available and affordable, is preferred, especially when students are returning to a supportive environment. For those who may not be able to participate in course work due to a significant mental illness, like acute psychosis, time off from school may be in the student's best interest.

For students without a supportive home to return to or access to comprehensive treatment away from school, being sent home may not improve their symptoms and could ultimately increase their risk. Furthermore, minority students may be more likely to face stigma regarding treatment from their families or local communities [3•]. And, for first-generation college students, who are more likely to come from a socioeconomically challenged group, campus may be the preferred setting for treatment. This is especially true if on-campus treatment would be covered or subsidized by student health fees, making it more affordable than off-campus care.

With increasing numbers of students on campus struggling with mental health concerns and higher risk behaviors, and the likelihood of limited access to care off campus, some universities are providing services that allow students to remain at school and recover in place. With timely and comprehensive treatment, these services can be critical in addressing the growing severity of mental health problems in college students.

The Landscape of College Mental Health: a Growing Storm

The increase in mental health concerns among college students, combined with inadequate resources to meet students' mental healthcare needs, is creating a "perfect storm." According to the 2018 National College Health Assessment, 31.1% of college students were diagnosed with or treated for a mental health problem in the last year, compared with 19.1% of students in 2008 [4]. According to the Healthy Minds Study, 37% of students screened positive for depression and 31% screened positive for generalized anxiety disorder in 2017–2018 compared with 20% for depression and 20% for generalized anxiety disorder in 2014–2015 [5].

The severity of mental health problems in college students also continues to increase over time. Psychiatric emergency services utilization, for example, tripled from 2007 to 2017, and psychiatric hospitalization rates have tripled since 1994 [6, 7]. Suicide rates for 15–24-year olds have increased from 10.1/100,000 in 2010 to 14.46/100,000 in 2017 [8]. Although some reports released prior to 2009 suggest suicide rates in college students are lower than in the non-student population, there is no mandatory reporting of college suicide or of suicides that occur when a student is on leave or has dropped out of school. Therefore the data might be underestimating suicide rates among college students [9, 10]. In fact, suicidal ideation has increased among college students from 5.8 to 10.8% in the last decade [6].

In the face of increased numbers and severity of mental health problems, mental health service utilization by college students has also increased, from 19% of students in 2007 to 34% in 2017 [6]. Despite this, many students with mental health issues still are not getting help. Only 53% of students who screened positive for depression or anxiety in 2017–2018 received mental health services [5].

To meet the growing mental health needs of students, some campus counseling centers have increased their staff, as well as hired case managers and strengthened community referral networks [11, 12]. However, many universities may not be prepared to provide on-campus care for the high-risk college student, who requires a higher level of care with closer follow-up and coordination among treatment providers. Collaborative care is essential for this population, particularly when it comes to suicide prevention [13].

Establishing coordinated and collaborative care in the college setting can be challenging, especially as there is a wide range of models of care in college mental health to choose from [14]. While some college mental health programs have fully integrated administration and record systems, others have counselors, psychiatrists, and primary care providers in separate systems. Some schools will treat the high-risk college student on campus, while others will refer them to the community.

Some universities in metropolitan areas have the option of referring students for care off-campus in nearby communities. Northwell Health and McLean Hospital near New York City and Boston, respectively, provide inpatient and outpatient treatment programs geared toward college students [7, 15]. However, many university communities do not have

comprehensive mental health resources for college-aged populations. For these schools, the treatment of high-risk college students and young adults becomes a major public health issue. Universities must appeal to local, state, and federal entities, asking for resources to be dedicated to addressing this problem.

In this article, we will review some on-campus specialized programs for high-risk students, including post-hospitalization care, intensive outpatient treatment, and specialized treatment for athletes. For the purpose of this article, we will define high-risk college students as students who are at increased risk of harm to self as a result of mental illness or who suffer from mental illness and belong to a group with increased exposure to stressors and traumas. In this article, we will not include treatment of students who are at risk of harm to others, as these students often require a different kind of evaluation and approach by a campus behavioral threat assessment team composed of personnel from law enforcement, student affairs, and the counseling center [16].

When speaking of "high-risk" students with mental health concerns, we include the following factors:

- Post-psychiatric hospitalization
- First episode of psychosis or chronic psychosis
- History of a suicide attempt
- Suicidal thoughts or behaviors, self-harming behaviors
- Substance use disorder
- Severe distress or dysfunction from mental health issues (depression, anxiety, bipolar disorder)
- Active anorexia or bulimia
- Socially isolated students
- Diverse populations: students of color, LGBTQ students, veterans, graduate students, international students, and athletes [1••]

Coordinated Team Approach for Post-hospitalized and Other High-Risk Students

Colorado State University (CSU) is a large public university, with a total student population of just over 31,000. More than 10 years ago, the university's Health Network (consisting primarily of primary care physicians, women's health, and psychiatry) integrated their medical records with the counseling center, which allowed much more efficient and holistic care for students struggling with mental illness. Later, a single building was constructed, allowing physical integration of counseling with other health services. This integration set the backdrop for moving toward a multidisciplinary team framework that included development of iTEAM, a program specifically designed to identify and treat high-risk/post-hospitalization students [17•].

The idea for iTEAM (Intensive Treatment Education Assessment and Management) grew out of a discussion between the then university president and the director of the Health Network. The university president offered funding to the Health Network director for the development of a program to address the need for on-campus services for high-acuity mental health disorders, enabling the development of an integrated team to identify, treat, and follow students requiring a higher level of care than the existing short-term counseling or psychiatric services could provide.

With separate funding than the rest of the health network, the iTEAM was able to focus on the development of high-quality, intensive, wrap-around services for a smaller number of students having serious mental health concerns, such as chronic self-harming behaviors, suicidal behaviors, new onset psychosis, and/or disruptive behaviors on campus. Bolstered by research which demonstrated the financial burden and morbidity associated with sending students away from college due to untreated mental health concerns, the iTEAM founders emphasized building the resources necessary to support keeping high-risk students and their treatment on campus whenever possible [18]. This not only allowed students with mental health concerns to be more closely monitored (ultimately decreasing risk to patients and the university community) but also often provided intensive services that would not have been available had students been asked to return home. Furthermore, it enabled students to remain on campus, supported ongoing connection with friends and local support networks, and, in many cases, allowed students with mental health concerns to continue to progress academically.

The iTEAM program itself currently consists of one half-time psychiatrist, 2 full-time counselors (PhD psychologist and a licensed clinical social worker), and a medical assistant, whose job is to assist the psychiatrist as well as be an available, accessible "face" to iTEAM, whom students can reach out to if they need appointments, refills, letters for professors or to drop/add classes, and work excuses. There are rotating post-doctoral and LCSW trainees who also provide supervised treatment to students.

To be referred to the program, a student must meet with a university case manager from Student Affairs who visits the local mental health inpatient/crisis units when students are admitted. Students may also be identified through the anonymous campus reporting line for students and staff or via reports from campus police, housing, or academic staff who have noticed concerning behaviors. During the initial case management meeting, a release of information is obtained, allowing communication between case managers, the university Support and Safety office, and iTEAM providers. Students are asked to participate in a 1½ h intake with one of the iTEAM providers, typically a counselor. Psychiatric

intakes are reserved for those patients who present with psychosis, new medication requiring timely management, and/or those with medically complicated presentations, such as concurrent head injury, seizure disorder, diabetes, or substance withdrawal.

Student intakes are then presented at a weekly staffing meeting during which students are assigned to individualized treatment options, most often a combination of weekly group and individual therapy (both dialectical behavior therapy (DBT) informed) and, when appropriate, psychiatry. Participation in staffing meetings by all iTEAM providers and thorough documentation of the discussion in the student's chart helps ensure that the team is providing recommendations that are well thought through and also mitigates risk to any individual provider by specifically documenting team agreement on estimation of risk levels as well as treatment recommendations.

The DBT informed structure of the therapy and group has been particularly helpful in treating students with self-harm behaviors, chronic suicidality, and emotional dysregulation, who make up the majority of our caseload. Just as important, perhaps, the weekly DBT consultation group for the treating providers (including psychiatry and therapists) allows consultation and debriefing which assists in preventing provider burnout when working with the highest risk, most challenging cases.

Echoing the overall increase in both acuity of illness, hospitalizations, and number of patients seen by the general psychiatry team, iTEAM patient numbers have increased steadily over the past several years, with 81 students completing intakes in fall 2018, compared with 22 students in fall 2015. Counseling Center Assessment of Psychological Symptoms (CCAPS) scores, which were first collected and tabulated in summer 2018, showed a modest but statistically significant reduction in distress index scores similar to improvements seen with other types of therapeutic interventions in the general college population [17•].

Overall, iTEAM has effectively provided more intensive services to high-risk/post-hospitalized students, which has decreased student distress levels, presumably increasing student retention and academic success. Anecdotally, many students have reported diminished or nonexistent suicidal thoughts/behaviors after treatment, a renewed sense of hope, and more effective skills in navigating their college experience. One current challenge the iTEAM faces is that it does not have the financial means to meet the increasing demand for its services due to growing numbers of students with more complex mental health problems. In addition, there has been some pressure from health network management to increase providers' ability to see larger numbers of patients faster. To this end, the CSU Counseling Center is shifting to a stepped-care model, in an attempt to provide services to as many students as possible with the relatively limited resources available.

Typically under stepped care, students with less severe symptoms and a higher level of functioning are offered less labor-intensive treatment options such as online counseling or computer-guided self-help modules [19]. This approach is designed to free up personnel and resources to care for those students requiring face-to-face treatment options such as individual counseling or medication management [20]. Presumably such a shift will address at least some of the increasing demand for services while minimizing wait times for those students with lower acuity concerns. It is yet to be determined how or if this will ultimately affect iTEAM services and if stepped care will be able to stem at least some of the increasing demand for on-campus mental health care. Although data remains somewhat sparse, supporters are beginning to report some success in using this organizational strategy for college mental health services; critics worry that stepped care may do little to diminish the increasing acuity of mental health problems in college-aged youth.

Intensive Outpatient Treatment at a Counseling and Mental Health Center

The University of Texas at (UT) Austin is a large state university with 18 colleges and schools. Over the last 8 years, there has been a 77% increase in the number of students served at the Counseling and Mental Health Center (CMHC). In the fall of 2017, enrollment was 51,525 students. For the 2017–2018 academic year, 6890 students were served at CMHC. Some students present to CMHC with severe mental health symptoms, which may include significant anxiety, depression, and suicidal ideation. These symptoms negatively affect a student's academic, psychological, and social functioning. Many times, counseling is not enough to manage this level of acuity.

In 2012, the CMHC began a collaboration with an off-campus community provider, Ascension Seton, to operate an intensive outpatient program (IOP) on campus at the CMHC for UT Austin students [21•]. Individuals with mental health symptoms impairing their ability to function benefit from IOP as an alternative to hospitalization [22]. In addition, college students who have been hospitalized benefit from a step down to a lower level of care before transitioning to once a week therapy.

The IOP consisted of 3 h of group therapy, 4 days a week for 4–5 weeks for UT Austin students. Because health insurance is not required at UT Austin, three scholarships spots out of the 8 total group spots were negotiated for those students who may not have health insurance. Ascension Seton provided the scholarship to up to 3 students per group who were uninsured. In 2012, the initial IOP, named Epoch IOP, provided processing and skill building therapy for young adult students ages 18–24. Therapy included self-compassion, CBT,

assertive communication, healthy boundary setting, distress tolerance skills, mindfulness skills, illness recognition and relapse prevention, and goal setting. A dialectical behavior therapy (DBT) IOP group was added in January 2016 because many students presented with depression, suicidal ideation, self-injury, and difficulty tolerating distress. This IOP program offered DBT skills focused therapy to reduce depression and anxiety, increase awareness of behavior patterns, and effectively manage impulsive behaviors, intense emotions, and chaotic relationships [22].

During the 2017–2018 academic year, a total of 104 students participated in the two IOP programs: 38% participated in the Epoch IOP, 59% participated in the DBT IOP, and 3% started in the Epoch IOP and then transitioned to DBT IOP. Referral sources for IOP included 65% from CMHC, 16% from an inpatient unit, 12% from off-campus providers, 3% from family/friends/self, and 4% unknown. The number of sessions a student attended ranged from 1 to 23 weeks. The highest attendance was 48% for 17–23 sessions. Thirteen percent attended 13–16 sessions, 9% attended 9–12 sessions, 12% attended 5–8 sessions, and 18% attended 1–4 sessions.

As for gender of IOP participants, 60% identified as female, 34% identified as male, and 6% identified as other (composed of 7 students who identified as gender nonconforming, non-binary, agender, or transgender). As for classification, the majority of students were juniors at 41%, followed by 25% sophomores, 20% seniors, 11% first year students, and 3% graduate students. Seventy-nine percent of IOP participants had health insurance and 21% were uninsured.

Demographics included 38% of students who identified as white, 23% identified as Hispanic, 21% Asian American, 7% multiracial, 6% Black/African American, and 5% other (consisting of 5 students who identified as Arab, Brazilian, Native American/Pacific Islander, and Middle Eastern).

In terms of mental health symptoms and diagnoses in the IOP participants, 84% had depression (major depressive disorder or unspecified depression). Sixty-two percent endorsed suicidal ideation or self-injury and 8% had made a suicide attempt. Fifty-one percent of students had diagnoses of anxiety disorders (generalized anxiety disorder, unspecified anxiety disorder, and social anxiety disorder). Eleven percent of IOP participants had a diagnosis of bipolar disorder (bipolar I disorder, bipolar II disorder, or unspecified bipolar disorder). Four percent of students had an eating disorder (bulimia or unspecified eating disorder) and 3% had a diagnosis of psychotic disorder (unspecified psychotic disorder or substance-induced psychotic disorder).

The impact on academics for the IOP participants was as follows: 36% of students had registered for Services for Students with Disabilities at the time of admission to IOP and 21% of IOP participants took a medical withdrawal. However, 77% stayed in school.

The existence of IOP on campus provides college students who have significant and acute mental health symptoms easily accessible treatment. IOP improved their mood and anxiety symptoms and decreased suicide risk, which led to improved functioning and the ability to stay in school for the majority. The IOPs incorporated equity and inclusion for those students of low socioeconomic status who did not have health insurance and could not afford to pay for services but would benefit from IOP treatment.

Special Populations: Treatment for Athletes

Northwestern University is a highly selective private university. With a total enrollment of more than 20,000 students, its undergraduate population is slightly above 8000 students. Its 500 student athletes compete in NCAA's Division I's Big Ten Conference, one of the Power Five Conferences. In order to improve care for these students, the university created two units in 2013: sports medicine housed in the student health service (NUHS) and sport psychology housed in the counseling center (CAPS). The latter is composed of two full-time psychologists and a part-time psychiatrist.

Similar to other universities nationwide, the rates of counseling center utilization and acuity and severity of presenting concerns have been increasing greatly at Northwestern. The sport psychology unit is utilized by almost 40% of Northwestern's student athletes. Northwestern University does not offer any intensive mental health treatment programs on campus. However, the campuses are located near several good options for a higher level of care. While most students take a medical leave of absence and return home to pursue more intensive treatment, some students, including student athletes, arrange their schedule to accommodate treatment and remain on campus.

Student athletes (SAs) are unique compared with other students on campus, because they have a more demanding schedule and pursue their sport under the rules of the NCAA. Coaches and athletic trainers have almost daily contact with them and often monitor them closely. As elite athletes, they face different stressors and are vulnerable to a deterioration of their mental health at different points in their athletic career. Injury, retirement from their sport, performance slumps, and negative dynamics with teammates and coaches are some of these stressors [23•]. They can get overwhelmed when competitions (including travel) and academic demands culminate at the same time. Furthermore, their medical care is in the hands of the sports medicine team and, when arranging a higher level of care for SAs, NCAA eligibility rules need to be taken into consideration.

Highly accomplished SAs can be motivated just as much or more by their desire to train for and compete in their sport as they are by academic and professional goals. The sports

medicine team determines whether student athletes are medically well enough to compete and can prevent SAs from participating in practice and/or competitions or reduce their athletic activity for medical reasons. Thus, poor health due to a severe mental illness can lead to reduced participation or complete removal from athletic activities. SAs can be required to follow through on the recommended mental health treatment as a condition for continued participation. This often motivates reluctant students to participate in a higher level of care such as intensive outpatient treatment (IOP) or partial hospitalization program (PHP). They know that successful completion of such a program and continued care is a condition for their participation.

When student athletes take a medical leave or reduce their academic load to part-time status in order to receive a higher level of care, they can lose their eligibility to participate in their sport. This is because the NCAA requires student athletes to complete a certain number of credits per academic year and maintain a certain GPA in order to be eligible to practice and compete [24]. SAs need to be educated about how the recommended treatment will affect their eligibility. It is imperative for the psychiatrist to consult with the compliance office in the athletic department when recommending a higher level of care. An option to file for a waiver from the NCAA exists, but the outcome is not certain.

Because of their schedules, SAs' social life usually revolves around their team. This means that a complete removal from team activities, as a result of either taking a medical leave or even a reduced course load while remaining on campus, can lead to social isolation. In the most successful cases, students who remain on campus are able to maintain social contact with their teammates despite not being able to participate in practice. Balancing the demands of course work, the NCAA requirements, and mental health treatment requires close coordination among various university support teams; athletic academic advisors, for example, can be invaluable in helping students navigate this process.

The following is a case example to illustrate how this collaboration can work: An international student athlete, who had been in treatment for her depression since high school, initially coped well at Northwestern with treatment by the sport psychology team. During her sophomore year, a slew of midterm exams/papers coincided with several competitions, some involving extensive travel. This ultimately led to a worsening of her depression and anxiety. Adjusting her medications (adding an agent to augment the antidepressant) further exacerbated her symptoms and her suicidal ideation became more frequent and intense. At this point, the team suggested a higher level of care. The athlete, her parents, and the coaching staff were very concerned about the effect that ceasing athletic activity completely would have on her mental health and her eligibility. With her consent, a group meeting was arranged. The coach, athletic academic adviser, compliance officer, head team physician, athletic trainer, and psychiatrist all took part in devising a plan that allowed for intensive treatment while preserving her eligibility. The academic advising staff helped her enroll in classes that worked with the PHP schedule. She remained in university housing. The psychiatrist and the head team physician as well as the coach also communicated with her parents back home. While the student was in the PHP, she did not practice with the team but worked out on her own to keep up her fitness. She also was able to remain socially involved with the Northwestern athletic community. By the time she stepped down to an IOP, she was able to take part in a few competitions at the end of the season.

In short, when helping SAs that need a higher level of care because of the severity of their mental illness, it is crucial to work with the support system that universities have in place for their student athletes, specifically Sports Medicine, Compliance, and Academic Advising. If clinically appropriate, staying on campus for mental health treatment can have added benefits to SAs, who can stay connected to this support system and utilize the advising and tutoring available to athletes. Ideally, mental health care can be provided on campus, or, if not, at least in a nearby location.

Of note, the report by the National Council on Disability includes athletes among special populations that benefit from mental health care on campus due to the unique stressors that they face, along with LGBTQ students, students of color, veterans, and international students [1••]. It is important for campuses to have services geared to these diverse populations.

Conclusions

As the programs above demonstrate, there are many benefits to providing care on campus for high-risk college students, especially when considering the needs of students with low socioeconomic status or those who hold minority identities, both of whom may struggle more than their peers to find available and affordable care at home or in the local campus community. Many students report that they prefer to stay on campus for care, so that they can remain connected to supportive friends and continue to progress in school. Athletes may particularly benefit from remaining close to their team, trainers, and advisers. Considering that three-quarters of mental health problems develop by age 24, on-campus programs can be uniquely designed for newly diagnosed patients as well as tailored to the developmental needs of 18–25 year-olds who are navigating the years of emerging adulthood [25].

As we have discussed, there can be challenges to providing care on campus as well. Some students are so impaired that they require specialized treatment programs or the support of family at home. While cost is another major obstacle to providing care on campus, universities will ultimately benefit financially from student retention and improved functioning.

Students and communities both are positively impacted by effective mental health treatment.

Will there be a growing trend for college students with serious mental health issues to be offered options to recover in place? Ideally, more studies will look at innovative programs on and near campus to find out which provide the greatest mental health and academic benefits. Studies can also inform the creation of a checklist of factors that will guide the clinician and patient in deciding whether on-campus, near-campus, or at-home programs are most beneficial to students.

It remains to be seen whether there will be a nationalized standard of college mental health with a relatively uniform approach to care or whether each institution will develop an individualized approach that speaks to their own campus culture and needs. As demonstrated in this paper, there are currently many individualized programs for high-risk patients such as post-hospitalization care, intensive outpatient therapy, and unique approaches for athletes and other populations under significant stress. Some universities are now looking at stepped-care models as a way to meet the wide range of campus mental health concerns.

Whatever the location or resources of the university, mental health care is likely to remain an exceedingly important factor in the success of many college-aged students. Universities have a responsibility to ensure that all students regardless of their mental health care needs are able to access appropriate services. Ultimately the well-being of the campus as a whole depends on it.

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Compliance with Ethical Standards

Conflict of Interest Marcia R. Morris, Nora I. Feldpausch, Melissa G. Inga Eshelman, and Bettina U. Bohle-Frankel declare that they have no conflict of interest.

Human and Animal Rights Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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- •• Of major importance

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