

[Athletic Training]

Mental Health Services in NCAA Division I Athletics: A Survey of Head ATCs

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Background: There is a growing awareness of the importance of mental health care in National Collegiate Athletic Association (NCAA) student-athletes; however, there is a lack of literature on mental health resources in collegiate settings. Identifying current practices can set the stage to improve the delivery of care.

Hypothesis: There is great variability in resources and current practices and no “standard of care” exists.

Study Design: Observational, quantitative.

Level of Evidence: Level 5.

Methods: One hundred twenty-seven (36% response rate) head athletic trainers at Division I NCAA member colleges completed a web-based survey. Questions assessed several aspects of mental health clinicians, perception of care coordination, and screening.

Results: Seventy-two percent of respondents noted that counseling took place in a counseling center, and 20.5% of respondents indicated that they had a mental health provider who worked in the athletic training room. Mental health clinician credentials included marriage and family therapist, psychologist, clinical social worker, and psychiatrist. The majority of athletic trainers (ATCs) noted that they are satisfied with the feedback from the mental health provider about the student-athletes' mental health (57.3%) and believe that they would be able to provide better care to student-athletes if mental health services occurred onsite in the training room (46.4%). Fewer than half (43%) indicated that they use screening instruments to assess for mental health disorders.

Conclusion: There is wide variability on how mental health services are provided to NCAA Division 1 student-athletes. Some mental health care providers are located offsite, while some provide care in the training room setting. Also, there are inconsistencies in the use of standardized screening tools for mental health evaluation. There is no standard collaborative or integrated care delivery model for student-athletes.

Clinical Relevance: Opportunities exist for standardization through integrated care models and increased use of validated screening tools to deliver comprehensive care to student-athletes.

Keywords: mental health; integrated care; college; student-athlete; athletic training

National Collegiate Athletic Association (NCAA) Division I college student-athletes are a unique population given their time commitments, stressors, and resources.

Although exercise and participation in sport have been identified as both prophylaxis against and treatment of many behavioral health diagnoses,⁶ student-athletes are certainly not immune to these conditions. Up to 20% of college student-athletes may suffer from depression,¹⁹ and research suggests that Division I college student-athletes have higher levels of

stress and other behavioral health issues, including substance abuse, than their nonathlete counterparts.¹² For several reasons, such as the perceived stigma surrounding mental health issues and concerns about the reactions of coaches or teammates, student-athletes may be less likely to admit to behavioral health issues and therefore seek mental health care.^{14,19}

Mental health clinicians have made significant advancements in understanding the relationship between mental skills and athletic performance,⁵ but only recently have they started to

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address the range of mental health issues in student-athletes (ie, NCAA Mental Health Guidelines) and their access to care. The NCAA, under the direction of Chief Medical Officer Brian Hainline, has made mental health a priority, attempting to make it at least as important as musculoskeletal injuries.¹⁵

There have been efforts to promote awareness and understanding of mental illness in collegiate athletes. In November 2013, the NCAA formed a task force to address mental health issues that face NCAA student-athletes. The multidisciplinary team, including 24 different mental health organizations, created the consensus document, “Mental Health Best Practices” (2016).¹³ The document is an extension of the publication, “Mind, Body and Sport: Understanding and Supporting Student-Athlete Mental Wellness.”⁴ To help NCAA member institutions understand and support student-athlete mental wellness, the document outlines best practice strategies.

The purpose of this research was to identify mental health care services available to student-athletes in Division I NCAA university settings.

METHODS

Survey

The study was approved in August 2015 by the Wake Forest School of Medicine Institutional Review Board. A 5- to 10-minute quantitative web-based survey was created in Qualtrics. The web-based survey consisted of 31 questions containing items of different formats: multiple choice, mark all that apply, and fill in the blank (see the Appendix, online at <http://journals.sagepub.com/doi/suppl/10.1177/1941738116679127>).

Population

The population in this study was head athletic trainers (ATCs) at 336 NCAA Division I universities. The head ATCs of all NCAA Division I universities were contacted via email with an invitation to complete the online survey between September 2015 and October 2016.

Data Analysis

Data analysis included descriptive statistics for all variables and frequency of responses. Statistical analyses of the quantitative results were conducted through SPSS, version 22.0 (SPSS Inc).

RESULTS

Demographics

One hundred twenty-seven participants completed the survey. This represents a 36% response rate. Participants were asked about sex, age, race, ethnicity, the location of the university setting, and years worked as an ATC (Table 1). Participants ranged from in age from 28 to 64 years ($M = 45.95$ years; $SD = 9.183$). The number of years worked ranged from 5 to 40 years ($M = 11.08$ years; $SD = 6.013$).

Table 1. Demographics of athletic trainers (ATCs) and university setting

	Frequency	Percentage
Sex^a		
Male	94	74.0
Female	30	23.6
Other	2	1.6
Age, y^b		
<30	1	0.8
30-50	84	66.1
>50	40	32
Race^c		
African American/black	5	3.9
Asian	3	2.4
Caucasian/white	111	87.4
Latino	4	3.1
Other	2	1.6
Mixed	2	1.6
Ethnicity^c		
Hispanic or Latino	5	3.9
Not Hispanic or Latino	117	92.1
Other	1	.8
University setting^c		
Rural	18	14.2
Suburban	18	14.2
Urban	26	10.5
City	65	51.2
Years worked as ATC^c		
5-10	13	10.2
11-15	18	14.2
16-20	21	16.5
21-25	30	23.6
26-30	17	13.4
31-35	22	17.3
36-40	6	4.8

^an = 126.

^bn = 125.

^cn = 127.

Table 2. Location of and time spent on campus for mental health clinician

	Frequency	Percentage
Location^a		
On campus, counseling center	92	72.4
On campus, athletic training room	26	20.5
On campus, athletic department	23	18.1
Off campus	22	17.3
On campus, other	14	11
Other	8	6.3
Number of clinicians^b		
1	15	60
2	6	24
3 or more	4	14
Time on campus, d^c		
One half	2	7.7
Two half	5	19.2
Four half	2	7.7
Five half	1	3.8
Six half	2	7.7
Eight half	1	3.8
Ten half	3	3.8
Other/don't know	10	36

^an = 127.^bn = 25.^cn = 26. Time is calculated in half days.

Location, Frequency, and Type of Mental Health Clinician Providing Care

Approximately 98% (n = 125) of participants noted that the student-athletes have an option to receive mental health care services; 2% did not have that option. More than half (n = 92, 72.4%) of participants noted that the mental health clinician is located in a student counseling center (separate from the athletic training room). Approximately 20.5% (n = 26) were in the athletic training room, 18.1% (n = 23) were within the campus athletic department, 17.3% (n = 22) were offsite, while 11% (n = 14) were onsite, and 6.3% (n = 8) reported other arrangements.

Twenty-five respondents provided information on the location and number of mental health clinicians working onsite. Table 2

presents the number of clinicians onsite and the amount of time they are present. Those who reported “other,” 36% (n = 10), noted that the mental health clinicians worked onsite for 2 hours per week.

Different types of mental health clinicians, from licensed social workers to sports psychologists, provide care to student-athletes. As seen in Table 3, the majority of mental health clinicians who deliver care to student-athletes are psychologists (29.1%, n = 37).

Employer of and Compensation for Mental Health Clinician

Of the 26 ATCs reporting onsite mental health services, the mental health clinicians were employed by the athletic department (73.1%, n = 19), student health (7.7%, n = 2), sports-

Table 3. Types of mental health clinicians working with student-athletes (n = 25)

	Frequency ^a	Percentage
Medical family therapist	1	0.8
Marriage and family therapist	2	1.6
Clinical psychologist	17	13.4
Counseling psychologist	8	6.3
Clinical social worker	6	4.7
Psychiatrist	4	3.1
Sport psychologist	12	9.4
Don't know/not sure	1	0.8

^aParticipants had option to mark all that apply.

specific budget (7.7%, n = 2), and bill insurance (4%, n = 1). Nineteen (73.1%) participants noted that mental health clinicians were compensated for the time spent working with student-athletes via hourly fees (36.8%, n = 7), salary (36.8%, n = 7), other (21.1%, n = 4), and don't know/not sure (5.3%, n = 1). Participants who responded with "other" noted that the mental health clinician had a predetermined rate based on whether the service was clinical or sports performance (3.8%, n = 1). In addition, some providers are contracted hourly or by salary (3.8%, n = 1), while others have a stipend for independent, wellness center/psychology clinic salaried by the university (3.8%, n = 1), or in-house provider is salaried, the community providers are hourly, and student health is supported by student fees (3.8%, n = 1).

ATCs' Perception of Mental Health Clinician Onsite, Presenting Issues, and Feedback

The participants were asked to rate from "Strongly agree" to "Strongly disagree" if they would be able to provide comprehensive care to student-athletes if mental health services were onsite in the training room. The statement read, "I would be able to provide better care to our student-athletes if there were mental health services onsite, i.e., in the training room." Forty-six percent (n = 59) indicated that they would be able to provide better care for their student-athletes if a mental health clinician was onsite. Table 4 shows the conditions that head ATCs identify as being present in the student athletes under their care.

Fifty-eight percent (n = 73) were satisfied with the feedback from mental health clinicians about the student-athlete's mental health. Of those ATCs satisfied, the form of communication between the ATC and mental health clinician was written (4%, n = 2), verbal (10%, n = 5), or electronic, such as text message or emails (2%, n = 1). ATCs noted that 87.5% (n = 19) of mental health clinicians document in a different medical chart and 12.5% (n = 3) document in the same medical chart as the ATCs.

Use of Screening Instruments

Participants were asked if they used screening instruments to assess student-athletes for mental health issues. Out of 127 participants, 42.5% (n = 54) used using screening instruments to assess for issues of mental health in the student-athlete. Table 5 demonstrates the percentage of use of particular instruments.

DISCUSSION

Location, Credentials, and Frequency of Mental Health Clinician

There is a lack of uniformity in the services available to the student-athletes. NCAA Mental Health Best Practices^{13(p8)} suggests that qualified mental health clinicians "should be easily accessible to student-athletes, which includes being accessible through establishment of a self-referral process." If this provider is available in or near the training room, this self-referral process may be made easier. The NCAA Best Practices notes that a provider should have "office space within or proximate to athletics department facilities" to increase the clinician's "visibility and accessibility."^{7(p8)}

Types of Mental Health Clinicians Delivering Care

There are several different clinician types delivering mental health in the athletic training room. There are currently no data or recommendations for which type of clinician is best suited for this role. Therefore, all sites that incorporate mental health care should confirm that the clinician has the competency to work with student-athletes. NCAA Mental Health Best Practices¹³ suggest that whatever the licensure of the clinician, he or she should pursue continuing education in a professional organization that is specific to athletics. Furthermore, professionals should "develop cultural competency relevant to providing care to both a college-age population and to athletes.

Table 4. Mental health issues encountered by athletic trainers (ATCs) (n = 127)

	Frequency	Percentage
Depression	125	98.4
Anxiety	124	97.6
Disordered eating	117	92.1
Family issues	115	90.6
Sports performance	113	89
Relationship difficulties	109	85.8
Suicidality	88	69.3
Bipolar disorder	75	48.4
Obsessive compulsive disorder	62	3.2
Self-harm (e.g., cutting)	3	2.4
Attention deficit, Asperger syndrome, schizophrenia, borderline personality disorder	2	0.8

In essence, cultural competency addresses both societal diversity and the culture of sports.^{13(p7)}

The availability of student-athlete access to a mental health clinician provided care to student-athletes varied. Though there are currently no recommendations for the amount of time a mental health clinician should be available, it is important that a student-athlete has regular access to a member of the health care team in case of emotional crisis. The most important aspect is that student-athletes have early and easy access to a provider, including after business hours.

Compensation of the mental health care provider is an area that has not been investigated. Currently, there are no recommendations for “best practices” regarding this funding. Separating these services from the mental health services provided to non-student-athletes, may improve the access and likelihood that an athlete seeks care.

ATCs' Perception of Student-Athlete Mental Health and Communication With Clinician

Athletic trainers are exposed to myriad mental health conditions while working with athletes. This fits with previous studies as mental illness in college athletes is similar to their nonathlete peers.^{16,18} This research suggests that head ATCs are aware of mental health issues in the student-athlete population, which is important because the ATCs are often the first line of triage for an athlete with mental illness. With the close interaction between the ATC and athlete, it is crucial that open lines of communication are maintained. The percentage of ATCs who reported encountering attention-deficit/hyperactivity disorder (ADHD) and substance abuse was surprisingly low.

The fact that just over half of the ATCs surveyed were satisfied with the communication between the mental health provider and themselves was surprising. Some of these methods of

Table 5. Use of screening instruments (n = 52)

	Frequency	Percentage
PHQ-2	18	14.2
PHQ-4	1	0.8
PHQ-9	18	14.2
GAD-7	13	10.2
AUDIT	6	4.7
CAGE	3	2.4
MDQ	5	4.0

AUDIT, Alcohol Use Disorders Identification Test; CAGE, CAGE questionnaire; GAD-7, Generalized Anxiety Disorder 7-item scale; MDQ, Mood Disorder Questionnaire; PHQ, Patient Health Questionnaire.

communication may not conform to Health Insurance Portability and Accountability Act (HIPAA) compliance, which is important to maintain. Very little consistency exists with documentation as some mental health clinicians documented in a different medical chart, while others documented in the same student-athlete medical chart.

Screening Instruments

The NCAA Best Practices states that institutions should consider using validated instruments during preparticipation physical exams to screen for mental health disorders and risk behaviors.¹³ For those who endorsed using mental health assessments, participants use a Patient Health Questionnaire (PHQ)^{10,11} to

assess depression, the Generalized Anxiety Disorder 7-item scale (GAD-7)¹⁷ to assess anxiety disorders, the Alcohol Use Disorders Identification Test (AUDIT)⁵ and CAGE⁷ to assess drug and alcohol misuse, and the Mood Disorder Questionnaire (MDQ)⁹ to assess for mood disorders. Using validated forms will increase the ability to capture at-risk student-athletes and allow for more appropriate care. As Trojian¹⁸ noted, using these validated tools is prudent to improve the sensitivity and the specificity of the screening process and should be considered in the evaluation of student athletes.

In addition to the aforementioned instruments to assess for depression, anxiety, and alcohol/drug use, the NCAA Best Practices Guidelines¹³ suggest using the SCOFF questionnaire,⁸ Cannabis Use Disorder Identification Test (CUDIT-R),¹ STOPBang Questionnaire,²¹ Insomnia Severity Index (ISI),³ and Adult ADHD Self-Report Scale Screener (ASRS version 1.1)² to assess for disordered eating, cannabis use, sleep apnea, insomnia, and ADHD, respectively. More education may be needed to inform providers responsible for caring for student-athletes.

There was a 36% (N = 127) response rate to the survey, which is a strength of our study. In addition, there are inherent limitations in self-reported, web-based surveys.²⁰ Participants were able to contact the researchers directly for questions; however, the data suggest that some participants did not complete the survey or could have reported incorrect roles and/or accessed the survey twice to complete and report different roles. In web-based research, it is difficult to control for the weaknesses of Internet research, such as sampling issues.²⁰ For example, participants may select incorrect responses during web-based surveys and not accurately report answers.

IMPLICATIONS

Clinical relevance should be placed on exploring how NCAA institutions can adopt integrated health care models to deliver comprehensive medical care to student-athletes.

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