MIND, BODY, AND SPORT: THE STATE OF MENTAL HEALTH IN COLLEGE ATHLETICS

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Program Director Lake Erie College of Osteopathic Sports Medicine

LECOM
LAKE ERIE COLLEGE OF OSTEOPATHIC MEDICINE

OMED® 17
OCTOBER 7-10 | PHILADELPHIA, PA
“Just remember, son, it doesn’t matter whether you win or lose—unless you want Daddy’s love.”
LECOM Sports Medicine

Official Team Physicians
Spectrum of Concern

- Mental Health
- Concussion
- PPE
- ACL Prevention
- Sudden Death
- Female Triad
- ACL RTP
- Shoulder Instability
- Medical Illness
- Nutrition/Supplements
- Regenerative Injections
- Snake Oil
- Overuse/Burnout
- Athletic Pubalgia
- Stress Fractures
- Facial Injuries
- Event Coverage
- Return to Play
- Ultrasound
- OMM
Objectives

- Discuss the current trends of mental health in college athletics.
- Identify those student athletes at risk for mental health dysfunction.
- Demonstrate a Mental Health Emergency Action and Management Plan (MHEAMP) for student athletes who have exhibited signs of deterioration.
- Assemble a campus mental health team.
- Review instruments for screening during PPE.
- Discuss Future Considerations
Suicide and Attempted Suicide in the United States During the 21st Century

Eric D. Caine, MD

Author Affiliations

JAMA Psychiatry. Published online September 13, 2017. doi:10.1001/jamapsychiatry.2017.2524
MISSING

Kostadinos Karageorge

22 years old
6'5"
285 lbs.
Brown eyes
Shaved/bald

Last seen at 741 W. Olson Avenue, Columbus, Wednesday, November 28th. Wearing black hoodie, black sweat pants.

PLEASE call (614) 326-2121 with ANY information.
U.S. suicide rate has risen sharply in the 21st century one of six adults takes psychiatric meds
A recent study examined nine years of NCAA data on athlete deaths and found that suicide accounted for 35 of the 477 deaths between 2003 and 2012 (7.3%).

Suicide was the 4th most common cause of death:
1. Accidents
2. Cardiovascular fatalities
3. Homicide
4. Suicide

29 of 35 suicides were male athletes (82.9%)
- DIV I: 17
- DIV II: 9
- DIV III: 9

Sport Specific
- Football: 13 cases
- Soccer: 5 cases
- Track: 5 cases
- Baseball: 4 cases
- Swimming: 3 cases

College Deaths

- Alcohol intoxication, 3 (0.6%)
- Drug overdose, 10 (2.1%)
- Head injury, 3 (0.6%)
- Heat stroke, 4 (0.8%)
- Medical - other, 14 (2.9%)
- Meningitis, 1 (0.2%)
- Sickle cell, 8 (2%)
- Unknown, 11 (2%)
- Suicide, 35 (7%)
- Homicide, 37 (7.8%)
- Cardiac, 81 (17.0%)
- Cancer, 34 (7.1%)
- Accident, 236 (49.5%)
# Suicides NCAA

<table>
<thead>
<tr>
<th>Sex</th>
<th>n</th>
<th>% of Total Suicides</th>
<th>NCAA Participants</th>
<th>Death Rate (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29</td>
<td>82.9</td>
<td>2,153,078</td>
<td>1.35</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>17.1</td>
<td>1,620,174</td>
<td>0.37</td>
</tr>
</tbody>
</table>

NCAA, National Collegiate Athletic Association.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>% of Total Suicides</th>
<th>NCAA Participants</th>
<th>Death Rate (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>24</td>
<td>68.5</td>
<td>2,752,594</td>
<td>0.87</td>
</tr>
<tr>
<td>African American</td>
<td>7</td>
<td>20.0</td>
<td>572,664</td>
<td>1.22</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>11.5</td>
<td>447,994</td>
<td>0.89</td>
</tr>
</tbody>
</table>

NCAA, National Collegiate Athletic Association.
<table>
<thead>
<tr>
<th>NCAA Division</th>
<th>n</th>
<th>% of Total Suicides</th>
<th>NCAA Participants</th>
<th>Death Rate (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>17</td>
<td>48.6</td>
<td>1,486,801</td>
<td>1.14</td>
</tr>
<tr>
<td>II</td>
<td>9</td>
<td>25.7</td>
<td>821,364</td>
<td>1.10</td>
</tr>
<tr>
<td>III</td>
<td>9</td>
<td>25.7</td>
<td>1,464,628</td>
<td>0.61</td>
</tr>
</tbody>
</table>

NCAA, National Collegiate Athletic Association.

<table>
<thead>
<tr>
<th>Sport</th>
<th>n</th>
<th>% of Total Suicides</th>
<th>NCAA Participants</th>
<th>Death Rate (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football</td>
<td>13</td>
<td>37.1</td>
<td>576,982</td>
<td>2.25</td>
</tr>
<tr>
<td>Soccer</td>
<td>5</td>
<td>14.3</td>
<td>395,494</td>
<td>1.26</td>
</tr>
<tr>
<td>Track/cross-country</td>
<td>5</td>
<td>14.3</td>
<td>418,069</td>
<td>1.20</td>
</tr>
<tr>
<td>Baseball</td>
<td>4</td>
<td>11.5</td>
<td>267,688</td>
<td>1.49</td>
</tr>
<tr>
<td>Swimming</td>
<td>3</td>
<td>8.6</td>
<td>178,849</td>
<td>1.68</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>14.3</td>
<td>1,936,227</td>
<td>0.26</td>
</tr>
</tbody>
</table>

NCAA, National Collegiate Athletic Association.
• The overall suicide rate was 0.93 per 100,000 STUDENT ATHLETES, lower than the incidence rate of 7.5 per 100,000 that the CDC reports for ALL COLLEGE STUDENTS.
### COLUMBIA-SUICIDE SEVERITY RATING SCALE (C-SSRS)

**RISK ASSESSMENT VERSION**

<table>
<thead>
<tr>
<th>Suicidal and Self-Injurious Behavior (Past 3 months)</th>
<th>Clinical Status (Recent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual suicide attempt</td>
<td>□ Lifetime</td>
</tr>
<tr>
<td>Interrupted attempt</td>
<td>□ Lifetime</td>
</tr>
<tr>
<td>Aborted or Self-Interrupted attempt</td>
<td>□ Lifetime</td>
</tr>
<tr>
<td>Other preparatory acts to kill self</td>
<td>□ Lifetime</td>
</tr>
<tr>
<td>Self-injurious behavior without suicidal intent</td>
<td>□ Lifetime</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suicidal Ideation (Most Severe in Past Month)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wish to be dead</td>
<td>□ Substance abuse or dependence</td>
</tr>
<tr>
<td>Suicidal thoughts</td>
<td>□ Agitation or severe anxiety</td>
</tr>
<tr>
<td>Suicidal thoughts with method (but without specific plan or intent to act)</td>
<td>□ Perceived burden on family or others</td>
</tr>
<tr>
<td>Suicidal intent (without specific plan)</td>
<td>□ Chronic physical pain or other acute medical problem (AIDS, COPD, cancer, etc.)</td>
</tr>
<tr>
<td>Suicidal intent with specific plan</td>
<td>□ Homicidal ideation</td>
</tr>
<tr>
<td>Activating Events (Recent)</td>
<td></td>
</tr>
<tr>
<td>Recent loss or other significant negative event</td>
<td>□ Aggressive behavior towards others</td>
</tr>
<tr>
<td>Describe:</td>
<td></td>
</tr>
<tr>
<td>□ Pending incarceration or homelessness</td>
<td>□ Method for suicide available (gun, pills, etc.)</td>
</tr>
<tr>
<td>□ Current or pending isolation or feeling alone</td>
<td>□ Refuses or feels unable to agree to safety plan</td>
</tr>
<tr>
<td>□ Identifies reasons for living</td>
<td></td>
</tr>
<tr>
<td>□ Identifies reasons for living</td>
<td></td>
</tr>
<tr>
<td>□ Responsible to family or others; living with family</td>
<td></td>
</tr>
<tr>
<td>□ Supportive social network or family</td>
<td></td>
</tr>
<tr>
<td>□ Fear of death or dying due to pain and suffering</td>
<td></td>
</tr>
<tr>
<td>□ Belief that suicide is immoral; high spirituality</td>
<td></td>
</tr>
<tr>
<td>□ Engaged in work or school</td>
<td></td>
</tr>
<tr>
<td>Other Risk Factors:</td>
<td></td>
</tr>
</tbody>
</table>

Describe any suicidal, self-injurious or aggressive behavior (include dates): |
Classification

Category 1 – Wish to be Dead
Category 2 – Non-specific Active Suicidal Thoughts
Category 3 – Active Suicidal Ideation with Any Methods (Not Plan) without Intent to Act
Category 4 – Active Suicidal Ideation with Some Intent to Act, without Specific Plan
Category 5 – Active Suicidal Ideation with Specific Plan and Intent
Category 6 – Preparatory Acts or Behavior
Category 7 – Aborted Attempt
Category 8 – Interrupted Attempt
Category 9 – Actual Attempt (non-fatal)
Category 10 – Completed Suicide

25/1  2/3 have consumed alcohol prior
The researchers screened 4786 visitors to their urgent care clinic. Participants who screened positive also filled out the Columbia-Suicide Severity Rating Scale (C-SSRS).

The 2 questions were: “In the past week including today, have you felt like life is NOT worth living? In the past week including today, have you wanted to kill yourself?”
August 1, 2017
Costs and Outcomes of Mental Health and Substance Use Disorders in the US 18%
Rabah Kamal

<table>
<thead>
<tr>
<th>Mental Illness Treatment</th>
<th>Accounted for $89 Billion (5%) of Total Medical Services Spending in the US in 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checkups/Prevention</td>
<td>$10 Billion in Spending</td>
</tr>
<tr>
<td>Circulatory</td>
<td></td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td></td>
</tr>
<tr>
<td>Respiratory</td>
<td></td>
</tr>
<tr>
<td>Endocrine</td>
<td></td>
</tr>
<tr>
<td>Nervous System</td>
<td></td>
</tr>
<tr>
<td>Cancers and Tumors</td>
<td></td>
</tr>
<tr>
<td>Injury and Poisoning</td>
<td></td>
</tr>
<tr>
<td>Genitourinary</td>
<td></td>
</tr>
<tr>
<td>Digestive</td>
<td></td>
</tr>
<tr>
<td>Mental Illness</td>
<td></td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td></td>
</tr>
<tr>
<td>Pregnancy/Childbirth</td>
<td></td>
</tr>
<tr>
<td>Complications</td>
<td></td>
</tr>
<tr>
<td>Dermatological</td>
<td></td>
</tr>
</tbody>
</table>
Who’s Turf?
Walgreens To Expand Mental Health Services
Spectrum of Mental Disorder

- Homicides
- Mass Shootings
- Terrorist Activity
- Bullying
- Racism
- CTE
- Financial reversals
- Frustrated Goals (Injury, Illness, Substance Use)
- Loss of Family, Faith, Friends
Mental Health or Public Health

- Economics/Financial
- Internet
- Bullying
- Child abuse
- Drug abuse
- Family Unit
- Television Advertising
- Social Media
- Spiritual
Issues

- State of Mind
- Confidence
- Depression
- Anxiety/Stress
- Injury Recovery
- Return to Learn/Perform
- Time Urgency
- Social Support
- Finances
- Privacy
- Sleep
- Romance and Reversals
- Academic Challenge
- Medications
- Substance Abuse
- Obligations
- Family History/Support
- Success/Failure
- Sexuality
- “Saving Face”
- Concussion
- Bullying
- ADHD/PTSD
- Resources for Counselling
- Discretion
- FERPA
- Personal Appearance
- Secondary Gain
College Athletics: State of Mind

- Mental Health Problems
  - Anxiety
  - Depression
  - Bipolar

- Eating Disorders
  - Anorexia,
  - Bulimia

- Risk Behaviors
  - Drugs,
  - Abuse
  - Invincibility

- Performance Pressure
  - Disappointment
  - Adversity
  - Competition
  - Fear
  - Injury
  - Self Esteem
  - Enhancement
  - Overtraining/Burnout
Approximately one third of student athletes noted struggling to find energy for other tasks because of the physical demands of their sport.

One-quarter reported being exhausted from the mental demands of their sport.

Up to 20% student athletes may suffer from depression.

About 40% of student athletes who sought help for a mental health issue reported high levels of satisfaction with the care they received from team or college personnel.

That means 60% of athletes felt unsatisfied with the care they received for their mental health problems.

<25 Division I Athletic Departments have full time licensed mental health professional.

*Taken from the NCAA 2015 GOALS Study of the Student Athlete Experience
Current trends of Mental Health in College Students

- 1 out of 2 have been in counseling
- 1 out of 3 have taken a psychiatric medication
- 1 out of 4 have self-injured
- 1 out of 3 have seriously considered suicide
- 1 in 10 have been hospitalized for psychiatric reasons
- Nearly 1 in 10 have made a suicide attempt
- 1 out of 5 have experienced sexual assault
- 1 out of 3 have experienced harassment or abuse
- 1 out of 3 have experienced a traumatic event

*Center for Collegiate Mental Health (CCMH), founded by and housed at Penn State’s Counseling and Psychological Services*
Personal Factors

- Injury
  - History
  - Severity
  - Type
  - Perceived cause
  - Recovery Status

- Individual Differences
  - Psychological
    - Personality
    - Self-perception
    - Self-motivation
    - Motivational orientation
    - Pain tolerance
    - Athletic Identity
    - Coping skills Psychological skills
    - History of stressors
    - Mood states
    - Prior Episodes

- Demographic
  - Gender
  - Age
  - Ethnicity
  - Socioeconomic status
  - Prior sport experience

- Physical
  - Use of ergogenic aids
  - Physical health status
  - Disordered eating
  - Sleep
  - Nutrition
Mental Health Problems

- Adjustment Disorders
- Anxiety Disorders
- Cognitive disorders
- Dissociative disorders
- Eating Disorders (Female Tetrad)
- Factitious Disorders
- Personality Disorders
- Psychosomatic Disorders
- ADHD
- Mood Disorders
- Schizophrenia
- Sexual and Gender Identity Disorders
- Sleep Disorders
- Somatoform Disorders
- Substance Use-Related Disorders
## Odds of Making It in the NFL

<table>
<thead>
<tr>
<th>Category</th>
<th>Odds</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.S. Football Players</td>
<td>1,086,627</td>
</tr>
<tr>
<td>H.S. Football Seniors</td>
<td>310,465</td>
</tr>
<tr>
<td>NCAA Football Players</td>
<td>70,147</td>
</tr>
<tr>
<td>NCAA FR Playing FB</td>
<td>20,042</td>
</tr>
<tr>
<td>% of HS players to NCAA</td>
<td>6.5%</td>
</tr>
<tr>
<td>NCAA SRs playing FB</td>
<td>15,588</td>
</tr>
<tr>
<td>Players scouted by NFL</td>
<td>6,500</td>
</tr>
<tr>
<td>Invited to Combine</td>
<td>350</td>
</tr>
<tr>
<td>Players drafted by NFL</td>
<td>256</td>
</tr>
<tr>
<td>Rookies making a Team</td>
<td>300</td>
</tr>
<tr>
<td>% of players NCAA to NFL</td>
<td>1.6%</td>
</tr>
<tr>
<td>NFL players reaching YR 4</td>
<td>150</td>
</tr>
<tr>
<td>2014 NFL Min Salary</td>
<td>$420,000</td>
</tr>
<tr>
<td>Income after Taxes (est.)</td>
<td>$252,000</td>
</tr>
</tbody>
</table>

If you're lucky enough to be one of the 6.5% to become a NCAA football player, and one of the 1.5% of that group to make it to the NFL, you’ll be lucky to get **THREE** years out of it. At a minimum salary, you won’t make enough to live on for the rest of your life.

**What's going to provide for you and your family after football is over?**

**Your College Education!**
Officially, the NCAA restricts student-athletes' in-season practice to 20 hours per week, or four hours per day. Many student-athletes, however, reported that they practice at least 30 hours a week on average, with some sport reporting weekly practice commitments of more than 40 hours, according to a 2011 NCAA survey cited in the UNC lawsuit.
## UNC Law Suit

### Average Hours Spent Per Week In-Season on Athletic Activities in 2010 (Student-Athlete Self-Report)

<table>
<thead>
<tr>
<th>Division I</th>
<th>Baseball</th>
<th>Men’s Basketball</th>
<th>Football (FBS/FCS)</th>
<th>All Other Men’s Sports</th>
<th>Women’s Basketball</th>
<th>All Other Women’s Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletic Hrs</td>
<td>42.1</td>
<td>39.2</td>
<td>43.3</td>
<td>41.6</td>
<td>32.0</td>
<td>37.6</td>
</tr>
</tbody>
</table>

### Total Sport Hours/Day In-Season (Weekday)

<table>
<thead>
<tr>
<th>Division I</th>
<th>Baseball</th>
<th>Men’s Basketball</th>
<th>Football</th>
<th>All Other Men’s Sports</th>
<th>Women’s Basketball</th>
<th>All Other Women’s Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Time in Hours</td>
<td>5.9</td>
<td>5.6</td>
<td>6.4</td>
<td>5.2</td>
<td>5.6</td>
<td>5.0</td>
</tr>
<tr>
<td>% Reporting Sport 6+ Hours/Day</td>
<td>48%</td>
<td>38%</td>
<td>52%</td>
<td>32%</td>
<td>32%</td>
<td>29%</td>
</tr>
</tbody>
</table>
Above the Neck

- **JOINT ABOVE**: State of Mind, Psych, Spirit, Soul
- **BRAIN**: Concussion, CNS, Cranial Nerves
- **JOINT BELOW**: Cervical Spine
Mental Health Overlap

- Vocal Cord Dysfunction
- Irritable Bowel Syndrome
- Anorexia Athletica
- Acid Peptic Disease
- Female Athletic Triad
- Post Concussion Syndrome
- ADHD
- Sleep Apnea/Disturbance
- Obesity
- Stress/PTSD
- Performance Anxiety
- Substance Use Disorder
Complex Concussion

- Cognitive/Fatigue
- Vestibular
- Oculomotor
- Affective
- Migraine
- Cervical Spine

Preferred Diagnosis
Substance Use Disorder

- Alcohol
- Marijuana
- Opiates
- Adderall
- Caffeine
- Tobacco
- Performance Enhancers
ALCOHOL AND DRUG USE
Number of full-time college students aged 18-22 who used alcohol or illicit drugs on an average day

Source: SAMHSA, National Surveys on Drug Use and Health 2011-14
Shakeeb Asrar, USA TODAY
PPE is an optimal time to ask about a history of mental health problems.
ATC should help the student athlete make initial appointments if there is a psychological concern.
Referral is confidential
Imminent threats require emergent mental health evaluation
More than 460,000 NCAA student-athletes compete in 24 sports every year.

1 in every 4 to 5 youths in America meets the criteria for a mental health disorder.

45.9 million American adults aged 18 years or older experience a mental illness.

Direct psychological care to the student athlete is OUTSIDE OF THE SCOPE OF PRACTICE for ATCs, however they play a vital role in recognizing and developing a plan to address psychological concerns in student athletes.
Currently no formalized mental health evaluation within the PPE

Several screening tools:
- PHQ-9
- PHQ-2
- GAD-7
- CAGE
- MDQ
- SCOFF
- LESC
- C-SSRS
- AUDIT C
- Beck Depression
- MADRS Sleep
- Hamilton Anxiety
The researchers screened 4786 visitors to their urgent care clinic.

95 Participants who screened positive also filled out the Columbia-Suicide Severity Rating Scale (C-SSRS).

The 2 questions were:

“In the past week including today, have you felt like life is NOT worth living?

In the past week including today, have you wanted to kill yourself?”
MENTAL HEALTH  MENTAL DISORDER
# Screening Tools

## The Patient Health Questionnaire-2 (PHQ-2)

<table>
<thead>
<tr>
<th>Patient Name _____________________________</th>
<th>Date of Visit ____________</th>
</tr>
</thead>
</table>

**Over the past 2 weeks, how often have you been bothered by any of the following problems?**

<table>
<thead>
<tr>
<th></th>
<th>Not At all</th>
<th>Several Days</th>
<th>More Than Half the Days</th>
<th>Nearly Every Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

A score of $\geq 3$ would warrant further follow up
### Beck II Depression Inventory

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I do things slowly.
2. My future seems hopeless.
3. It is hard for me to concentrate on reading.
4. The pleasure and joy has gone out of my life.
5. I have difficulty making decisions.
6. I have lost interest in aspects of life that used to be important to me.
7. I feel sad, blue, and unhappy.
8. I am agitated and keep moving around.
9. I feel fatigued.
10. It takes great effort for me to do simple things.
11. I feel that I am a guilty person who deserves to be punished.
12. I feel like a failure.
13. I feel lifeless -- more dead than alive.
14. My sleep has been disturbed -- too little, too much, or broken sleep.
15. I spend time thinking about HOW I might kill myself.
16. I feel trapped or caught.
17. I feel depressed even when good things happen to me.
18. Without trying to diet, I have lost, or gained, weight.

**SCORING:**

- 54 & up: Severe depression
- 36 – 53: Moderate / severe depression
- 22 – 35: Mild to moderate depression
- 18 – 21: Borderline depression
- 10 – 17: Possible mild depression
- 0 – 9: No depression likely
SCREENING TOPIC:
GENERAL INDEX

Measure: NATA suggestion for mental health-related survey.


Adapted from: Carroll JFX, McGinley JJ. A screening form for identifying mental health problems in alcohol/other drug dependent persons. Alcohol Treat Quarterly 2001;19:33-47. 10

1. I often have trouble sleeping.
2. I wish I had more energy most days of the week.
3. I think about things over and over.
4. I feel anxious and nervous much of the time.
5. I often feel sad or depressed.
6. I struggle with being confident.
7. I don’t feel hopeful about the future.
8. I have a hard time managing my emotions (frustration, anger, impatience).
9. I have feelings of hurting myself or others.

Scoring: Responses of “Yes” or “No.”

Interpretation: Any response of “Yes” should lead to follow-up discussion between the student-athlete and a member of the primary athletics health care provider team and/or point person for determination about whether the student-athlete should be referred to a licensed mental health professional for further evaluation.
Screening Tools

SCREENING TOPIC: DEPRESSION

Measure: Harvard Department of Psychiatry/National Depression Screening Day Scale


Over the past two weeks, how often have you:

1. Been feeling low in energy, slowed down?
2. Blamed yourself for things?
3. Had poor appetite?
4. Had difficulty falling asleep, staying asleep?
5. Been feeling hopeless about the future?
6. Been feeling blue?
7. Been feeling no interest in things?
8. Had feelings of worthlessness?
9. Thought about or wanted to commit suicide?
10. Had difficulty concentrating or making decisions?

Scoring: None or a little of the time=0 points; Some of the time=1 point; Most of the time=2 points; All of the time=3 points. Sum item scores.

Interpretation: Score of 0-8: symptoms are not consistent with a major depressive episode. A complete evaluation is not recommended, except in the case of a positive response to the suicide question (item 9). Score of 9-10: Symptoms are consistent with a major depressive episode. Presence of a major depressive disorder is likely. A complete evaluation is recommended. Severity level is typically mild or moderate, depending upon the degree of impairment. Score of 17-30: Symptoms are strongly consistent with criteria for a major depressive episode. Presence of major depressive disorder is very likely. A complete evaluation is strongly recommended. In this higher range, the severity level may be more severe and require immediate attention. Note: Further evaluation is recommended for any individual who scores one point or more on the suicide question (item 9), regardless of the total score.
Screening Tools

Screening Topic: Anxiety

Measure: Beck Anxiety Inventory


Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by that symptom during the past month, including today, by indicating the response option using: 0 for not at all; 1 for mildly but it didn’t bother me too much; 2 for moderately – it wasn’t pleasant at times; 3 for severely – it bothered me a lot.

1. Numbness or tingling
2. Feeling hot
3. Wobbliness in legs
4. Unable to relax
5. Fear of worst happening
6. Dizzy or lightheaded
7. Heart pounding/racing
8. Unsteady
9. Terrified or afraid
10. Nervous
11. Feeling of choking
12. Hands trembling
13. Shaky/unsteady
14. Fear of losing control
15. Difficulty in breathing
16. Fear of dying
17. Scared
18. Indigestion
19. Faint/lightheaded
20. Face flushed
21. Hot/cold sweats

Scoring: Sum item scores.

Interpretation: 0-21 indicates low anxiety, 21-35 indicates moderate anxiety, more than 36 indicates high anxiety. Individuals scoring in the moderate anxiety range or higher should have a follow-up discussion between the student-athlete and a member of the primary athletics health care provider team and/or point person for determination about whether the student-athlete should be referred to a licensed mental health professional for further evaluation.
Screening Tools

DISORDERED EATING

Measure: SCOFF questionnaire


1. Do you make yourself sick because you feel uncomfortably full?
2. Do you worry that you have lost control over how much you eat?
3. Have you recently lost more than 15 pounds in a three-month period?
4. Do you believe yourself to be fat when others say you are thin?
5. Would you say food dominates your life?

Scoring: Responses of "Yes" or "No."

Interpretation: Any response of "Yes" should lead to follow-up discussion between the student-athlete and a member of the primary athletics health care provider team and/or point person for determination about whether the student-athlete should be referred to a licensed mental health professional for further evaluation.
Recommended screening questions for the female athlete triad from BJSM 2016

Have you ever had a menstrual period?
Age at your first menstrual period?
Your most recent menstrual period?
Number of periods in the past 12 months?
Are you presently taking any hormones?
Do you worry about your weight?
Are you trying to gain or lose weight?
Are you on a special diet?
Have you ever had an eating disorder?
Have you ever had a stress fracture?
Ever been told you have low bone density?
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you make yourself sick because you feel uncomfortably full?</td>
<td>Yes?</td>
</tr>
<tr>
<td>Do you worry that you have lost control over how much you eat?</td>
<td>Yes?</td>
</tr>
<tr>
<td>Have you recently lost more than one stone (14 lb) in a 3-mo period?</td>
<td>Yes?</td>
</tr>
<tr>
<td>Do you believe yourself to be fat when others say you are too thin?</td>
<td>Yes?</td>
</tr>
<tr>
<td>Would you say that food dominates your life?</td>
<td>Yes?</td>
</tr>
</tbody>
</table>

Each "yes" equals 1 point; a score of 2 indicates a likely diagnosis of anorexia nervosa or bulimia. Abbreviation: SCOFF, sick, control, one, fat, food. Morgan JF, et al.12
SCREENING TOPIC:
ADHD

Measure: Adult ADHD Self-Report Scale (ASRS-v1.1) Screener


NOTE: As with all mental health concerns, it is important to facilitate a specialty referral to establish an ADHD diagnosis; by doing so, the clinician with expertise in assessment of these issues can effectively rule out other explanations for attention difficulties, including, but not limited to, disordered sleep, overtraining, anxiety, depression, stress and poor time management. It is important to note that although ADHD can develop in emerging adults, it is primarily a developmental disorder with childhood onset.

Select the response option that best describes how you have felt and conducted yourself over the past six months.

1. How often do you have trouble wrapping up the final details of a project, once the challenging parts have been done?
2. How often do you have difficulty getting things in order when you have to do a task that requires organization?
3. How often do you have problems remembering appointments or obligations?
4. When you have a task that requires a lot of thought, how often do you avoid or delay getting started?
5. How often do you fidget or squirm with your hands or feet when you have to sit down for a long time?
6. How often do you feel overly active and compelled to do things, like you were driven by a motor?

Scoring: Response options are never, rarely, sometimes, often and very often. For each of questions 1, 2 and 3, assign one point to a response of sometimes, often or very often. For each of questions 4, 5 and 6, assign one point to a response of often or very often. Sum all scores.

Interpretation: A score of four or more indicates that symptoms may be consistent with Adult ADHD, and a follow-up consultation with a health care provider can determine whether a further evaluation is appropriate.
SCREENING TOPIC:
ALCOHOL USE

Measure: Alcohol Use Disorders Identification Test (AUDIT-C)


1. How often do you have a drink containing alcohol? [score 0 for never, 1 for monthly or less, 2 for two-four times a month, 3 for two-three times a week, 4 for four or more times a week]

2. How many drinks containing alcohol do you have on a typical day when you are drinking? [score 0 for one or two drinks, 1 for three or four drinks, 2 for five or six drinks, 3 for seven to nine drinks, and 4 for 10 or more drinks]

3. How often do you have six or more drinks on one occasion? [score 0 for never, 1 for less than monthly, 2 for monthly, 3 for weekly, 4 for daily or almost daily]

Scoring: Each question is scored on a 0-4 scale. Points are summed to give total score.

Interpretation: Maximum score is 12. A score of ≥4 identifies 86 percent of men who report drinking above recommended levels that meet the criteria for alcohol use disorders. A score of ≥2 identifies 84 percent of women who report hazardous drinking or alcohol use disorders. Individuals meeting or exceeding these thresholds should be referred for further evaluation from a mental health professional.
Identify those student athletes at risk for mental health dysfunction

STATE OF MIND

LIFE EVENTS SURVEY FOR COLLEGIATE ATHLETES (LESCA)

1-56 Questions
Anti-depressants

- 13% age 12 and over, took meds in last month,
- 17% Female
- $\frac{1}{4}$ have been using for ten years
- Third leading class of medication 14.5 Billion$ 300%$ Increase
- 4-8 weeks to become therapeutic
- 30% ineffective

National Health and Nutrition Survey 2017
Melancholia

- Bloodletting
- Burn at Stake
- ECT
- Iproniazid
- Imipramine (TCA)
- Prozac

- Diet, Exercise, Music, Laughter
- Cognitive Behavioral Therapy
- Behavioral Activation Therapy
- Mindfulness Training
- Lifestyle Changes
Behaviors to Monitor That May Reflect Psychological Concerns

- Changes in eating and sleeping habits
- Unexplained weight loss or gain
- Drug or alcohol abuse
- Gambling issues
- Withdrawing
- Decreased interest in activities
- Talking about death or dying
- Loss of emotion
- Problems concentrating or focusing
- Frequent complaints

- Unexplained wounds or deliberate self harm.
- Irritable / angry
- Irresponsibility / lying
- Legal problems
- Negative self talk
- Mood swings
- Excessive worry
- Shaking / trembling
- GI complaints
- Headaches
- Overuse injuries
Mental Health Red Flags

- Prolonged recovery
- Purposeful underreporting/over-reporting
- Missed Appointments
- Poor Performance classroom
- Poor Performance on field
- Anger Mismanagement
- Irritability
- Sleep Disturbance
- Multiple Injuries
Early intervention is effective

- Once student-athlete agrees to evaluation, referral should be done as soon as possible
- AT should help student-athlete make initial appointment
- AT can offer to accompany student-athlete to their appointment
- Example of why having a preexisting relationship with campus/community health care professionals is important
Mental Health Checklist

- Prevention
- Preparation
- Managing Non Emergent Mental Health Issue
- Managing Emergent Mental Health Issue
- After care and follow up Mental Health Issue
Mental Health Emergencies

- Suicidal or Homicidal Ideations
- Sexual Assault
- Assault
- Acute Psychosis or Paranoia
- Highly Agitated or Threatening Behavior
- Acute Delirium/Confusion
- Acute Intoxication or Drug Overdose
Emergent Mental Health Referral

- If student-athlete demonstrates imminent threat to self, others, or property, emergent mental health referral is recommended
- Obtain the institutional protocol for emergent mental health evaluations
- If student-athlete appears or acts violently, call campus security immediately for assistance
- If suicidal but non violent, do not leave alone. Call for assistance per protocol
- Seek assistance from athletic administration, student affairs or general counsel about contacting parents
Case #1

19 YO HOCKEY ATHLETE

- Female Hockey Transfer
- Goalie, New Coach
- New State, New Dorm
- New Teammates
- New Academic Challenge
- Great Performance Expectations
- Family Separation
- 30h/week Training

19 YO FEMALE STUDENT

- Choking/Dysphagia
- SOB/Chest Tightness with Exertion
- Inhaler daily
- H2 Blocker
- Sad, Down, Blue
- Poor Sleep
- Poor Diet
- Poor Social
- History
- Physical
- EKG
- PHQ9
- LESC
- VCD Survey
- Counselling
- Support Staff
- Reassurance, Understanding & Encouragement
- Follow Up
“Wellness 5”

- Exercise
- Sleep
- Nutrition
- Mental Health
- Substance Abuse
Social Support and Injury

- Listening support
- Emotional support
- Emotional challenge
- Task appreciation
- Task challenge
- Reality confirmation
- Material assistance
- Personal assistance

*Richman et al.*
• Characteristics of the Injury
  – Type
  – Course
  – Severity
  – Location
  – History

• Sociodemographic Factors
  – Age
  – Gender
  – Race/Ethnicity
  – Socioeconomic status

• Social Contextual Factors
  – Social Network
  – Life Stress
  – Situational characteristics
  – Rehabilitation environment

• Biological Factors
  – Endocrine
  – Metabolism
  – Neurochemistry
  – Tissue Repair
  – Nutrition
  – Sleep
  – Circulation
  – Respiration
  – Immune Functioning

• Intermediate Biopsychological Outcomes
  – Range of motion
  – Strength
  – Joint Laxity
  – Pain
  – Endurance
  – Rate of Recovery

• Sport Injury Rehabilitation Outcomes
  – Functional performance
  – Quality of Life
  – Treatment satisfaction
  – Readiness to return to sport
Seven key components

- Injury
- Socio-demographic factors
- Biological factors
- Psychological factors
- Social / contextual factors
- Intermediate biopsychological factors
- Sport injury rehabilitation outcomes

*Brewer, Andersen, Van Raalte*
TRUE GRIT

- Sacrifice through short term setbacks for long term goals
Assemble a campus mental health team

- Team Physician
- ATC
- Campus Counseling Service
- Campus Security
- Local police
- Community based mental health care professionals
- Sports Psychologist
- Psychiatrist
- Administrators and Coaches
Clinical Sports Psychiatry
An International Perspective

Edited by David A. Baron,
Situational factors correlate with rehab adherence

- Perceived exertion during rehab
- Perceived injury severity
- Perceived susceptibility to further complications
- Plans for next level play
- Rehab practitioner expectations
- Social support for rehab
- *** Athletes who are given specific goals have greater understanding and better adherence than those athletes not given specific goals.
Stress Reduction

- Exercise
- Social Connection
- Nutrition
- Meditation
- Sunlight
- Imagery
- Breathing
- Laughter
- Sleep
- Yoga
- Sense of Warmth
- Positive Messaging
- Vacation/Rest/Breaks
mental health
AWARENESS TASK FORCE
a campaign to promote psychological wellbeing among healthcare professionals
- 27% medical students depressed
- 11% suicidal ideation
- 15% seek treatment
- 309/10187 Moderate risk for suicide
- 147 High risk for suicide
References

- Baron D. Clinical Sports Psychiatry
- NCAA, The. "Mental Health." NCAA.org. NCAA.
- Rao, MD Ashwin Suicide in NCAA Athletes: Nine Year Survey Sports Health 2015
“I can think of no better way of redeeming this tragic world today than love and laughter. Too many of the young have forgotten how to laugh, and too many of the elders have forgotten how to love. Would not our lives be lightened if only we could all learn to laugh more easily at ourselves and to love one another.”  

Theodore M. Hesburgh, C.S.C.
● LOSE SOME WEIGHT
● STAND UP STRAIGHT
● SPEED UP GAIT
● DON’T FILL PLATE
● WATER GLASSES EIGHT
● SLEEP FOR EIGHT
● TALK TO MATE
● IMPROVE MENTAL STATE
Behaviors To Monitor

The AT and team physician are in positions to observe and interact with student-athletes on a daily basis. They should consider the patient’s possible psychological response to an injury, particularly one that is season or career ending.

- Athletic department personnel have the trust of the student-athlete
- Some student-athletes are unaware of how stressors affect them
- They will act out “nonverbally” as a way of alerting others that something is bothering them
- The student-athlete produces a level of dysfunction that moves them away from their baseline of well being
- Subclinical changes in mood and mental state can affect student-athletes and require attention by sports medicine staff
Have a team in place:

- Team Physician(s)
- Athletic Trainer(s)
- Campus Counseling
- Community based mental health professionals

Approaching student-athlete can be uncomfortable

- Have the facts correct
- Focus on student-athlete as a person
- Listen and encourage conversation
- Understand stigma attached to mental health care
Confidentiality

- Question of informing student-athletes coach or parents often arises
- Student-athlete should be informed that referral is confidential it may be helpful to notify coach and parents
- AT can facilitate that notification is no different than if there were a physical injury
- They should be informed that if insurance will be used, parents will receive notification through an explanation of benefits
University administrators face the challenge of the risks associated with mental health in their student-athlete population

- Develop a policy and related procedures for identifying and referring student-athletes to appropriate university administrators and counselors
- Evaluate institution’s insurance policies that may be triggered in a mental health incident
- Protect confidentiality
**Student-Athlete Concerns**

- They may feel that status on team, including playing time may be affected if coaches are aware of mental health issues.
- They will view therapists in positive way if they feel therapist understand the world of athletics and the life of a student-athlete.
- Important that campus counseling have a relationship with athletic department.
- Helpful to identify an individual within athletics as contact point with counseling center.
- An AT should be that point person.
I  I walk down the street. There is a deep hole in the sidewalk I fall in. I am lost... I am hopeless. It isn't my fault. It takes forever to find a way out.

II  I walk down the same street. There is a deep hole in the sidewalk. I pretend I don't see it. I fall in again. I can't believe I'm in the same place. But it isn't my fault. It still takes a long time to get out.

III  I walk down the same street. There is a deep hole in the sidewalk. I see it is there. I still fall in...it's a habit My eyes are open; I know where I am; It is my fault. I get out immediately.

IV  I walk down the same street. There is a deep hole in the sidewalk. I walk around it.

V   I walk down another street.
WE SHOULD NOT PREY UPON THE VULNERABILITY OF THE SICK, FEARFUL AND INFIRMED


Neal TL, Diamond AB, Goldman S et al. Inter-association recommendations for developing a plan to recognize and

5. Shirreffs SM, Maughan RJ. The effect of alcohol on athletic perform
- Title IX Amendment
- Clery Act (Campus Crime Reports)
- FERPA (Family Educational Rights and Privacy Act)
- VAWA (Violence Against Women Act)
- 2013 New York Safe Act (34,000 likely to harm others)