Identifying and Addressing Mental Health Concerns in Student Athletes

2017 ACHA Conference
June 1st, 2017

DAVID S. EDWARDS, M.D.
TEXAS TECH UNIVERSITY
DEPARTMENT OF FAMILY & COMMUNITY MEDICINE,
SPORTS MEDICINE DIVISION
Objectives

- Recognize signs and symptoms of potential psychological distress and common mental disorders in athletes.
- Obtain a psychosocial history from an at-risk athlete / client.
- Implement “best practices” in preparing for mental health emergencies using a multi-disciplinary approach.
“Maybe this will send the red-alert button to take all of this stuff very seriously.”

-Dr. Brian Hainline
Chief Medical Officer, NCAA
What is Mental Health?

“The successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity.”

Dr. David Satcher, U.S. Surgeon General 2001
When Expectations Differ From Reality
Prevalence of Depression

- Underreporting is typical
- Dep’t of HHS, 2008: 6.7% of adults have depression within a year
  - 8.7% of 18-25 yo adults
- Studies in athletes: 15.6%-21%
  - Wolanin A., et al. 2016: n=465, data collected over 3 years
    - 23.7% of NCAA div I athletes at a single university (28% of females, 17.5% of males)
    - 6.3% were moderately/severely depressed
    - 35.4% of track and field athletes, 34% of cheerleaders, only 13.5% of lacrosse athletes
- Voluntary vs involuntary retirement
  - WOLANIN A, ET AL., 2016
Prevalence of Mental Disorders in Adolescents

- Approximately 1 in 3 adolescents have anxiety disorder.
- 19.1% of adolescents have a behavioral disorder
- 11.4% of adolescents have substance-use disorders
- 22.2% described a mental distress severe enough to interfere with daily life
Education-Impacting Disabilities

- Major depressive disorder
- Generalized anxiety disorder
- Social anxiety/social phobia
- Adjustment disorder
  - “stress response syndrome”
- Obsessive/compulsive disorder
- Oppositional defiant disorder
- Addictions
- Post-traumatic stress disorder
- Panic disorder
- Bipolar disorder

Often coexist with learning disabilities, ADHD, chronic medical illness, and autism spectrum disorder

RIDPATH, BROWN, HAINLINE, KROSHUS, & WILFERT, 2014.
Consider a Basic Lab Workup

Metabolic:
- Iron deficiency
- Wilson’s Disease

Infectious:
- Mononucleosis
- HIV risk factors?

Hormonal:
- Cushing’s Disease
- Thyroid dysfunction
- Vitamin D deficiency

Other testing depending on signs/symptoms
Environmental Factors

**BULLYING**

- “Any unwanted aggressive behavior by another youth or group of youths who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated.

- Bullying may inflict harm or distress on the targeted youth including physical, psychological, social, or educational harm.”

  - CDC

**HAZING**

- “Any humiliating or dangerous activity expected of a student who belongs to a group, regardless of his or her willingness to participate.”

  - CDC
Treating Injured Athletes

- Listen, build trust
- Cultural context
- Educate about the diagnosis
- Identify misinformation about the diagnosis
- Prepare the athlete for the “road ahead”
- Encourage stress-coping skills
  - Cognitive-based techniques
  - Somatic-based techniques
  - Cognitive-behavioral techniques

HERRING S ET AL., 2006. IMAGE: WWW.OKUMA.COM
Treating injured athletes

- Injury can trigger/unmask mental health issues
- Higher prevalence of performance anxiety, eating disorders, and binge drinking
- Barriers to seeking help for mental health issues
  - #1 obstacle is **STIGMA**
  - Lack of mental health literacy
  - Negative past experiences of help-seeking
- Chronic stress can increase the risk of injury
- Depression & anxiety are concussion modifiers

*PUTUKIAN M, 2016. GULLIVER A ET AL, 2012*
Psychological concerns in student-athletes: Roles of the college health team

Goals: Recognize (requires active listening) and refer as needed

Do: Provide care with empathy

Don’ts:
- Act shocked or surprised
- Argue/debate moral issues
- Assume the problem will resolve with time
- Attempt to “fix” the problem
- Assure secrecy
Psychological concerns in student-athletes: Roles of the college health team

Identify emergencies

- “Am I concerned the student-athlete may harm himself/herself?”
- “Am I concerned the student-athlete may harm others?”
- “Did the student-athlete make verbal or physical threats?”
- “Do I feel threatened or uncomfortable?”
- “Are there unusual statements that may be due to substance use?”
- “Does the student-athlete have access to a weapon?”

GOLDMAN, BROWN, HAINLINE, KROSHUS, & WILFERT, 2014
Psychological concerns in student-athletes: Roles of the college health team

Manage immediate safety risks

◦ Look out for your safety and that of others
◦ Show concern - talk in a quiet/secure place
◦ Emphasize the importance of safety
◦ Get help
◦ Do not leave the student-athlete alone, but do not place yourself at risk if he/she is trying to leave.
◦ If activating 911 or campus security:
  ◦ Provide description of the individual
  ◦ His/her name and contact information
  ◦ Describe the situation
  ◦ Location of athlete or direction in which he/she left

GOLDMAN, BROWN, HAINLINE, KROSHUS, & WILFERT, 2014
“It’s important for athletic trainers and team physicians, as well as student-athletes, coaches, and administrators, to understand that emotional reactions to injury are normal.”

- Margot Putukian, MD

**COMMON RESPONSES**
- Frustration
- Isolation
- Sadness
- Fear
- Anger
- Altered sleep & eating habits

**PROBLEMATIC RESPONSES**
- Persistent sleep/eating alterations
- Apathy
- Depression
- Alienation
- Rage
- Self-medication with alcohol / drugs

PUTUKIAN, BROWN, HAINLINE, KROSHUS, & WILFERT, 2014
Case

A 17 yo freshman presents to the Student Wellness Center for pre-participation physical exam to “walk-on” to the football team. He is recovering from an unspecified back injury and has received “clearance” to RTP from a local neurosurgeon. He is accompanied by his mother. You hear concerns that he is less interactive at home and that grades have been poor since time of the injury 3 months ago.

◦ Additional history?
◦ With mother present or without?
◦ Where do I begin in evaluating this athlete?
The Pre-participation Evaluation - History

- **General questions**
  - “Has a doctor ever denied or restricted your participation in sports for any reason?”
  - “Do you feel stressed out?”

- **Medical questions**
  - “Have you ever had a head injury or concussion?”
  - “Have you ever had a hit or blow to the head that caused confusion, prolonged headache, or memory problems?”
  - “Do you worry about your weight?”
  - “Are you trying to or has anyone recommended that you gain or lose weight?”
  - “Are you on a special diet or do you avoid certain types of foods?”
  - “Have you ever had an eating disorder?”
  - “Do you have any concerns that you would like to discuss with a doctor?”

BERNARDT DT AND ROBERTS WO, 2010
The PPE – History: “Additional Questions to Consider on More Sensitive Issues”

“Do you feel stressed out or under a lot of pressure?”
“Do you ever feel sad, hopeless, depressed, or anxious?”
“Do you feel safe at your home or residence?”
“Have you ever tried cigarettes, chewing tobacco, snuff, or dip?”
“During the past 30 days, did you use chewing tobacco, snuff, or dip?”
“Do you drink alcohol or use other drugs?”
“Have you ever taken anabolic steroids or used any other performance-enhancing supplements?”
The same 17 yo freshman presents to you for evaluation of elbow pain shortly after successfully joining the football team. He was restrained by coaching staff yesterday for choking a teammate during 2-a-day football workouts. The young man states that he was trying to get into the locker room but the teammate was blocking the entrance and gave him a “dirty look” when asked to move. Your best response(s) is/are:

A. “Boys will be boys, but this sounds like mental illness to me.”
B. “Sounds like you are in beast mode.”
C. “Sounds like your teammate was very rude. Can we try to see this situation from a different point of view?”
D. “I understand you anger in this situation. What are some other ways you could have solved the problem without violence.”
E. “Can I ask you a couple of questions to help me understand this situation better?”

😊 C, D, and E
G. All of the above
You are working with a 19 yo young lady for treatment of knee pain due to patellofemoral syndrome. She is a performing arts major with plans on a career in dance. She has missed several appointments with the physical therapist. She presents today for evaluation and seems withdrawn. What is the best question to ask her initially?

A. Why are you here today?

Hello. I’m glad you’re here. Tell me how things are going with your knee lately.

C. What’s wrong with you lately?

D. Are you feeling stressed out or under a lot of pressure?
The Psychosocial History - HEEADSSSS

- Goal: Identify “gators” that may be causing/complicating psychological concerns
- Useful in interviewing adolescents / young adults
- Ensure patient confidentiality.
- Interview the athlete/client alone if possible.
- Ask open-ended questions.
The Psychosocial History - HEEADSSS

Home
- “Where do you live, and who lives there with you?”

Education / Employment
- “Tell me about school.”
- “What are you good at in school? What are you not so good at?”
- “Do you work in addition to going to school? About how many hours/week?”

Eating
- “Tell me what you think about your weight and shape.”
- “Tell me what you like and don’t like about your body.”

Activities
- “Tell me about your friends.”
- “What do you and your friends like to do for fun?”
- Beware: “bored all the time.”

BERMAN, 1972 AND REVISION BY COHEN, 1988
The Psychosocial History - HEEADSSS

**Drugs**
- “What kinds of drugs have you seen around your school or at parties?”
- “Do any of your friends use drugs or alcohol?”
- “Do you feel pressure to use drugs or alcohol?”

**Sexual activity**
- “Youth is often a time of sexual exploration. Tell me about any romantic relations that you have been involved in.”
- “Tell me about your sexual life.”
- “Have you been involved in activity that was painful or unwanted?”

**Suicidality and depression**
- Ask about appetite and sleeping.
- Ask about a family history of depression, suicide, or mental health disorders
- “Do you have thoughts of hurting yourself?” “Do you have a plan?”

BERMAN, 1972 AND REVISION BY COHEN, 1988
The Psychosocial History - HEEADSSS

Safety

- “Accidents are the leading cause of death and injury in people your age. What are you doing actively to prevent this?”
- “How has violence affected your life?”
- “Have you felt unsafe?”
  - Home, neighborhood, school?
  - On a date or in a relationship?
  - On your team?

“Do you have any other concerns?”

BERMAN, 1972 AND REVISION BY COHEN, 1988
Your college’s 20 y.o. back-up pitcher has recently been complaining of headaches. There is no known injury recalled by the athlete or observed by coaches or teammates. However, you hear several complaints that he is moody and late to practices. Other than some redness of the eyes and poor eye contact, his physical exam (including balance) is normal. He smells faintly of alcohol. What is the next best step in evaluation / management?

A. Obtain additional history with a teammate present
B. Obtain additional history with a coach present
C. Obtain additional history privately
D. Refer to Alcoholics Anonymous
E. Initiate physical and cognitive rest for treatment of concussion
Interviewing the Athlete/Client with Suspected Substance Abuse – CRAFFT questions

• “Have you ever ridden in a Car with someone who was high or using drugs or alcohol?”

• “Do you ever use drugs or alcohol to Relax, feel better about yourself, or fit in?”

• “Do you ever use drugs or drink when you are Alone?”

• “Do you Forget things you did while using drugs or alcohol?”

• “Do your family or Friends ever tell you that you should cut down on your drinking or drug use?”

• “Have you gotten into Trouble while using drugs or alcohol?”

• 2 or more questions answered Yes = high risk!

KNIGHT, SHERRITT, SCHRIER, ET AL., 2002
Time-out!
Stressors Common in Student Athletes

RISK FACTORS

- Illness/Injury
- Pressure
- Balancing obligations
- Decline in/poor athletic performance (outcome inconsistent with expectation)
- Retirement
  - Forced
  - Strong athletic identity

PROTECTIVE FACTORS

- Social network
- Team support

RAO A & HONG E, 2016
“Mental health in intercollegiate athletics is a large and complicated puzzle. While athletic trainers (ATs) are only one piece of that puzzle, we’re a pretty vital one.

We are hired as athletics departments’ primary medical professionals, but along the way we find ourselves as confidants, motivators, encouragers and even friends to the hundreds of student-athletes we serve.”

Rachel Sharpe, ATC
“Athenic trainers have a responsibility to fulfill our role and affix our piece in the mental health puzzle. There is still much that needs to be decided and discovered, but someone has to initiate the conversation. Why not us?”

Rachel Sharpe, ATC
A 21 yo female soccer player is undergoing rehabilitation for injury to the AIIS and will miss the rest of her senior season. School performance has declined over the past month, and she reports being bored “all the time.” She is indecisive when asked what her immediate and long-term goals are and routinely forgets to keep scheduled appointments with her athletic trainer for treatment of her injury. When asked about her appetite and sleep, she dryly says, “better than ever.”

Which of the following mental disorders is most likely to accompany her current behavior?

A. Bipolar disorder
B. Anxiety disorder
C. Post-traumatic stress disorder
D. Attention Deficit Hyperactivity Disorder
A 21 yo female basketball player with recent ACL tear is undergoing a post-operative rehabilitation protocol under your supervision. Which of the following is/are the most accurate generalization(s) regarding her mental health?

A. Athletic injury is rarely accompanied by psychological symptoms.
B. Mood changes are likely to impact her rehabilitation.
C. Emotional disturbance is less likely compared to her concussed teammate.
D. Helpful adjuncts to the protocol include: positive self-talk, relaxation, goal-setting, and healing imagery
E. B&D
F. All of the above
Helpful Tools: PHQ-9 and GAD-7

- Please see the attached questionnaires.
- Validated questionnaires for depression (PHQ-9) and anxiety (GAD-7)
- Evaluates symptoms over the past 2 weeks
- Condensed into the very brief PHQ-4

KROENKE, SPITZER, WILLIAMS, & LOWE, 2009
### PHQ-4

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

*(Use ✔ to indicate your answer)*

<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. Feeling nervous, anxious or on edge</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Not being able to stop or control worrying</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

*(For office coding: Total Score T___ = ____ + ____ + ____)*
A 17 yo freshman baseball player with aspirations to play professionally presents with ankle pain x 3 weeks. He works with a private pitching coach and a hitting coach. Academic performance is declining. He denies TTP to the foot and ankle and yawns several times during your evaluation. On exam, he is afebrile. BP is 142/92. HR is 100. Eye contact is poor. Exam is otherwise normal. When asked about baseball, he responds, “Practice makes perfect right?”

The next best step in his evaluation is:

A. Begin an ankle rehabilitation protocol
B. Obtain additional history
C. Advise of the need for labs: CBC, CMP, CK, TSH, CMV and EBV titers
D. Reassurance, his presentation is typical
An 18 yo javelin thrower presents for his 4th session of counselling with you. He is undergoing shoulder rehabilitation. He has a history of severe acne to the shoulders and upper back. He also has depression diagnosed at age 14 and takes fluoxetine under the guidance of his primary care physician. He has recently seen the doctor for a medication refill (no change made in dose). His goal was to make the U.S. Olympic team, but his performance during conference tournaments has been poor. During previous sessions with you, he has made limited eye contact and had a flat affect with monotonous voice. You smelled marijuana on him at the last therapy session.

Today, however, he appears engaged in the therapy session and smiles when you ask him how he’s doing today. At the end of the session, he offers you his “lucky cap” as a token of all you have done to help him. What is the next best step in evaluation of this client?

A. Accept the cap since it would be rude not to.
B. Decline the cap since it smells of marijuana and screen for substance abuse.
C. “Are you/have you been thinking about killing yourself?”
D. “You’re not thinking about suicide, are you?”
E. Schedule follow-up once shoulder rehabilitation is complete.
Risk Factors for Suicide

- Anabolic steroid abuse
- Concussions? (Conflicting evidence)
- Alcohol abuse, drug abuse
- Psychiatric problems
- Bullying, sexual abuse
- Retirement from sport (conflicting evidence)
Red Flags for Impending Suicide

• Severe depression and social withdrawal
  • Beware a sudden improvement in mood

• Decline in academic/work performance

• Giving away personal possessions

• Placing affairs in order

• Verbal / written suicide threats, “going away”

• Previous suicide attempts

• Obtaining the “tools”

• Plan
Assisting the Suicidal Client – Take Action!

- Assume that the behavior / threat is serious.
- Do not leave the client alone (unless you are in danger.)
- Remove things that could be used in an attempt.

Immediate referral:
- Counselling center on campus
- Nearest hospital’s emergency room

Have names and numbers of referral sources available.
- National Suicide Prevention Lifeline: 800-273-TALK (8255)
- Crisis Text Line: text “help” to 741-741
Survivors of Suicide – Additional Resources

You!
- Listen patiently

Support groups in the community
- [www.suicidology.org](http://www.suicidology.org)

Survivors of Suicide
- [www.survivorsofsuicide.com](http://www.survivorsofsuicide.com)

Suicide Awareness; Voices of Education (SAVE)
- [www.save.org](http://www.save.org)

American Foundation of Suicide Prevention (AFSP)
- [www.afsp.org](http://www.afsp.org)
You are treating recurrent bilateral shin splints in a 17 yo freshman girl on the cross country team. She requests a copy of her recent weights from the electronic medical record. In between the history and physical exam, she tells you of her plans to pursue graduate studies at Harvard, Yale, or Stanford, and that Oxford is her “back up” since she has a 4.0 GPA, is an accomplished pianist, is running for student senate, and is planning to be captain of her cross country team next season. Her BMI is 16.5 kg/m². Occasionally, you see her eating grapes after practice. When asked about her nutrition, she says “Everything is fine. I like eating Big Macs with my dad, but he isn’t around much anymore. Now, I’m vegan.” Which is the next best step in management?

A. Additional history from the athlete
B. Call her father to obtain a detailed dietary history of the athlete.
C. Loan her your copy of “Paleo-Dieting for Dummies.”
D. Treat the shin splints, and ignore the drama. You are busy!
A 21 yo collegiate long-distance runner presents for evaluation of fatigue and amenorrhea x 2 months. She is afebrile, BP is 118/72, HR is 85, and examination is significant for supra-pubic fullness.

- Labwork?
- Diagnosis?
- Is continuation of running safe and if so, what are the benefits?
Unplanned Pregnancy is a time of emotional stress

Can be seen as a sign of irresponsibility by coach/teammates

- Pregnancy can occur even if using OCPs correctly
- Non-consensual activity?
  - “trauma-informed” approach with emphasis on safety

Re-evaluation of goals (for both parents)

- Personal, athletic, academic

Risk factor for depression

Mourning

- Miscarriage, elective abortion
Pregnancy & Parenting Policies: NCAA statement

- Privacy, work with her healthcare provider
- Remind that pregnancy is normal and healthy
- Ask non-judgmental questions
- Supportive coaches are key
- Strong drive and goal-oriented
- Many athletes report improved stamina and strength post child-birth
- Academic progress continues throughout pregnancy
Pregnancy & Parenting Policies: NCAA statement

- Work with your ATC / Team Physician

- Reassurance: “I will maintain your confidentiality as long as it is medically safe to do so.”
  - Remind: “Your scholarship and team membership are not at risk.”

- Open ended: “I’m glad you are telling me about this, and I understand you may have many questions. I want to provide you with information, time, and support. Let’s figure out how we can do that.”

- Non-judgmental: “Please tell me whatever you’d like.” “How are you feeling?”

- Support structures: “Is Coach aware? How do you feel about talking with him/her?” “Would you like for me to accompany you when you want to discuss this with Coach?”
  - “Is your family aware?”
  - “Is your partner aware?”
Sexual/Relationship Violence on Campus: ACHA Guidelines for Best Practices

- Trauma-informed approach
- Make prevention a priority
- 24-hr crisis response
- Anonymous reporting options
- Policy statement or directive from the institution’s president/chancellor
- “Climate” survey regularly
Minimize the “Bystander Effect”

- [http://stepupprogram.org](http://stepupprogram.org)

- Modules for individual and group training, facilitator training:
  - Anger
  - Depression
  - Disordered Eating
  - Gambling
  - Hazing
  - Relationship Abuse
  - Sexual Assault
Barriers to helping our athletes / clients

- Starting the conversation
  - Stakeholders

- Efficient and timely referrals
  - State psychology licensing board for referral sources in your community
    - [www.ceunit.com/psychologistsstateboards.htm](http://www.ceunit.com/psychologistsstateboards.htm)

- The culture of athletics
  - If available, reach out to the counseling center / student mental health service on campus

- Patient privacy

GOLDMAN, BROWN, HAINLINE, KROSHUS, & WILFERT, 2014
Barriers to helping our athletes / clients

- Starting the conversation
  - Stakeholders

- Efficient and timely referrals
  - State psychology licensing board for referral sources in your community
    - [www.ceunit.com/psychologistsstateboards.htm](http://www.ceunit.com/psychologistsstateboards.htm)

- The culture of athletics
  - If available, reach out to the counseling center / student mental health service on campus

- Patient privacy

GOLDMAN, BROWN, HAINLINE, KROSHUS, & WILFERT, 2014
Mental Health Best Practices: NCAA Sport Science Institute

1. Clinical licensure of practitioners providing mental healthcare
2. Procedures for identification and referral of student athletes to qualified practitioners
   - Emergency action plans
   - Non-emergency action plans
3. Pre-participation mental health screening
4. Health-promoting environments that support mental well-being and resilience

HTTP://WWW.NCAA.ORG
Collegiate Mental Health Services – Best Practices

- Communication between Athletics Department & University’s Student Wellness Center/Counselling Services
- Understand that student-athletes are a unique subgroup with emphasis on clinicians aware of “sport culture.”
- Provide information on mental health services in resource guides as part of the sports medicine packet for student-athletes
- Educate coaches and administrators on the difference between mental health referrals vs sports performance referrals.
- Identify a leader within the Athletics Department or Sports Medicine who can oversee emotional well-being in athletes and be a liaison with campus/community resources.

CHEW & THOMPSON, BROWN, HAINLINE, KROSHUS, & WILFERT, 2014
Create A Game Plan for Mental Health

What are your institution’s policies & procedures for the general campus?

What are your institution’s “duty to report” policies?

Written document for mental health issues:
- Triage and referral (include phone numbers)
- Staff education
- After-hours protocol
- Flexibility: case-by-case basis
- Collaborate with available resources/administration
- Review with school district / university general counsel
- Distribute to personnel and administration

- Debrief after managing each case and revise the protocol as needed.

GOLDMAN, BROWN, HAINLINE, KROSHUS, & WILFERT, 2014
NEAL TL, ET AL., 2015
References


Hogshead-Makar N, Sorensen E. Pregnant and parenting student-athletes: resources and model policies. Downloaded from www.ncaa.org on 6/5/15


References


Trojian T. Depression is under-recognized in the sports setting: time for primary care sports medicine to be proactive and screen widely for depression symptoms. *Br J Sports Med.* 2016(50);137-139.


“What can we do as clinics and professionals to better collaborate and coordinate care, so that we can better meet the mental health needs of our collegiate community?”

- Who are the key players/entities?
  - Personnel
  - ER resources
  - Psychiatric inpatient facilities

- Waiting times?
- Major growth vs small adjustments?
- Bottlenecks in workflows?
- EMR issues
- “Warm” hand-offs
- Do the processes work, especially when everyone is busy?
Our main business is not to see what lies dimly at a distance, but to do what lies clearly at hand.

Thomas Carlyle