Basic Athletic Training
Course Pack A

CHAPTER

9

Psychosocial Intervention and Patient Care

STUDENT OUTCOMES

1. Describe the prevalence of psychological disorders in the United States.
2. Explain the role of the athletic trainer in assessing a patient exhibiting signs and symptoms of psychological distress.
3. Identify common signs and symptoms of psychological distress.
4. Demonstrate patient-centered counseling skills used in motivational interviewing to build a strong relationship with the patient.
5. Identify the key elements for achieving cultural

competence and how the LEARN model can be used to enhance communication to better understand the worldview of the patient.

6. Describe the decision-making model and the two alternatives to possible interventions that may occur when a patient exhibits psychological distress.
7. Identify different methods used to facilitate change in identified behaviors in a patient.
8. Describe the elements that a practitioner might use in motivational interviewing.
9. Explain when and how to make a referral for a patient exhibiting psychological distress and identify potential licensed mental health professionals that could be contacted to assist.
10. Describe the affective cycle of injury and what indicators are used to demonstrate a successful recovery.
11. Describe effective intervention strategies used for help seeking and rehabilitation intervention.

INTRODUCTION

Psychological factors can enhance or inhibit an individual's success in sport participation. As such, knowledge of the physical, psychological, emotional, social, and performance factors that affect an individual is essential for the health care practitioner. An understanding of each component and their interrelationships are necessary to effectively treat the whole person.

In this chapter, psychosocial factors associated with an individual's health and well-being, sport performance, and injury will be presented. The role of the athletic trainer in facilitating help seeking by the patient using a decision-making process to help the athlete will also be discussed.

THE PREVALENCE OF PSYCHOLOGICAL DISORDERS

Jim, a 19-year-old, highly competitive wrestler, has come into the athletic training room early in the morning wanting to talk with you. Jim looks like he did not sleep well last night, appears disheveled, and out of sorts. After cordial greetings, you ask how you can be of assistance today. Jim reports that he has been under a lot of stress lately with trying to make weight for the upcoming season. He has had disrupted sleep, missed several early morning classes, and has had difficulty keeping up with his homework. He is feeling challenged about having to lose weight, yet his coach insists that he will be able to excel in the new weight class. What concerns about Jim's presentation and situation comes to mind that warrants further assessment?

The World Health Organization (WHO) defines health as "physical, mental, and social well-being" and contends that historically, psychological (mental) well-being has not received much attention.[1] Statistics show mental disorders to be the number one cause of disability in the United States.[2] Healthy People 2010[3] identified the top 10 health indicators, showing substance abuse ranking fourth and mental illness ranking sixth. It is estimated that 26.2% of people older than 18 years old in the United States suffer from a mental illness in any given year, with 45% meeting the criteria for two or more psychological disorders; this translates into over 57.7 million adults.[4] The Substance Abuse and Mental Health Services Administration (SAMHSA)[5] reports 10.7% of adolescents suffers from a diagnosable mental illness each year in the United States, with 977,000 adolescents (38%) receiving treatment for depression.

The prevalence of mental illnesses is expected to increase globally and affect both males and females, across all socioeconomic groups, ages, races, and ethnic groups. Mental health and behavioral disorders account for nearly one-fourth of disability in the world.[6] As such, all health care providers will encounter individuals experiencing mental health concerns.

Psychological Concerns and Athletes

There is a small body of research about psychological disorders in athletes. Study findings have been mixed, with some showing athletes as having a higher risk for psychological concerns, whereas other studies show the prevalence of psychological disorders to be the same for athletes and nonathletes. However, there seems to be agreement among most researchers that athletes experience a greater degree of stress related to the additional demands of their sport, risk of injury, and expectations for success. Although mental health help seeking for psychological concerns is low in the general population, athletes appear less likely to seek help for psychological problems. Barriers identified with mental health help-seeking include not being able to distinguish between normative stress and distress; negative attitudes about professional help-seeking; personal characteristics of the individual experiencing distress; stigma about mental illness; and practical concerns related to finances, lack of transportation, and time.[7]

The risk of injury, being injured, rehabilitation demands, and career-ending injuries have unique stressors specific to sports. These stressors can have a psychological effect on the individual, resulting in psychological distress.[8,9] The Team Physician consensus statement and the National Athletic Trainers' Association (NATA) consensus statement recommend that athletic trainers know how to monitor injured athletes for changes in behavior, signs of psychological distress, and suicidal behavior associated with injury.[10–12]

Substance abuse and high-risk drinking have been shown to be higher for athletes than nonathletes, with athletes drinking greater quantities of alcohol and engaging in binge drinking more often than nonathletes.[13] Studies have shown that athletes engage in gambling and are more likely to have gambling problems. These gambling problems seem to persist into adulthood.[14] Research shows college student athletes engage in a wide range of risky behaviors, including excessive alcohol use, unprotected sex, drinking and driving, and using illegal substances.[15] Athletic trainers report being prepared for psychological distress related to injury and less prepared for noninjury mental health concerns.[16]

Identifying Psychological Distress

Treating the whole person includes the ability to assess psychological well-being. This critical component can be done by taking a comprehensive medical history and assessing for signs and symptoms of psychological distress. In addition to a formal assessment, it is recommended that practitioners note any changes in behavior, affect, or cognition, and if these changes appear to come on gradually or suddenly. Psychological distress can be associated with a patient's internal state (i.e., psychological/emotional) and external stressors (i.e., sociological, cultural, contextual).[12] Common signs and symptoms of psychological distress are listed in **Box 9.1**.

BOX 9.1 Common Signs and Symptoms of Psychological Distress

Any change in behavior or the continued presence of signs and symptoms of psychological distress may warrant a referral to a licensed mental health professional. Beware of the following:

- Social withdrawal
- Emotional outbursts, such as agitation or irritability
- Excessive worry
- Changes in sleep patterns
- Change in appetite
- Denying the seriousness or extent of injury
- Signs and symptoms of depression
- Signs and symptoms of anxiety
- Lack in commitment or motivation to one's sport or rehabilitation
- Poor focus, concentration, or judgment
- Unconfirmed reports of pain
- Change in mood or inappropriate affect
- Suicidal thoughts

Jim has come into the athletic training room to discuss personal issues. It is evident that Jim feels comfortable talking with you. To help facilitate the discussion, it is important for you to employ helping skills to develop a relationship with Jim while assessing for red flags associated with psychological distress.

ROLE OF THE ATHLETIC TRAINER: THE PSYCHOSOCIAL DOMAIN

Jim shares with you that he is homesick for his family and friends. In high school, he was popular and outgoing. Wrestling has been his life. He won the state title at the 180-lb weight class and received a full scholarship to wrestle at the university. His family is delighted that Jim is the first to go to college and is grateful that he is wrestling for such a prestigious university. Jim reports feeling pressured to succeed in sports and academics to please his parents.

For many individuals, the development and maintenance of a physically fit body provides a focal point for social and economic success as well as being essential to their identity as a physically active person. When participation in sport or physical activity is central to one's lifestyle, experiencing psychological distress or sustaining an injury can negatively impact an active lifestyle and overall well-being. Therefore, practitioners must know how to identify distress, provide education and support, and know when and how to refer patients with psychological concerns to the appropriate licensed mental health professionals.

Athletic trainers are considered second-level helpers for psychosocial concerns. Psychologists, psychiatrists, licensed counselors, and licensed independent clinical social workers are considered professional helpers, because they are trained and licensed to diagnose and treat psychological distress and disorders. Second-level helpers consist of health care

practitioners who work in a wide range of allied health care fields providing direct patient care but who are not educated nor trained to provide mental health services.[17] The role of the athletic trainer, as a second-level helper and that which is consistent with the Role Delineation Competencies, is to be able to identify psychological distress and provide education, support, and make referrals when appropriate to mental health professionals. The NATA developed a consensus statement to guide the education of athletic trainers when working with athletes with psychological concerns.[10]

Helping Skills

Helping is defined as "assisting patients in exploring feelings, gaining insight, and making positive change in their lives."[18] Building a helping relationship is essential for effective helping. Using traditional patient-centered helper skills have been shown to be effective with establishing a working relationship with patients.[17,19] The OARS patient-centered counseling skills framework used in motivational interviewing has been shown to be effective for building the relationship as well as with facilitating change.[19] OARS stands for

- **O**pen-ended questions
- **A**ffirming
- **R**eflecting
- **S**ummarizing

Open-ended questions are used to open the conversation and to allow the patient room to share his or her thoughts and feelings. An example of an open-ended question is "Tell me about your sleeping habits." *Affirming* patients is critical; that is, letting them know that they are doing a good job, that they are courageous, and so forth. It is important to remember that sharing personal challenges and struggles is not easy. *Reflections* are statements used to repeat or state back information to the patient to demonstrate that you, the helper, understand the meaning of what has been shared. A reflection could be a rephrase of what was heard or it could be a paraphrase with the addition of

information from you about a hunch. An example of this might be "I hear you say that you do not sleep well for several nights before a big match. I wonder if you are feeling some prematch performance anxiety." Finally, it is important to *summarize* what you have talked about to ensure that you and the patient are on the same page. It is often helpful to summarize the discussion prior to moving toward action. Use of these microskills by health care practitioners is effective when working with patients in health care settings, especially when time is limited.[20]

Cultural Competence

Cultural competence is the ability to embrace another person's worldview by "learning new patterns of behavior and effectively applying them in appropriate settings."[21(p3)] There are five key elements for achieving cultural competence: (1) value diversity, (2) having the capacity for cultural self-assessment, (3) being aware of the inherent dynamics when cultures interact, (4) institutionalizing cultural knowledge, and (5) developing appropriate adaptations for service delivery.[21] A recent study found that athletic trainers reported a high level of cultural competence, although this was not evidenced in how the athletic trainers delivered care.[22] Schlabach and Peer[23] believe that cultural competence is a foundational behavior for all athletic trainers. They contend that athletic trainers need to demonstrate that they embrace diversity and be knowledgeable and willing to serve all individuals in the global community.

The LEARN model was introduced in 1983 by Berlin and Fowkes[24] for assisting health care practitioners to enhance communication and better understand the worldview of a patient who may be culturally different from themselves. LEARN stands for

- **L**isten
- **E**licit
- **A**cknowledge
- **R**ecommend

- **N**egotiate

Listening requires that athletic trainers employ active listening skills. *Elicit* refers to using open-ended questions to gain general information about the patient's worldview. Next, it is important for the athletic trainer to *acknowledge* and discuss cultural similarities and differences with the patient. Intervention strategies need to integrate the patient's perspective or worldview about health, disease, and the health care system. Finally, the helper offers *recommendations* while keeping in mind that all intervention strategies are most effective when *negotiated* with the patient. The LEARN model is a collaborative effort between the athletic trainer and patient to assist with identifying culturally appropriate interventions. It is recommended that all athletic training education programs include multicultural training for entry-level practitioners, especially where athletic trainers provide services in a multitude of employment settings with patients across the lifespan that encompass many and varied diverse peoples.[25]

You can empathize with Jim's concerns about succeeding in wrestling and in academics. As you ask open-ended questions and allow Jim to express his thoughts and feelings, you want to affirm that what Jim is feeling is normal for competitive athletes. As you listen to Jim's story, what have you learned about Jim's worldview?

THE DECISION-MAKING MODEL

During your discussion, you have learned the following: Jim is concerned about a decrease in academic performance, is feeling homesick and misses his family and friends, is feeling pressured by the coach's decision to perform at a lower weight class, and feels stress associated with family expectations for success. You have noted a number of red flags that have concerned you about Jim and would like to consult with a mental health professional to develop effective

strategies to work with Jim. Identify a mental health professional for a confidential consultation about how best to proceed with Jim.

The decision-making model (DMM), developed by Bacon and Anderson,[26] is a protocol to assist health care practitioners with identifying red flags associated with psychological distress and determining if these signs and symptoms warrant an emergency intervention, although unlikely, or the more typical planned intervention. Most patients exhibiting psychological distress will fall under a planned intervention. The DMM (Fig. 9.1) provides a guide for the athletic trainer to assess red flags that may signal psychological distress and help determine the patient's readiness for help seeking. Knowing a patient's level of readiness allows the athletic trainer to select effective strategies to facilitate readiness for change and/or help seeking.

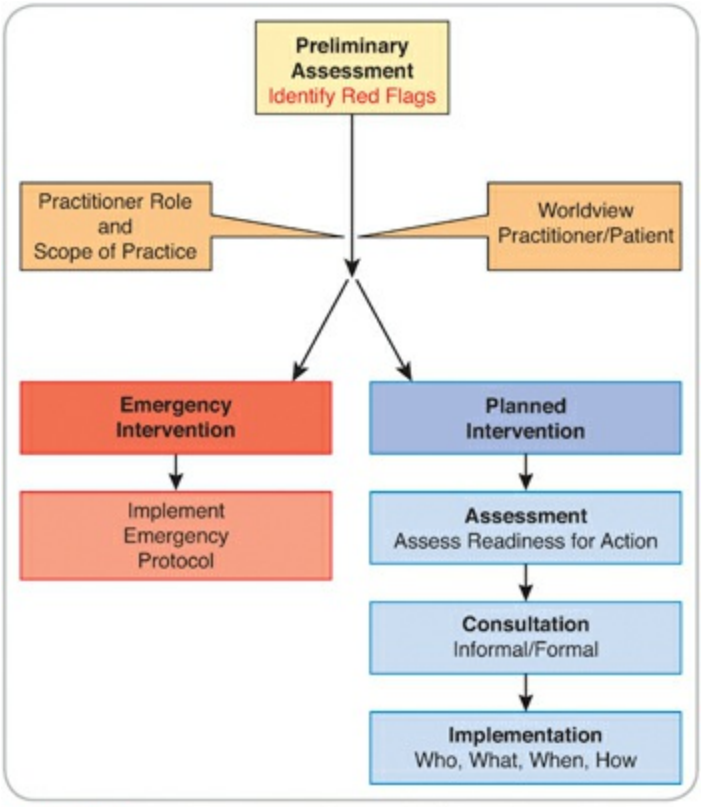

Figure 9.1. The decision-making model. (From Bacon VL, Anderson MK. *The Athletic Trainer's Role in Facilitating Healthy Behavior Change: The Psychosocial Domain.* Bridgewater, MA: Bridgewater State College; 2007. Reprinted with permission.)

Preliminary Assessment

The preliminary assessment begins when the practitioner encounters a patient who exhibits or self-reports signs and symptoms of psychological distress. These signs and symptoms may become apparent while taking a medical history or observed by the practitioner during the assessment. Using effective helping skills will aid in developing rapport with the patient and will facilitate the gathering of pertinent information. Other forms of data collection include direct observation, information from medical and educational records, and from key informants, when appropriate. This preliminary assessment is used to identify red flags; that is, signs and symptoms of psychological distress. Gourlay and Barnum[12] suggest identifying signs and symptoms in four domains: behavioral, cognitive, emotional/psychological, and medical/physical and to inquire about prior psychological distress, psychotropic medications, substance abuse, and prior hospitalizations. Examples of common signs and symptoms associated with stress can be seen in Table 9.1.

TABLE 9.1 Common Signs and Symptoms Associated with Stress

COGNITIVE	PHYSICAL
Confusion in thinking	Excessive sweating
Difficulty making decisions	Feeling dizzy
Decrease in concentration	Increased heart rate
Memory dysfunction	Elevated blood pressure
Poor judgment	Rapid breathing
Lowered academic performance	Increased symptoms of anxiety
EMOTIONAL	**BEHAVIORAL**
Emotional shock	Changes in behavior patterns
Feelings of anger, grief, loss, or depression	Changes in eating
Feeling overwhelmed	Withdrawal or isolative behavior
Decreased personal hygiene	Less attention to presentation
Presents with flattened affect	
Displays inappropriate and/or excessive affect	

From Bacon VL, Anderson MK. *The Athletic Trainer's Role in Facilitating Healthy Behavior Change: The Psychosocial Domain.* Bridgewater, MA: Bridgewater State College; 2007.

It is important to be mindful of the practitioner's role when working with patients exhibiting psychological distress, to adhere to the scope of practice listed in the Board of Certification (BOC) Role Delineation Study and licensing guidelines, as well as to demonstrate cultural competence as previously described. It is recommended that athletic trainers consult with a licensed mental health professional when working with patients with a psychological distress or disorder for guidance throughout the process.

Emergency Interventions

The emergency intervention protocol is implemented when presented signs and symptoms warrant immediate attention. Some examples of situations or conditions necessitating immediate attention include (1) a risk of suicide as assessed by a licensed mental health professional, (2) child or elder abuse where the patient is currently at risk, or (3) psychotic disorders where the patient may not be able to adequately care for himself or herself. Every institution, agency, school, or health care facility should have a protocol in place to address both medical and psychological emergencies. It is important for practitioners to be familiar with the established protocol as well as which mental health professional to contact for consultation or for making a referral.

Planned Interventions

Once it is determined that the athlete is not experiencing severe psychological distress and is not in danger of harming himself or herself or others, the athletic trainer may proceed with a planned intervention. It is important to use good helping skills and be culturally sensitive while building rapport and developing an effective helping relationship. The planned intervention entails three components:

- An assessment of readiness for action, which is typically mental health help seeking
- A selection and implementation of effective strategies that are consistent with the level of readiness
- A consultation/referral with a licensed mental health professional

Assessment

An essential factor in facilitating change is the practitioner's ability to assess the patient's level of readiness for any behavior, particularly one's readiness for change. The stages of change, also known as the transtheoretical model, was developed in 1982 by Prochaska, Norcosse, and DiClemente to help promote behavior change. The basic premise of the model, described in

Changing for Good,[27] is that change is a process with predictable stages. There are specific processes that are effective at promoting change in each stage. Stages are not necessarily completed in order, and difficulties may be encountered in any of the stages. The five stages include the following:

- Precontemplation
- Contemplation
- Preparation
- Action
- Maintenance that leads to termination

Learning how to assess readiness for change will assist with determining what strategies have been shown to be effective for facilitating change. More specifically, the practitioner will assess patient's readiness for help seeking, that is, addressing the patient's psychological concerns with a licensed mental health professional. The authors list nine methods to facilitate a change with regard to an identified behavior, called change processes, and their intended use[27]:

1. Consciousness raising: to increase information about the self and the problem
2. Social liberation: to increase social alternatives for behaviors that are problematic
3. Emotional arousal: to experience and express feelings about one's problems and solutions
4. Self-reevaluation: to assess feelings and thoughts about the self with respect to a problem
5. Commitment: to choose to make a commitment to act, or believe in one's ability to change
6. Countering: to substitute alternatives for problem behaviors
7. Environment control: to avoid stimuli that elicit problem behaviors

8. Reward: to reward one's self, or being rewarded by others, for making change
9. Helping relationships: for enlisting the help of someone who cares

Implementation

The implementation of strategies by the athletic trainer to facilitate mental health help seeking requires the athletic trainer to continue to employ effective communication skills and to work within his or her role and professional boundaries. Using effective strategies can play a significant role in patient motivation, especially with rehabilitation adherence and with positive health outcomes.[28]

Motivational interviewing (MI) is a method used by many practitioners to enhance a patient's motivation to change. The elements of MI encompass the practitioner's ability to[20]

- Work in collaboration with the patient
- Listen for change talk used or not used by the patient
- Listen for language from the patient about wanting to maintain the "status quo"
- Think about resistance from the patient as being related to one or more of the following factors:
  - A lack of agreement between the practitioner and patient
  - Little to no collaboration
  - Low empathy from the practitioner
  - Little patient autonomy

When using MI, there are four basic principles to guide the practitioner while conversing with the patients: (1) Express empathy, (2) develop discrepancy, (3) roll with resistance (avoid arguing), and (4) support self-efficacy. MI is often used in conjunction with change theory, because MI has been shown to be effective with facilitating motivation for change for the

different stages of change.[20]

Consultation and Referrals to Licensed Mental Health Professionals

An important competency for athletic trainers is the ability to identify psychological distress and to know how to make a referral for psychological concerns as well as to select and recommend appropriate mental health professionals. Estimates about the prevalence of mental illness are high and expected to increase. Current estimates show 19% of adults (43 million) and 60% of children and adolescents have a diagnosable mental disorder necessitating a mental health intervention. What is also known is that a central factor preventing those in need of mental health services from taking action continues to be not seeking professional help.[10] Knowing how to assess for readiness for change will assist with determining what strategies will help facilitate change in the patient's readiness for mental health help seeking, that is, addressing their psychological concerns with a licensed mental health professional.

Licensed Mental Health Professionals

There are several types of mental health professionals available to athletic trainers for referrals. Each profession has unique education and clinical training that must comply with state licensing requirements. It is important to be familiar with the different professions and to make certain that the mental health professional holds a valid license to practice.

- **Psychiatrist**

Psychiatrists are licensed medical doctors who are educated and trained to provide mental health services. Formal education and training entails completing a 4-year undergraduate degree, 4 years of medical school, and then completing an internship and residency for a minimum of 3 years. Psychiatrists are trained to diagnose and treat mental illness, including the ability to prescribe psychotropic medicine. Psychiatrists work in a variety of settings,

such as private practice, mental health centers, and hospitals.

Psychologist

Psychologists are mental health professionals who have completed an approved clinical or counseling degree, which consists of an undergraduate degree, a master's degree, and an approved doctoral program (120 credit hours). In addition to their formal education, they complete a mental health practicum, a 1-year predoctoral internship, and 1 to 2 years of postdoctoral training. Psychologists are trained to conduct psychological testing to assist in the prevention, assessment, diagnosis, and treatment of mental disorders. Licensed psychologists work in a variety of settings, including private practice, mental health centers, hospitals, government settings, and in applied research.

Social Worker

Social workers are mental health professionals who are educated and trained to work with patients and who provide a wide variety of services. A bachelor's degree in social work is the minimum standard and prepares professionals for entry-level positions. A master's degree in social work is required in order to provide direct clinical mental health services. Licensed independent clinical social workers (LICSWs) are trained and licensed to provide direct mental health care, supervision, and the administration of health care programs. LICSWs complete 60 credit hours of education at the master's level, a practicum, an internship, and 2 years of postdegree experience. LICSWs work in a wide range of employment settings.

Professional Counselor

Professional counselors are prepared for work in schools, colleges, community mental health settings, and private practice. Each type of counselor has different education and training requirements. Licensed professional counselors are educated and trained to provide therapy, have completed minimum of 60 credit hours of formal education at the master's degree level, a practicum, an internship, and 2 years of postdegree experience.

Marriage and Family Therapist

Marriage and family therapists provide direct mental health services similar to professional counselors. They complete a 60 credit hours master's degree program, a practicum and an internship, as well as 2 years of postdegree experience. Licensed marriage and family therapists provide assessment and treatment using a family systems perspective with individuals, families, and groups. They work in a variety of practice settings, including private practice, community mental health centers, and hospitals.

Sport Psychologist/Sport Performance Consultant

Sport psychologists and sport performance consultants are trained to work with athletes to achieve optimal performance. Whereas a sport psychologist often has completed the education, training, and is licensed to practice as a mental health professional, a sport performance consultant is not trained to diagnose and treat mental health issues. It is important to ascertain whether a sport psychologist holds a state-approved psychologist license. Some sport psychologists and sport performance consultants are certified with the Association for the Advancement of Applied Sports Psychology. Although this certification is good to have, it is not required.

Individuals that could be consulted to help with strategies for Jim include a psychologist, social worker, or professional counselor. These individuals are educated and trained to assess and treat patients with a mental illness or disorder.

INJURY AND REHABILITATION

Riley, a female distance runner, is diagnosed with plantar fasciitis a week before an Olympic qualifying race. She has been training for this race and a potential spot on the Olympic team for the past 3 years. The injury will prevent her from competing at her desired level for approximately 1 month, eliminating any chance of a position on the

Olympic team. How might this patient react to the inability to race competitively? What impact will this reaction have on her rehabilitation? How can the athletic trainer provide education, guidance, and support to help this person cope with the physical, psychological, and emotional effects of being injured and completing a successful injury rehabilitation plan?

Sports injury is a potential risk for all athletes and physically active individuals. Athletic trainers are well equipped to conduct an assessment of an injury and to make decisions about the medical needs of the injured patient. In addition to treating the physical injury, recovery and rehabilitation involves an understanding of an injured patient's psychological response to being injured as well as knowledge about psychological factors associated with rehabilitation and recovery.

Understanding the Impact of Injury

A number of theories have been offered that provide a framework for understanding the impact of injury on a physically active individual. Although each model looks at the impact of injury somewhat differently, they all contend that psychosocial factors are complex and need to be given consideration. In 1986, Feltz[8] suggested there are three potential psychological effects of injury: (1) emotional trauma of the injury, (2) psychological factors associated with rehabilitation and recovery, and (3) the psychological impact of the injury on an individual's future with respect to continuing to be physically active or involved in sports. Evidence-based practices recommend a psychosocial approach when addressing injury rehabilitation with athletes.[29]

The stage perspective by Kübler-Ross[30] suggests that there are stages of grieving through which an individual progresses when confronted with loss. Kübler-Ross[30] identified the following stages: (1) disbelief, denial, and isolation; (2) anger; (3) bargaining; (4) depression; and (5) acceptance. Although this model has some intuitive appeal, the stereotypic linear pattern of distinct emotional responses has not stood up to empirical scrutiny.[31]

Furthermore, if an individual reacts to injury in stages, then practitioners should be able to predict a patient's progress during rehabilitation; however, this rarely is the case for injured individuals.

The affective cycle of injury has had great appeal, because this model identifies four quadrants impacted when an individual has sustained an injury: physical well-being, emotional well-being, social well-being, and self-concept.[32] Heil's model is holistic in nature. He contends that these quadrants are interrelated and may be a source of stress for the patient. Heil's model depicts the process of rehabilitation and recovery that begins with distress and then moves to denial and finally to determined coping for those who recover psychologically.

Heil identified 10 indicators of successful recovery[33]:

1. Know the game: being educated about the rehabilitation process
2. Goal-directed thinking: setting realistic short-term and long-term goals
3. Focused attention: the ability to focus, which is helpful with sport performance and rehabilitation
4. Controlled emotional intensity: the ability to channel emotions
5. Precise skill execution: using good form with body building and with rehabilitation exercises
6. Training intensity: understanding training principles for conditioning and rehabilitation; that is adequate load without overloading, which can lead to reinjury
7. Performance over pain: the ability to cope with pain and use pain management techniques
8. Calculated risk taking: effective decision making for optimal performance and injury prevention
9. Mental toughness: the ability to remain positive and determined
10. Self-actualization: the ability to grow from successes and challenges

Regardless of the framework used, it is important for the practitioner to understand the psychosocial factors associated with injury and recovery as well as to monitor the injured individual's level of stress for signs and symptoms of psychological distress.

Injury, Rehabilitation, and Recovery

A collaborative team approach to injury rehabilitation has been shown to have a positive influence on rehabilitation outcomes.[29] It is essential that the athletic trainer involve the patient in all phases of treatment as well as to provide education about the many challenges the injured person will face during the rehabilitation process. Injured individuals may experience a plethora of thoughts and emotions (e.g., fear, isolation, disruption in identity, loss of income, or potential scholarships), which left untreated, may lead to psycho-socio-emotional difficulties (Table 9.2). It is important for the injured individual to experience a steady rate of recovery in order to reduce the patent's frustration and enhance the patient's belief in the ability to achieve a successful outcome.

TABLE 9.2 Signs and Symptoms of Anxiety in Rehabilitation

CATEGORY	SIGNS AND SYMPTOMS
Physical	Muscle tension and bracing; short, choppy breathing; decreased coordination; fatigue; rushed speech; minor secondary injuries or nagging illness with recurrent physical complaints; and sleeping problems
Cognitive	Excessive negativity and overly self-critical statements of low confidence in rehabilitation, extreme thinking and unrealistic expectations, and very narrow focus
Emotional	Anger, depression, irritability, moodiness, and impatience
Social	Decreased communication, social withdrawal, intolerance, and abruptness with others
Performance	Overall decline in motivation and enjoyment in rehabilitation, loss of interest in sports and other activities, nervousness and physical tension during therapy, trying too hard in therapy or "giving up" in response to obstacles and setbacks, and decrease in school or work performance

Strategies to Facilitate and Enhance Coping Skills Postinjury

A number of strategies can be employed by the practitioner to assist athletes and physically active individuals cope more effectively with injury. Several strategies have shown to be effective in assisting athletes through the recovery process, such as education, goal setting, social support, and the use of mental

skills during rehabilitation.[33,34] These strategies assist the injured individual to negotiate challenges, maintain his or her motivation, and regain his or her confidence. Research has found that when athletic trainers are skilled with employing mental skills and maintain a positive attitude about the rehabilitation process, athletes' recovery rates and adherence with rehabilitation are improved.[35,36]

Education

It is imperative that the clinician inform the injured patient about the injury and recovery process. This includes sharing information about the treatment plan, intended goals, and any side effects or sensations that may be experienced along the way. Educating the patient helps him or her understand the rehabilitation process, avoid surprises, and, hopefully, reduce anxiety associated with the recovery and rehabilitation process.[37] Stiller-Ostrowski, Gould, and Covassin[38] state that injured athletes report good communication skills as being very important for having a good rapport with athletic trainers, which is also associated with favorable rehabilitation outcomes.

Goal Setting

Goal setting is an effective strategy shown to increase motivation during the recovery program. This practice helps to guide the individual's efforts by providing a sense of control that may enhance motivation, persistence, and commitment, and thus facilitates the incorporation of new strategies to improve performance. Individuals who set specific personal goals exhibit an increase in self-efficacy; that is, they feel empowered and experience greater satisfaction with the rehabilitation and recovery process.[9,39]

Gould[39] suggests the following guidelines for setting goals for improved effectiveness:

- Set measurable goals.
- Goals should be moderately difficult yet realistic.
- Set both short-term and long-term goals.

- Have both process and performance goals.
- Set goals for specific program.
- Make the goals positive.

Goal setting is best accomplished when patients have a strong working relationship and work collaboratively toward rehabilitation goals. Goals should be written to include a target date and should be monitored by the athletic trainer, as well as evaluated. Box 9.2 provides guidelines for establishing goals for rehabilitation.

BOX 9.2 Guidelines to Goal Setting

Goals should be:

- **Specific and measurable.** The patient must know exactly what to do and be able to determine if gains are made.
- **Stated in positive versus negative language.** Knowing what to do guides behavior, whereas knowing what to avoid creates a focus on errors without providing a constructive alternative.
- **Challenging but realistic.** Overly difficult goals set up the individual for failure and pose a threat to the individual. The lower the individual's self-confidence, the more important success becomes and the greater the importance of setting attainable goals.
- **Established on a timetable for completion.** This allows a check on progress and an evaluation of whether realistic goals have been set.
- **Integrated as short-, intermediate-, and long-term goals.** A comprehensive program links daily activities with expectations for specific competitions as well as for season and career goals.
- **Personalized and internalized.** The patient must embrace goals as his or her own, not as something from the outside.
- **Monitored and evaluated.** Feedback must be provided to assess goals, and the goals should be modified based on progress.

- **Linked to life goals.** This identifies sport and rehabilitation as learning experiences in life, and it helps the individual put sport/physical activity in a broader perspective. This is especially important for individuals whose return to sport/activity is doubtful.

Social Support

Social support has been extensively researched and has been found to play a significant role with rehabilitation and recovery for athletes and is seen as a central factor in the rehabilitation process.[40,41] Social support encompasses listening, emotional support, assistance, and reality confirmation.[42] Social support comes from key individuals in the patient's family, circle of friends, teammates, coaches, and athletic trainers. A strong positive correlation has been found between the athletic trainer's positive beliefs about recovery and the injured athlete's positive beliefs about his or her own recovery process.[41] It is imperative that athletic trainers help secure a supportive network for the athlete to reduce potential isolation and increase rehabilitation outcomes.

Mental Skills Techniques

Mental skills techniques have been successful for enhancing performance as well as with facilitating recovery from injury. Specifically, the use of relaxation, imagery, and positive self-talk have been shown to facilitate the recovery process and to increase adherence rates.[33] Athletes can learn and practice these skills and employ them as needed.

Relaxation

Relaxation is an effective technique to help reduce pain and the effects of anxiety. Once an individual has learned deep relaxation skills, he or she can use these skills to reduce and often remove localized tension associated with injury as well as to facilitate recovery from fatigue.[43] Relaxation techniques can help reduce tension, slow breathing, and lower heart rate, all of which are important techniques that can extend over the course of one's life. Two general methods of relaxation training exist; namely, mind to muscle and muscle to

mind. Mind to muscle is accomplished with the aid of meditation and/or imagery techniques. Muscle to mind involves breathing exercises and progressive relaxation, the active contraction of various muscles. Relaxation techniques are most effective when practiced and learned during times of low demand; that is, out of season. A review of the literature by Williams[43] shows that individuals with an internal locus of control who maintain a positive outlook appear to be more successful with learning and applying relaxation techniques (Table 9.3).

TABLE 9.3 Relaxation Techniques

TECHNIQUE	EXAMPLES
Pain Reduction	
Deep breathing	Emphasize slow, deep, rhythmic breathing.
Muscle relaxation	Passive or progressive relaxation
Meditation	Repetitive focusing on mantra or breathing
Therapeutic massage	Manual manipulation of muscles, tendons, and ligaments
Pain Focusing	
External focus	Listening to relaxing or inspiring music, watching a movie, or playing chess
Soothing imagery	Generating calming images (e.g., lying on a beach or floating in space)
Neutral imaginings	Imagining playing chess or building a model airplane
Rhythmic cognitive activity	Saying the alphabet backward or meditating
Pain acknowledgment	Giving pain a "hot" color, such as red, and then changing it to a less painful "cool" color, such as blue
Dramatic coping	Seeing pain as being part of an epic challenge to overcome insurmountable odds
Situational assessment	Evaluating the causes of pain to take steps to reduce it

Imagery

Imagery has long been used in the physical training process to enhance performance. It involves the mental practice of a skill before the actual physical performance of the skill. In the rehabilitation process, imagery can be used to mentally practice the skills or processes that will expedite and promote a safe return to activity, such as envisioning healing, soothing (i.e., pain management), or performance (i.e., proper technique of an exercise). Imagery can be enhanced by preceding it with relaxation exercises, such as passive or progressive relaxation. These relaxation techniques can reduce anxiety and the physical manifestations of pain and can increase the vividness and control in imagery. Mental imagery can serve to motivate the individual to realize that this technique can facilitate his or her performance on return to activity.[44]

Positive Self-talk

Control over one's cognition has been shown to directly impact a person's self-confidence.[45] Injured individuals often express negative thoughts and feelings about the injury, which in turn, can lead to low self-esteem and low self-confidence. Negative thinking leads to negative feelings and ultimately to unproductive behavior (e.g., poor performance, poor recovery). The negative thoughts can be redirected into positive thoughts that direct and motivate the individual to succeed with his or her rehabilitation.

The distance runner will not be able to try out for a position on the next Olympic team. Clearly, her emotional and psychological state will have a direct impact on the success or failure of the therapeutic exercise program. Goal setting and mental skills training can be beneficial in addressing psychological influences that may inhibit the program. If progress is inhibited for several days because of suspected psychological issues, the athletic trainer should consult with a licensed mental health professional.

SUMMARY

1. Statistics show mental disorders to be the number one cause of disability in the United States.
2. Athletes experience a greater degree of stress related to the additional demands of their sport, risk of injury, and expectations for success.
3. Psychological distress can be associated with a patient's internal state (i.e., psychological/emotional) and external stressors (i.e., sociological, cultural, contextual).
4. Athletic trainers are considered second-level helpers for psychosocial concerns.
5. The OARS patient-centered counseling skills used in MI stands for **o**pen-

ended questions, **a**ffirming, **r**eflecting, and **s**ummarizing.

6. The five key elements for achieving cultural competence are to (1) value diversity, (2) have the capacity for cultural self-assessment, (3) be aware of the inherent dynamics when cultures interact, (4) institutionalize cultural knowledge, and (5) develop appropriate adaptations for service delivery.
7. The LEARN model can assist practitioners to enhance communication and to better understand the worldview of a patient who may be culturally different from themselves. LEARN stands for **l**isten, **e**licit, **a**cknowledge, **r**ecommend, and **n**egotiate.
8. The DMM is a protocol to assist with identifying red flags associated with psychological distress and determining if these signs and symptoms warrant an emergency or planned intervention.
9. During the preliminary assessment, red flags denoting possible psychological distress should be noted in four domains: behavioral, cognitive, emotional/psychological, and medical/physical.
10. Situations or conditions necessitating an emergency intervention include (1) a risk of suicide as assessed by a licensed mental health professional, (2) a child or elder abuse where the patient is currently at risk, or (3) psychotic disorders where the patient may not be able to adequately care for himself or herself.
11. Planned intervention entails the assessment of readiness for action, typically help seeking, the selection and implementation of effective strategies consistent with the level of readiness, and consultation/referral with a licensed mental health professional.
12. The stages of change, also known as the transtheoretical model, include the stages of precontemplation, contemplation, preparation, action, and maintenance that leads to termination.
13. When using MI, the practitioner should express empathy, develop discrepancy, roll with resistance (avoid arguing), and support self-

efficacy.

14. Mental health professionals that may be consulted for psychosocial issues include psychiatrists, psychologists, social workers, professional counselors, marriage and family therapists, or sport psychologists.
15. The affective cycle of injury, developed by Heil, identifies four quadrants impacted when an individual has sustained an injury: physical well-being, emotional well-being, social well-being, and self-concept. These factors may stem from the emotional trauma of the injury, the psychological factors associated with rehabilitation and recovery, and the psychological impact of the injury on an individual's future with respect to continuing to be physically active or involved in sports.
16. Strategies that may facilitate and enhance coping skills postinjury include education, goal setting, social support, and mental skills techniques encompassing relaxation techniques, imagery, and positive self-talk.

APPLICATION QUESTIONS

1. When doing a formal assessment, why is it important to note changes in behavior, affect, and cognition?
2. Explain the role of a second-level helper, and how it differs from the role of a mental health professional?
3. Describe in detail the OARS patient-centered counseling skills.
4. In the opening scenario of this chapter, Jim, the collegiate wrestler, is Latino. Apply the LEARN model to demonstrate your cultural competence.
5. Identify and describe the steps of the planned intervention using the DMM protocol that you would use with Jim the wrestler.
6. Create an MI dialogue demonstrating the elements of MI when working to facilitate help seeking with Jim.

7. Describe the training and credentials of two mental health professionals.
8. Identify and describe the strategies that you would employ with Riley, the female distance runner, to facilitate and enhance coping postinjury.

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