INTERDISCIPLINARY APPROACH TO INJURY PREVENTION AND RETURN TO PLAY

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Clinical Settings

Athletics setting
• High school, NAIA, D2, D1
• Clinical educator
• AT student internship director

Industrial setting
• Tree climbers
Objectives

✓ Learn to improve patient outcomes through an interdisciplinary clinical practice
✓ Understand factors that influence an athletic trainer’s ability to collaborate

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Interdisciplinary

Relating to more than one branch of knowledge (Oxford online)

Creating something by thinking beyond boundaries (Wikipedia)

Interprofessional Collaborative Practice (IPCP)¹
Does an interdisciplinary approach improve patient outcomes?\textsuperscript{2,3}

- Thought
- Effective Collaboration
- Action

\[ \text{Equals} \quad \text{Improved outcomes} \]
Challenges of an Interdisciplinary Approach

1. Ability to engage in IPCP
2. Knowledge of roles and scope
3. Factors affecting team collaboration
4. Time to participate in IPCP
Utilization of an Interdisciplinary Team

Stanford Women’s Volleyball

1. Athletic Trainer
2. Sports Performance
3. Coaches
4. Sports Dietitian
5. Sports Psychologist
6. Team Physician
7. Physical Therapist
Internal vs External Load \(^4,5\)

Internal load ➔
Psychophysiological response to exercise\(^1\)
- Mental
- Biomechanical vs physiological\(^2\)

External Load ➔
Physical work prescribed in training
Internal Load vs Post-exercise Response

- Internal load (direct)
  - HR during
  - Blood samples
  - VO₂ max

- Post-exercise response (in-direct)
  - RPEs
    - Physical
    - Mental
  - HR post
  - HR variability
External Load

- Choose variable(s)
  - Jump count
  - Distance
  - Acceleration
  - Speed

- Measure
  - Relative precision
  - Accuracy dependent on:
    - Activity
    - Measurement
    - Consistency
Theoretical Framework for Internal Load$^{5,6}$
Requires creativity, a willingness to learn, and an open mind.
Summary

✓ Patient outcomes are improved through an interdisciplinary clinical practice:
  ✓ More precise training and rehab prescription
  ✓ Objective measurements
  ✓ Patient engagement

✓ Factors that influence an athletic trainer’s ability to collaborate are:
  ✓ Ability to engage in IPCP
  ✓ Knowledge of roles and scope
  ✓ Factors affecting team collaboration
  ✓ Time to participate in IPCP
Thank you!
References


3. Pabian P, Kolber M, McCarthy J. Postrehabilitation Strength and Conditioning of the Shoulder: An Interdisciplinary Approach. Department of Health Professions, University of Central Florida, Orlando, Florida; 2 Department of Physical Therapy, Nova Southeastern University, Fort Lauderdale, Florida; and 3 Department of Physical Therapy, The University of Alabama at Birmingham, Birmingham, Alabama Volume 33 Number 3 June 2011


