Physical Trauma & Addiction
The Interplay

Spencer Richards, Ph.D.
Services for Outpatient Addiction Recovery (SOAR)

Stephen R. Sheppard, Ph.D.
Substance Abuse Residential Rehabilitation Treatment Program (SARRTP)

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VETERANS HEALTH ADMINISTRATION

Generic Case Study...

- Age: Yours
- Gender: Yours
- Occupation: Yours
- Social Support System: Yours
- Mental Health: Likely Obsessive-compulsive Traits
- Other Strengths and Weaknesses: Yours

VETERANS HEALTH ADMINISTRATION
Generic Case Study Continued

- Sudden Event: Single Motor Vehicle Accident
- Loss of consciousness
- Immediate paralysis at C8 level
- Emergent Care: AirMed Transport, Emergency Surgery, Intensive Care

And, then you wake up...

Physical Rehabilitation

- Mobility
  - Learning to roll side to side
  - Sitting up
  - Transferring from bed to wheelchair
  - Wheelchair mobility
- Activities of Daily Living
  - Bathing
  - Grooming
  - Dressing
  - Eating
Physical Rehabilitation

- **Health**
  - Skin Protection
  - Bladder Function
  - Bowel Function
  - Sexual Function

- **Pain**
  - Musculoskeletal
  - Neuropathic

- **Spasticity**

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How do you think you would do?

- **Emotionally and Existentially?**
- **Work and Finances?**
- **Social Support?**
- **Recreation?**

**How would you rebuild your Quality of Life?**

**What if...?**
Goals for Today

- Review theoretical models of adjustment to disability
- Review factors that influence adaptation.
- Discuss the interplay between substance use disorders and adaptation to disability and chronic illness.
- Identification of key clinical roadblocks and introduce a broad conceptual framework that can guide intervention.

Spinal Cord Injury (SCI)

- Approximately 17,000 new cases per year
- 78% male
- Age Range: 16-30, Modal Age: about 24
- Ethnicity
  - 61% Caucasian
  - 22% African-American
  - 13% Hispanic
  - 3% Asian

VETERANS HEALTH ADMINISTRATION

More SCI Facts & Figures

➢ Causes:
  MVA  38%
  Falls  32%
  Violence  14%
  Sports  8%

➢ Level of Injury:
  Incomplete Tetraplegia  47%
  Complete Tetraplegia  12%
  Incomplete Paraplegia  20%
  Complete Paraplegia  20%

VETERANS HEALTH ADMINISTRATION

High Risk Behaviors

VETERANS HEALTH ADMINISTRATION
SCI and Substance Use

- Approximately 33% had pre-injury alcohol use disorder.
- 31-50% were under the influence of alcohol at time of injury.
- 32-35% were using illicit substances prior to injury
- 16-33% under the influence of illicit substances at time of injury.
- 26% were under the influence of alcohol and other substances at the time of injury.


Quality of Life (WHO?)

- An individuals’ PERCEPTIONS of their position in life.
- In the CONTEXT of the CULTURE and VALUE systems.
- In relation to their GOALS, EXPECTATIONS, STANDARDS and CONCERNS.
- It is a BROAD CONCEPT affected in a complex way by:
  • Physical health and Psychological state
  • Level of independence
  • Social relationships
  • Salient features of the environment

Quality of Life

- Not a static achievement

- It is a lifelong endeavor

  A disabling condition virtually always results in physical & psychosocial pain.

  Positive biopsychosocial adaptation is difficult and fundamentally important.
What does it mean to “adjust?”

➢ To undergo a process of psychosocial adaptation where the disability becomes integrated into the individual’s life, identity, and self-concept.

➢ State of person-environment integration.

➢ The person increasingly exhibits success in solving problems and managing environment.


What does it mean to “adjust?”

➢ The person places value on existing abilities and moves beyond personal loss.

➢ Hopefully create or rebuild a sense of “well-being” and Quality of Life.

Stage Models of Adjustment

- Crisis Management:
  - Shock
  - Anxiety
  - Denial

- Experiencing Loss:
  - Depression
  - Anger

- Adaptation:
  - Acknowledgement
  - Acceptance
  - ...Adjustment

- Legitimize suffering and need to undergo a process of adaptation

- People aren’t nearly so methodical...

- Support/Information...Processing...Action

Case Examples: Tom

- “Tom” Slipped on ice: C4 Tetraplegia

- Caucasian man, Mid-50’s

- Travelling salesman

- Very nice wife and grown son

- Moderate to heavy alcohol use

- LONER!
Case Example: Jim

- “Jim” Injured while snowmobiling
- Caucasian man, Mid-40’s
- Computer engineer
- Very nice wife and extended family
- SOCIABLE AND WELL-CONNECTED

“Somatopsychological Models”

- Emphasizes the personal meaning of the disability and the value it holds for a person.
- Perception of loss of personal value.
- Coping or Succumbing to the Disability?
  - SUCCUMBING: Emphasizing negative affects, and avoiding the challenge for change, fixated on unrealistic attempts to return to normal.
  - COPING: Focusing on their intrinsic value, oriented on what can be done, and experiencing changes in their value system.

Four Major Changes

- Expansion of the scope of values.
- Decreased importance of physical matters.
- Containment of the effects of the disability.
- Shift from making comparisons to preinjury life to intrinsic values (improved self-concept).

Case Example: Kerry

- “Kerry”-T1 Spinal Cord Injury-Intoxicated Cycling
- Early 30’s
- Physical and emotional abuse in childhood
- College-educated and Employed
- Avid outdoor recreation
- Moderate to heavy alcohol and marijuana use when not working
Somatopsychology Clinical Intervention

- Emphasizes an active approach to coping.
- Recommends helping persons identify and explore values.
- Work to help replace physical values with more intangible values.
- Help persons take pride in accomplishment.
- Help persons anticipate and prepare for challenges.

“Cyclical” Models of Adjustment

- Shifting Perceptions
- Changing Values
- Coping Changes
- Environmental Modification
- And so on...

- Sadness/Depression
- Anxiety/Fear
- Anger
- Etcetera...

Case Example: Adam

➢ “Adam”-C6 Tetraplegia in a MVA

➢ 17 years old

➢ Multiple adverse childhood events

➢ Substance use: methamphetamine, alcohol, MJ

➢ “Boot Camp”

➢ Supportive Uncle

“Cyclical” Models of Adjustment

➢ Experiencing emotional pain and working through it is an important part of the process.

➢ People interrupt the process if they “block” painful feelings or get “stuck” in depression, anxiety, etc.
Common Ground of Adjustment Models

- Legitimize emotional distress and pain.
- Acknowledge people need to deal with pain, somehow.
- Acknowledge people need to avoid pain part of the time in order to continue functioning.

**Across all models OVERUSE of AVOIDANT coping strategies is problematic!**

Personality Factors Related to Adjustment

- Sociable.
- Internal Locus of Control.
- Active Coping: Willing to “lean in” to the challenge.
- Able to tolerate frustration and discomfort.
- Stable sense of self and self-worth.
- Cognitive flexibility-Benefit Finding
Other Individual Factors Related to Adjustment

- Prior experience or having a role model.
- History of Psychiatric Disorder or Substance Abuse.
- Social Support.
- Marital Status.
- Age and Gender.
- Socioeconomic status.

Disability Factors Related to Adjustment

- Pain or other complications (e.g., spasticity, infections).
- Degree of impairment: Generally the more impairment the more challenging.
- Body image changes.
- Prognosis: Poorer prognosis can be a harder adjustment, but...
Environmental Factors Related to Adjustment

- Environmental Obstacles and Accessibility.
- Lack of Positive Stimulation.
- Isolation.
- Cultural Attitudes and Beliefs.

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Heredity
Personality/Early Experiences

Beliefs about Self and the World
Values  Behaviors  Goals

SUCCESSFUL ADJUSTMENT
Cognitive Factors (Helpful)
- Positive re-appraisal
- Perceived control over life
- Self-efficacy regarding illness
- Optimism/Hope
- Benefit finding
- Self-efficacy regarding general life
- Acceptance of illness
- Spirituality

Behavioral Factors (Helpful)
- Problem-focused strategies
- Seeking social support
- Healthy behaviors

Social/environmental Factors
- High perceived social support
- Positive relationships/interactions

ADJUSTMENT DIFFICULTIES
Cognitive Factors (Unhelpful)
- High perceived stress
- Wishful thinking or avoidance
- Uncertainty about illness
- Appraisal of illness as threatening
- Dysfunctional cognitions
- Helplessness
- Perceived barriers to health behaviors
- Unhelpful illness/symptom representations
- Unhelpful beliefs about pain

Behavioral Factors (Unhelpful)
- Coping through avoidance
- Unhelpful responses to symptoms (avoidance/testing)

Disruption of Emotional Equilibrium and Quality of Life

Mental Health and SCI

- Approximately 30-50% experience depression.
- Declines 2-5 years post-injury.
- Some studies show an increase in depression later in life with SCI.
- Approximately 20-40% experience anxiety
- Antidepressants and psychological Tx help.

Other Relevant Psychosocial Factors

- Divorce rates are elevated compared to the general population.
- Marital satisfaction is generally higher for couples that met after the injury.
How will a History of Substance Use Disorder Impact Adjustment?

- Avoidant coping?!?
- Co-occurring mental health disorders.
- Social support challenges.
- Vocational function and income?
- And so on...

Consequences of Alcohol Intoxication at the Time of Injury

- Extended length of hospital stay, including ICU.
- Longer time on ventilator.
- Greater risk of complications: pneumonia, blood clots, urinary tract infections, and pressure sores.
- Higher post-injury mortality rate.

Consequences of Intoxication at the Time of Injury

- Less active in rehabilitation.
- Lower level of functional independence at the time of discharge.
- More likely to be depressed.
- Increased probability of bankruptcy following injury.

Strongly suggestive of avoidant coping and difficulty adjusting.


“Rock Bottom?”

- Approximately 50% of persons with a pre-injury history of alcohol or other substance use disorder return to pre-injury levels.
- A small percentage of persons without a pre-injury history develop a post-injury substance use disorder.

Relapse After Injury...

Do you have feelings of inadequacy?

How Does Substance Use Disorder Impact Adjustment?

- Increased likelihood of depression.
- Limited activity and participation
- Lower quality of life
- Increased likelihood of physical complications (e.g., pressure sores, UTI).
- Earlier mortality.

Let’s Pause to Stretch...

Gratitude

It's not happiness that brings us gratitude.
It's gratitude that brings us happiness.

www.facebook.com/montreybayholistic

OK...So, we've identified major challenges. How do we navigate out of this?

Assembling Parts to a Whole (WHO)

Function → Activity → Participation → Quality of Life

Environment → Personal Factors

Maximizing participation is the stepping stone to improved Quality of Life!
Motivation is a key challenge!

Solving problems and addressing environmental barriers...
Challenges of Rebuilding
Personal Factors

Function → Activity → Participation → Quality of Life

Environment

Personal Factors

Emotions...self-concept...changing values...

Conclusions

- Serious physical trauma represents an extraordinary challenge.
- Substance abuse is the single biggest contributor to traumatic injury resulting in disability.
- Substance use predicts a more challenging rehabilitation.
- But, there is room for resilience and extraordinary successes.
Questions

References

Difficulty Adjusting and Health Management

- Self-Monitoring and Self-Care are essential.

- Emotional adjustment can significantly influence self-care.

- Mortality and Spinal Cord Injury
  - Pulmonary
  - Infection: Bladder and Skin
  - Heart Disease and cancer
  - Suicide (10-15%, 5-7X higher than general public)

Among persons with SCI...Depression may well be the #1 cause of death in the first 2-5 years...