



Session Descriptions & Objectives **Monday, May 6, 2019**

Mitch Rosenthal Memorial Lecture

Challenges & Strategies in Predicting Brain Injury Outcomes

Flora Hammond, M.D.

Predicting the outcomes of traumatic brain injury has implications to clinical care, resource allocation, research outcome, and patient/family counseling. Over the years we have found several apparent markers of recovery, at least when applied in the general sense. However, translating research in this area into the practice of outcome prediction has significant challenges. Outcome predictions are powerful in that they have the potential to guide expectations and there by impact resource allocation. Most studies on traumatic brain injury have categorized outcome in to good and bad recovery. In many cases, the broad category of “bad recovery” includes “severe disability”, thus combining outcomes ranging from dead and vegetative to not being able to pay your own bills. Markers for recovery might have a potential role in monitoring one’s recovery to identify when someone is not progressing as anticipated. Additionally, predicted outcomes may have a role as a standard by which intervention outcomes are compared, and have been postulated as a tool for stratifying randomization in clinical trials. Other challenges confronting the clinician are how to best approach families with this prognostic information, and how the information should be used clinically (if at all) and when. These considerations for prognostication will be reviewed. Published guidelines and approaches to prognostication, as well as limitations and challenges will be discussed.

Objectives:

1. Discuss the needs and uses of outcome prediction
2. Explain the pitfalls in predicting outcomes
3. Identify some of the prognostic factors used in outcome prediction and understand limitations in use
4. Discuss strategies in outcome prediction

Coping Skills Group Intervention: Integrating Wellness & Psychological Strategies

Samantha Backhaus, Ph.D., LCP

This presentation will focus on describing the basic elements of the evidenced-based Brain Injury Coping Skills Group, which is a 16-session group for persons with brain injury and a caregiver. Less time will be spent reviewing each module in detail and the research studies examining the efficacy of this program. Instead, the primary focus of this talk is more intervention based. Specifically, attendees will learn about the BICS Wellness Model that can be taught to group participants, as well as wellness strategies that are used to enhance recovery following a brain injury. Participants will also learn how cognitive-behavioral, dialectical-behavioral, and some Acceptance and Commitment approaches are integrated in this intervention, so as to promote better self-efficacy, mood, neurobehavioral functioning, and adaptation to life after BI.

Objectives:

1. Become Familiar with the Basic Elements of the Brain Injury Coping Skills (BICS) Intervention
2. Learn about the BICS Wellness Model to Improving Health and Well-Being after Brain Injury
3. Describe CBT, DBT, and ACT Paradigms Used in Helping to Promote Adaptation



When Is It mTBI, When Is It PTSD, and When Is It Both: How Do You Know, and What Do You Do about It?

Brian Meyer, Ph.D., LCP

There is a high degree of overlap between mild traumatic brain injuries and Post-Traumatic Stress Disorder, both in civilian and in Veteran populations. Depending on who is doing the diagnosing and what is being focused on, one or the other conclusion can be drawn. That is because there is also a high degree of overlap between the symptoms of mTBI/Post-Concussive Syndrome and PTSD. This presentation will discuss what we know about the overlap of mTBI/PCS and PTSD in civilian and Veteran populations. It will also address how we can them apart and the implications for how we treat them.

Objectives:

1. Participants will be able to discuss why mTBI/PCS and PTSD are so often found together
2. Participants will be able to identify at least three overlapping and six distinctive symptoms of mTBI/PCS and PTSD
3. Participants will be able to identify strategies about how to treat co-occurring PTSD and mTBI

Return to Driving after Brain Injury: How can a General Occupational Therapy Practitioner Help You?

Kathryn Perry, OT

Driving is an occupation which many individuals recovering from a brain injury desire to return to performing. Although the path may not be clear or simple, occupational therapy can help the patient and the physician navigate the return to driving process. We will briefly review research related to driving after brain injury as well as the Virginia Department of Motor Vehicles medical policies and procedures. Participants will gain an understanding of how a general occupational therapy practitioner can assist a patient in the return to driving process as part of a comprehensive occupational therapy evaluation. Sheltering Arms Driver Readiness Program, which includes an off road driving assessment and if available and appropriate, use of the driving simulator will be examined. Participants will gain an understanding of what a Certified Driving Rehabilitation Specialist (CDRS) is and when a CDRS referral is required. Finally, we will provide additional resources for attendees to continue to remain well informed on the topic of return to driving.

Objectives:

1. Attendees will gain a general understanding of research related to brain injury and driving
2. Participants will be able to locate the Virginia Department of Motor Vehicles medical policies and procedures
3. Participants will gain understanding of how a general occupational therapy practitioner can assist them in the return to driving process as part of a comprehensive occupational therapy evaluation
4. Participants will gain understanding of what the Sheltering Arms Driver Readiness Program entails, including how the driving simulator is utilized
5. Participants will be able to locate a Certified Driving Rehabilitation Specialist (CDRS) in the area and gain understanding of when a referral to CDRS is required
6. Attendees will receive additional resources on the topic of return to driving



Concussive Brain Injury: Clinical Caveats and Interventions to Optimize Outcomes

Nathan Zasler, M.D.

This talk will address the numerous issues that are important for clinicians to keep in mind when evaluating persons with presumptive post-concussive complaints. Issues to be addressed include understanding the lack of consensus regarding diagnostic criteria and terminology, the typical natural history of concussion recovery, challenges in differential diagnosis and factors to keep in mind that may influence recovery course. Factors that have been showing to be predictors of protracted symptomatology and so-called PPCS will be reviewed in the context of both evidence based medicine and theoretical posits. Finally, specific recommendations will be given to improve patient outcome and decrease the risk of protracted symptomatology.

Objectives:

1. Review facts about concussive brain injury (CBI) and some of the challenges in clinical care and research
2. Examine the natural history and outcomes of CBI
3. Discuss terminology and its appropriateness and limitations as regards PCS and PPCS
4. Provide insights on why some patients develop PPCS
5. Understand causality determination and differential diagnosis in the context of evaluating PPCS
6. Discuss suggestions on how to minimize PPCS

Communicating Prognosis after Brain Injury

Flora Hammond, M.D.

After brain injury, patients and families need information about future outcomes. This information needs to encompass the range of possible outcomes, while being tailored to the individual and their desire for information. It is important for the provider to understand that the delivering prognostic information may impact care choice, expectations, and eventual outcome. Depending on the information communicated and the means of communication, prognostic discussions may also be a source of hope and provide a roadmap for recovery. Approaches to communicating prognostic information will be explored in this workshop.

Objectives:

1. Consider the needs of individuals and their families in exploring prognosis with health care providers
2. Discuss pitfalls and strategies for communicating prognosis
3. Understand the impact and utility of prognostic information
4. Identify some useful approaches to communicating prognosis

Yoga & Meditation for TBI: Evidence, Innovations and Ways Forward

Paula Levin-Alcorn, MSW, LCSW, CBIS & Asya Haikin, MA, C-IAYT, RYT-500

This interactive presentation will describe the evidence-based benefits of yoga and meditation for TBI and modifications to improve the safety and accessibility of these practices. Participants will also be guided through examples of TBI-friendly yoga and meditation practices.

Objectives:

1. Experience brief TBI-friendly yoga and meditation to enhance participants' confidence to participate in these practices in their communities
2. Be able to explain techniques for adapting yoga and meditation for the TBI population
3. Be able to explain the evidence-based benefits of yoga and meditation for TBI rehabilitation



Finding Identity and Meaning after TBI

Tom Bergquist, Ph.D., LCP

This session will review the impact of brain injury and treatment after brain injury on issues of identity and meaning. A case study will be used to illustrate how after experiencing a significant loss of purpose after brain injury, the rehabilitation process can be used to help find purpose and meaning again.

Objectives:

1. Describe the impact of TBI and rehabilitation after TBI on mood and coping.
2. Understand the need to incorporate mood, sense of meaning and identity into the rehabilitation process after TBI.

Suicide and Brain Injury: A Double Challenge

Robert Karol, Ph.D.

This presentation will address the issue of suicide post brain injury. It will begin with a description of the increased risk after brain injury and then explore risk factors and warning signs. The talk will conclude with how to respond to a person who is exhibiting suicidal ideation.

Objectives:

1. Describe the increased risk of suicide after brain injury
2. Explain the risk factors for suicide
3. Understand how to respond to a suicidal episode

Evaluating and Managing Concussions: Getting Back to Basics

Kevin Carneiro, D.O.

We will discuss and basic framework on how to evaluate concussions in a clinical setting. We will touch upon a multifaceted treatment approach. Goal is to leave with some practical tips that the audience can use in their clinical settings.

Objectives:

1. Be able to understand the basic framework for a concussion evaluation
2. Be able to understand the role of exercise in concussion management and how to prescribe it
3. Be able to understand sleep issues in concussion and how to manage it



Helping Individuals Improve Relationship Skills after Brain Injury

Samantha Backhaus, Ph.D. & Flora Hammond, M.D.

Research has shown that relationships are significantly impacted following a brain injury (BI), and this can influence rehabilitation and psychosocial outcomes. As such, there is a critical need to teach individuals how to enhance their relationship skills after a brain injury. Based on this need, a team of rehabilitation experts worked for several years to develop an innovative community outreach 2-day program, the Help Me, Help You interactive workshop for persons with BI and a family member. This presentation will briefly review these critical research findings regarding the effects of BI on relationships, and further explain the need for interventions to address this need. The presenters will briefly describe the psychosocial, affect recognition, and emotional treatment models that were used in the development of this workshop (the EmReg, TREAT, FARI, BICS, and Couples CARE programs). The major portion of this presentation will be spent describing the structural elements of this interactive workshop, consumer responses to this program, and thoughts for future directions.

Objectives:

1. Better understand the impact of brain injury on relationships
2. Learn about 5 core treatment models used to develop a relationship skill-building workshop
3. Describe the elements of the Help Me, Help You Workshop: A 2-day program aimed at teaching individuals emotional awareness and communication skills to enhance their relationships

Applications of Eastern Medicine in Rehabilitation Model for Service Members with TBI & PTSD

William Robbins, M.D.

This presentation will discuss the incorporation of alternative treatments hailing from eastern medicine for the sequel of persisting symptoms, impaired cognitive and emotional functioning as well as post traumatic headache after TBI in service members with and without PTSD in a rehabilitation setting.

Objectives:

1. Identify benefits of mindfulness and Chi Gong on cognition and emotional balance
2. Identify practices develop mindfulness in both patients and therapists
3. Identify the role of acupuncture in the treatment of post-traumatic headaches
4. Identify the application procedures for acupuncture in the treatment of post traumatic headaches

Resilience after Brain Injury

Rolf Gainer, Ph.D.

People who are living with a brain injury disability are faced with redefining themselves and establishing a life with personal meaning and value. Each person responds to the challenges of disability uniquely. Understanding resilience is important to each individual as they face the challenges and barriers created by disability.

Objectives:

1. To examine the concept of psychological resilience in relation to disability
2. To identify the processes of change associated with resiliency
3. To understand the significance of the personal narrative as a component of resiliency



Tuesday, May 7, 2019

When Failure is Not an Option: From TBI to Ph.D.

Kelli Williams Gary, Ph.D., OTR/L

At 20 years of age, Dr. Kelli W. Gary was attending a university in FL as a business administration major and with a relatively new goal of pursuing Army life full-time as a commissioned officer upon graduation. She had a major car accident, sustained a severe traumatic brain injury (TBI) and was abruptly thrust into a totally different world where she had to deal with the major consequences and how it changed her entire life. As she climbed out of a depressive state, she became determined to not let her TBI defeat her and used her strengths, information, and resources to assist her in pursuing a totally new direction in life. This is when she discovered the love for occupational therapy and the passion to attain the highest level of education no matter what limitations she has. Her goal was to inform others of how she overcame her injuries to pursue a BS, two Masters, and Ph.D. after sustaining a severe TBI resulting in physical and long-term cognitive and emotional problems. It is her desire to equip the audience with knowledge of living with a disabling condition but developing the coping and practical strategies needed to overcome those difficulties. With patience, persistence, and tenacity, she was able to achieve a level of greatness after a TBI and she would like to motivate others in her position to do the same.

Objectives:

1. Identify physical, cognitive, and emotional symptoms that are common after traumatic brain injury
2. Describe in detail my journey to return to school after brain injury and obtain BS, MPH, MS, and Ph.D. and describe challenges with work history in between
3. Describes ways to cope with unexpected changes that often result after traumatic brain injury
4. Discuss the strategies that assist with enhancing productivity and happiness after suffering from a traumatic brain injury

Cognitive Rehabilitation for Persons with ABI

Thomas Bergquist, Ph.D., LP

This session will review efforts by a national task force to review the literature on cognitive rehabilitation CR after acquired brain injury (ABI) and create specific practice guidelines for CR including specific examples of recommended approaches.

Objectives:

1. Be able to demonstrate a basic understanding of evidence supporting the viability of cognitive rehabilitation as a treatment for memory dysfunction following acquired brain injury.



Ethics Plenary Session

Reflection on Ethics in Brain Injury Practice

Robert Karol, Ph.D., LP, ABPP, CBIST

This presentation will address the nature of ethical standards. Both aspirational and obligatory ethical variables will be discussed. It will then provide a description of these across disciplines. The talk will conclude with an opportunity for participants to explore ethical issues in case studies.

Objectives:

1. Describe the nature of ethical standards
2. Explain differences in ethical standards across disciplines
3. Explore ethical issues in case examples

An Integrated MD/PT Clinic Model for Concussion Management: Benefit to the Patient and as a Program

Cristin Beazley, PT, DPT, CBIS

Continued development and implementation of concussion services is necessary to address current management which can often be ineffective and inconsistent. An integrated model with PT and physician services allows the patient to have early access to education and evaluation with a defined plan to get them started on their way to recovery.

Objectives:

1. To understand the role of the integrated clinic model
2. To understand the benefit to the patient of the integrated model
3. Understand the business implications and benefit of the integrated model

Knowledge Translation in the Trenches: Extra Functional Electrical Stimulation Cycling Practice During Inpatient Rehabilitation

Zachary Crump, PT, DPT, NCS

The purpose of this session is to describe a 3 year knowledge translation process of implementing extra FES cycling into inpatient rehabilitation. The results of one feasibility study and one, year long, quasi-experimental study were applied to the Knowledge to Action Cycle; extra FES practice went from 0% use to 50% use after 3 years of knowledge translation.

Objectives:

1. Describe the Knowledge to Action Cycle and knowledge translation strategies used in clinical research
2. Explain the benefits of extra practice and the effects of FES on recovery in patients who have suffered a stroke
3. Describe knowledge translation strategies utilized for extra practice at Sheltering Arms



Psychogenic Stuttering after TBI

Woody Beach, Ph.D., CCC-SLP

Acquired stuttering in adults is often caused by neurogenic insults including stroke, traumatic brain injury, and degenerative neurological disease. Although traumatic brain injury is a common etiology of acquired stuttering, psychological factors may complicate diagnosis and treatment. Misdiagnosing psychogenic stuttering may result in unsuccessful or incomplete treatment. Consideration of psychogenic etiologies should be a part of any speech evaluation after traumatic brain injury. This lecture will utilize a case study to address issues of psychogenic stuttering after concussion.

Objectives:

1. List etiologies of acquired stuttering in adults
2. Differentiate symptoms and other findings of psychogenic vs. neurogenic stuttering
3. Describe treatment strategies for psychogenic stuttering by speech pathologists

Role of Therapy Services for the Pediatric Patient in Concussion: What's New?

Ryan Lockwood, MS, PT, CSCS

This session will discuss the latest research and treatment strategies to address the management of concussion and post concussion symptoms by therapy services including PT, OT, and Speech. This session will focus on relevant assessment and treatment strategies used in therapy services, care coordination, and referral considerations.

Objectives:

1. Participants will be able to recognize signs and symptoms of concussion in pediatrics that would benefit from therapy services
2. Participants will be able to identify current treatment strategies and recommendations used in therapy services
3. Participants will appreciate how an interdisciplinary team can be used as best practice

The Effects of Exercise on Individuals with Depression and Brain Injury

Katie St. Clair, PT, DPT, CBIS

This review provides evidence that patients post brain injury may utilize multiple types of aerobic exercise to reduce depression symptoms. Exercises performed at low-moderate intensity, 60 minutes per session, 3-5 sessions per week, for a minimum of 8-12 weeks may achieve statistically significant reduction in depression symptoms.

Objectives:

1. Compare and contrast various depression scales for assessment of symptoms in patients post brain injury
2. Examine literature with evidence-based exercise protocols which may reduce depressive symptoms post brain injury
3. Identify implementable exercise recommendations for improved depressive symptoms in patients living with brain injury



Group Therapy Focused on the Meaning and Purpose in Life for Individuals with Brain Injury

Alison Fedio, Ph.D., PsyD

Group therapy for individuals with mild/moderate traumatic brain injury based on meaning making and purpose in life yielded improvement in clients' perceptions of their overall functioning, self-conscious emotions, creativity, and activity levels. Pilot study findings are reported.

Objectives:

1. Learn Frankl's basic principles for living life with meaning (logotherapy)
2. Appreciate outcome measures targeting self-conscious emotions and creativity
3. Appreciate the utility of group therapy for creating positive change post mild/moderate TBI

Cognitive Prosthetics for TBI & Return to School: A Comprehensive Guide

Melissa Oliver, OT

This presentation will cover future technology in development as well as new and creative uses of existing technology for augmenting cognitive processes in individuals with traumatic brain injury who are returning to school. The presentation will discuss feature assessment, selection and application models of assistive technology for cognitive prosthetics.

Objectives:

1. Identify feature matching assessment procedures
2. Identify new and current technology for return to school
3. Identify training process including letters of accommodations

Interdisciplinary Team Approach to the Assessment and Treatment of Sleep Disorders in a Polytrauma Rehabilitation Setting

Rylie Power, BS

Many people with brain injury experience sleep disorders, and early identification and treatment may improve rehabilitation outcomes. This session describes an interdisciplinary program of sleep assessment and treatment conducted in a residential rehabilitation setting, with discussion of program and patient outcomes.

Objectives:

1. Present an interdisciplinary sleep assessment protocol and intervention model developed within a Polytrauma residential rehab setting
2. Discuss sleep tracking tools and strategies used for assessment and treatment
3. Discuss formative and summative evaluation outcomes of program efficacy



The Resilience and Adjustment Intervention: An Empirically-Based Approach

Jeffrey Kreutzer, Ph.D.

The recent growth of Positive Psychology in the field of Clinical Psychology has seen a greater focus on patients' strengths rather than disability, maladaptation, and distress. Only recently has the field of brain injury rehabilitation shifted toward the principles of Positive Psychology as a structural foundation. In response to this movement, researchers at the NIDILRR-funded Virginia Commonwealth University Traumatic Brain Injury Model System have developed and, via a randomized clinical trial, evaluated the efficacy of the Resilience and Adjustment Intervention (RAI). This presentation will delineate the elements of the RAI as well as the underlying efficacy data supporting the notion that resilience can be strengthened thereby improving emotional well-being.

Objectives:

1. Discuss the characteristics of resilience
2. Recognize resilient qualities in consumers
3. Selectively employ resilience-based interventions to enhance consumers' well-being

Accommodations & Access for Students with TBI

Megan Vaughan, CCC-SLP, CBIS

Individuals who have sustained a traumatic brain injury face a variety of obstacles when returning to school. Research has shown that specialized accommodations in conjunction with the student advocating for these accommodations is imperative for success as many disabled student programs are not familiar with the needs of this population.

Objectives:

1. Identify the roles of the patient, OT, PT, MD, PSY, RT, Voc, and SLP in return to school accommodations preparations
2. Identify the various available accommodations and alternatives for students with TBI in the college and high school/ middle school setting
3. Identify activities for student to advocate for his/her own accommodations



Effectiveness of Nutritional Supplementation for Improving Outcomes after Concussion/Mild TBI: A Systematic Review

Cheryl Ford-Smith, PT, DPT

The purpose of this session is to determine the efficacy of nutritional supplementation for the reduction of symptoms related to concussion with improved functional and cognitive outcomes for individuals diagnosed with acute and chronic symptoms related to concussion or mTBI. Data suggests that omega-3 fatty acids, n-acetyl cysteine (NAC), and Enzogenol promoted improvement in memory and post-concussive symptoms. A combination of omega-3 fatty acids, a high-potency multivitamin and a brain enhancement supplement (ginkgo, vinpocetine, phosphatidylserine, acetyl-l-carnitine, huperzine A, alpha-lipoic acid and n-acetyl cysteine) demonstrated improved brain perfusion with improved general cognitive proficiency, attention, memory, and reasoning. Existing evidence demonstrates potential efficacy of nutritional supplements such as NAC and Enzogenol to promote post-concussion symptom remission and improving cognitive functioning and mental fatigue.

Objectives:

1. Increase awareness of the research available related to supplementation
2. Supplementation and improvement in concussion symptoms
3. Discuss which supplements have been researched

Measuring Emotional Distress after TBI

Grace Denio, BS

BSI-18 and the 13-Item Stress Test scores were compared using data from three time-points in a brain injury resilience and adjustment intervention clinical trial. Conclusions: These findings indicate that the 13-Item Stress Test performs in a similar manner to the BSI-18 in measuring stress in TBI survivor populations.

Objectives:

1. Compare the validity of the 13-Item Stress Test against the Brief Symptom Inventory-18 (Derogatis, 2000) as a measure of anxiety symptoms in a sample of individuals with TBI and to further examine anxiety and depression symptoms in the context of TBI.

A Law to Protect Brain Injury and Trauma Survivors

Cheryl Kempf

This session presents the details of how this law was researched, planned and came into being. Cheryl was the survivor of this incident and on her own wrote, spoke to legislators about her brain injury, her arrest, PTSD and how that became her question on how to prevent this from happening to anyone else who is different.

Objectives:

1. To inform about this law and who it helps
2. To encourage survivors, family, caregivers, and decision makers that effecting change is important, and how this was done for HB 1338
3. To network this law from a state law to national legislation, helping brain trauma survivors everywhere because brain trauma happens everywhere



HEADING FORWARD

-Together-

Music and the Effects on the Brain

Anna McChesney, MS, LPC

Music therapy will be compared and contrasted to the personal use of music to benefit and cause positive change in the brain. Effects will include emotional and mood regulation, speech, physical and cognition. Techniques, interventions, and goals will be shared.

Objectives:

1. Understand the effects of music on the brain
2. Differentiate between personal music use and professional music therapy
3. Learn music techniques to enhance brain health