BRAIN INJURY ASSOCIATION OF MICHIGAN

Certification Exam Preparation Course
Chapter 1: Overview of Brain Injury

WEBINAR

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Module Objectives

- Describe the incidence, prevalence and epidemiology of brain injury.
- Distinguish between traumatic brain injury and acquired brain injury.
- Describe the systems of care available in the rehabilitation continuum.
- List several of the funding issues for the support of persons with brain injury.
- Explain the TBI Act of 1996 and its impact on services and funding for persons with brain injury.

Introduction

Traumatic brain injury (TBI) has been called the "***silent epidemic***."

- An estimated ***10 million*** Americans are affected by stroke and TBI
- This makes brain injury the ***second*** most prevalent injury and disability in the United States.

Definition of TBI

TBI is an insult to the brain, not of a degenerative or congenital nature but caused by ***an external physical*** force, that may produce a diminished or altered state of consciousness, which results in an impairment of cognitive abilities or physical functioning. It can also result in the disturbance of behavioral or emotional functioning. These impairments may be either ***temporary or permanent*** and cause partial or total functional disability or psychosocial maladjustment.

National Head Injury Foundation (1996)

Causes of TBI

- Motor Vehicle Crashes
- Falls
- Gunshot Wounds
- Sports Injuries
- Workplace Injuries
- Child Abuse
- Domestic Violence
- Military Actions
- Other injuries caused by trauma

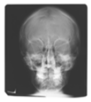
Definition of Acquired Brain Injury (ABI)

An ABI is an injury to the brain that has occurred after ***birth*** and is not hereditary, congenital or degenerative. The injury commonly results in a change in neuronal activity, which affects the physical integrity, the metabolic activity, or the functional ability of the cell. The term does not refer to brain injuries induced by birth trauma. Includes TBI and injuries caused by an ***internal insult*** to the brain.

Brain Injury Association of America (1997)

Causes of ABI

- TBI
- Tumor
- Blood clot
- Stroke
- Seizure
- Toxic exposure (e.g., substance abuse, ingestion of lead, inhalation of volatile agents)



- Infections (encephalitis, meningitis)
- Metabolic disorders (insulin shock, diabetic coma, liver and kidney disease)
- Neurotoxic poisoning
- Lack of ***oxygen*** to the brain (airway obstruction, strangulation, cardiopulmonary arrest, carbon monoxide poisoning, drowning)

ABI Effects

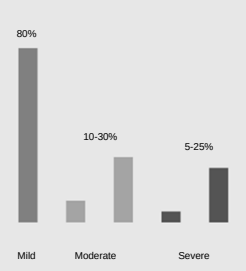
Acquired brain injury may result in mild, moderate, or severe impairments in one or more areas including:

- ***Cognition*** (i.e. speech-language communication, memory, attention and concentration, reasoning and abstract thinking)
- ***Physical functions*** (i.e. ambulating, seeing, hearing, balancing)
- ***Psychosocial behavior*** (i.e. social skills, anger management, impulsivity)

Understanding the Definitions

- While it is important to understand the different definitions of brain injury, the term brain injury is used throughout this manual to refer to acquired brain injury.
- When reference is specifically made to injury caused by trauma due to external physical force, the term traumatic brain injury (TBI) is used.
- Much of the research has been done with persons with ***TBI***.

Injury Severity



Injuries are classified according to mild, moderate and severe injuries.

- ***80%*** are mild
- 10-30% are moderate
- 5-25% are severe

Concussion: mild TBI that often goes undiagnosed as such

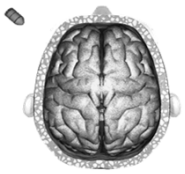
Epidemiology of TBI

- Every ***23 seconds***, one person in the United States sustains a traumatic brain injury.

- More than ***50,000*** people die every year as a result of traumatic brain injury.
- 235,000 people are hospitalized each year with traumatic brain injury.
- 80,000-90,000 Americans experience the onset of a long-term disability following traumatic brain injury each year.

Epidemiology of TBI

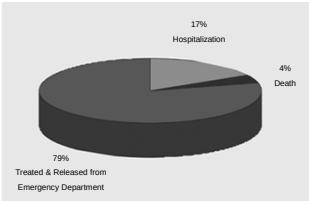
- After one traumatic brain injury, the risk for a second injury is ***three times greater***; after the second injury, the risk for a third injury is ***eight times greater***.
- After 2/3 of firearm-related traumatic brain injuries are classified as suicidal in intent.
- ***91%*** of firearm-related TBI's result in death.



Courtesy Centre for Neuro Skills

Incidence of TBI

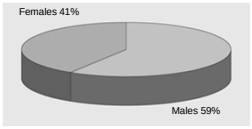
- 1.4 Million Traumatic Brain Injuries occur every year.



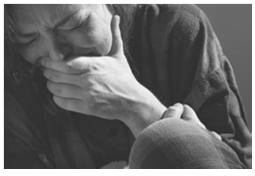
- Deaths 4%
- Hospitalizations 17%
- Emergency Department Visits 79%

Incidence & Gender

- In other words, males sustain 1.5 times as many brain injuries as females.
- Males have higher rates of Hospitalization, Death and Emergency Department Visits



Incidence & Gender



- ***Intimate violence*** is the leading cause of serious injury to American women between the ages of 15 and 44 and frequently results in TBI.

Incidence & Age

- Incidence of TBI is highest in the 0-4 age group (1121 per 100,000)
- Deaths from TBI are highest in the 75 or older age group (51 per 100,000)
- Emergency Department visits are highest in the 0-4 age group (1035 per 100,000)

Cause of Injury

Alcohol is a significant factor in injury etiology:

- In a review of publications examining alcohol intoxication at the time of injury, rates ranged from 37% to 51%.

Systems of Care

Hospital-Based Services

- Acute Hospital Care
- Acute Rehabilitation

Post-Hospital Services

- Skilled Nursing Facility (Sub-acute)
- Post-Acute Rehabilitation
- Outpatient Services
- Supported Living

National Accreditation & State Licensure

- National accreditation organizations have established set standards for rehabilitation programs.
  - ***JCAHO***: Joint Commission on the Accreditation of Healthcare Organizations
  - ***CARF***: Commission on the Accreditation of Rehabilitation Facilities
- A number of states have required ***licenses*** for programs serving persons with brain injury.
- The goal of accreditation standards and licensure is to ensure that ***the organization has the capacity*** to meet the needs of individuals with disabilities.

Costs of Traumatic Brain Injury

- Traumatic brain injuries cost more than ***$60 billion*** annually.
- Estimated lifetime costs for one year of those injuries are $406 billion.

The costs are often due to the resultant life-long disability.

Funding

Approximately ***5%*** of individuals with severe brain injuries have adequate funding for long-term treatment.

Brain Injury Association of America

Whatever the funding source, it is essential that:

- Advocacy is provided
- Available funding is appropriately and cost effectively managed

Private Funding

Indemnity Insurance

- Insurer assumed the responsibility of paying medical benefits for services performed and covered under the policy in return for premium payments

Managed Care

- Health Maintenance Organizations (HMOs)
- Preferred Provider Organizations (PPOs)
  - Gate-keeping
  - Elective contracting with providers
  - Quality controls
  - Risk-sharing

Public Funding

Medicaid provides health care for more than ***40 million*** people throughout the US:

- Low-income families
- People who are blind
- People age 65 and older
- People who have disabilities

Medicaid.gov
Keeping America Healthy

Public Funding

State Home and Community-Based Services Waivers (HCBS)

- A state with Centers for Medicare and Medicaid approval can waive one or more of the requirements of eligibility for funding and provision of services.
- ***Increases*** accessibility to services.
- Encourages the development of new approaches for health care delivery to meet the special needs of particular areas or groups of people (e.g., persons with brain injury).

Home and community based services

- Case management
- Home health aide services
- Adult day health
- Respite care
- Homemaker service
- Personal care
- Habilitation services
- Day treatment or other partial hospitalization services, psychosocial rehabilitation services, clinic services for individuals with chronic mental illness
- Expanded habilitation services (i.e., prevocational services to prepare an individual for paid or unpaid employment)
- Other: emergency response systems, assistive technology, etc.

Access to Services

Those most likely to have difficulty accessing services are individuals:

- With ***cognitive impairment*** but who lack physical disabilities
- Without an effective ***advocate***
- With ***problematic or unmanageable*** behaviors *

* Without treatment, individuals with problematic or unmanageable behaviors are the most likely to become ***homeless, institutionalized in a mental facility, or imprisoned***.

Government Accounting Office (GAO)

GAO Report

- The 1997 GAO report on Traumatic Brain Injury determined that Medicaid and Home and Community Based Waiver programs covered an estimated 2,478 individuals and spent $118 million.
- By comparison in the same year, waivers covered an estimated 236,000 individuals with mental retardation/developmental disabilities and spent approximately $5.8 billion!

The Olmstead Decision

- It requires states to administer their services, programs, and activities "in the ***most integrated setting*** appropriate to the needs of qualified individuals with disabilities."
- The ADA and the *Olmstead decision* apply to all qualified individuals with disabilities regardless of ***age***.
- The decision has resulted in several federal and state initiatives that will make living in ***the community*** a reality for more people with disabilities.

Advocacy: Brain Injury Association of America (BIAA)

- In 1980, a group of ***family members*** of persons with traumatic brain injuries founded the National Head Injury Foundation, now BIAA.
- The organization has grown into a ***national*** organization, including 42 chartered state affiliates.

Traumatic Brain Injury Act (1996)

Purpose

- To expand efforts to identify methods of ***preventing*** traumatic brain injury
- Expand biomedical research efforts or minimize the severity of dysfunction as a result of such an injury
- To improve the ***delivery and quality of services*** through State demonstration projects

Traumatic Brain Injury Act (1996)

TBI Act authorized:

- The Centers for Disease Control and Prevention (CDC) to establish projects to ***prevent and reduce the incidence of*** traumatic brain injury
- The National Institutes of Health to ***award grants*** to conduct basic and applied research on developing new methods for more effective diagnosis, therapies, and a continuum of care.

The Health Resources and Services Administration (HRSA)

- Provides grants to states to carry out demonstration programs to implement systems that ensure statewide access to comprehensive and coordinated TBI services.
- States who receive grants must implement the following components:
  - Statewide TBI advisory board
  - Staff responsible for TBI activities
  - Statewide needs assessment to address the full spectrum of services
  - Statewide action plan to develop a comprehensive, community-based system of care (HRSA 1999).

Research

- A ***traumatic brain injury*** can happen to a child or adult of any age, race, gender, religion or socioeconomic status.
- It is important to quantify the problem by conducting ***surveillance***.
  - ***Surveillance*** is the ongoing and systematic collection, analysis and interpretation of data used to describe and monitor a health event.

Traumatic Brain Injury (TBI) Model Systems of Care (TBIMS) (1987)

- Funding provided by US Department of Education's National Institute on Disability and Rehabilitation Research (NIDRR), which maintains the TBI Model Systems National Database
- To develop a ***model system of care*** for persons with traumatic brain injury, emphasizing continuity and comprehensiveness of care
- To maintain a standardized national database for innovative analyses of ***TBI treatment*** and outcomes.
- Each center provides a coordinated system of emergency care, acute neurotrauma management, comprehensive inpatient rehabilitation and long-term interdisciplinary follow-up services.

NIH Research

The National Institutes of Health conducted research on the development of new methods and modalities for:

- More effective diagnosis
- Measurement of degree of injury
- Post-injury monitoring
- Assessment of ***care models*** for brain injury recovery and long term care

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Chapter 8: Legal and Ethical Issues

WEBINAR

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Module Objectives

- Describe the legal rights of persons receiving rehabilitation services.
- Explain the ethical standards of rehabilitation staff.
- Define basic legal terms and concepts.
- Explain the rights of an individual in rehabilitation under the Americans with Disabilities Act.

Legal Rights of the Individual Receiving Rehab Services

- Legal Rights are powers or privileges that an individual has ***under the law***.
- Physical or mental changes that occur after a brain injury do not alter a person's ***legal rights***.
- However, if the individual is unable to exercise those rights, then a legal representative may exercise those rights for the individual as allowed by state law.

Basic Legal Rights

The four basic sources of law are:

- ***Common Law*** – Developed from court decisions.
- ***Constitutional Law*** – Based on the U.S. Constitution, as well as the constitution of the state where the person lives.
- ***Statutory Law*** – Enacted by Congress or a state legislature in the form of individual *statutes*, which together form a *code*.
- ***Administrative Law*** – Created by administrative agencies such as the Department of Health and Human Services, by statute, or the state legislature. Authorized an agency to create laws known as *rules* or *regulations*.

Client Bill of Rights

- A written guarantee of basic rights for persons in treatment programs.
- Staff are accountable to adhere to these rights in their treatment activities.
- A violation of any of these rights could be an unlawful act or potential grounds for a lawsuit.
- Must be posted in a prominent place in the program
- Must be written in the primary language of each resident
  - Assistance must be provided to each person to assure comprehension of his or her rights.

Client Bill of Rights and You

- Individual staff and programs as a whole are accountable to adhere to these rights in all of their operations.
- A violation of any of these rights could be an unlawful act or potential grounds for a lawsuit.
- As a staff member, you do not have a choice in this matter. It is your responsibility to immediately bring ***potential violations*** up to your supervisor or program, or outside agency, if necessary, as they are discovered. Failure to do so may make you personally liable for any violations.

Seclusion and Restraint

- ***Seclusion*** – generally defined as isolating a person from others and physically preventing him or her from leaving a confined area.
  - May include a locked time-out room or solitary confinement, or physically preventing a person from leaving a room by stopping him or in the doorway.
- ***Restraint*** – generally defined as any manual, mechanical, chemical or other means of restricting movement or access to one's body, against one's will.
  - May include other people holding the person; restricting movement through straps, belts, helmets, placement in chairs that they can not get out of, or other mechanical means.

Use of Seclusion and Restraint

- Seclusion and restraint are highly restrictive procedures that place both individuals receiving treatment and staff at risk for ***severe harm or death***.
- Each year people placed in restraint die because of postural asphyxiation and other medical causes. A number of staff are ***severely injured***.

Use of Seclusion and Restraint

- State and federal law, as well as accrediting organizations such as JACHO and CARF, and professional associations mandate that seclusion and restraint can only be used as a measure of last resort when no other viable options are available and there is ***imminent danger*** to either the client or others.
- Laws on seclusion and restraint usage vary across patient populations, ages and treatment settings.

Use of Seclusion and Restraint

- In many states each use of seclusion or restraint is viewed as crisis intervention due to ***treatment failure***, and not as an effective treatment.
- Each episode of seclusion or restraint requires review by the individual's treatment team to reassess and revise current treatment protocols to reduce or prevent the need for these restrictive procedures.

Guidelines for the Use of Seclusion and Restraint

- Seclusion and restraint procedures are never allowed for retribution, staff convenience, or to make up for inadequacies of the treatment program such as an unsafe environment, inadequate staffing, inadequate training of staff, poor professional oversight, lack of treatment planning, or other such factors.
- Seclusion or restraint is only to be considered when a person truly is an imminent danger to him/herself or others and other ***less restrictive procedures*** have been ineffective.
- Implementation of seclusion or restraint must occur according to pre-established guidelines that often require an order from a qualified medical professional or psychologist.

Guidelines for the Use of Seclusion and Restraint

- The physical and psychological status of the individual under restraint or seclusion must be constantly monitored by a qualified staff member at the site of the intervention.
- The episode of seclusion or restraint must end as soon as the ***individual is no longer of danger to him/herself or others***. It may not be continued until compliance to some other program demand or compliance criteria has been met.

Guidelines for the Use of Seclusion and Restraint

- Although many seclusion and restraint procedures are implemented via non-violent physical crisis intervention techniques, it is important to remember that regardless of intended approach, the recipient of such intervention will usually experience the technique as violent and personally degrading.
- It is critical that all staff and the individual involved in the procedure debrief together to review the circumstances leading up to the use of the restrictive intervention, the process of the intervention, personal reactions to the intervention, and what can be done in the future to prevent the need for seclusion or restraint.

Medical Restraints

- Medically prescribed restraints are often considered as a different class from restraints to address behavioral challenges.
- These may include helmets for people prone to falling due to seizures, lap belts or lap trays on wheel chairs to prevent falling and assist daily activities, and other devices that promote the safety and function of the individual. They must be prescribed by a physician and monitored for safety.
- Most medical restraints can be managed by the individual or are applied and removed under his or her direction.
- Medical restraints can be abused when they really are for ***behavioral control***.

Accreditation Standards and the Law

- Accreditation addresses ***standards of safety*** and ***quality of care*** provided by a facility.
- It may be voluntary required for state licensing requirements or federal certification.
- Major accreditation organizations include:
  - Joint Commission on Accreditation of Healthcare Organization (JCAHO)
  - Commission on Accreditation of Rehabilitation Facilities (CARF)
- Accreditation standards vary across settings, populations, and treatment goals.

Ethical Standards

Ethical Standards are standards of ***professional conduct*** rooted in the ***moral principles*** and ***values*** of society and the profession.

- Although legal rights are anchored in ethical standards, ethical standards exceed legal rights.
- Regulatory boards, employers, and professional organizations (i.e, state board of nursing, ASHA, APA) often establish ethical standards in professional codes of conduct and in state regulations.
- Rehabilitation staff must follow both the law and a broader standard of ethics established within their state, program and profession.

Ethical Standards

The ethical standards of health care professions usually reflect the following principles:

- Respect
- Beneficence
- Autonomy
- Nondiscrimination
- Loyalty
- Truthfulness
- Competence
- Compliance
- Confidentiality

Legal Terms and Concepts

- ***Competency or Capacity***
  - A legal term that describes a person's mental ability to understand the nature and effect of one's decisions and acts.
  - Generally, the law presumes that a person is competent unless proven otherwise.
  - Only a court may determine that an individual is legally incompetent
  - If deemed incompetent, the court will appoint a representative to make the decisions that the individual is incapable of making.
  - Staff should report concerns that a legally competent patient is not competent or vice versa.

Legal Terms and Concepts

- ***Guardianship***
  - A legally enforceable arrangement under which one person, the guardian, has the legal right and duty to care for another (the ward).
  - A person with a guardian does not lose basic legal rights.
  - Guardian of the person – cares for the personal needs of the ward.
  - Guardian of the estate – cares for the property of the ward.
  - Plenary guardianship – cares for the personal needs and the property of the ward.

Legal Terms and Concepts

- ***Power of Attorney***
  - A competent person, the principal, appoints another, the agent, to act for him in legal and financial matters.
  - The agent may have specified broad or limited powers.
  - The powers of the agent may begin immediately or following an event (i.e., brain injury).
  - The appointment may also be *durable*, meaning that the powers do not change when the principal becomes disabled or incompetent.
  - Under most state laws, a guardian can override or revoke the power of attorney.
  - Staff should be aware of powers of attorney and their specified duties.

Legal Terms and Concepts

- ***Living Will***
  - A document that provides written instructions by a competent adult to a physician on providing, withholding, or withdrawing life-sustaining procedures when the individual is in a terminal or permanently unconscious condition.
- ***Durable Power of Attorney for Health Care*** = Medical power of attorney/Health care proxy
  - A competent adult, the principal, appoints an agent to make decisions about medical care in the event that the principal is unable to make those decisions.
  - It differs from a living will or advance directive because the principal is not giving specific instructions about what to do, but identifying the person he or she wants to make those decisions.

Confidentiality & HIPAA

- Health care providers have a duty to maintain patient confidentiality.
- Federal Health Insurance Portability and Accountability Act (HIPAA) - 1996 - Effective April 2003.

  - Requires regulations to be developed to protect individually identifiable health information.
  - HIPAA privacy standards – identifying health information which can be linked to a person individually, may not be used or disclosed for reasons other than treatment, payment or service operations without specific authorization from the individual or a guardian.

Privilege

- The patient's right to prevent disclosure of healthcare information to others by a health care provider, unless authorized by the patient.
  - State laws may allow disclosure of patient information with the patient's approval when it is deemed in the public interest, such as: reporting communicable diseases, gunshot wounds, and abuse.
  - A health care provider may also have a required and statutory *duty to warn* third parties of a risk of violence, contagious disease, abuse or other risk in special circumstances.

Informed Consent

- A patient's right to consent to care only after the health care provider fully discloses risks and facts necessary to make an informed decision about health care.
- The individual (or their appropriate guardian) must be given accurate and timely information in a format and language that ***the individual*** can understand.

Abuse, Neglect, and Exploitation

- ***Abuse*** – the willful infliction of injury, unreasonable confinement, intimidation, or punishment with resulting physical harm, pain or mental anguish.

- ***Neglect*** – usually a failure to provide for the basic needs of a dependent individual.
- ***Exploitation*** – the use of a dependent individual's property illegally or without the consent of the individual.

Abuse, Neglect, and Exploitation

- Persons (especially staff) with reasonable cause to believe that abuse, neglect or exploitation has occurred, or is occurring, are required by law to ***report the activity immediately*** to the appropriate government authority or to be subjected to penalty themselves.
- In most states, licensed professionals are mandatory reporters. They must report if there is a reasonable presumption. Proof that the allegation is correct is *not necessary*.

Advocate

- An individual or organization who serves on behalf ***of an individual***
  - Each individual has the right to seek the assistance of an advocate without reprisal.
  - Advocates may include organizations such as the Brain Injury Association of America, state protection and advocacy systems, case managers, or other specified individuals and organizations.

Americans with Disabilities Act (ADA)

- 1990 landmark Civil Rights Act designed to prohibit discrimination against individuals with disability
- Protects individuals with disabilities against discrimination
- Requires the provision of ***reasonable accommodations*** to minimize the handicapping effects of disability in the following areas:
  - Employment
  - State & local government services
  - Transportation
  - Public accommodations
  - Telecommunications

Americans with Disabilities Act (ADA)

ADA definition of an individual with a disability:

- A person who has a physical or mental impairment that substantially limits one or more major life activities such as walking, breathing, seeing, hearing, speaking, learning and working; or

- A person who has a history or record of such an impairment; or
- A person who is perceived by others as having such impairment

Conclusion

- It is important to understand the legal rights of an individual receiving brain injury rehabilitation services as well as the legal and ethical standards required of staff.
- Understanding the basic legal concepts encountered in the day-to-day world of brain injury rehabilitation helps to improve services and outcomes, as well as protect the patient, rehabilitation facility and its staff.