Managing Challenging Behaviors in Brain Injury

A Jackpot of Topics
4.21.16
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Challenging Behaviors

Dangerous
- Physical Aggression / Assault
- Verbal Aggression / Threatening
- Elopement
- Sexually Intrusive Behavior
- Suicidal Behavior
- Delusional Behavior
- Self Injurious Behavior

Problematic
- Poor Initiation
- Refusal Behavior
- Excessive Phone Call / Text
- Mood Disorders
- Pain Behavior
- Substance Abuse
- Eating Issues
- Hoarding
Origin of Behavior
Co-occurring Disorders

• Medical Disorder
  – Delirium
  – Pain
  – Metabolic Disorder

• Mood Disorder

• Disorders of Diminished Motivation

• Psychiatric Disorder

• Agitation / Aggression following TBI
How Challenging Behaviors May Develop

• Predisposition due to co-occurring issues

• Behavior is a primitive form of communication

• Early displays of unwanted behavior are followed by results that are often intended to produce comfort or achieve the quick solution
How Challenging Behaviors May Develop

• These results ultimately strengthen unwanted behaviors

• Over time this inadvertent strengthening of unwanted behavior makes likelihood of recovery less favorable and more difficult

• Extinction procedures may also initially produce more frequent or intense unwanted behavior
Essential Elements to Treat

- Experienced Treatment Team
- Appropriate Setting
- Trained Staff
- Data Collection Systems
- Communication Systems
- Treatment Philosophy
- Psychiatry, Neuropsychiatry, Neurology
- Behavior Analyst
- Nursing
- Physical Therapy
- Occupational Therapy
- Speech Cognitive Therapy
- Psychology & Neuropsychology
- Substance Abuse Counselor
- Recreational Therapy
- Brain Injury Specialists
- Case Management
Importance of Philosophy

• Guides interdisciplinary team in comprehensive assessment and treatment efforts

• Supports establishing priorities and promotes integrated programming at all levels

• Enables treatment programming to be consistent and highly individualized

• Provides organizing framework for all involved to navigate and promote successful recovery
Neurobehavioral Philosophy: 3 Keys to Stability & Success

Establish Medical Stability

Comprehensive & Integrated Programming

Skills Development
Motivation Enhancement

Develop Stable Activity Plan
Short Term Programming Phases

1. Assessment Phase
   - Medical
   - Clinical
   - Observational

2. Stabilization Phase
   - Prioritization
   - Integrated Programming

3. Generalization Phase
   - Community Reentry
   - Self – Directed / Other Directed
Case Study: Jim

- Currently age 46; injured in 2001 age 31
- United States Air Force Fighter Pilot - active duty – married at the time of the injury
- Single motor vehicle accident – ejected from car
- Diagnosed with TBI and presumed anoxic brain injury
- Prior to ReMed living at home with his and two young children, day programming services, aide
Assessment Phase: Jim

- Medical
- Physical
- Cognitive
- Communication
- Personal Care
- Behavioral
Establish Medical Stability

Promote Skills and Motivation to Change

Develop Stable Activity Plan
Medical Interventions

- Metabolic Instability
- Sleep Disorders
- Pain
- Spasticity
- Incontinence
- Mood / Behavior
- Medications
Treatment for Aggression
Psychopharmacology

- Antipsychotics
- Secondary Generation Antipsychotics (Atypicals)
- Sedatives and Hypnotics
- Antianxiety
- Anticonvulsants
- Antimanic
- Antidepressants
- Stimulants
- Antihypertensives (Beta – Blockers)
Medical Stability & Neurobehavioral Programming

- Create and disseminate Crisis Plan
- Identify and define target behaviors
- Determine method and type of data collection
- Implement structured routine to promote stability and enable effective data analysis
- Prioritize behaviors and establish criteria for stability
- Acknowledge limited efficacy of consequence-based programming due to variability in responding
## MacroTracker

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<th>Activity</th>
<th>Interval</th>
<th>Check all that occurred during interval</th>
<th>Intake</th>
<th>Urine Output</th>
<th>Incontinent?</th>
<th>Incontinent?</th>
<th>Bowel Tracker (circle all that apply)</th>
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Establish Medical Stability

Promote Skills and Motivation to Change

Develop Stable Activity Plan
Behavior Change Can Occur Best in the Presence of Two Essential Elements:

Motivation to Change

• Have I made the decision to make the necessary changes in my life?

Skills to Change

• Do I have the skills to implement these changes?
Treatment Frames of Reference

• Cognitive Behavior Approaches

• Specialty Training
  – Vestibular Certification
  – PTSD
  – Biofeedback
  – Motivational Enhancement
  – Substance Abuse Counseling

• Behavior Analysis
Behavior Stability & Neurobehavioral Programming

- Establish Function and consider Functional Analysis to refine hypotheses
- Identify precursors behaviors (especially if high risk)
- Consider safety issues, level of stability and resources when developing intervention
- Employ procedure(s) for one or more target behaviors
- Refine data collection and employ data-based decision making for programming elements
- Determine candidacy for Self-Management
Behavior Principles

Reinforcement
- any consequence that increases the probability of a response occurring again

Two Types of Reinforcement
- Positive Reinforcement
- Negative Reinforcement

Punishment
- any consequence that decreases the probability of a response occurring again

Two types of Punishment
- Positive Punishment
- Negative Punishment
Functional Assessment

• **Understand** purpose (Function) of behavior.

• Gather information through a variety of objective and subjective methods (i.e. activities, settings, people, etc...)
  – ABC Data Form

• Formulate hypothesis of what occasions and maintains the behavior
  – Possible Functions
    • Positive reinforcement
    • Negative Reinforcement
    • Automatic Reinforcement
Behavior Programming

- **Antecedent-based interventions**
  - cueing & prompting
  - environmental alterations

- **Consequence-based interventions**
  - Reinforcement
    - Always used first
    - consider both positive and negative Reinforcement
  - Punishment
    - last resort, only when necessary because of safety or risk and always paired with reinforcement
    - Negative Punishment used exclusively
Stabilization Phase: Jim

- Medical
- Physical
- Cognitive
- Communication
- Personal Care
- Behavioral
Establish Medical Stability

Develop Stable Activity Plan

Promote Skills and Motivation to Change
Unstable Activity Pattern Sources

- Poor initiation and/or follow through
- Limited choice
- Imbalance of reinforcement availability/potency with regard to preferred activities
- Inattention to risks associated with competing reinforcers
- Inaccessibility of support
- Limited commitment to trial new activity
Stable Activity Plan & Neurobehavorial Programming

• Activity plan should promote routine and pacing that supports safety and stability
• Consider choice, where possible, to mitigate resistance
• Continue to refine programming and criteria, i.e. trial fading support, less frequent reinforcement
• Ensure Generalization and Maintenance of skills through specific programming and support
• Incorporate transitional and discharge elements
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**Criteria & Rating Scale**

**Program Guidelines**
(describe all NO’s on back of schedule)

- **Comply with Phone Access Guidelines**
  (Incoming calls only from Mom & Dad)
- **Not target, instigate or disrupt other clients’ programs or milieu in general**
- **Comply with Campus Access Guidelines**
- **Zero occurrences of High Risk Behaviors**
  (e.g. Elopement, Drug Seek/Use, Physical Aggress, etc...)

**Issues & Concerns**

0= seeks immediate attention to issue; non-redirectable
1= seeks immediate attention but redirectable to I & C with mod-max assis
2= min assist to redirect to schedule, use I & C and/or delay
3= maintains attention to activity; uses I & C independently and/or at scheduled times

**Mood & Urges Rating**

0= No urges, feeling calm/focused, not restless
1= Some urges, mild restlessness or upset
2= Frequent or intense urges; demanding, threats, verbal aggression
3= constant or intense urges; high risk behavior

**Coping**

0= unwilling to manage mood/urges, not talking with others, resistant to support
1= difficult to manage/describe but open to support
2= Accesses support, describes mood/urges, actively managing with strategies
3= Independently managing, maintaining schedule
Generalization of Skills

• Skills practiced under projected conditions (stimuli common to the natural environment) versus “Train & Hope” - teaching a skill under one set of circumstances and hoping it occurs in the new environment

• Natural Contingencies - Teach the skill using contingencies which will occur in the natural environment

• Indiscriminable Contingencies – difficult for the learner to discriminate whether the next response will produce reinforcement (shift from continuous to intermittent schedules of reinforcement) to promote more resilient behavior change

• Home visits / community drop off / family ed
Generalization Phase: Jim

- Medical
- Physical
- Cognitive
- Communication
- Personal Care
- Behavioral
Any Questions?