

**BEHAVIOR MANAGEMENT &
BEHAVIOR MODIFICATION
FOLLOWING
TRAUMATIC BRAIN INJURY**

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OUTLINE

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Why Managing Behavioral Challenges Important

Benefits of Managing Behavioral Issues

1. Requirements for participation in rehab
2. Ensuring the safety of the patient and staff
3. Allowing patients to maximize participation in therapy
4. Support of family/caregiver
5. Support of staff
6. Effect on other patients

Factors Influencing Behaviors



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Factors Influencing Behavior

1. Premorbid coping skills
2. History of alcohol or substance abuse
3. History of prior violent/abusive behavior
4. History and severity of prior mental health issues
5. Culture

Types of Behavioral Challenges



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Challenging Behavior

- Common definition is “any behavior pattern that disrupts provision of rehabilitation services and/or compromises safety.” (Kerkhoff & Butt, 2017)
- Research has shown that “social and behavioural disorders after TBI are common and troubling for the person with TBI, family members, friends, teachers, work supervisor, peers and others.” (Ylvisaker et al., 2007)

Examples of Challenging Behaviors

1. Agitation
2. Aggression
3. Disinhibition
4. Perseveration
5. Irritability
6. Immature behavior
7. Rigidity
8. Inappropriate social and/or sexual behaviors
9. Egocentrism

(Sabaz et al., 2014; Ylvisaker, M. et al, 2007)

Behavior Management Strategies



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Agitation/Aggression

- Agitation/irritability are predictive of an increased length of stay (Yudofsky, Silver, & Anderson, 2013).
- Both situational variables & individual patient characteristics influence agitation and aggression (Alderman, 2007).
- Language impairment is also a predictor of aggression, particularly physical aggression (Alderman, 2007).
- The most severe aggression occurs outside of structured therapy sessions.

Spotting Agitation/Aggression

What to look for:

- Change in behavior (e.g., motor restlessness, eye contact)
- Change in speech rate, rhythm, or volume
- Change in conversation (e.g., outwardly directed statements of blame/anger)
- Change in appearance (e.g., flushed face, sweating, posture)

Managing Agitation

Examples

- Nothing seems to please the patient – he or she complains about everything.
- The patient becomes very anxious when he or she has to go to therapies
- For those with memory deficits, they become agitated if they believe that the staff is not providing them with proper care (e.g., pain meds, toileting etc.)

Managing Agitation

Management Techniques to help prevent agitation:

- turn off or keep volume of the television or stereo low
- limit visitors to one or two at a time
- avoid noisy areas
- give simple directions
- if there are certain persons the patient finds irritating, try to limit time that is spent with them
- keep changes to a minimum
- add structure to the day, knowing how the day will go may help
- use written reminders of information the patient is having a difficult time tracking (e.g., pain med schedule)

Managing Agitation

Management Techniques to help calm the patient when he or she becomes agitated:

- minimize noise, reduce stimulation
- direct the patient's attention away from the source of agitation
- let him or her keep moving if showing motor restlessness
- remove the audience
- do not scold the patient, this will only increase the level of agitation
- model calm behavior, speak in a quiet and even tone
- give the patient their personal space

Managing Agitation

Staff Considerations:

- Are there ways to avoid precipitating factors (e.g., pain, hunger, fatigue)?
- Attempt to be rationally detached - the ability to stay in control of our behavior and not take things personally.
- Understand the integrated experience - how our behavior and attitudes affect the behavior and attitude of others.

CPI - Nonviolent Crisis Intervention

Managing Agitation

Staff Considerations:

- Be aware of proxemics (personal space) - area surrounding our body is considered and extension of ourselves. In the US it ranges from 1.5 to 3 feet, but can vary based on gender, familiarity, culture etc.
- Be mindful of kinesics (body language) - how we communicate through our posture, stance, movement, facial expressions.
- Be conscious of paraverbal communication - how we say what we say (i.e., tone, volume, cadence)

Managing Agitation

Staff Considerations:

- Use empathetic listening by being non-judgemental, giving your undivided attention, and using re-statements to clarify

Managing Serious Risk to Self and Others /Unsafe Behaviors

Medications:

Antipsychotics

Benzodiazepines

Antimanic

Anxiolytics

Beta Blockers

Antidepressants

Restraints:

Enclosure bed

Wrist restraints

Mittens

Pelvic restraints

*Always use the least restrictive method

Behavior Modification Strategies



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Behavior Modification: Practical Approach Model

Behavior Modification is a psychotherapeutic intervention primarily used to eliminate or reduce maladaptive behavior.

Step 1: Consideration of Ethical/Legal Issues - Is the behavior truly challenging?
Could the behavior result in legal issues?

Step 2: Assessment - obtained via neuropsych testing, interviews, behavior rating scales, and observation

Step 3: Formulation - determine what is driving the challenging behavior

Step 4: Intervention - Individually designed with a clear set of procedures to follow

Step 5: Evaluation - continuous processes throughout the intervention

(Alderman, Wood, & Worthington, 2019)

Keys to a Successful Behavior Modification Program

Understanding behavior: The A, B, Cs

1. Antecedent - What is contributing to the behavior? What happened right before the behavior started?
 - * Internal (pain, fatigue, hunger, toileting, psychological, cognitive)
 - * External (frustration with task, interaction with particular individual)
2. Behavior - What did the patient do? What is the problem behavior?
3. Consequences - What is reinforcing the behavior?
 - * What immediately follows the behavior that makes it more likely that the behavior will reoccur?

Keys to a Successful Behavior Modification Program

How do we change the behavior? Modifying Behavior Through Consequences:

1. Positive reinforcement - Increases desired behavior with reward, attention, praise
(If you clean your room I will let you play video games)
2. Negative reinforcement - Increases desired behavior by removing unpleasant stimuli
(If you clean your room you won't have to go grocery shopping)
3. Positive punishment - Decreases behavior by adding an unpleasant consequences
(If you swear I'll wash your mouth out with soap)
4. Negative punishment - Decreases behavior by removing a pleasant consequences
(If you don't stop hitting your sister I will take away your video game)

Punishment is never recommended as it is much less effective than positive reinforcement and raises legal and ethical concerns.

Keys to a Successful Behavior Modification Program

- Token economy is type of behavior modification plan frequently used.
 - Some decided on token (e.g., sticker, checkmark) is a earned by exhibiting the desired behavior. These tokens can then be exchanged for the decided upon reinforcer.
- Shaping involves helping the patient make successive approximations to a desired behavior.
 - Make subgoals that will help progress the patient to the desired behavior. After meeting the first subgoal for a period of time, reinforcement then becomes contingent on advancing to the next subgoal.

Keys to a Successful Behavior Modification Program

- Reinforcers or rewards are a key part of a behavior plan; therefore, it is important to take the time to figure out **what the patient finds rewarding**.
- The more immediate to the behavior the reinforcer can be given, the better.
- **Consistency, Consistency, Consistency!**
 - It is crucial that everyone involved in the plan understand the plan and follows it exactly.
 - If there is not consistency from all staff members the behavior plan will not be successful.

Case Example

- R.J. had a history of severe TBI. He was admitted to the unit after surgery for hydrocephalus.
- R.J.'s physician had prior knowledge about his background, desire to work, and behavior issues, it was her suggestion to develop a program to “hire” the patient to “work” on the rehabilitation unit.
- Following additional discussions with R.J.'s physician, his wife, and inpatient rehabilitation therapists, the neuropsychology staff developed a behavior modification plan to improve participation and reduce verbally aggressive behavior.
- R.J.'s desire to work and contribute to the family finances was the basis for the program, using the principles of operant conditioning (i.e., token economy).

Case Example

The following plan was developed:

- R.J. was temporarily paid a “salary” for his participation in the neurorehabilitation program as part of a "job training" program.
- As part of this program, his daily responsibilities were outlined, including participation in therapies, following instructions, being well groomed, helping out with unit tasks, filling out forms (e.g., his menu), using professional language (e.g., no swearing), and following a schedule (e.g., taking medications at prescribed times).
- R.J. was informed that, if he completed the above-mentioned tasks, he could earn up to \$30/day.
- With the assistance of R.J.'s wife, we arranged for his "salary" to be given to him via bank receipt. He was excited about beginning the program and agreeable to this plan.

Case Example

- The behavior plan was reviewed with R.J.'s therapists and nursing staff.
- A checklist of his daily responsibilities titled "Job Evaluation Form" was posted in his room. Sample copies of the form were provided to his therapists and the nursing staff.
- On a daily basis, therapists and nursing staff would fill out R.J.'s "Job Evaluation Form."
- R.J. received a check mark in the appropriate box if the staff member felt R.J. had met his goals for that therapy session or nursing task.
- R.J. was praised when he demonstrated professional (cooperative and courteous) behavior.
- The following day, R.J. and his speech therapist would add up the number of check marks and determine R.J.'s earned salary for the previous day. For every two check marks R.J. received, he was paid \$5.00.

Case Example

- R.J. was maintained on Depakote and Trazodone by his psychiatrist during his stay.
- His participation in therapies significantly improved and disruptive behaviors decreased.
- On the day he was discharged, R.J. received a bank deposit slip indicating that an amount equal to his earned salary was deposited into a savings account for their children.
- Following discharge, R.J. was accepted into a day treatment program for adults with brain injury. The job training program was transitioned to that setting as well.
- During follow-up with R.J.'s wife approximately six months following discharge, she reported that R.J. continued to do well with the behavior program, and that he took great pride in saying that he “works” at the day treatment center.



Thank You!

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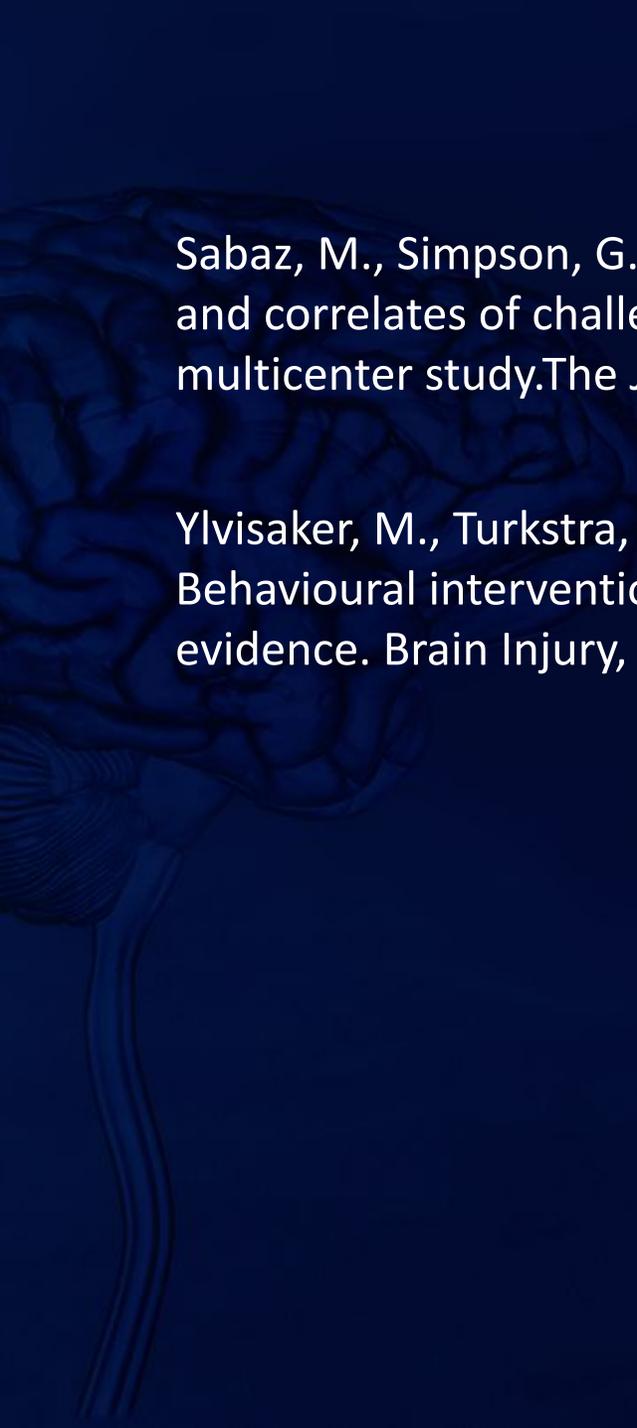
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A stylized, dark blue graphic of a human brain is positioned on the left side of the slide, extending from the top to the bottom. The brain is rendered with fine lines and shading to show its complex structure.

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Managing Lack of Awareness

Examples

- lack of awareness of deficits or limitations
- inaccurate self-image/self-perception
- The patient becomes frustrated after repeated attempts to engage in activities that he or she can no longer perform
- The patient appears confused by the difficulty that he or she is having with previously simple tasks

Management Techniques

- provide the patient with consistent and supportive feedback
- give realistic feedback as you observe their behavior
- cue them to use accurate self-statements

Managing Impulsivity

Examples

- acting or speaking before gathering all the information
- Not taking time to think things through and considering the consequences
- rushing or acting in a quick manner that can lead to struggling with a simple task

Management Techniques

- encourage the patient to slow down and think through tasks or responses
- use a reward system for small periods of self-control
- suggest alternatives for more desired behaviors
- try to anticipate when the patient is likely to have difficulty and give them gentle reminders about avoiding those behaviors/topics

Managing Poor Initiation/Motivation

Examples

- the patient may appear interested in participating in a task, but fails to begin work on it or follow through once the work has begun
- when attempting to start a task the patient may appear disorganized and become frustrated with what seems like a simple sequence of steps

Management Techniques

- break tasks down into smaller steps to help the patient to easily understand, remember, and master each step
- help the patient develop a structured daily routine
- provide specific choices for tasks, such as, “Would you like to do A or B?”
- set a realistic time frame in which to complete the task, allowing them extra time than they may have needed before the injury

Managing Perseveration

For individuals who are having difficulty with initiation and/or motivation, it can seem to others as if they are “just plain lazy.” However, in reality, the person is

Examples

- The patient talks repeatedly about getting back to driving
- The patient continues to repeat the story of his or her injury even to those persons who have heard the story before
- The patient constantly complains about his dislike for something

Management Techniques

- If there is an issue that the patient one insists on discussing over and over, set up a time each day for him or her to talk about that topic. Be sure to stick to the time frame, however, and hold off more talk about the subject until the next day at that time.
- try to divert the conversation to another topic
- write down the answer to a recurrent topic to help remind the individual that the issue has been resolved or when and how the issue will be resolved

Managing Sexually Inappropriate Behavior

Examples

- exposing oneself
- frequent masturbation
- inappropriate comments
- sexual advances

Management Techniques

- be non-judgmental
- be direct and explain how the behavior is inappropriate for the situation
- provide feedback about appropriate behaviors/comments if applicable
- if masturbation is the issue, provide the individual with the opportunity to do so in a private environment