Factors Affecting Adherence to Upper Extremity Devices in the Acquired Brain Injury Population: Client and Therapist Perspectives

Background

- Upper extremity (UE) motor impairments are common after acquired brain injury (ABI), and can have a significant impact on daily life. Without proper management, UE motor impairments can potentially lead to long term complications, such as contractures, spasticity and hemiplegic shoulder pain.

Purpose

- To explore adherence to UE devices and orthotics in the ABI population after discharge from acute inpatient rehabilitation as well as educational methods used by occupational therapy (OT) practitioners for device training.

Methods

- Online surveys exploring educational and training techniques for UE orthotics and devices used by OTs in acute inpatient rehabilitation
- Semi-structured interviews with clients with ABI and their caregivers after discharge to home from acute inpatient rehabilitation
- Descriptive statistics and frequency distributions
- First and second cycle coding methods used to identify themes

Results

OT Practitioner Survey Results

OT practitioners at the research site report:

- Using a variety of educational methods for UE device training, including demonstration, handouts and family training sessions.
- Anticipating barriers to client understanding of education provided due to a variety of personal factors
- Adapting educational and training methods based on client personal factors
- Including caregivers and other staff in UE device training

Client/Caregiver Interview Themes

[Diagram showing major themes and sub-themes related to factors affecting adherence to UE devices.]
Considerations for Patient/Caregiver Education and OT practice

- Including caregivers in clients’ occupational therapy sessions fosters positive caregiver support both in the rehabilitation setting and at home post-discharge.
- Utilizing client-centered educational methods facilitates understanding and adherence.
- Incorporating clients directly into training may promote a better understanding of recommendations and further facilitate adherence following discharge.
- Incorporating education pertaining to unique, unexpected scenarios that may occur following discharge may better equip clients and caregivers to make informed and safe decisions.
- All stakeholders involved in a clients’ care should be trained in correct procedures and therapeutic recommendations to ensure consistency.

Helpful Strategies for UE Orthotics/Device Training

- Increase the use of visual aids such as labeling straps and attachments.
- Involve caregivers and family as much as possible.
- Involve the client as much as possible, even if teaching them to verbally instruct a caregiver.
- Use teach back.
- Consider using pictures on handouts instead of all text.

Resources for Creating User Friendly Patient Education Materials

- Center for Plain Language
  - [http://centerforplainlanguage.org](http://centerforplainlanguage.org)
- SMOG Readability Test
- Health Literacy Counseling—Plain Language Writing Resources
  - [https://healthliteracy.com/writing-services/](https://healthliteracy.com/writing-services/)

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Interested in learning more about patient education, adherence and health literacy within the ABI population? See references below....


