

BACKGROUND

The Canadian Occupational Performance Measurement (COPM) is an interview-based assessment that analyzes a patient's priority activity limitations and the performance and satisfaction rate in which they are able to complete the activity (Law, 2019). The COPM was the focus when creating a program to incorporate functional measurements into the evaluation process because the patient has complete voice on how the assessment will be. As a result, the subsequent intervention sessions follow suit on the results from the initial assessment of the COPM, making the duration of care patient-centered and occupation-based.

The Jebsen-Taylor Hand Function Test (JTHFT) is a standardized assessment that is observation-based and was designed for individuals with an upper extremity disorder (Harte, 2014). The JTHFT was selected due to the functional tasks that it prompts the patients to complete, such as handwriting, self-feeding, turning papers, and lifting various sizes and weights (cans, pennies, paperclips, and bottle caps). It can also be utilized as an intervention due to the functionality the assessment comprises.

CLIENT HISTORY

DH was in a motorcycle crash on September 15th, 2019 and stayed at CUMC Bergan-Mercy until October 7th, 2019. Upon radiology tests, it was found that she had bilateral hand fractures, a right forearm fracture, a left rib fracture, multiple spinal fractures, and road rash. Subsequently, she had surgery on her right forearm and bilateral wrists.

During her initial evaluation at CHI University Campus, she had complaints of BUE weakness, reduced A/PROM. She reported being unable to self-feed, complete toilet hygiene, bathing, and dressing due to her limited ROM and pain. DH stated not working her full-time job at Belvedere Elementary School since the injury, but it is a priority for her to return to work.

RESEARCH QUESTION

What is the outcome when emphasizing functional performance evaluations in rehabilitation?

METHODS

Canadian Occupational Performance Measure					
Client Information					
Name:	Initial assessment: 01/23/2020				
Date:	Re-assessment: 02/24/2020				
Therapist Name: Taylor Knecht, OTS					
Occupational Performance Problem	Importance	Performance T1	Satisfaction T1	Performance T2	Satisfaction T2
1. Grooming/hygiene (Dressing, bathing, hair care, accessories)	10	1	1	6	6
2. Bed mobility	10	3	3	8	8
3. Driving	10	1	1	4*	4
4. Working	10	1	1	5*	5
5. Cooking	10	3	2	8	8
Total Scores		Total Performance T1: 9	Total Satisfaction T1: 8	Total Performance T2: 31	Total Satisfaction T2: 31
Average Scores (Total number of problems)		Average Performance T1: 1.8	Average Satisfaction T1: 1.6	Average Performance T2: 6.2	Average Satisfaction T2: 6.2
Change of scores (T2-T1)		Change in performance: 22 (+6)		Change in satisfaction: 23 (+6)	

Note/Observation: Initial Assessment - Emotionally labile behavior -> discussed mental health care Re-assessment -> Mental limitations rather than physical

Interventions

ADL-Based:

- ❖ Toilet hygiene
- ❖ Hair care
- ❖ Dressing

IADL-Based:

- ❖ Grocery shopping with sled
- ❖ Driving on BTE
- ❖ Returning to work
- ❖ Cooking

BUE ROM:

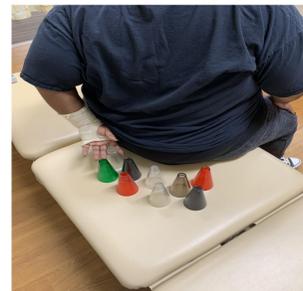
- ❖ PROM tool
- ❖ Overhead pulley
- ❖ Wall ladder
- ❖ Pronation/Supination Tool
- ❖ Velcro board

BUE Strength:

- ❖ Baltimore Therapeutic Equipment Co. (BTE program)
- ❖ Pinch pins and pegs
- ❖ Therapy putty
- ❖ Upper-extremity bike
- ❖ Weighted medicine ball exercises
- ❖ Finger web

Psychosocial:

- ❖ Extensive goal planning and coaching
- ❖ Collaborative care planning
 - ❖ OT, PT, & mental health counseling
- ❖ Cognitive Behavioral Therapy
 - ❖ Reflecting the good that occurred after the accident



RESULTS

Significant improvements:

- ❖ Grooming/hygiene, specifically toilet hygiene
- ❖ Bed mobility
- ❖ Cooking
- ❖ Driving
 - ❖ Mental health has been the biggest limiter
 - ❖ There is still a lot of area to improve with this task, but DH has drove to sessions multiple times

Slight improvements:

- ❖ Working – activity analysis, such as typing and extended walking
 - ❖ Mental health is the biggest limiter

Observations:

- ❖ Enhanced enlightened state of mind
- ❖ Increased confidence in capabilities

I gained:

- ❖ An insight on the importance of emphasizing functional-based measurements in outpatient care
- ❖ The holistic perspective of an individual's rehabilitations process after a traumatic accident
- ❖ Knowledge on the necessity of incorporating the patient's voice into all aspects of the duration of care

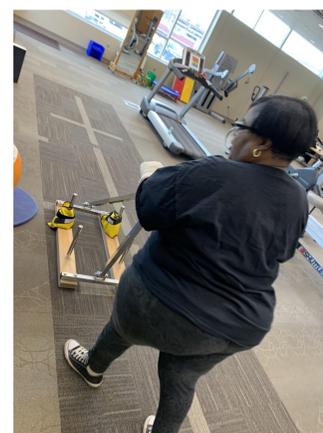
DH gained:

- ❖ Increased ROM and strength to complete ADL/IADLs
- ❖ Enhanced confidence to begin the next step of the recovery journey
- ❖ "The test made us closer because it allowed us to set goals and achieve them. I liked that the COPM went through every part of my abilities and disabilities, even my emotional state... it touched on everything" - DH

Limitations:

The biggest limitation for ADL/IADL based interventions is the fact that we were always in the clinic, when community re-integration would have been more beneficial.

The JTHFT was administered in the middle of our duration of care, rather than in the beginning so we did not receive a full picture of progress



RESULTS (cont.)

Prior to the COPM:

- ❖ DH was limited by mental health with all ADL/IADLs
 - ❖ She was missing that intrinsic motivation to keep pushing herself
 - ❖ There was a push of biomechanical frame of reference without her completely understanding the purpose of it
- #### After the COPM:
- ❖ We (OT, PT, mental health, and patient) were all on the same page
 - ❖ She expanded her confidence so that she was able to increase her independence with BADLs, which had a positive impact on her relationship
 - ❖ She slowly, but surely started driving
 - ❖ She became more social in her personal life again

The COPM also prompted a thorough activity analysis for each occupation in order for DH to rate an appropriate performance and satisfaction level.

BOTTOM LINE FOR OT: JTHFT

The JTHFT is an appropriate assessment for any population. The assessment is appropriate for an outpatient setting due to the time it requires to complete. The assessment should be administered during the initial evaluation and re-administered during the re-evaluations when deemed appropriate to do so. The results indicate a functional measurement for the individual's gross and fine motor ability with their upper extremities. The results are indicative of whether the patient is appropriate for skilled OT services or not, as well as additional assessments that are applicable to administer to the patient given the diagnosis and client factors.

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