ICE Case Study

LEARNING ACTIVITY
Focus on Intervention Planning

Watch the video case and plan the next intervention session. During a lab session, implement the planned session with a partner, who role-plays the client. Lab partners then switch roles. This allows each student to strengthen understanding of the condition and client as well as to explore the process and outcomes of the planned intervention. Consider time needed to prepare interventions, time required for the client to complete the activities, and discover potentially overlooked details in the provision of services. This also promotes encoding and retrieval of cases and flexibility in problem-solving related to the case and interventions.

Occupational Profile

Ben is a 20-year-old male, admitted for MVR with subsequent L MCA Aneurysm that results in RUE hemiplegia. His PMH is significant for drug abuse and HIV. He currently has sternal and standard precautions (with evidence of sternal healing). His deficits include RUE function, cognition, functional mobility, and possibly visual perception.

Ben lives with his father in a 2-story home. Although his father works full-time, Ben is unemployed and is unable to state his current goals. This may be due to cognitive deficits but may also be related to his limited occupational roles prior to admission. His father reports that Ben was independent in ADLs and IADLs, but only worked part-time for a short time after his high school graduation in retail. Family goals are for Ben to return home, but it is important that he re-gain some function in ADLs and mobility within the home. If safety awareness improves, Ben's father would like to be able to leave him during the day when he works.

Client Strengths

- Functional LUE
- Movement/strength in RLE
- Sensation appears intact
- Family support (father)
- Participates with encouragement
- Prior I in ADLs and IADLs

Client Deficits

- RUE flaccid (non-functional)
- Standing endurance < 1 minute
- Decreased cognition (impulsivity, needs simple commands, poor insight)
- Mod to max A for ADLs
- Mod A for mobility

Model of Practice

The PEO model addresses the dynamic relationship between the person, environment, and occupation to maximize occupational performance. In acute care and rehabilitation, the focus will be on remediating Ben's motor and cognitive function as much as possible. His young age makes neuroplasticity possible, so hopefully functional gains can be made through therapy. The hospital environment may be somewhat limited related to the discharge goals;

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however it is a good place to start to limit external stimuli, facilitate safety for Ben, and provide a controlled environment in which to pursue the improved motor and cognitive skills. Ultimately, the home environment will have to be considered in discharge planning, however. This must be addressed with Ben's father so that additional supports could be arranged if necessary prior to Ben's return to the home environment. Finally, occupational performance is addressed through the selection of therapeutic activities that will be utilized to address Ben's deficits and capitalize on his strengths. Using familiar occupations in therapy, such as ADLs, and basic mobility that will be needed for the home environment, will facilitate improved function.

Frame of Reference

A neuro-developmental (or sensorimotor) frame of reference will guide OT service delivery for Ben. This approach is appropriate to address the sensory and motor effects of the aneurysm, as it attempts to use a variety of input to assist the brain to re-organize, thereby improving function. It follows a developmental approach, addressing simple motor control before attempting very complex tasks. However, many neuro-developmental approaches emphasize the use of normal and functional activities to provide the sensory input in patterns of normal movement. Specific techniques of this FOR may include weight-bearing, weight-shifting, bilateral movement patterns, and crossing the midline.

Dynamic Interactional (cognitive rehab) FOR will also be implemented, to address Ben's impulsivity and decreased executive functions. Therapists will need to adapt their interactions with Ben in the course of the therapeutic activities and/or occupations. This will assist him to organize his learning, understand and overcome negative behaviors, and be successful in improving cognition during interventions.

Evidence to Support and/or Guide OT Process

Kessler, D., Egan, M.Y., Dubouloz, C-J., McEwen, S., & Graham, F. P. (2018). Occupational performance coaching for stroke survivors (OPC-Stroke): Understanding of mechanisms of actions. *British Journal of Occupational Therapy, 81*(6), 326-337. doi: 10.1177/0308022618756001

OPC describes a technique in which a therapist coaches the patient to assist them to solve problems and make progress toward patient goals. It includes providing emotional support and respect, teaching the client metacognitive strategies (reflection, planning), and assisting client to test out plans that are designed to achieve goals.

This problem-solving system should fit well with Ben's cognitive needs and the Dynamic Interactional FOR. It will allow the therapists to use a consistent approach to hopefully remediate, but compensate for (if necessary) the deficits in executive function.

Goals for next Session

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Client will improve RUE function to gross assist, to improve ADL function.
Client will improve standing endurance to 10 minutes, to facilitate ADL participation.
Client will demonstrate safety awareness in ADLs with minimal verbal cues.

Intervention Plan for Next Session

With a planned session of 30 minutes, create a bulleted list of activities for the session.

Session to be completed in OT clinic, re-introduce self to Ben and orient to OT

- Set up room with towel and washcloth at sink, and chair placed near sink. Place grooming items such as electric razor, brush, toothbrush, toothpaste, cup, on therapy mat nearby, as well as small bag or basket (will be used to transport items)
- Transfer Ben from w/c to mat (guard R side, gait belt, quad cane available)
- Re-assess tone and muscle function through PROM and/or AROM as Ben is able to perform.
- Ensure ADL items on mat to Ben's right side, place small basket on left side.
- Support weight-bearing on Ben's RUE to rotate trunk and cross midline, grasping ADL items with left and place in basket. Use facilitation techniques as indicated to RUE; if balance allows, use RUE as gross assist for bilateral grasping pattern to grasp and move ADL items.
- Rest if needed, then facilitate sit to stand and walk to sink (quad cane, gait belt)
- If safe, allow Ben to carry basket. If not, set up at sink before he moves to standing. (Ensure safety throughout session – if sitting balance is not at supervision or independent level, transfer Ben back to wheelchair before moving basket of ADL items rather than leaving him seated without supervision or support on mat.)
- Once Ben is safely transported to sink, guard him in standing. Facilitate brushing teeth and shaving at sink, using R hand as functional assist if possible. Ask Ben to stand as long as possible, sit when needed (note duration of standing for documentation note).
- Use cognitive strategies as needed throughout session for sequencing of activities, reason for standing (relate to mobility needed to return home), endurance, attention to R side, incorporation of RUE into functional activities (Note frequency of cueing, level of assistance, and cognitive strategies used, for documentation note).
- Transfer back to w/c and return to room. Call bell in reach, chair alarm if needed.

Critical Reflection Questions

(Answer after session)

What went well in the intervention session?

What could be improved if you could do this over?

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Did anything occur that was unexpected? How might this influence future sessions with this client?
What was meaningful about this case? How could you encode, retrieve and reuse this case?

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