Maximising Self-Care Rehabilitation
An Introduction for Nursing Staff
Presentation B

Developed by Department of Occupational Therapy RPH and TRACS WA
as part of the 2013 Learning Tool
Supporting Patient Self Care Rehabilitation Goals in a Neurological
Rehabilitation Setting: An Education Resource for Nursing Staff

Delivering a Healthy WA
Learning Objectives

- Review general principles and strategies for neurorehabilitation
- Develop understanding of neurological symptoms affecting higher cognitive functioning
- Develop further strategies for maximising self-care rehabilitation

Read objectives.
Principles of Rehabilitation

- **Rehabilitation aims to maximise participation of the patient in his or her social setting**
- It requires:
  - Teamwork
  - Goals
  - Specific, repetitive learning opportunities
  - Patient and family education

These principles were discussed in the first session.

We need to remember why the patient is here – it is so that they will be able to lead as full a life as possible in the future.

In order for that to happen we need to work as a team and use the strengths and skills of the different team members.

We need to set clear goals so that we all know what we are hoping to achieve and will know when we have achieved it. The patient needs to be included in the setting of goals.

For neuroplasticity to occur, we need to provide specific, repetitive learning opportunities which are meaningful to the patient.

We need to provide education to the patient and their family so that they fully understand what is happening and what they can expect for the future.
Interprofessional Practice

- Two or more professions working together as a team with a common purpose, commitment and mutual respect
  
  (Freeth et al, 2008)

- It involves a negotiated agreement between health professionals which values the expertise and contributions that various health professionals bring to patient care
  
  (Zwarenstein et al, 2009)

Interprofessional practice is a greater level of cooperation and communication between health professionals than a standard multidisciplinary team. In a multidisciplinary team the different professions are present but they communicate formally and at set times such as during weekly team meetings. An interprofessional team communicates continually and coordinates their interventions to achieve the maximum benefit for the patients. In order to work interprofessionally team members need to have a thorough understanding of each other’s roles and respect for the specialised work that they do.

Reflect on the type of teamwork that takes place in this setting. Have there been any improvements or changes since the first presentation? Do the nursing staff feel more comfortable discussing things with the OT?
In this presentation we are going to explore these higher level cognitive functions which have a significant effect on a patient’s participation in rehabilitation. Deficits in these areas result in a higher risk of functional dependence, failure to return to previous occupations and poor social participation.

(Poulin et al, 2012)

Remember that when OT’s talk about “occupation” they are not just referring to a paid job or career. Occupation encompasses all the jobs and roles that a person does such as driving a car, social activities, housework, shopping, caring for others.
Self-Awareness

- Insight

- “The ability to consciously process information about ourselves in a manner that reflects a relatively objective view”
  (Prigatano, 1997)

- “The ability to recognise deficits or problems caused by injury”
  (Crosson et al, 1989)

Self-awareness is a common problem for patients who have had a stroke. A study by Hartman-Maeir et al in 2003 found that 70% of patients had a lack of awareness at admission and this was still present at discharge for 42%. Positive rehabilitation outcomes are linked to whether the patient has self-awareness (Ownsworth and Clare, 2006).

If the patient is unaware of the problem, they cannot take steps to put things right.
This model was created by Crosson et al in 1989 and used extensively in research around self-awareness.

Intellectual awareness is the foundation level. It refers to the ability to understand that a certain function is impaired and its implication in daily living, for example, a patient with hemiplegia understands that their arm is affected and it might cause them problems with activities of daily living.

Emergent awareness is the second level and this is the ability to recognise a problem when it happens, for example the patient recognises as they are eating that their impairment is preventing them from being able to use a spoon to eat.

At the highest level, anticipating awareness, the patient is able to anticipate a problem that will occur because of the deficit. They do not need to try the task to know that they will have difficulties. The patient with hemiplegia knows that they are going to have difficulties eating meals, dressing and so on. This level of awareness enables the patient to start to apply strategies to work around their limitations.

The better a patient’s self-awareness, the more likely they are to have favourable rehabilitation outcomes. Unfortunately, greater self-awareness can also lead to depression and anxiety so this must be watched for. It is important not to set the patient up for failure. If your patient is wanting to do something that you feel would be too great a challenge, talk to the OT and they might be able to work out ways of breaking the task down into manageable steps.

Self-awareness is likely to be greater when the patient is doing something meaningful so self-care presents an ideal opportunity to work on this problem (Toglia & Kirk, 2000).
Developing Self-Awareness

Self-awareness can best be achieved when patients discover their own errors rather than relying on feedback from others.

- Define the task
- Predict the performance
- Anticipate and pre-plan for errors or obstacles
- Choose a suitable strategy
- Assess the amount of assistance needed
- Reflect

(Goverover et al, 2007)

Self-awareness can best be achieved when patients discover their own errors rather than relying on feedback from others.

Start off by getting the patient to clearly define what they are going to do.

Ask them to predict how well they think they might do it.

Get the patient to think about what they might have trouble with.

Get the patient to think of ways to overcome the identified difficulties like writing a list if they are likely to forget something.

Consider together how much assistance will be needed.

Once the task has been completed encourage the patient to reflect on how they actually performed compared to how what they expected.
Executive Functioning

- Provides control and direction for lower level, automatic functions
- Includes: initiation, planning, sequencing, monitoring, solving problems, dual tasking, switching, inhibition and working memory

(Poulin et al., 2012)

Executive functioning is not just required by sharp-suited businessmen. These are skills that we all use on a daily basis. Without these executive functions we would not be able to do our jobs.

Let’s consider some of the parts that make up executive functioning.

Initiation - starting a task, it requires motivation
Planning – working out what needs to be done, what resources are required, time-management
Sequencing – doing the right things in the right order
Monitoring – checking whether everything is going to plan and being aware of anything unexpected
Solving problems – working out a strategy when things don’t go to plan
Dual-tasking – doing two tasks concurrently (we will explore this in more detail later)
Switching – moving attention between tasks
Inhibition – resisting those urges to do something you shouldn’t
Working memory – keeping track of what you’re doing, where you’re up to in the task and what you will need to do next. This is required to keep to the plan.

Consider getting ready to come to work in a morning and how you use these executive functions to get out of bed, showered, dressed, fed, sort out children, partner, pets etc…….
Dysexecutive syndrome is the name given to disorders of executive functioning. These disorders generally fall into 3 categories: disinhibited behaviours, motivational or drive difficulties and disorganised behaviours. They are usually caused by damage to the frontal lobe of the brain. Patients may display all or some of these symptoms.

*Discuss how these problems might manifest themselves in patients in this setting. Can you identify any current patients with dysexecutive function?*

Depression and anxiety are linked to damage in the same area of the brain and can exacerbate difficulties in organising tasks. Conversely difficulties with executive functioning may lead to depression and anxiety.
Strategy training is about planning and problem-solving. Get the patient to talk through the plan before starting the task, for example, before having a shower say which items he/she needs and the order in which they will do things. Get them to repeat the plan at times during the task. Gradually reduce the amount of times that the plan or strategy is repeated.

If a patient gets into difficulties during a task i.e. they have forgotten the sequence or something unexpected has happened. Get them to stop and think the problem through. They may need help to break the task down into more manageable steps and encouragement to monitor their progress.

There is some evidence that we can train our working memories to become more efficient. Encourage the patient to use their working memories, for example, rehearse the list of items they need to take into the shower or the items of clothing they need. Use any opportunities for the patient to practice using their working memory. Discuss situations they can do this with patients.

External compensation can be any method of reminding patients what they need to do and in what order. This could include written lists, reminders on computers or smartphones, diaries or calendars, alarms or pagers.
Dual or Multi-Tasking

- Part of executive functioning
- Dovetailing of tasks to be time effective
- Requires retrospective and prospective memory, planning and error monitoring

(Cook, 2008)

Dual tasking is part of executive functioning. Patients who experience problems with dual tasking may also have other symptoms of dysexecutive syndrome.

Dual-tasking enables us to be efficient with our time and to deal with a number of real life situations, switch between tasks and cope with internal and environmental stimuli and interruptions. An internal stimulus might be wanting to go to the toilet during a task, something external might be a phone ringing or someone coming into the room. A person with dual-tasking difficulties may be physically and cognitively able, yet they will have difficulties with day-to-day occupations. Consider the task of cooking a meal. A patient with multi-tasking difficulty would cook one item at a time so that when they have eventually finished the items cooked first will be cold. Generally, they will appear unreliable and disorganised in most areas of their daily life.
Dual tasking, mobility and falls

- Walking and talking
- Verbal tasks can affect sitting balance in stroke patients \textit{(Harley et al, 2006)}
- Attention and dual task deficits increase falls risk \textit{(Hyndman & Ashburn, 2003)}

Combining walking and talking (or thinking) is the most basic level of dual-tasking and something we take for granted because we don’t have to think about walking – it is completely automatic.

When a patient is re-learning how to walk, it requires a great deal of concentration and doesn’t allow much spare cognitive capacity for other tasks.

Research has shown that even very simple verbal tasks can affect a patient’s sitting balance after a stroke. \textit{(Harley et al, 2006)} Patients with attention or dual-tasking deficits are at a significantly increased risk of falling. \textit{(Hyndman & Ashburn, 2003)}
Addressing dual tasking problems

- Simplify the tasks
- Consider the complexity or automaticity of the tasks
- Increase challenges gradually
- Avoid unnecessary interruptions
- Increased falls risk
  
  *(McCulloch, 2007)*

Be careful not to overstretch your patient and expect them to do too many things concurrently.

Consider how much they need to think about the tasks. Are they automatic and well-learned or does it require a lot of concentration? A patient who is just learning to walk or talk again will need to concentrate fully on that and may not be ready to do anything else at the same time.

Sometimes just speaking to a patient can increase the cognitive load so that they are unable to maintain their concentration on the original task.

Consider getting the patient to sit down or stand still (with support if necessary) before speaking to them.
We have covered....

- General principles and strategies for neurorehabilitation
- The impact of reduced self-awareness, dysexecutive syndrome and dual/multi-tasking on self-care activities
- Further strategies for maximising self-care rehabilitation
Over the two presentations we have looked at a variety of cognitive symptoms which you are likely to see in patients in a neurorehabilitation setting and we have looked at some strategies and interventions to use when assisting these patients with their self-care.

Hopefully, by now, you will also have had the opportunity to observe the OT carrying out a self-care intervention with a patient and to try out the strategies yourself.

Review plans for each nurse to observe OT and OT to observe each nurse.

The input of nursing staff is essential for good quality rehabilitation. Consistency is very important.

In order to achieve that we all need to communicate effectively.

Review communication methods in your setting: medical notes, care plans, goal setting documentation, team meetings. Discuss opportunities for verbal communication. What is a good time for nurses to talk to you? How can they leave messages if they are working evenings, nights or weekends?

Provide opportunity for questions.

Hand out evaluation forms for feedback and pass on evaluation results to TRACS WA.
Background

This project was developed from a pilot project based on Ward 2, Royal Perth Hospital, Shenton Park Campus (RPH SPC) in 2013.

The project was initiated by Jocelyn White, Senior Occupational Therapist and supported by TRACS WA, Ward 2 and the RPH SPC Occupational Therapy and Nursing Departments.

The pilot program was developed and led by Jocelyn White.

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References

References continued

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