

SESSION III: 1:30 - 3:30
 Cognitive and Cognitive-Linguistic Communication Disorders
 III: Treatments for Cognitive and Cognitive-Linguistic Disorders
 OUTLINE

- General treatment principles in TBI, RHI, and dementias
- Specific treatment techniques appropriate for various underlying disorders and deficits
- Unique and functional treatment activities/tasks focused on targeted cognitive communication deficits and patient needs

NOTE: This handout has been adapted from the PPT used in presentation. The content information is still present. The reason for this adaption is that I would like the attendees to think creatively at the time - and not with advanced preparation

Treatment

- You clinicians know a number of the typical Tx procedures that - yes - I'm about to cover first.
- BUT - HOW can you make a bit different, more functional, more interesting?

Let's be creative

Treatment - Tasks for Memory

Procedural memory

- Following sequential directions
 - Pt listens to your description/directions for a certain task
 - Pt (tracks) identifies how many steps are involved? After, Pt writes steps down on separate cards
 - Mix up the cards and the Pt resorts cards in order

Now - Creative Discussion

continued - Procedural memory

Another Tx activity

Sequenced Tasks - You give name of a task (no steps modeled or described by clinician) and they list the steps for task (start to finish) in a sequence, as in-depth as possible (possible errors if Pt with ideational or ideomotor apraxia)

Example - *Cashing a check*

- Get checkbook and fill out check
- Take it to bank
- Sign, cash it
- Count the money you receive

Depending on severity, this task could be broken down into more discreet steps

More Sequenced Tasks- Procedural Memory

- **IMPORTANT** - Can you come up with some tasks based on Pt's interests?

Related to hobbies, work , daily activities, etc. etc.



During Session will discuss further!

Episodic memory

Example Tx tasks -

- **Word list recall** (that IS episodic memory - of giving the list)
- **Story retell** - Consider your story carefully: Is it of interest to Pt? Is it dull? Is it the right complexity?
- **Relaying their life events** - "*What did you do in college*"
Now - Creative Discussion

Topographic memory

Example Tx tasks include:

- Order photographs by locations on a route
 - Requires previous picture taking of areas. Can family member or friend take the photos? If not, will you?
- Describe the route you drive home, etc.
- Draw the layout of your bedroom
- Maybe more difficult - discuss how landmarks on routes have changed over the years

In presentation will provide some graphic examples on the next slide

Semantic (conceptual) Memory

Know what I mean by “Semantic Memory”?

Name category to which these items belong: Present pictures?

necklace - earrings - watch

sister - mother - aunt - cousin

- How complex will your pictures be? How busy the picture?
- This is not to be performed exactly like a verbal categorization task..
- So, opposite of naming items within a given category (map them out by subcategories? Draw them?)

Therapy in TBI - Compensatory Strategies

A major focus for “treatment” of TBI
also very important in RHD!

- Compensatory Strategies should maximize strengths and make use of what the patient CAN do. (Based on Milton & Wertz, etc)
- Example: If patient can't use public transportation - but can read a list of directions... make cue cards for specific trips. Train patient to follow the directions in sequence. Use a map of Metro system?

Compensatory Strategies

- Strategies are on a continuum. As patient progresses and learns - techniques may change. External cues may become internalized.
- A strategy may be difficult at first - but - patient learns and it becomes easier.

Compensatory Strategies

- The patient should be involved in developing the strategy!
- The number of strategies used should be monitored. Too many strategies reduces effectiveness. Evaluate the effect of a new strategy on the performance of those already used. May decline!
- It helps if a patient understands why a strategy is being used (but not essential as long as they can learn it)

(pre)Compensatory Strategies

Strategies prior to teaching a compensatory Strategy

- These may be *actual goals* - for treatment - prior to implementing strategies!
- Self awareness: Of course - you will have been working on these.
 - Be able to discriminate between effective and ineffective performance
 - Become aware of deficits
 - Recognize implications of deficits

(pre)Compensatory Strategies

Teach value of strategies

- Goal: Patient to agree that strategies are helpful in accomplishing their goals
 - Show video of someone failing without strategy and another of someone succeeding with strategy
 - Have advanced patients provide testimonial of value of strategies.
 - Do problem solving exercises - use strategies to solve
 - Have patient evaluate self - with and without strategies (video)
 - Discuss with patient - how non-tbi people use strategies - like day-timers, memos, etc)

Compensatory Strategies

Actually Teaching the Strategies -

- *Subtitled: Ways to teach strategies.*

- Self Discovery
 - Construct task that causes failure then adjust the task for success (example - a paragraph reading task with too little time versus one with adequate time)
 - *Kind of like the kiddie tx for requests?*
- Modeling
 - SLP or Peer (or friend?) models use of the strategy (role play - use video, etc)
 - Verbalize the strategy as you do it.

Compensatory Strategies

Teaching Strategies - *continued*

- Direct Instruction
 - Guide use with pictures, diagrams, written instruction, outline, flow chart, etc.
 - Make it concrete
 - Is it FUNCTIONAL for this Patient???
- Attention and Concentration
 - External aids: Smartphones are AmAZinG: timers, alarm, verbal cues (T.O.T.E.)
 - Internal aids: self-instruction, self-monitoring

Teaching Strategies - *continued*

• Orientation

- External: pictures, memory book
- Internal: selecting “anchor points” to places or points in time.
- We do that! To think of Larry Molt and my “anchor” point is a classroom at FAU - when his wife nailed him on a ridiculous example he gave! Perinatal Hypoxia.
Or him standing in a dorm room at the University of Jyvaskyla, FI (even funnier)

• Input control

- If Auditory; Give speaker feedback... “please slow down”, “please write it down for me”.
- If Visual; cover parts up and systematically look at parts. Index card with slit.

continued - Compensatory Strategies

• Verbal processing - comprehension

- Use self questioning, “Do I understand?”
- Ask for clarification or repetitions

Now - Creative Discussion

• Memory (encoding and retrieval)

- Create basic scripts (external or internal)
Example, Script for going to a restaurant or Biker Bar
- Memory book (for little money - if not using a smartphone)

For: Appointments, people met & where, dates, tasks by day, biographical information, etc.

Now - Creative Discussion

Compensatory Strategies

• Learning Behaviors

- Use tape recorder (no on Smartphones)
- Set alarm on Smartphone for every 15 min - Pt to do “self questioning” - T.O.T.E.?

• Organization

- Task Organization - Lay out tasks in advance, include materials needed, steps, and time frame
- Thought organization - construct time-line to maintain order of events

Functional Skills for Tx

Related to the following slides - need to consider Pt's interests and what they need to be able to do!!

- Functional Memory
Includes: Orientation - Recalling schedules - Recalling Events - Learning new tasks
Other tasks?? Now - Creative Discussion
- Functional Reading (USE THESE - so FUNCTIONAL)
- Signs, Coupons, Menus, Advertisements, Brochures, Job Applications (if appropriate), Newspapers, Magazines, Flyers, Billboards (you take the dang picture)
Now - Creative Discussion

Functional Skills for Tx

- Money Management
- Coins and paper money, Calculations, Purchases, Credit cards, Investments
What other tasks can you think of?
- Study and Testing Skills
- For school or for education for new occupation
- Following Schedules
- Classroom behavior
- Initiating asking for help - and of whom?
- Concentration (attention) - attention to what?
- Study habits (time management - completion of work)

Functional Skills for Tx

- Telephone Skills
- Placing a call
- Recording the information
- Using telephone book - or more likely looking up number on Smartphone or computer?
- Making emergency calls - can you just do a hotkey on their phone?
- Transportation
- Planning for use of public transportation
- Organizes and executes trips
- Obtaining a drivers license (eeeeckk)
- Use of Maps (talked about before)
- Problem solving breakdowns, etc
- Now - Creative Discussion

Functional Skills for Tx

- *In depth* examples of “skills” - For banking
 - Complete checks
 - Filling out deposit and withdrawal slips
 - Balancing checkbook
 - Managing savings record
 - Using Cash card
 - Recording transactions

Now - Creative Discussion

A treatment consideration described for Aphasia - but awesome for TBI/RHD -

“Making a good time”: The role of friendship in living successfully with aphasia, Brown et al., 2013, IJSLP

- Per SLPs’ clinical work they stress the need that caregivers (spouses, etc.), family, and friends be included the therapeutic process.

Although some psychological issues may complicate work in this area... the implications are apparent

- Friendship should be a very important issue
- Since many of pts’ friends didn’t know or understand about communication disorders, provide information and education for friends specifically. Teach friends techniques and how to optimize communication/interaction

continues -

- Consider group treatment and support groups!

Below ALSO from “Making a good time”: The role of friendship in living successfully with aphasia, Brown et al., IJSLP

- Per SLPs’ clinical work: stress the need that caregivers (spouses, etc.), family, and friends be included the therapeutic process
- We have Pts that lose most of their friends after a TBI or stroke: Since many of pts’ friends didn’t know or understand about communication disorders, provide information and education for friends specifically. Teach friends techniques and how to optimize communication/interaction

CONTINUED -Referred to a study: "Making a good time": The role of friendship in living successfully with aphasia.

Another important notion

- Provide pts with ways to meet one another. Have group tx, put them in touch with support groups (start one?), and provide introductions to the different associations. Also, explore interest groups in the community and encourage the pt to participate. Need to help them overcome their difficulties in social activities.

❖ When working with TBI and RHD patients we often include their significant other (hopefully) but we should also include all of their important communicative partners (not all at the same time - of course)

✓ How can those "other" persons be included in treatment? See deficits associated with TBI and think of roles they can play

continued - Per group Tx and support groups

- Provide pts with ways to meet one another. Have group tx, put them in touch with support groups (start one?), and provide introductions to the different associations. Also, explore interest groups in the community and encourage the pt to participate. Need to help them overcome their difficulties in social activities
- Both TBI and RHD Pts can have significant social difficulties - even if they don't realize it

Related to communication with communicative partners

The following is from - Describing conversations between individuals with traumatic brain injury (TBI) and communication partners following communication partner training: Using exchange structure analysis, *Sim, et al., 2013*

Treatment provided to the JOINT grp

- Tx 10wks; 3.5hr wk (2.5hr wk group & 1 hr wk individual)
- Groups restricted to 4-5 pairs

Social communication skills training program (SCST)

Goal - "...maximize communicative effectiveness by reducing the effects of cognitive communication deficits and achieve more rewarding , productive conversations."

- Used 'Behavioral techniques' - role-plays, video feedback, cues for self-monitoring

continued - Social communication skills training program

TBI participants' Tx was to "...apply appropriate verbal and non-verbal behavior in social situations."

- *Everyday communicative partners* (ECPs) trained on providing positive feedback and scaffolding technique
 - Scaffolding includes: Cognitive support, emotional support, collaborative turn-taking, positive question style, helping to "...organize and extend their [partners] thinking to elaborate conversation topics..."
- Homework to audio-tape home-based tasks to promote use of techniques

continued - Social Skills Training

- Findings summarized: (compared to controls)
 - Everyday communicative Partners (ECPs) reduced their use of negative questioning in conversations and potentially increase use of helpful questions
 - This improved naturalness and quality of conversations
 - ECPs trend for increased a) information tracking information given by their partner and b) negotiating of communication breakdowns
 - Those with TBI may be trained to better share the "communication burden" with their ECPs
 - Those with TBI demonstrated increased productivity in casual conversations
 - ECPs able to scaffold conversations to encourage contribution of partners

continued - Social Skills Training

...BTW - The Appendices in this publication are great, with the protocols used as well as an outline and description of the treatment tasks

Once again - the information provided in last few slides in from :

Describing conversations between individuals with traumatic brain injury (TBI) and communication partners following communication partner training: Using exchange structure analysis, Sim, et al., 2013

They below was taken from "Knowledge translation in ABI rehabilitation: A model for consolidating and applying the evidence for cognitive-communication interventions", MacDonald & Wiseman-Hakes, 2010

From this meta-study (above) - there's this list the following approaches that "...appear to helpful across intervention domains..."

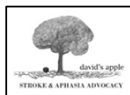
- Individualized goals
- Feedback and outcome measures
- Context sensitive tx embedded in communications and environments of daily life
- Self-evaluation & self-regulation techniques
- Use of meta-cognitive strategies
- Focus on activity and participation levels of intervention and outcome rather than impairment level drill and training

- Activity Time -

Will provide the activity task during the presentation.

Conclusion

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A small plug for something very close to my heart -
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