



Dysarthria therapy: Part 1

Go beyond compensatory strategies

Practice what you want to improve

- Focus on talking, unless you have good reason to focus on subsystems.
- Just talking “a lot” isn’t sufficient for recovery for most people.
- Follow principles of motor learning.

Choose the level of speech that matches the goal

- For most people, this will be conversational speech.
- Choose personally meaningful phrases and sentences.
- Avoid word lists. At a minimum, put each word in a carrier phrase.

Drill, drill, drill!

- Maximize outcomes by getting as many trials as possible each session.
- May start off with repeating the same target, but move to variable practice as soon as your patient is reasonably successful.
 - Example of constant practice for /k/: Repeating the word "car" over and over.
 - Example of variable practice for /k/: Repeating words with /k/ in different places. "Car, take, parking, skirt".
- Reasonably successful can be defined as >50% accurate or close approximation on 3-5 trials.

Practice more than once a day

- Motor learning is better with distributing practice over time.
- Try to assign at least two practice sessions daily.

Explicitly teach the strategies

- People do better when they understand the problem and how therapy exercises help.
- Ask your patient to teach the information back to you or to a family member.

Informally assess carryover frequently

- Quickly probe carryover at start and end of each session to gauge learning.
- Be patient! Following the principles of motor learning decreases accuracy in the short run, but improves outcomes.

Repetition to start, then variable practice.

- Constant practice can be done at any level of speech: sound, word, phrase, etc.
- Repeat the target only until your patient begins to have reasonable success.
- Then switch to variable practice, which will maximize motor learning.
- Many ways to introduce variable practice, including:
 - Use different words with the same target sound in different positions.
 - Increase the length of utterance.
 - Change the speech task difficulty, for instance from repetition to sentence completion.
 - Increase the cognitive load, for instance by randomly inserting a working memory task.

The articulation hierarchy

- Single sound: "k".
- One syllable words, no consonant blends:
 - Initial: Car, coat, cup.
 - Final: Back, neck, take.
 - Medial: Bacon, hockey, making.
- Increasing syllable length, no consonant blends.
- One syllable words, consonant blends in each word position.
 - Initial: Clean, crumb, quit.
 - Final: Milk, dark, box.
 - Medial: Likely, secret, parking.
- Increasing syllable length, with consonant blends.
- Phrases: Come here. Can you? Find coat.
- Short sentences: Come here now. Can I eat? I like cake.
- Longer sentences: Can you come here now? Can you find my coat? I like to eat birthday cake.

Move up and down the articulation hierarchy

- Start at the highest level you expect success.
- Move to the next higher level when your patient is reasonably successful on 3-5 trials.
- If your patient has too much difficulty, move back down.

- It's ok to skip levels. Focus on helping your patient produce the longest utterances they can.
- Likely will move up and down the hierarchy many times during the session.

Make the task unpredictable

- If the next trial is predictable, your patient likely has the motor plan already activated.
- This doesn't represent what happens in normal conversation.
- Force your patient to activate each motor plan from scratch for each trial.
- This will likely decrease accuracy in the short run, but should see better outcomes.

How to make the task unpredictable

- Targeting the impaired sound in different word positions.
- Treating multiple impaired sounds.
- Moving between different levels on the articulation hierarchy.
- Switching between speech strategies (for example, speaking slowly vs loudly).
- Changing the emotion we convey (pretend to be happy, angry, surprised, etc...).
- Varying the speaking context (talk to a different person, move to a different area, imagine a different scenario).
- Changing the difficulty of the speech task.
- Non-articulation therapy goal (for example, memory or word-finding).

Be sensitive to signs of frustration

- If we make it clear WHY we're practicing the way we are, our patients are more likely to persist.
- But we all have our limits for tackling challenging work.
- Try to begin and end each session with success.

Ways to respond to frustration

- Drop down the articulation hierarchy.
- Make the speech task easier.
- Pick a different therapy target.
- Honestly praise the good aspects you noticed.
- Make a recording and compare to one from evaluation day.
- Take a break.

Check out eatspeakthink.com/articulation-therapy-dysarthria-1 for more information.