

---

# The Brain, The Body and You: Communication and Behaviours

---

Audrey Brown, SLP & Ruth Doran, Professor  
Presented by St. Lawrence College  
With support from the MOHLTC Stroke System  
of Southeastern Ontario

---

This project is supported by:



**STROKE NETWORK**  
*of Southeastern Ontario*

---

- 
- Characteristics of successful communication partners
  - Communicating with survivors (and for that matter, everyone else)
  - Post-stroke problems that make communication harder
  - Dysarthria
  - Cognitive communication impairments
  - Aphasia – the “teaser”
-

---

# Characteristics of Successful Communication Partners

- Respect
  - A clear message
  - A desire to understand the other person's message
  - Trust in the other person to listen
  - Empathy for each other
-

---

# Characteristics (continued)

## **When the message is not getting across:**

- A sense of optimism
  - Patience and persistence
  - Creativity
  - Honest – “I’m sorry...”
-

---

# Communicating with the Survivors: The Basics

- Ask how the person wants to be addressed
  - Introduce yourself and your purpose in being there
  - Deal with private matters privately
  - Be calm, direct and positive in all communication
  - Adjust the environment
-

---

# Post Stroke Problems That Make Communication Harder

- Cannot physically get to where he/she wants to be
  - Cannot communicate eye-to-eye
  - Impaired hearing / vision
  - He/she may not be able to alter facial expressions
  - Has slower responses or inappropriate responses
  - Cannot manage personal care
-

---

# So much for the basics...now for some terminology

## **What do we mean by:**

- Communication?
  - Speech?
  - Language?
  - Voice?
  - Cognition?
-

---

# Communication

- The exchange of information, ideas, etc. between at least two people
-

---

# Speech

- The motor movements of the lips, tongue, jaw, vocal tract, etc. that work together to create the SOUNDS we use to communicate
  - Disorders: Dysarthria and Apraxia
-

---

# Language

- The agreed-upon code that a group of people uses, made up of words, grammars, rules, etc., that allow communication to take place
  - Disorder: Aphasia
-

---

# Voice

- The sounds made by the larynx

---

# Cognition

- The “thinking” part of communication:
    - Attention
    - Concentration
    - Memory
    - Visual perception
    - Planning
    - Problem-solving
    - Self- monitoring
  - Disorders: Dementia, strokes which cause damage to the executive centres of the brain
-

---

# What communication disorders can occur after a stroke?

- Dysarthria
  - Apraxia
  - Aphasia
  - Cognitive-Communication disorders
-

---

# Dysarthria: A Motor Speech Problem

- **DYSARTHRIA:** Difficulty making speech sounds clearly
  - Survivors with dysarthria have **NOT** lost language. They may still:
    - Think, plan, decide and reason
    - Understand spoken language
    - Read
    - Write or type
    - Use computers or other devices to communicate
-

---

# Apraxia

- A problem with the COORDINATION of the muscles of speech
  - The messages from the brain are not able to reach the speech muscles in a smooth, accurate and rapid manner
  - As with dysarthria, the person may still have full command of their ability to speak, listen, read and write
-

---

# Dysarthria: what you can do to help

- Communicate in a quiet place.
  - Repeat what you have understood. Clarify anything you have not understood.
  - Jot down notes.
  - It may be easier for the person to write down information if they are able – provide paper and pen.
-

---

# What you can do to help (continued)

- Consider using:
    - Paper and pen
    - A computer
    - Picture / work / phrase board
    - Alphabet board
  - Communicate about significant issues when the survivor is rested
  - Be open when you don't understand
  - Negotiate – does the person want you to help finish their words / sentences?
-

---

# Cognitive Communication Impairments

- Reduced ability to understand and communicate clearly related to:
    - Problems with organization of thoughts
    - Concentration
    - Memory
    - Knowledge of non-verbal communication
  - Often seen in survivors with right hemisphere strokes
-

---

# Cognitive Communication Impairments (continued)

- Survivors with right hemisphere communication impairments are able to:
    - Speak clearly in fluent sentences
    - Understand direct, concrete communication
    - Tell and laugh at familiar jokes
    - Sometimes read
    - Write some words and sentences
-

---

# Communicating When a Survivor Has Cognitive Impairments

## ■ Problems:

- ❑ Fluent but poorly organized or wanders off-topic
  - ❑ Leaves out relevant information
  - ❑ Makes little eye contact (especially on the left)
  - ❑ May appear rude
  - ❑ Doesn't understand / remember what has been said
-

---

# Aphasia: A Loss of Language

- May affect a survivor's ability to:
    - Talk
    - Read
    - Write
    - Understand
-

---

# Definition of Aphasia

- Aphasia is a language difficulty that happens because a stroke has affected the part of the brain that holds the language dictionary.
  - People with aphasia are competent adults who **know more than they can say**.
-

---

# Communicating When a Survivor Has Aphasia

- **Survivors with aphasia can:**
    - Think, plan, decide, and reason
    - Usually produce some clear words
    - Understand facial expressions and gestures
  
  - **BUT:**
    - Difficulty understanding spoken language
    - Difficulty expressing words and sentences
-

---

# Strategies to Help You Get Your Message Across

- Look at the person when you are speaking.
  - Speak in a tone of voice appropriate for communication with an adult.
  - Communicate one idea at a time.
  - Write down key words.
  - Use gestures and facial expressions.
-

---

# More Strategies (continued)

- Use objects to help get your message across.
- Use YES / NO questions.
- Draw simple pictures.
- Acknowledge that the person with aphasia knows what they want to say but cannot say it.

**“I know you know...”**

---

# A Communication Scenario

<b>Conversation</b>	<b>Strategies used by the caregiver</b>
<p><i>“Mrs. Jones, I want to tell you about an event we have coming up. I think you will be interested.”</i></p> <p>“This is today.”</p> <p>“On Tuesday, the John Higgins Band is coming to play.”</p> <p>“They are coming here.”</p> <p>“Do you want to go.”</p>	<p>Comes prepared with a calendar, scrap paper, and a black marker.</p> <p>Points to the date on the calendar.</p> <p>Points to the date on the calendar and then writes down [TUESDAY OCT. 6]</p> <p>Writes down [JOHN HIGGINS BAND]. Uses hand gesture to indicate the location.</p> <p>Writes down [DO YOU WANT TO GO?] and points to the resident. Writes down [YES / NO / I DON'T KNOW] and waits for the resident to point to the response.</p>

---

# Strategies to Help the Person with Aphasia Get Their Message Across

- Encourage the person to write down a word or draw.
  - Encourage the person to point to something.
  - Identify the general topic first and then move onto the details.
    - “Are you talking about your family?”
    - “Are you talking about your daughter?”
    - “Are you wondering if she is coming to visit today?”
-

---

# More Strategies (continued)

- Ask YES / NO questions.
- Use a written YES / NO for the person to point to.
- Encourage the person to use some of the words you have written down to communicate.
  - I have heard you are a music fan.

YES      NO      I DON'T KNOW

---

---

# Pictographic Topic Pages

- Pictograph pages are a tool to facilitate communication.
- Use the pictographs to provide visual cues to the topic of the conversation.
- Encourage the person with aphasia to point to the relevant pictograph.

**[www.aphasia.ca](http://www.aphasia.ca)**

---