

# NC Department of Health and Human Services NC Nurse Aide I Curriculum

Module R
Cognitive Changes Due to Aging

**July 2024** 

## **Objectives**

- 1. Discuss the healthy aging brain
- 2. Identify cognitive changes due to aging
- Describe the importance of pacing and patience while delivering care to the older adult

# Cognition

- Refers to the mental processes involved in thinking, learning, understanding and remembering
- Messages sent to the brain from the five senses are:
  - changed
  - stored in memory
  - recovered from memory
  - used to answer questions
  - used to respond to requests
  - used to perform tasks
- Cognitive function is related to use

# **The Healthy Aging Brain**



# Learning in the Older Adults

- The gaining of information, skills, and knowledge
- Older adults learn easier and better when they can set their own pace
- Learning is dependent on memory
- Memory involves the storing of information in the brain for later use

#### "Use It Or Lose It"



# **Cognitive Changes Due to Aging**

- Size of neurons (brain cells) progressively decrease
- Total brain mass decreases
- Responses slow down
- Increased learning time needed



# **Cognitive Changes Due to Aging**

- Mild short-term memory loss
- Motivation to learn decreases
- Feels threatened when changes are evident in public
- Challenged by more than one task or more than one request
- Unable to ignore external stimuli while performing basic tasks

# **Understanding Reaction Time**

Changes in reaction time vary from person to person

May be impaired by aging process, sensory deficits or chronic disease

#### **Reaction Time in Older Adults**

- Responses slow down
- Increased time for learning new activities
- More difficulty in re-learning motor skills
- Decreased ability to process conversation
- Decreased reaction time

#### **Reaction Time in Older Adults**



More deliberate, less frequent responses

Less effective performance when pace is fast

Easily confused at times

#### Workload of the Nurse Aide



Nurse Aides have multiple tasks to accomplish in a short period of time

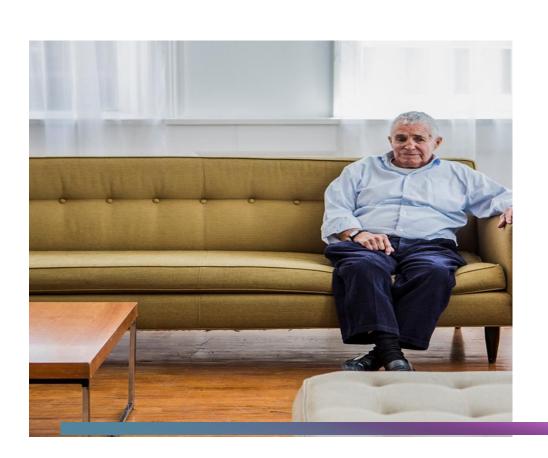
# Effects of a Fast-Paced Environment for an Older Adult

Resident's ability to learn, perform a task, or maintain motivation can be negatively affected in a fast-paced environment.

Residents are more cautious and less willing and able to respond quickly

Residents may be less willing to complete task due to fear of failure

# Social Breakdown Syndrome



- Occurs if a resident is rushed or not allowed enough time to complete tasks
- Blames self for not being able to keep up
- Begins to feel incompetent with decrease in self-esteem

## Social Breakdown Syndrome

# Society becomes impatient with those who cannot keep up



# **Effective Responses by the Nurse Aide**

Pacing and patience can be used to offset the effects of a resident's slowed reaction time



# **Pacing and Patience**

Residents who are encouraged to set their own pace:

- Are better able to perform or learn new things
- Will establish enough time to use assets to the best of their abilities
- Feel better about themselves, competent, and in control



#### Role of Nurse Aide

Inform resident of the task ahead of time

- Relate new information or tasks with the past
- Identify supplies and equipment needed to complete a task
- Demonstrate for the resident what is to be done

#### Role of Nurse Aide

- Ensure hearing aid(s) are in place, glasses are clean and properly worn
- Slow down pace when working with residents
- Allow the resident to set the pace
- Provide time for the resident to focus



### The End