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Educating Caregivers in Assisted Living Facilities (ALFS) Who Care for People with Dementia

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EDUCATING CAREGIVERS IN ASSISTED LIVING FACILITIES (ALFS) WHO CARE FOR PEOPLE WITH DEMENTIA

by

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APPROVAL PAGE

This Scholarly Project Paper, submitted by Ashley Palmer and Rodney Palmer in partial fulfillment of the requirement for the Degree of Master of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

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PERMISSION

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Department	Occupational Therapy
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TABLE OF CONTENTS

ACKNOWLEDGEMENTS v

ABSTRACT vi

CHAPTER

I. INTRODUCTION 8

II. REVIEW OF LITERATURE 10

III. METHOD 20

IV. PRODUCT 22

Introduction to Educational Materials 23

Instructor Course Materials 25

Learner Handouts 104

Case Studies 132

Evaluation Materials 135

V. SUMMARY 138

REFERENCES 141

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ABSTRACT

It is estimated that approximately 40-71% of residents living within assisted living facilities (ALFs) have a form of dementia or other cognitive impairment (Harris-Kojetin et al., 2016; Zimmerman, Sloana, & Reed, 2014). There is also evidence that suggests that caregivers working within ALFs have inadequate knowledge on how to care for a resident diagnosed with dementia (Hughes, Bagley, Reilly, Burns, & Challis, 2008; McKenzie, Teri, Pike, LaFazia, & Van Leynseele, 2012; Sharpp, Kayser-Jones, & Young, 2012; Zimmerman et al., 2014). The authors of this scholarly project created an instructional manual that can be used to train caregivers within ALFs to address the current gap in their knowledge. Methodology: The authors used the information gained from the literature review, information gathered through collaboration with faculty at the University of North Dakota's Occupational Therapy Program, and information gathered after researching topics related to dementia to create the product. Product: The instructional manual was created using Knowles Andragogy Adult Learning Model (Knowles, Holton, & Swanson, 2012). The introduction to the manual includes information on how to apply the adult learning model throughout the educational sessions. The educational materials include three 2-hour PowerPoint slide shows that include information on what dementia is, how dementia impacts a resident's life, an overview of the Cognitive Disabilities Reconsidered Model (CDRM) by Levy and Burns (2011), and different strategies the caregivers can use at each level of the CDRM to better care for residents diagnosed with dementia.

The manual also includes an evaluation of learners' knowledge by using a pre-test and post-test design. Finally, a small handout was created that contains important concepts that were discussed in the instructional materials so the learners can reference the information later if needed. It is intended for the instructional manual to be utilized by an occupational therapist who understands how to apply the adult learning theory and has adequate knowledge with the CDRM. The education material can be used to meet the continuing educational requirements within the state of Wyoming for ALF caregivers.

CHAPTER I

INTRODUCTION

With the increasing older adult population, the prevalence of dementia is on the rise (Center for Disease Control, 2013). The cognitive deficits associated with dementia elicit limitations in functional abilities (World Health Organization, 2016); therefore, causing these individuals to transition from their homes to a long-term care setting, such as an assisted living facility (ALF) (United States Department of Health and Human Services, n.d.). Currently it is estimated that 40% of people residing within ALFs in the United States have a diagnoses of dementia (Harris-Kojetin et al., 2016). Despite the high prevalence of dementia within ALFs, recent research has documented that education pertaining to dementia care is limited for those working within these facilities (Hughes, Bagley, Reilly, Burns, & Challis, 2008; McKenzie, Teri, Pike, LaFazia, & Van Leyneele, 2012; Sharpp, Kayser-Jones, & Young, 2012; Zimmerman et al., 2014). It is crucial for ALF staff to understand how to interact and help residents diagnosed with dementia in a safe and effective manner within the ALF. To do this, it is imperative that staff members are educated and trained using evidenced-based methods.

The proposed education program for this scholarly project is aimed at improving ALF staff education and training in the area of caring for someone who has dementia. The authors used Knowles Andragogy adult learning model to help structure the educational and training program to ensure the materials increase the care staff's

knowledge and abilities. Increasing the staff's knowledge and training will allow them to effectivity care for the residents who are diagnosed with dementia. It is anticipated an increase in effective caring will improve the well-being of staff and residents.

In conjunction with Andragogy, the authors used the Cognitive Disabilities Reconsidered Model (CDRM) by Levy and Burns (2011) to conceptualize the functional levels of residents diagnosed with dementia. The CDRM uses data from the Cognitive Performance Test (CPT) to categorize residents into one of nine CDRM functional levels. The CDRM functional levels provides suggestions on what memory stores and sensory experiences are available to the resident. The educational and training materials in the scholarly project are directed at helping ALF staff understand the CDRM levels and how to help them select activities and interaction techniques based on the resident's functional level. It is hoped by using the CDRM it will allow for more efficacious care for the residents diagnosed with dementia and reduce the stress that is placed on the staff members.

The following chapters will review the current literature on the topics of care staff education and training in regard to dementia care in long-term care settings with a focus on ALF, methodology used to create the educational and training materials, the product that can be used to educate care staff on the topic of dementia care, and a summary of the scholarly project.

CHAPTER II

REVIEW OF LITERATURE

In the United States, it is estimated that approximately 40-71% of people residing in assisted living facilities (ALFs) have a form of dementia or other cognitive impairment (Harris-Kojetin et al., 2016; Zimmerman, Sloana, & Reed, 2014); however, many care providers working within these facilities have limited knowledge on dementia and how to care for someone who has dementia (Hughes, Bagley, Reilly, Burns, & Challis, 2008; McKenzie, Teri, Pike, LaFazia, & Van Leynseele, 2012; Sharpp, Kayser-Jones, & Young, 2012; Zimmerman et al., 2014). Researchers have also found that care providers understand education is vital when working with people who are diagnosed with dementia (Jones, Moyle & Stockwell-Smith, 2013; Stockwell-Smith, Jones, & Moyle, 2011).

With the increasing prevalence of dementia, it is important to consider the type of care being provided to these individuals. With the breadth of current literature documenting inadequacy of education and training for care providers of residents diagnosed with dementia, it is important to create training and educational materials based on current research. By increasing care providers' knowledge on dementia through education and training, it is assumed care providers will have increased confidence, decreased burnout, and increased quality of care provided to people diagnosed with dementia.

Background

Dementia

Dementia is a progressive cognitive impairment that can cause deficiencies in memory, comprehension, judgment, language, thinking, learning capacity, orientation, social behavior, emotional control, and motivation (World Health Organization [WHO], 2016). Due to the impact on an individual's cognitive ability, dementia is a major public health concern among the elderly worldwide (WHO, 2016). There are ten forms of dementia with each presenting symptoms differently. The forms of dementia are: Alzhelmer's disease, vascular dementia, dementia with Lewis bodies, mixed dementia, Parkinson's disease, frontotemporal dementia, Creutzfeld-Jakob disease, normal pressure hydrocephalus, Huntington's disease, and Wernicke-Korsakoff Syndrome (Alzheimer's Association, 2016a).

Dementia usually occurs in individuals 60 years of age and older with the risk of developing dementia doubling every five years after the age of 60 (Centers for Disease Control [CDC], 2013). Currently, it is estimated that 5.3 million Americans are diagnosed with Alzheimer's disease, which is the most common form of dementia. Furthermore, it is estimated that approximately 40% of people residing in assisted living facilities have a form of dementia (Harris-Kojetin et al., 2016). Zimmerman et al. (2014) found 29% of ALF residents had mild cognitive impairments, 23% had moderate cognitive impairments, and 19% had severe cognitive impairments. While some people diagnosed with dementia are able to stay within their homes, there comes a time when professional help is needed and the individual will need to move to a long-term care setting, such as an assisted living facility (United States Department of Health and Human Services, n.d.).

Assisted Living Facility

An ALF is a residential care facility in which care staff is available 24 hours per day, but the assistance provided by staff is minimal (Wyoming Department of Health [WDH], 2007). Regulations for ALFs vary between states; therefore, for the purpose of this scholarly project the authors focused on their home state of Wyoming. Within Wyoming, there are two licensure levels for ALFs --- level one and level two. Level one facilities do not have a secure dementia unit, but provide core services including: meals, housekeeping, laundry services, assistance with local transportation, assistance with obtaining medical services, appropriate recreational activities, limited assistance with personal care, and 24-hour monitoring of each resident. Level two facilities have a secure dementia unit and therefore provide services additional to the core services. Additional services provided within level 2 facilities include: increased assistance with activities of daily living, individualized assistance with nutrition and hydration, dementia specific activities, and services to maintain skin integrity and continence (WDH, 2007).

Assisted Living Facility Staffing

It is currently estimated that 82% of full time equivalents in residential care communities, such as assisted living facilities, are completed by aides (certified nursing assistants (CNAs), home health aides, personal care aides, personal care assistants, home care aides, and medication technicians or medication aides) (Harris-Kojetin et al., 2016). Assisted living facilities also employ registered nurses (RNs), licensed practical nurses (LPNs), registered dietitians, certified dietary managers, and chief administrative officers (WDH, 2007). In the state of Wyoming, a level one licensed facility is required to have a

CNA, LPN, or RN awake and on duty during every shift. Level two facilities have more regulations due to the secure dementia unit and therefore are required to have a LPN or RN on duty at all times (WDH, 2007). Due to the vast array of level of education between staff in ALFs, it is important to ensure all staff members have sufficient training in regard to caring for residents diagnosed with dementia.

Current Education Levels

In the state of Wyoming, it is expected that employees within ALFs are trained to improve resident care (WDH, 2007). Staff within level two facilities are required to have documented training in techniques to: (1) care for residents who cannot perform ADLs independently, (2) reduce challenging behaviors, (3) provide therapeutic programming to promote highest levels of functioning (4) reduce safety risks, (5) recognize common medication side effects, (6) handle atypical behavior in relation to bowel and bladder functions, and (7) promote independence and self-worth (WDH, 2007). Furthermore, level two direct care staff are required to have 12 hours of continuing education annually related to care of residents with dementia (WDH, 2007).

Despite the training requirements for ALFs in Wyoming, the level of dementia education and training for staff is unquantifiable due to lack of research conducted in ALFs within the state of Wyoming. Therefore, the authors used data collected from studies conducted elsewhere to gain a better understanding of the level of education and training ALF staff have in regard to dementia. According to the research gathered, ALF and long term care (LTC) staff have limited education and training pertaining to dementia as well as caring for someone who has dementia (Hughes et al., 2008; Jones et al., 2013; McKenzie et al., 2012; Sharpp et al., 2012; Zimmerman et al., 2014).

It has been documented that 14-44% of staff within LTC settings had not received education or training related to caring for residents with cognitive impairments prior to their current employment (Hughes et al., 2008; McKenzie et al., 2012). Furthermore, 37% of staff reported receiving no training related to cognitive impairments from their current employer (McKenzie et al., 2012), and 70% of staff did not have any formal qualifications (Hughes et al., 2008).

In a study conducted by Sharpp et al., (2012), 95% of ALF staff were unable to correctly answer the question "What is dementia?". Staff within this study also had minimal understanding on how dementia impacted the residents (Sharpp et al., 2012). Jones et al. (2013) found that staff who worked within dementia care facilities scored an average of 62.5% on a test that covered information directly related to dementia. Furthermore, Zimmerman et al. (2014) found that only 42% of the staff members were able to characterize if a resident was experiencing dementia symptoms; therefore, concluded staff training improvement is a major concern within ALFs.

Need for Education

The limited education and training provided within the facilities is impacting the working environment for staff and living environment for residents. According to Hughes et al. (2008) a lack in training significantly impacted the staff's confidence levels when caring for residents diagnosed with dementia. It has been documented that dementia behaviors increased stress (Neville & Teri, 2011) and reactive behaviors (McKenzie et al., 2012) experienced by the staff. Neville and Teri (2011) suggest increased stressors could change how staff respond to residents who are diagnosed with dementia; therefore, inducing more anxiety within the residents and placing further stress on the staff

members (Neville & Terri, 2011).

Due to the high percentages of people diagnosed with dementia residing in ALFs, it is imperative that staff within the facilities are knowledgeable and can provide appropriate care. Cadieux, Garcia, and Patrick (2013) found that having knowledgeable staff is a current need for LTC settings that provide housing for residents with dementia. Despite the evidence of low levels of training and education pertaining to dementia within ALFs, it has been documented that staff have a high regard for education (Jones et al., 2013; Stockwell-Smith et al., 2011). Barbosa, Nolan, Sousa, and Figueiredo (2015) provided evidence that after an education intervention staff felt they had a better understanding of dementia behaviors and how to manage them. It has also been documented that staff had increased confidence levels while interacting with residents with dementia when they had formal qualifications, a high value for dementia training, and an increased understanding (Hughes et al., 2008). Furthermore, staff interactions have been shown to impact the residents' quality of life (Moyle, Fetherstonhaugh, Greben, & Beattie, 2015; O'Rourke, Duggleby, Fraser, & Jerke, 2015); therefore, by increasing confidence levels through education and training it is hoped to improve staff and resident well-being.

Role of Occupational Therapy for Education in Assisted Living Facilities

Occupational Therapy's Role in Educating Staff

The role of an occupational therapist, in terms of dementia care, is to educate care providers about the disease and how it impacts the individual's ability to accomplish meaningful tasks (Robnett, 2012). Occupational therapists also assist in helping care providers cope due to the increased demands of caring for someone diagnosed with

dementia. An occupational therapist can complete this role through direct care or as a consultant (Robnett, 2012). For this scholarly project, the authors will provide education and training to care staff through a consulting position.

According to The American Occupational Therapy Association (2014) occupational therapists can intervene with five different types of interventions; however, the intervention type utilized for this scholarly project is education and training. The American Occupational Therapy Association (2014) defines education as information that increases the client's knowledge and understanding about topics related to occupation, meaningful participation, and health and well-being. Training is defined as learning new skills the clients can use to accomplish certain goals that will in turn increase occupational performance. This scholarly project is intended to increase the ALF staff's knowledge, understanding, and skillset pertaining to dementia to improve role competence as a staff member and improve staff and resident well-being through the use of education and training.

Education-Based Model

Knowles' Andragogy model was used to guide the product of this scholarly project. Andragogy is an adult learning model that encourages active participation of the learners throughout the learning process (Knowles, Holton, & Swanson, 2012). Knowles presents six principles for educators to use when designing and leading adult education. The six principles that guide the model are (1) the learner's need to know, (2) self-concept of the learner, (3) prior experience of the learner, (4) readiness to learn, (5) orientation to learning, and (6) motivation to learn (Knowles et al., 2012, p 3). This model will guide the authors in creating educational materials suited towards adult

learners to increase effectiveness of the learning process.

Cognitive Disabilities Reconsidered Model

The Cognitive Disabilities Reconsidered Model (CDRM) uses the Cognitive Performance Test (CPT) to categorize the functional capacities of residents with cognitive impairments. The model is based on three important concepts that are believed to influence successful occupational performance (Levy & Burns, 2011). These concepts include sensory-perceptual memory, working memory, and long-term memory. The sensory-perceptual memory automatically filters information from the environment, looks for patterns, and selects relevant information from the working memory store or it can trigger a long-term memory response. Working memory takes information from the sensory-perceptual memory and long-term memory to produce a functional response. Long-term memory is comprised of explicit and implicit stores. Explicit information is data the resident is aware he or she is learning or taking in, whereas implicit is the data the resident is taking in that he or she is unaware (Levy & Burns, 2011).

The authors of the model suggest that when residents develop dementia their ability to take in information form their senses decreases; thus limiting the amount of relevant information the resident's working memory has to produce a functional occupational outcome (Levy & Burns, 2011). As residents develop more advanced dementia their sensory-perceptual memory becomes significantly compromised. As the disease progresses, the resident will have a difficult time keeping information and transferring it to his or her long-term memory; therefore, residents rely on habitual tasks because it is difficult to learn new information (Levy & Burns, 2011).

While the CDRM is complex, it is important to understand the functional levels

of residents when planning daily occupations. Having a clear understanding of what level the resident is functioning at will allow ALF staff to intervene appropriately so the resident is successful. The goal of this model is to provide caregivers with necessary information in order for them "to present the just-right kinds of environmental cues to match the individual's limited attentional capacities and to promote accessibility to memory stores that might not otherwise be retrieved" (Levy & Burns, 2011, p 417). The care staff will be able to provide the appropriate environmental cues using the CDRM model after the residents are assessed using the CPT.

Cognitive Performance Test

The CPT is a standardized assessment tool used by occupational therapists to evaluate cognitive function by having the resident complete functional tasks (Burns, 2013). Each functional task completed by a resident is scored based on descriptive guidelines. The scores are averaged to determine level of cognitive functioning. The average score ranges between a 1.0-5.6, with higher scores indicating higher cognitive functioning (Burns, 2013). The clients score corresponds with the CDRM categories to determine functional level.

Psychometric Properties of Cognitive Performance Test

It has been documented that the internal consistency of the CPT varied between .71- .95 (Bar-Yosef, Weinblatt, & Katz, 1999; Burns, Mortimer, & Merchak, 1994; Douglas, Letts, Eva, & Richardson, 2012). The inter-rater reliability varied between 91-.98 (Bar-Yosef et al, 1999; Burns et al., 1994), and test-retest reliability was .89 (Burns et al., 1994). Also, Burns et al. (1994) documented that the CPT scores correlated significantly with the Mini-Mental Examination (r=.67), Instrumental Activities of Daily

Living (r=.64), and Physical Self-Maintenance Scale (r=.49). Furthermore, Bar-Yosef et al. (1999) concluded the CPT has construct validity.

Purpose

The purpose of this scholarly project is to create educational and training materials for ALF staff to ensure that residents who are diagnosed with dementia are receiving current, evidenced based care while they reside within an ALFs. Increasing the staff's education and training on dementia, by utilizing the CDRM and Knowles Andragogy Model, will allow staff members to develop effective methods to care for residents with dementia.

Conclusion

There is an increased need to improve education and training of ALF staff in regard to dementia due to the increasing prevalence of the diagnosis as well as the documentation of limited knowledge. Despite the current evidence of limited knowledge and skills pertaining to dementia, staff value education and training. It is important for the authors of this scholarly project to create an educational and training manual that can be used to increase the knowledge and skills of staff who work within ALFs. It is anticipated that an increase in education and training for ALF staff will translate to increased self-efficacy of staff and more effective treatment of residents who are diagnosed with dementia.

CHAPTER III

METHOLDOLGY

Prior experience in the field of dementia care as well as previous encounters with dementia care staff motivated the authors to explore topics related to dementia. The authors visited two dementia care units within assisted living facilities (ALF) in Casper, Wyoming, to gain a better understanding of the current training needs of care givers in regard to dementia. By listening to the concerns of ALF staff, the authors conducted a literature review to determine topics of concern for the dementia population living within ALFs. Through the literature review, the authors discovered there was a documented need to increase staff education levels pertaining to caring for individuals diagnosed with dementia.

The authors then collaborated with University of North Dakota Occupational Therapy Program faculty to determine how to approach the current need. It was determined that creating educational materials for ALF staff would address this current need. Knowles Andragogy adult leaning model was selected to guide the authors while creating educational materials for the staff. Also, the authors decided to educate the staff on the Cognitive Disabilities Reconsidered Model to help the staff learn and use the model when caring for residents.

Once the primary decisions had been made, the authors conducted a comprehensive literature review pertaining to dementia and education levels of dementia care staff within ALFs. The authors found sources related to different aspects of dementia such as symptoms, types, prevalence, etc. Furthermore, the authors found numerous sources identifying an educational deficit in regard to dementia for assisted living staff. Once all of the information was reviewed, the authors generated their scholarly project. The product contains educational materials that can be used within ALFs to increase the staff educational level. The educational materials are intended to cover three separate sessions that are two hours each in length. Additionally, the educational material will contain an outcomes measure, handouts, and case studies.

After completing the product, the authors continued to work with their scholarly advisor to make revisions to the final scholarly project. As the final revisions to the scholarly product were completed, the authors formatted the sections into introduction, review of literature, methodology, products, and summary. The final product can be located in chapter four.

CHAPTER IV

PRODUCT

Introduction to Educational Manual

To the Educator of this material:

The materials presented within this manual were built using Knowles Andragogy adult learning model. The information provided below summarizes the assumptions and the implications for educating adults based on this model. It is recommended the assumptions of the model are used to increase the efficacy of the learning process.

Knowles' Assumptions for teaching adults include:

1. *The need to know.* Adult learners need to know why it is important to learn something before they learn it. They want to know the benefits of learning the information and the negative consequences if they do not learn the information. Therefore, your first role as an adult educator is to help the learners become aware of why they need to know the information (i.e. better care for client, increased satisfaction with job). Also, the learners will need to know how it will impact resident care and their jobs if they do not know the information.
2. *The learners' self-concept.* Adults are autonomous and have a self-concept of being responsible for their own lives. They want to be treated as though they are capable of making their own decisions. Adult learners do not appreciate having others impose their opinions on them. Therefore, as the educator of the course you need to encourage input from the learners so they feel they have some control of their learning experience.
3. *The role of the learners' experience.* Adult learners have a variety of experiences that they have acquired throughout their lives making each adult learner very diverse. The vast array of experiences creates different learning styles, needs, motivations, etc.; therefore, as an educator you need to adapt the education strategies to match the individual or group. The differences in experiences also allow adult learners to learn from the experiences of their peers through group discussion, case studies, or simulation exercises. Throughout the presentations, there are suggested questions that could be used to encourage discussion. Also, for the final presentation there are two case studies that can be used to increase the learning opportunities. Adult experiences could also cause negative effects for learning such as biases, preconceptions, and mental habits, which could possibly prevent an openness to learn new information or skills. As an adult educator, your role is to assist the learners in examining their habits or biases to open their minds to alternate approaches. Finally, adults view their experiences as being a part of who they are, so if an adult's experience is devalued or ignored he or she may take offense to it
4. *Readiness to learn.* Adults develop a readiness to learn things they need to know in order to be effective in life. Therefore, the timing for educational experiences

should be based upon what is currently happening within their life. As the educator, you may assist in the readiness to learn by discussing how the information will make the learners more effective in their job as well as other possible benefits.

5. *Orientation to learning.* Learning experiences for adults are oriented towards solving problems or are centered around aspects of life. An adult becomes motivated to learn if the material will help him or her solve a problem or complete a task more successfully. As the educator of the class, it would be beneficial to provide examples as to how the information presented will help the learners complete a task or solve a problem.
6. *Motivation.* Adults are motivated to learn by both internal (self-esteem, quality of life, job satisfaction) and external (promotion, better job, increase in salary) motivators. As the educator you can reinforce the possible benefits of learning the information to increase motivation.

Throughout the caregivers' PowerPoint presentations, there are recommendations on how to incorporate these assumptions. Remember, your job as the educator is to facilitate the learning process. Incorporating the assumptions mentioned above can increase the ease of facilitation and improve the learning experience of everyone who attends.

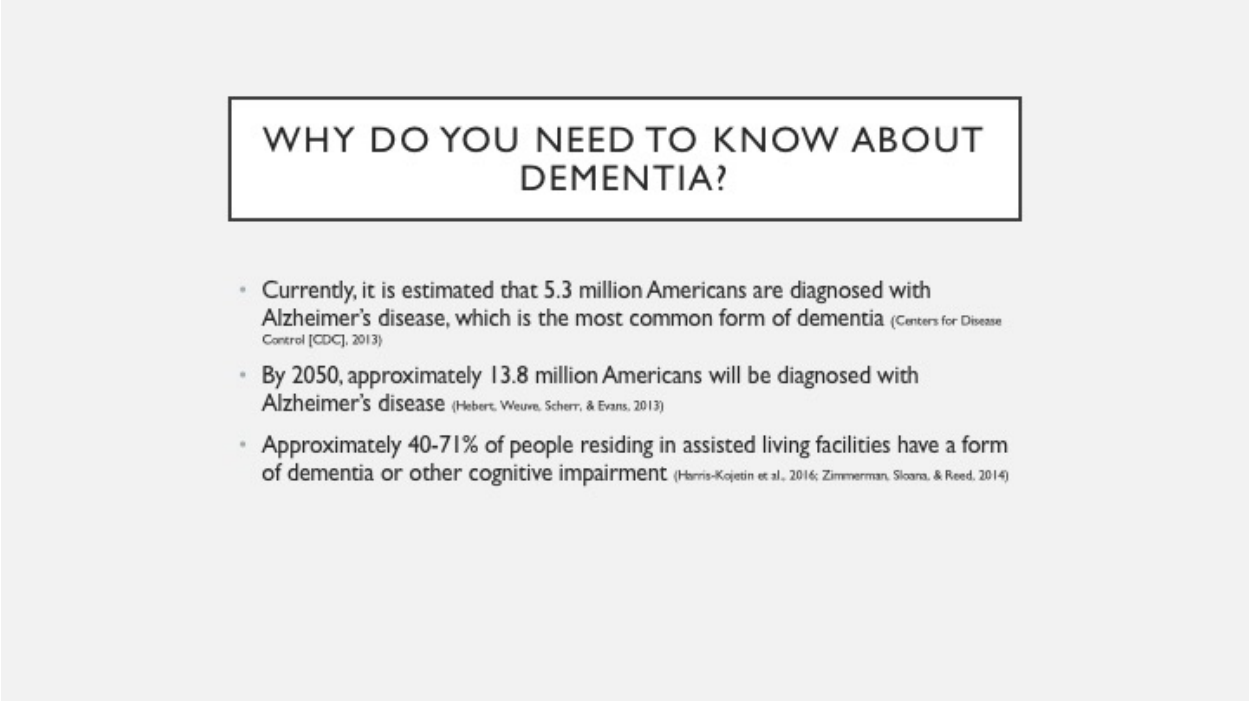
Instructor Course Materials

DEMENTIA

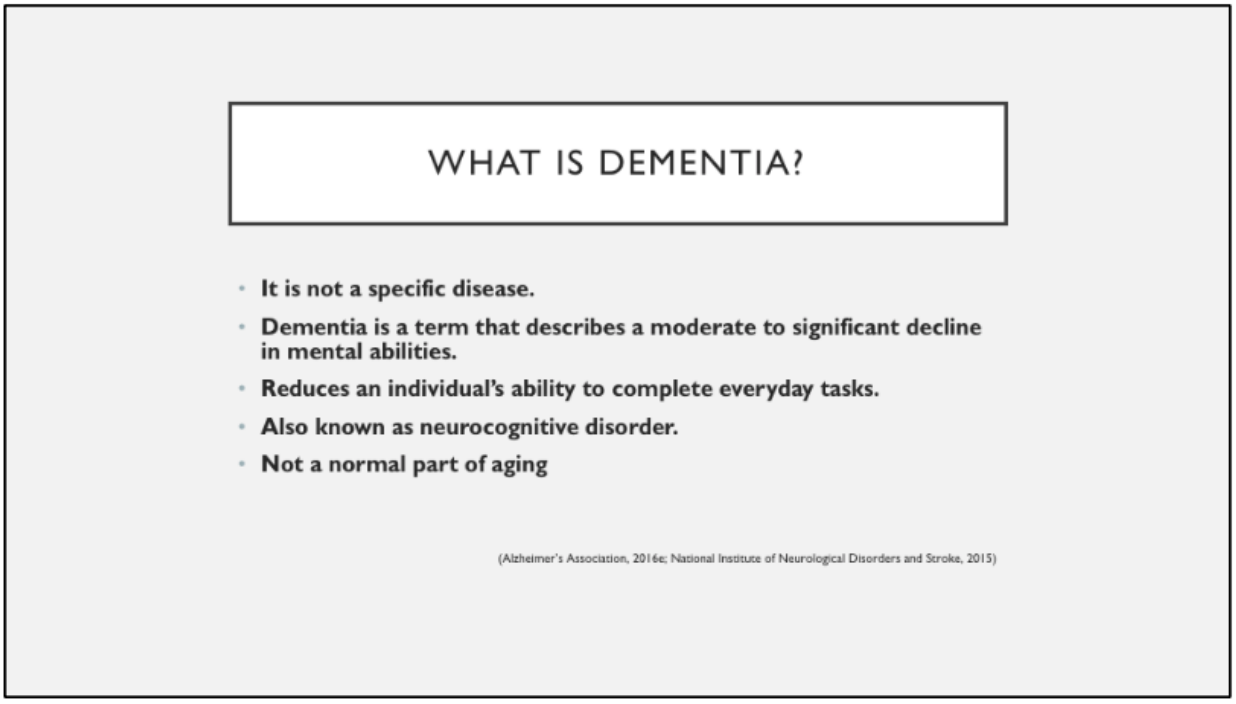
By Rodney Palmer, MOTS and Ashley Palmer, MOTS

LEARNING OBJECTIVES

- The learner will understand and comprehend what dementia is.
- The learner will understand the different diagnosis that can lead to dementia symptoms
- The learner will understand and apply the information in regard to dementia to his/her current residents



Who has experience of working with people who have dementia?
Have those experiences been good or bad?
Do you feel having a better knowledge of dementia would help you care for these individuals?
How would you describe dementia?



Diagnosis criteria:
1) "Evidence of significant cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition)"
2) "The cognitive deficits interfere with independence in everyday activities."
(American Psychiatric Association, 2013)

DECLINE IN MENTAL ABILITIES

- Memory
- Comprehension
- Judgment
- Language
- Thinking
- Learning capacity
- Orientation
- Social behavior
- Emotional control
- Motivation

(World Health Organization [WHO], 2016)

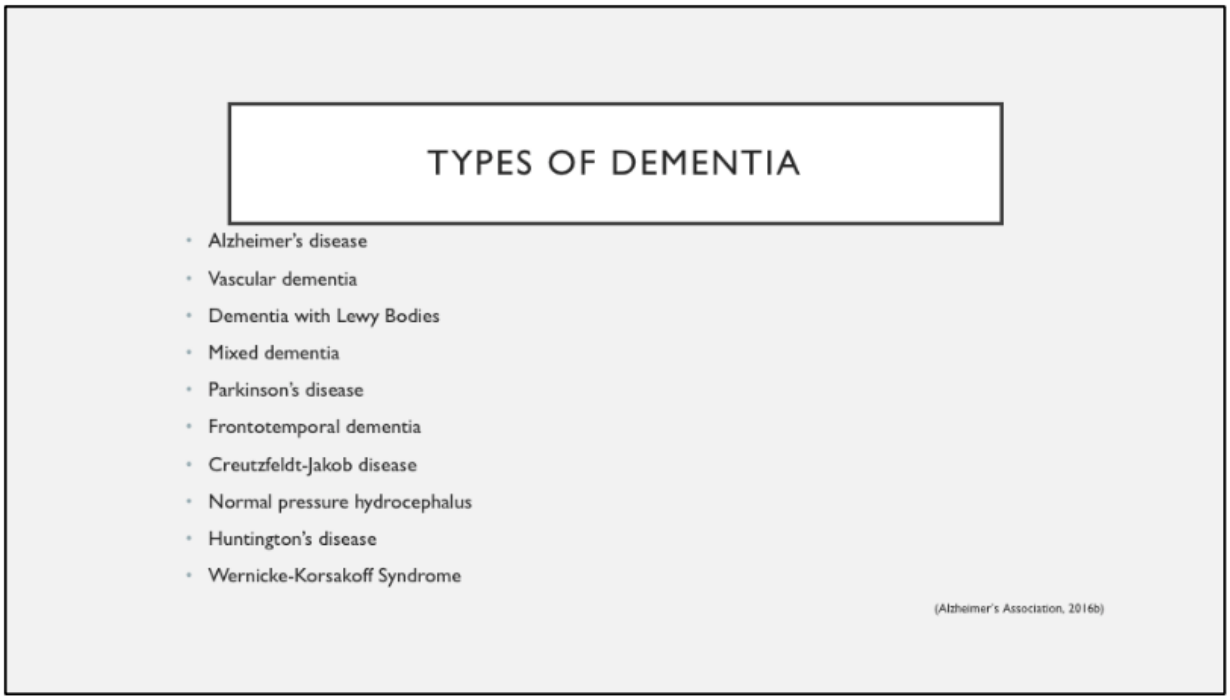
DEMENTIA FACTS

- Dementia usually occurs in individuals 60 years of age and older with the risk of developing dementia doubling every five years after the age of 60 (CDC, 2013)
- Approximately 40% of people residing in assisted living facilities have a form of dementia (Harris-Kojetin et al., 2016)

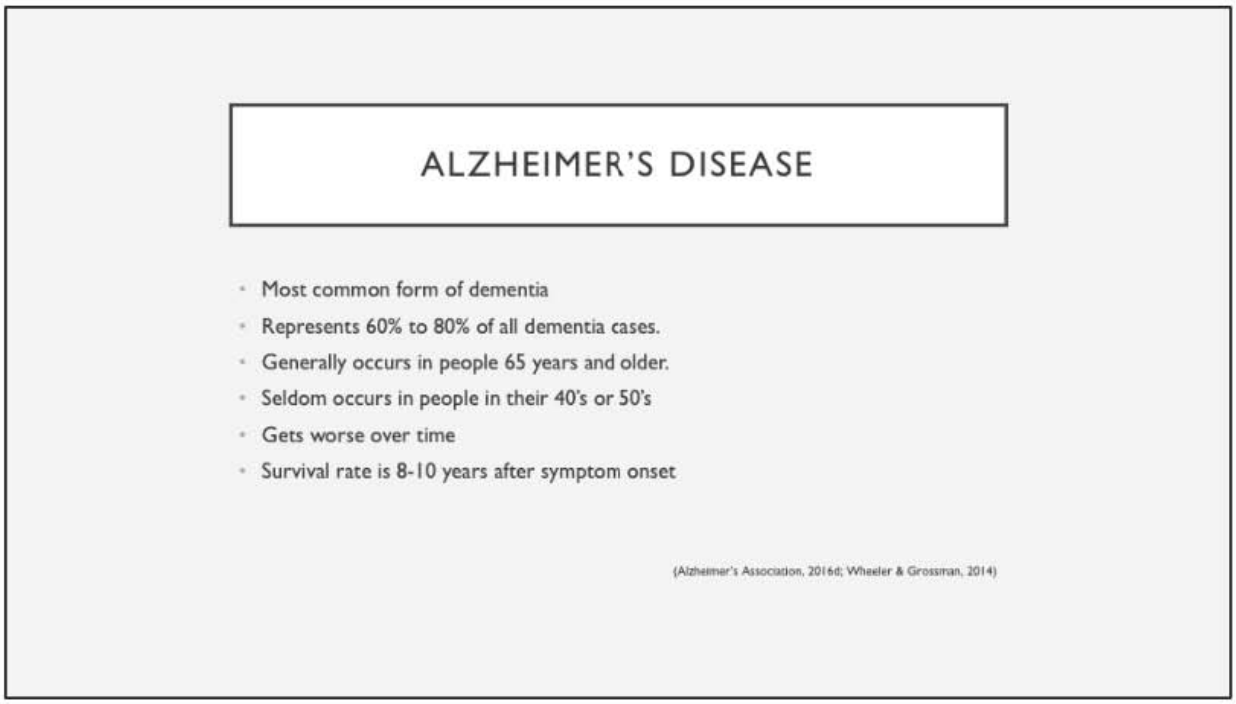
WHAT CAUSES DEMENTIA?

- Dementia is caused by damaged brain cells
- Damage to different areas of the brain cause different symptoms/impairments
- Different types of dementia are associated with cell damage to specific parts of the brain

(Alzheimer's Association, 2016a)



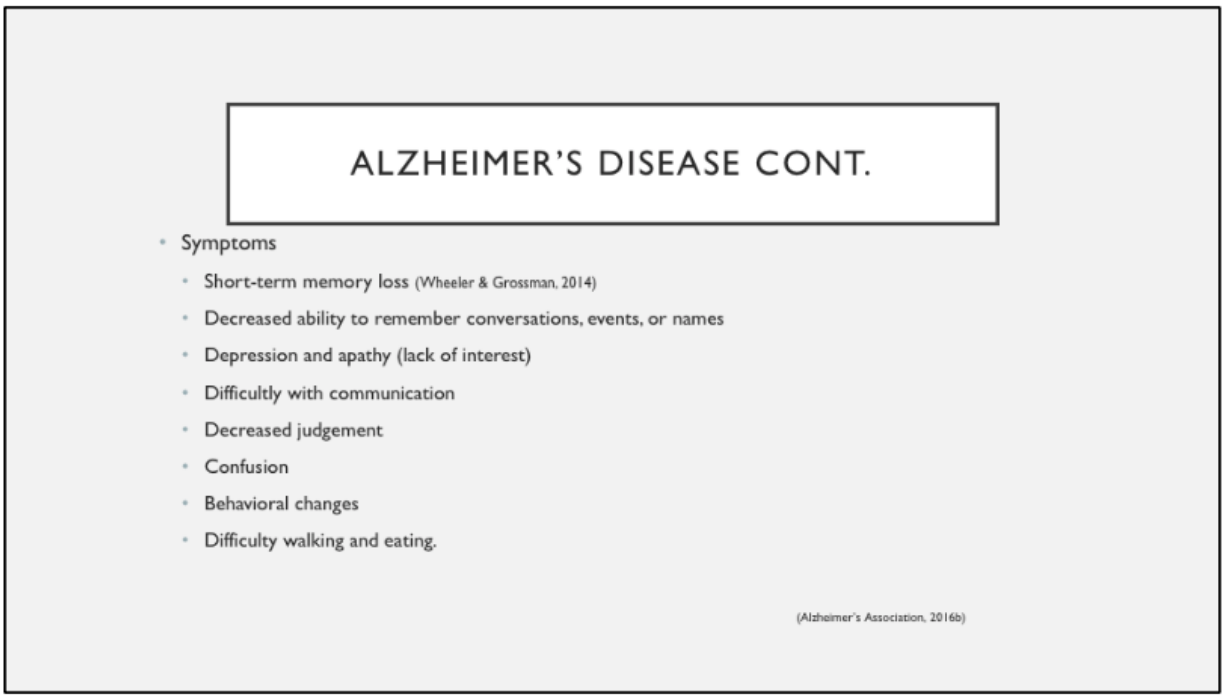
We will look at each of these diagnoses in detail next.


ALZHEIMER'S DISEASE
Most common form of dementia
Represents 60% to 80% of all dementia cases.
Generally occurs in people 65 years and older.
Seldom occurs in people in their 40's or 50's
Gets worse over time
Survival rate is 8-10 years after symptom onset
(Alzheimer's Association, 2016d; Wheeler & Grossman, 2014)

ALZHEIMER'S DISEASE CONT.

- Risk Factors
  - Inherit risk factor
  - Increased age
  - Inflammatory factors
  - Head trauma

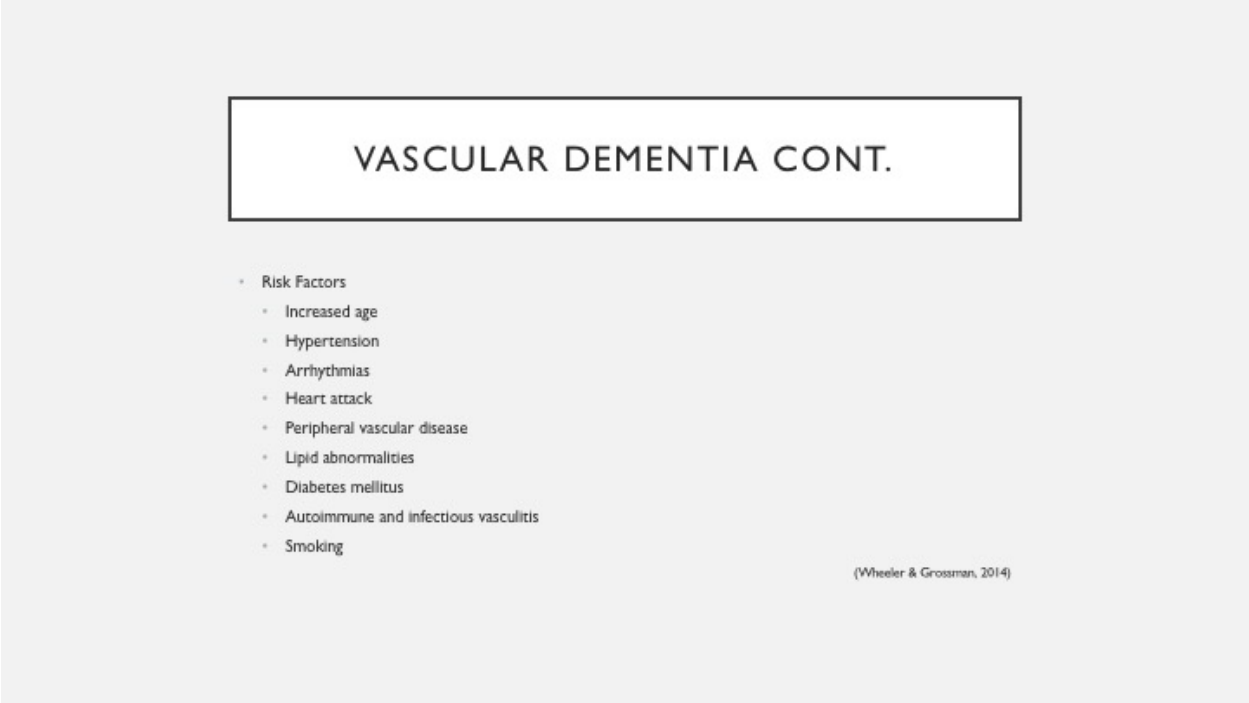
(Wheeler & Grossman, 2014)



Ask the students if they have experience working with someone who had this type of dementia?

VASCULAR DEMENTIA

- Also known as multi-infarct or post-stroke dementia (Alzheimer's Association, 2016b).
  - Loss or reduced blood supply to brain (Ischemic) (Wheeler & Grossman, 2014)
  - A swelling of blood in the area of the brain (hemorrhagic) (Wheeler & Grossman, 2014)
  - Approximately 10% of dementia cases (Alzheimer's Association, 2016c)



Ask the students if they have experienced this type of dementia?

VASCULAR DEMENTIA CONT.

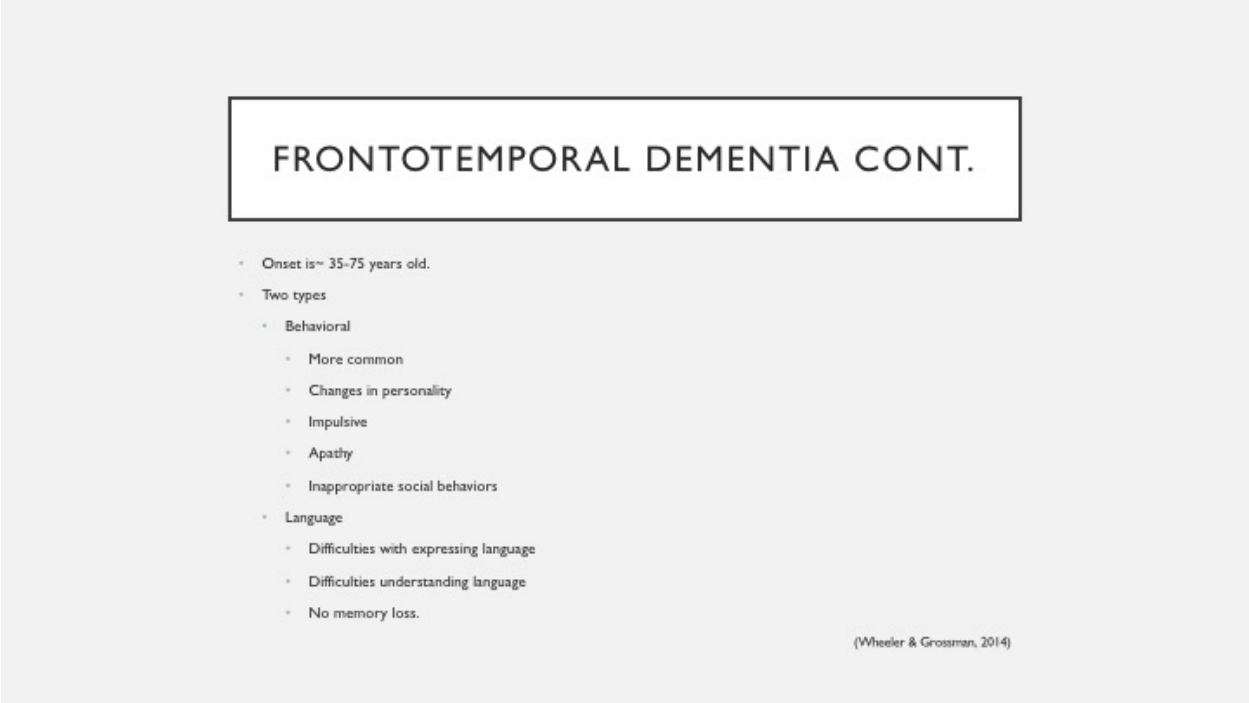
- Symptoms (Vary depending on severity of damage to blood vessel and the area of the brain impacted)
  - Decreased judgement
  - Difficulty with planning
  - Confusion
  - Disorientation
  - Trouble Speaking
  - Vision loss
  - This type of dementia does not typically have memory loss like Alzheimer's disease

(Alzheimer's Association, 2016b; Alzheimer's Association, 2016c)

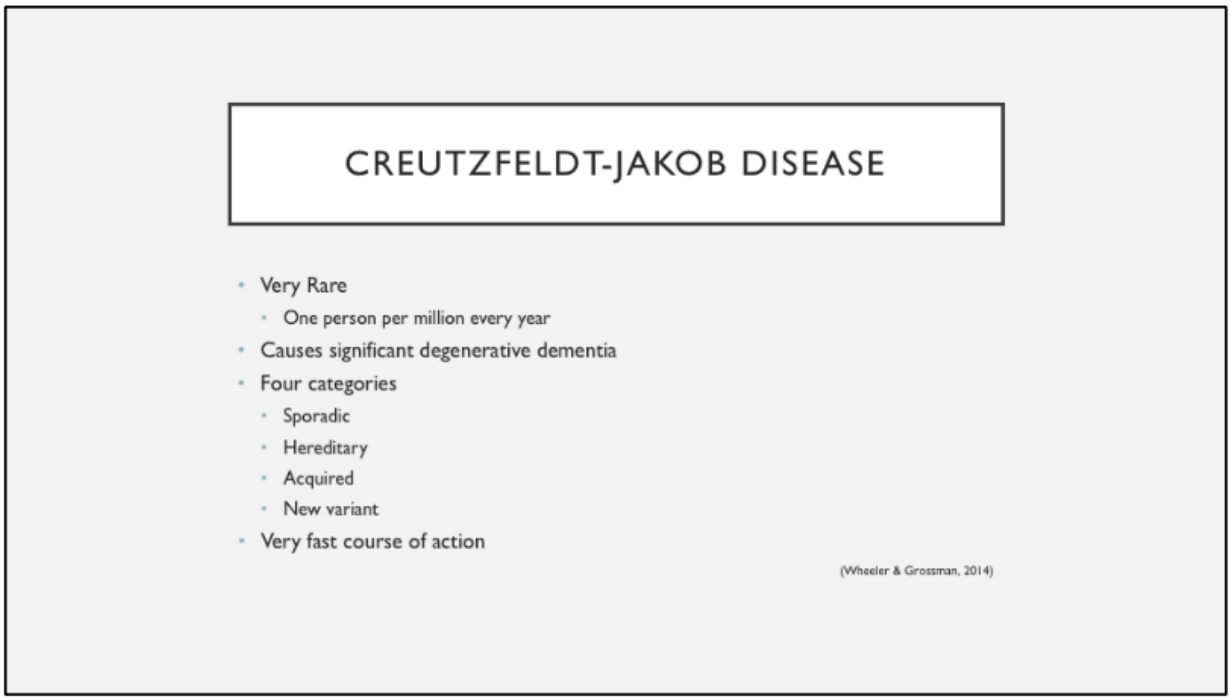
FRONTOTEMPORAL DEMENTIA

- Rare
- Affects the fontal and anterior temporal lobes of the brain
- Also known as Pick's disease

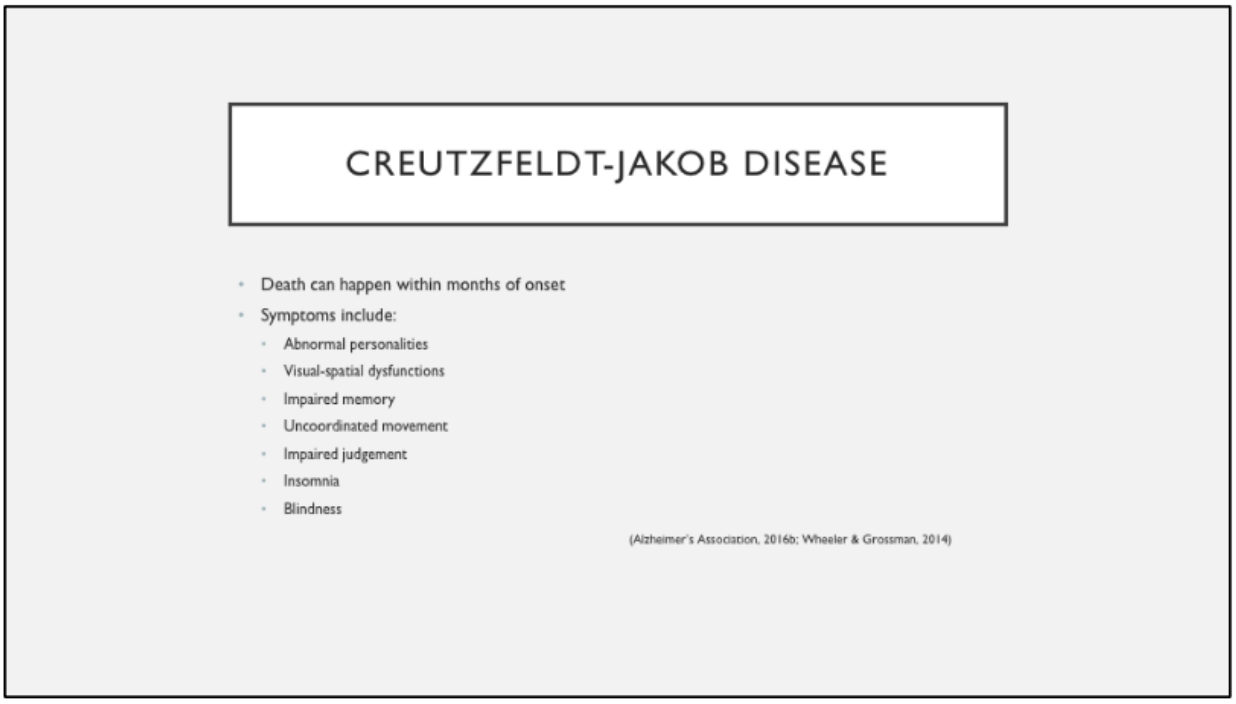
(Alzheimer's Association, 2016b; Wheeler & Grossman, 2014)



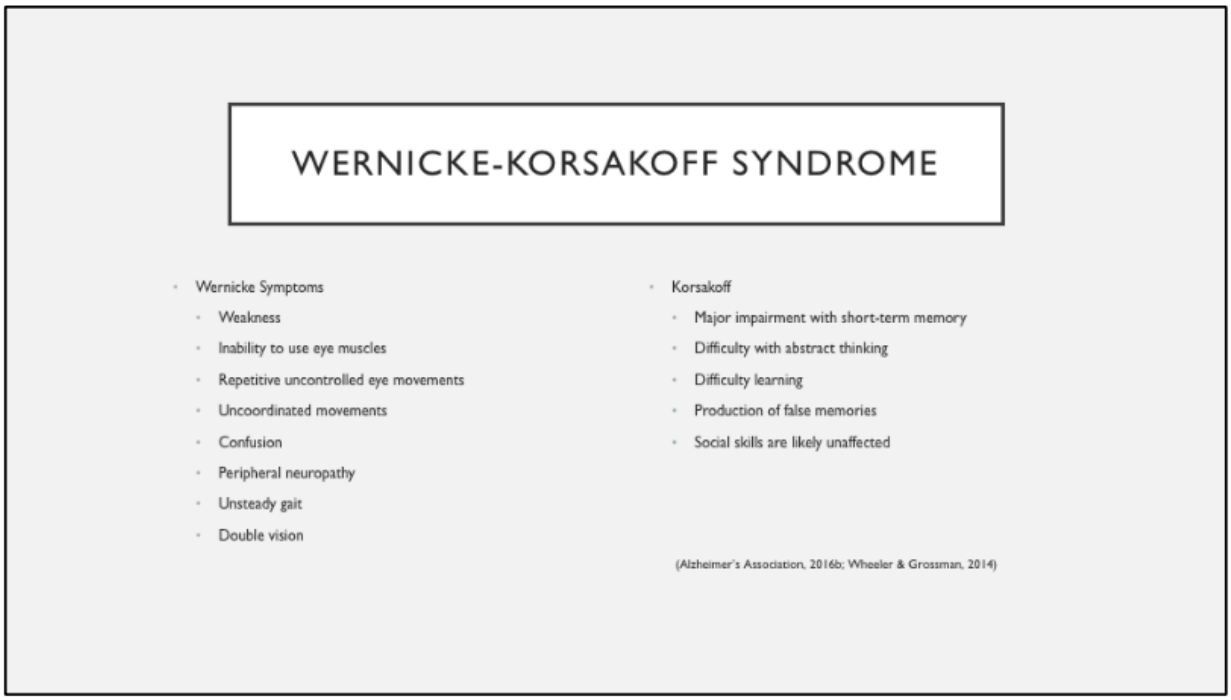
Ask the students if they have experienced this type of dementia?



Sporadic- Happens when the individual does not have any of the risk factors and it is the most common type.
Hereditary- Passed down within families and is very rare
New variant- like sporadic, but the individual has significant behavioral and sensory deficits and it occurs in the younger population (within their 20s).



Visual-spatial dysfunctions: difficulty judging distances and depth perception (Zoltan, 2007)
Ask the students if they have experienced this type of dementia?



Most common cause is chronic alcohol abuse.
Two different conditions that usually occur together. (Wernicke encephalopathy and Korsakoff syndrome)

HUNTINGTON'S DISEASE

- Purely hereditary
  - Autosomal dominant disorder
- Commonly diagnosed in 4th and 5th decades of life
- Can have a juvenile onset
- Might be caused by an imbalance of dopamine and acetylcholine

(Alzheimer's Association, 2016b; Wheeler & Grossman, 2014)


HUNTINGTON'S DISEASE CONT.
Symptoms
Depression
Personality changes
Memory loss
Impulsive behavior
Antisocial behavior
Emotional outburst
Loss of initiative behavior
Difficulty concentrating
Reduction in spontaneous behavior
Difficulty performing voluntary movement
Dystonic posture
Involuntary movements
Irritability
(Alzheimer's Association, 2016b; Wheeler & Grossman, 2014)

DEMENTIA WITH LEWY BODIES

- 10-25% of dementia cases
- Symptoms
  - Changes in alertness and attention
  - Visual hallucinations
  - Parkinson's disease-like motor movements
  - Memory loss
  - Difficulty with cognitive processing
  - Changes in sleep patterns

(Alzheimer's Association, 2016b; Wheeler & Grossman, 2014)

PARKINSON'S DISEASE

- Around 20% of clients with Parkinson's disease have dementia
- Risk increases with age
- Dementia symptoms are seen after the client develops the classic symptoms of Parkinson's disease
- Symptoms can appear like dementia with Lewy bodies

(Alzheimer's Association, 2016b; Wheeler & Grossman, 2014)

MIXED DEMENTIA

- It is where there are multiple abnormalities within the individual's brain that are contributing to dementia.
- It is a combination of the causes of dementia

(Alzheimer's Association, 2016b)

NORMAL PRESSURE HYDROCEPHALUS

- Caused by an increase of fluid within the brain
- Can be fixed by surgically implanting a shunt
- Symptoms
  - Decreased ability with walking
  - Memory loss
  - Incontinence

(Alzheimer's Association, 2016b)

DISCUSSION

- How do you think these symptoms could impact everyday life of a resident?
- Have you noticed these symptoms in the residents you work with?
- What are some strategies you have used to help the residents?
- Do you feel like having a better understanding of dementia will impact the care provided to the residents? Why or why not?
- What information did you find most surprising/interesting?

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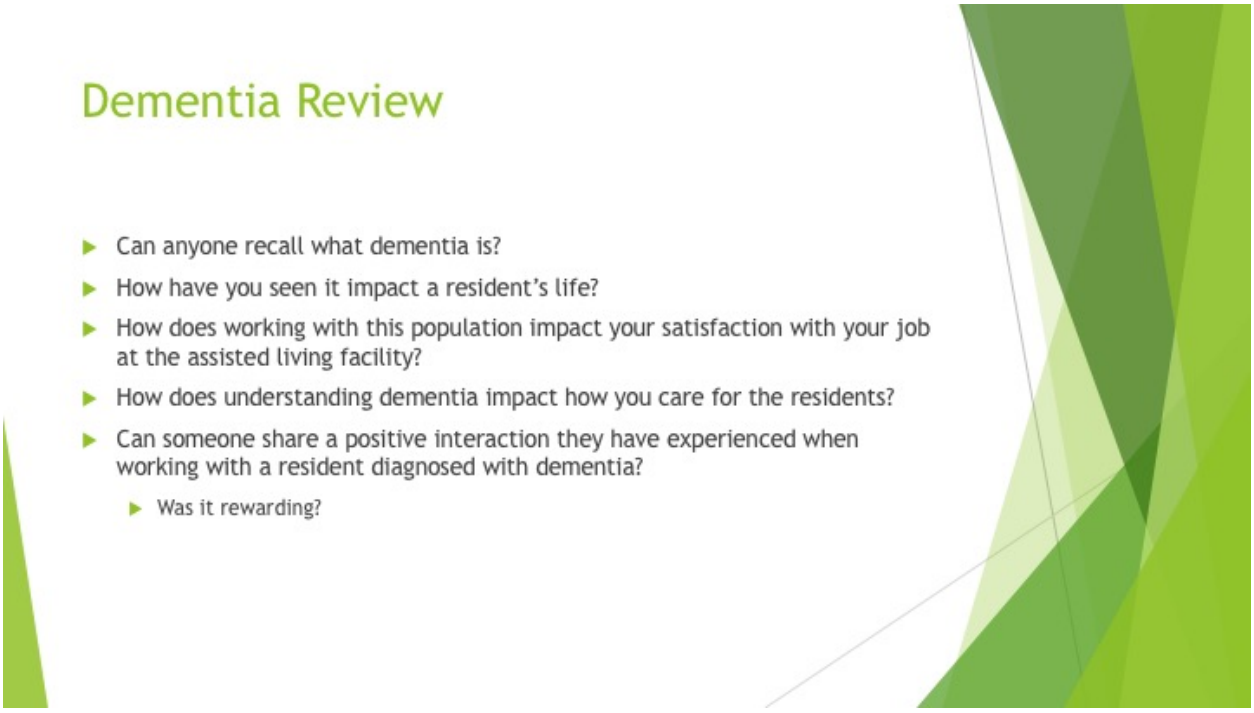
Dementia Impact on Residents

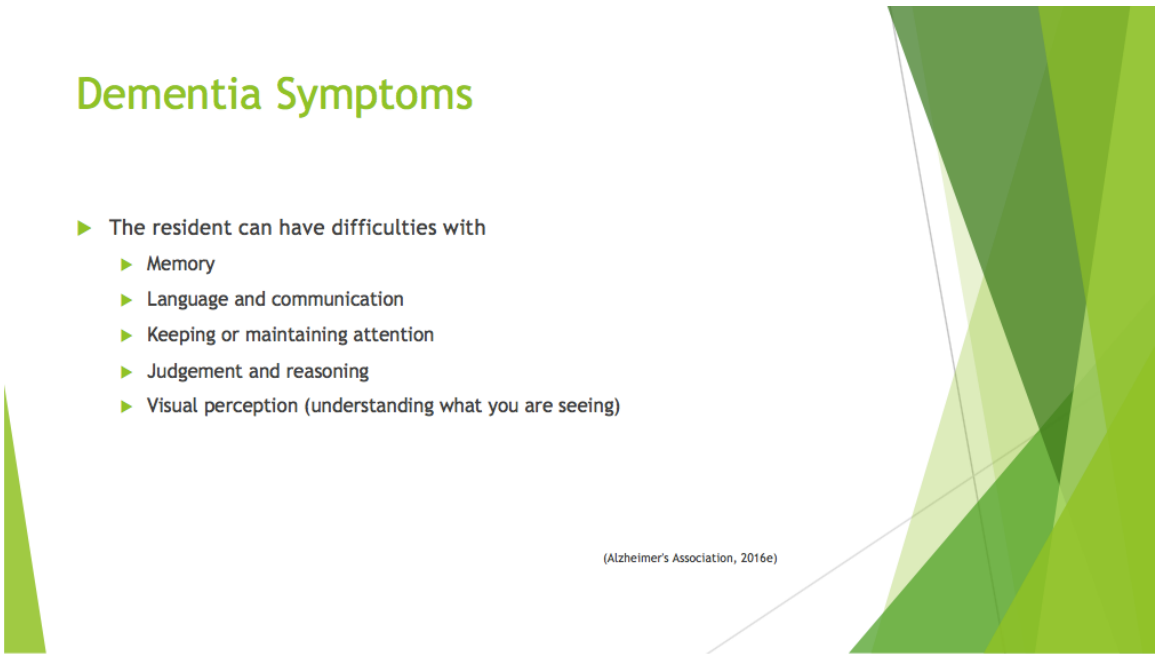
By Rodney Palmer, MOTS and Ashley Palmer, MOTS

Learning Objectives

- The learner will understand what the difference is between Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs).
- The learner will understand common symptoms related to dementia.
- The learner will understand how dementia impacts a resident's life.
- The learner will understand and demonstrate competence in the basic concepts within the Cognitive Disabilities Reconsidered Model (CDRM).



Have them get together in groups and discuss these questions and then report back to the whole group.



Ask the learners these questions:
1) How do you think these symptoms impact the residents' daily life?

2) Does anyone have some examples they would like to share about any of the symptoms they have been exposed to while working with this population?

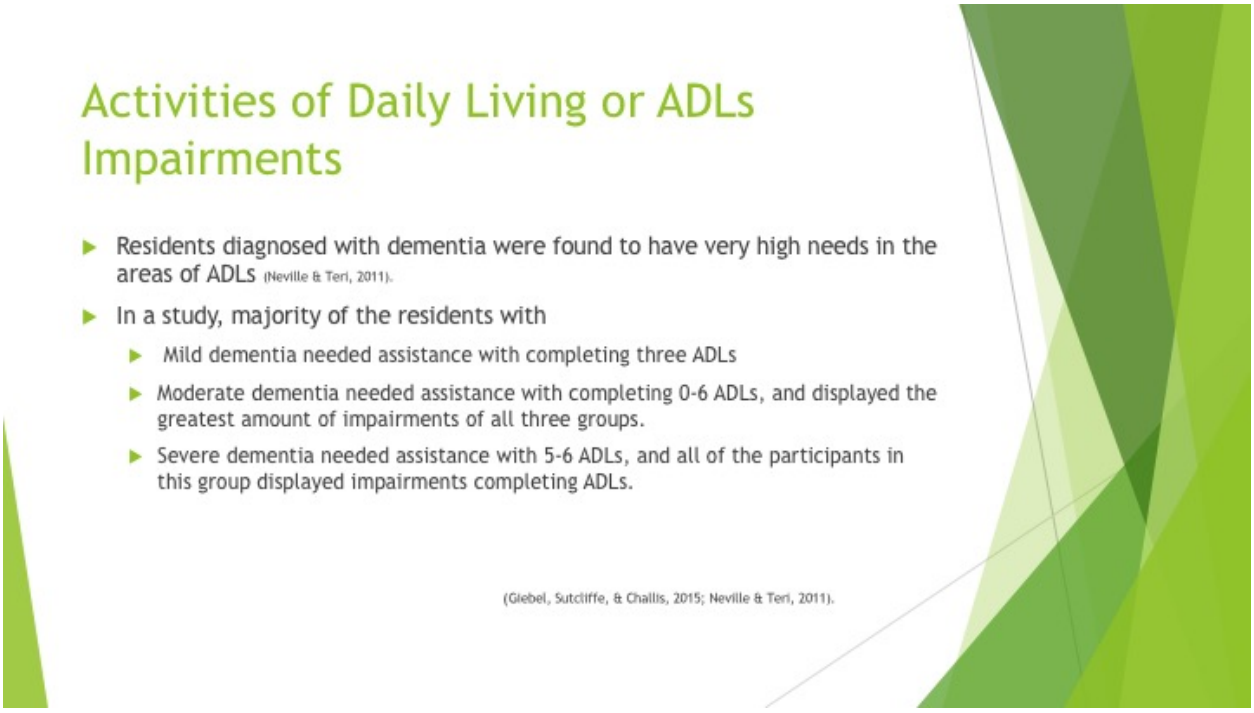
3) How can you better help residents when they are presenting with these symptoms?

How Symptoms Impact Residents' Life

- The following slides are definitions of important terms and ways how dementia impacts a resident's life.
- It is important to know how dementia impacts a resident's life because you are the ones working for and with them.
- It will help you complete your job more effectively and efficiently
- It will provide you and the resident with a positive experience in regard to his or her care.

Activities of Daily Living (ADLs)

- How would you define ADLs?
- According to the Centers for Medicare and Medicaid Services (2008), ADLs are defined as "activities related to personal care". ADLs can include dressing skills, toileting skills, bathing, transfers, eating, walking, and showering.
- Do you see residents with dementia experiencing difficulties with ADLs?
  - Examples of what ADLs might be impaired based on symptoms?
  - Examples on ways you have helped a resident complete a task.

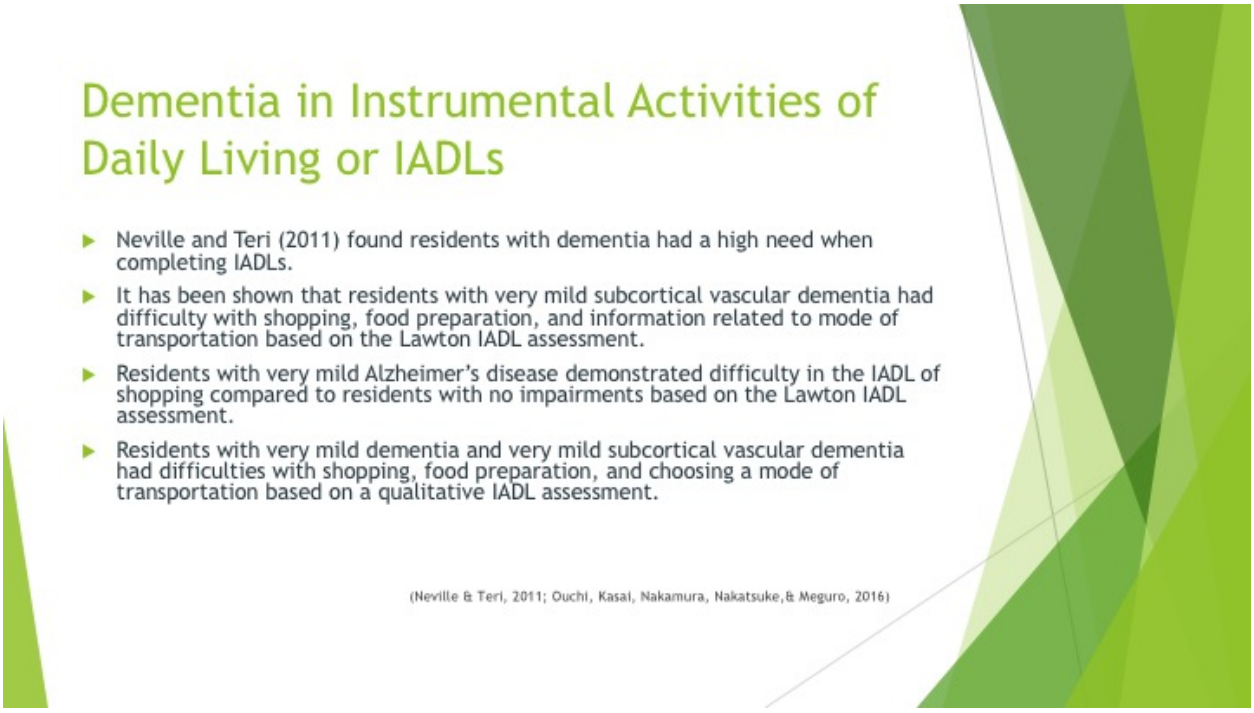


Giebel, Sutcliffe, and Challis (2015) found that clients with dementia were able to keep skills such as feeding, transferring, and toileting with only slight impairments as dementia progressed.

This information provides the learner with research on how dementia impacts residents in the area of ADL completion.

Ask the learners if they agree or disagree with the research findings? Do they have examples they would like to share on how dementia impacts a residents' ADL performance?

When a resident is within an assisted living facility they will likely have high impairments in these areas because they are unable to live independently. Impairments in these areas could be a reason why the resident and his or her family decided that an assisted living facility is the best option for them.

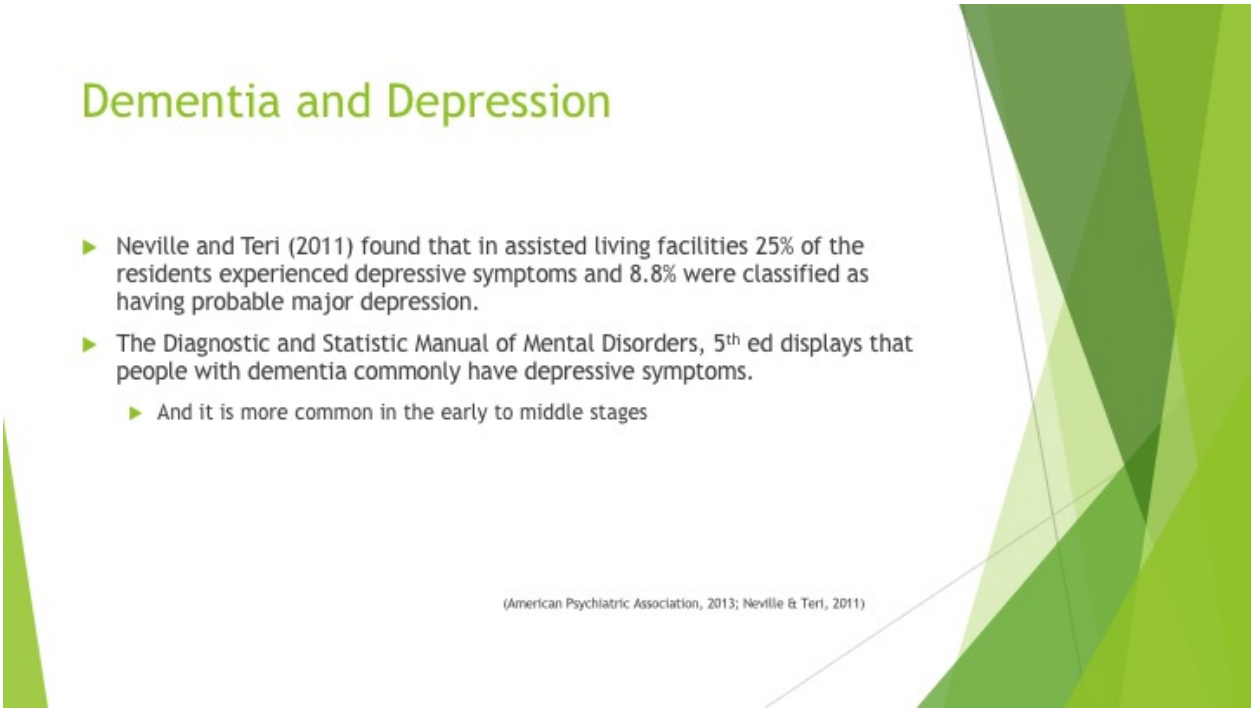


This information demonstrates the needs of residents with dementia. It is important to understand what the residents can and cannot do to ensure they are safe and experience success.

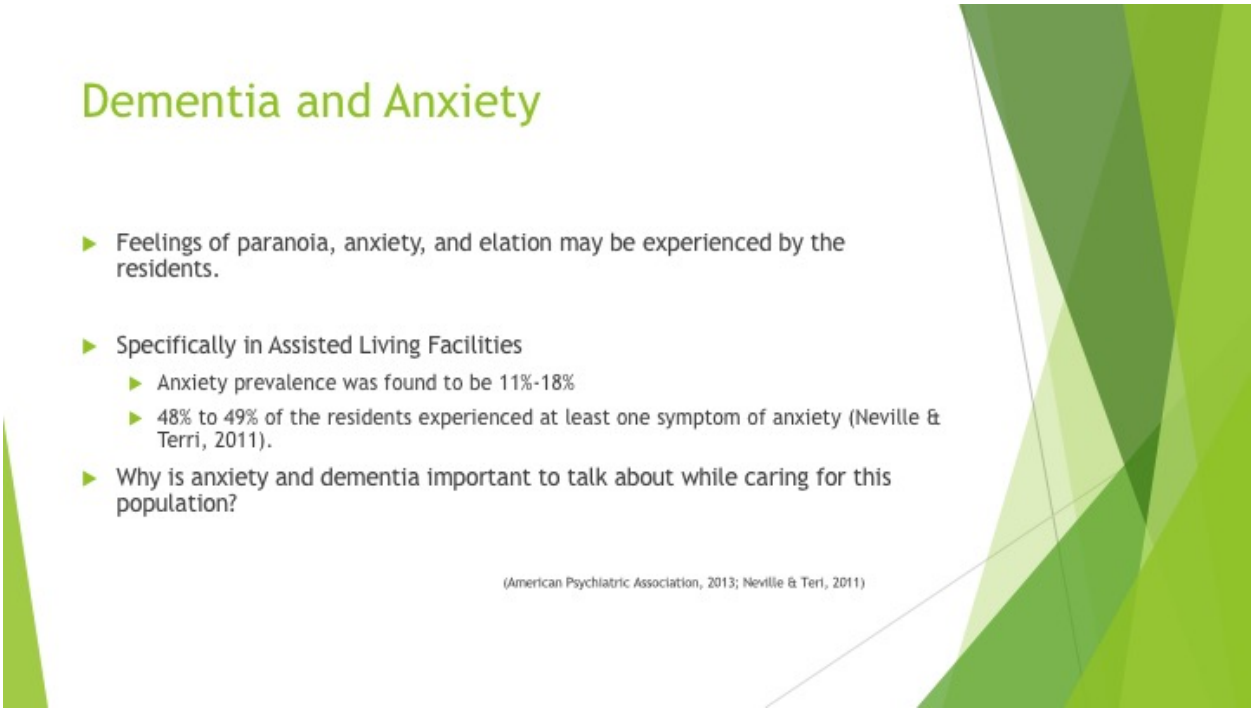
This information also demonstrates that every person diagnosed with dementia is slightly different.

It is important to understand what risk factors place a resident with dementia at a high fall risk for falls. It allows you, as a care giver, to help reduce and prevent falls for residents with dementia.

Another important fact Pellfolk, Gustasson, Gustafson, and Karlsson (2009) found was that 77.7% of the falls happened with no one around to witness them.

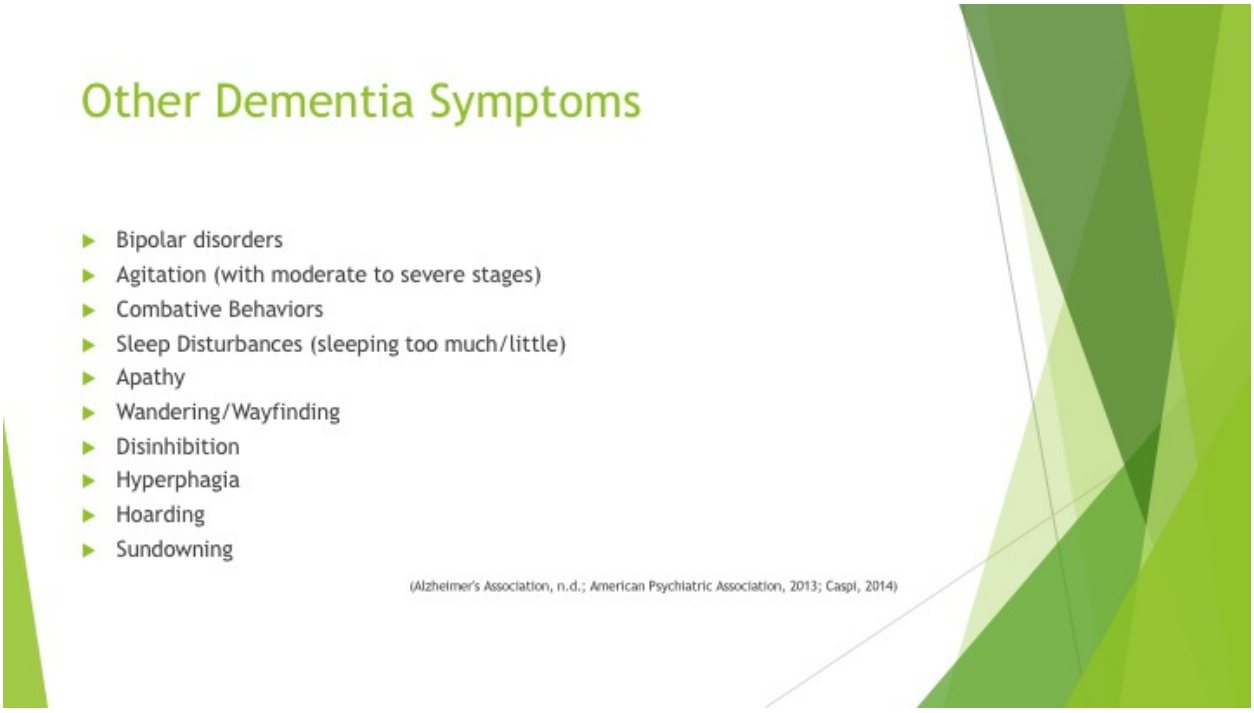


This information provides the learner with knowledge on how prevalent depression is in residents with dementia. It allows them to identify that not only does the person have difficulties with memory but he/she also might be dealing with a psychiatric disorder as well. It is always important to watch for signs and symptoms of depression.



How can these symptoms impact a person's ability to complete daily tasks such as ADLs and IADLs?

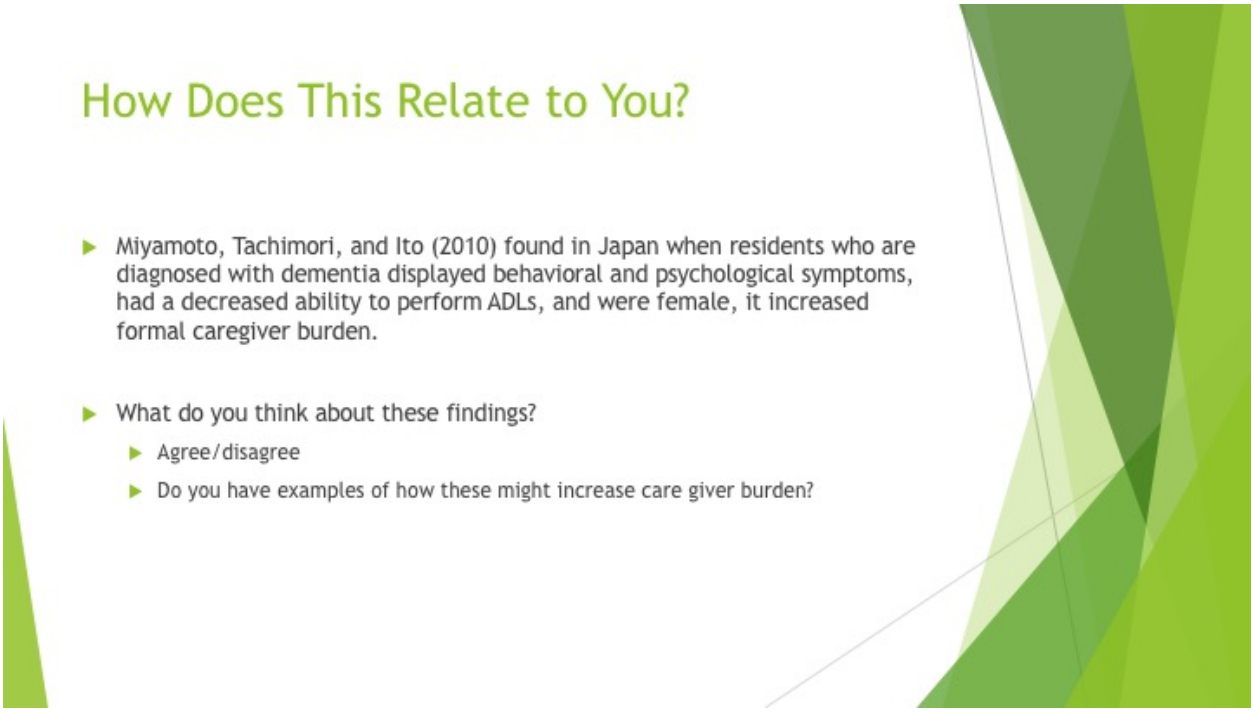
Has anyone here experienced residents who have displayed these symptoms?



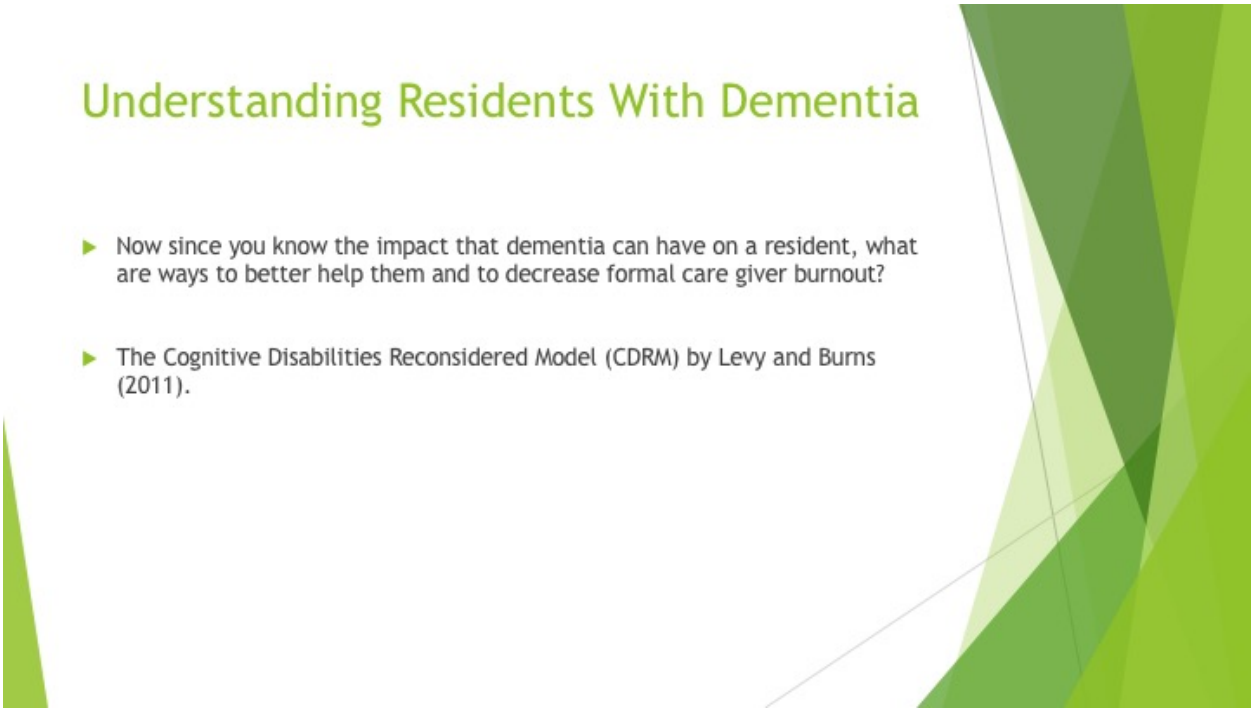
Does anyone in the class have an example of how a resident displayed the above symptoms while working with them?

Will someone share an experience on how managing these symptoms made your job more difficult?

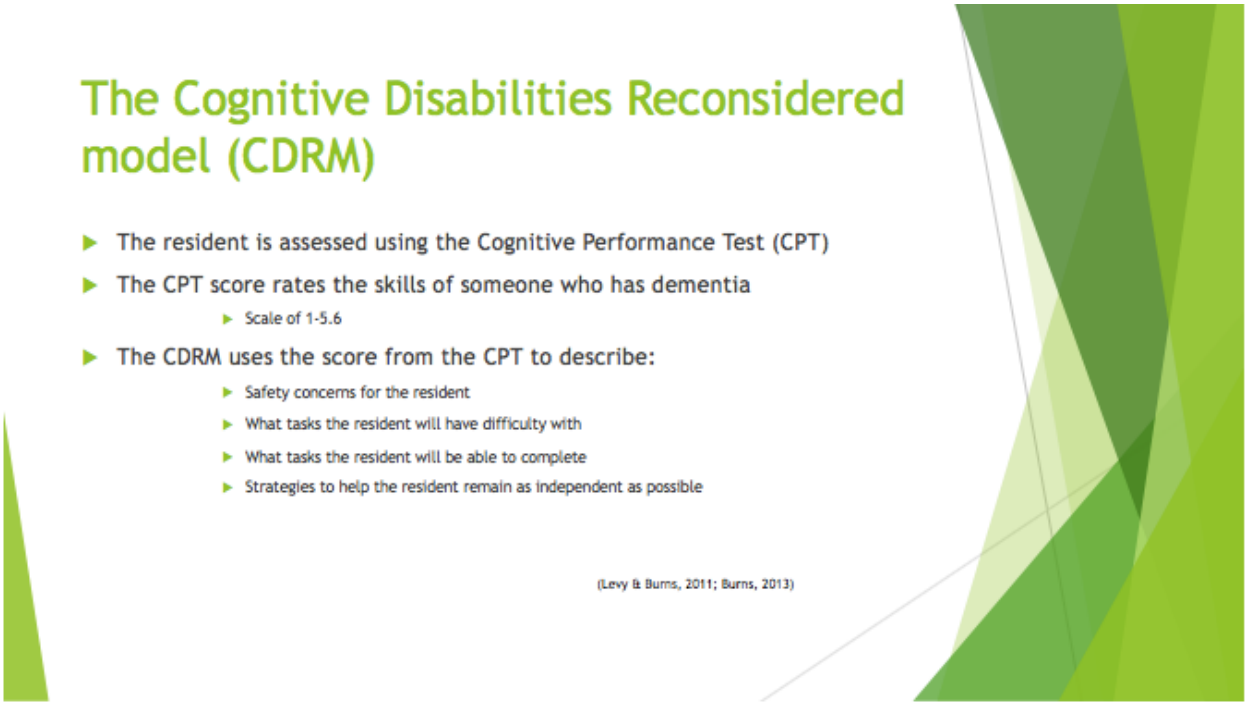
Explain to the students that there are a lot of symptoms a resident with dementia may experience. It is important to understand that the resident will and can display these symptoms.



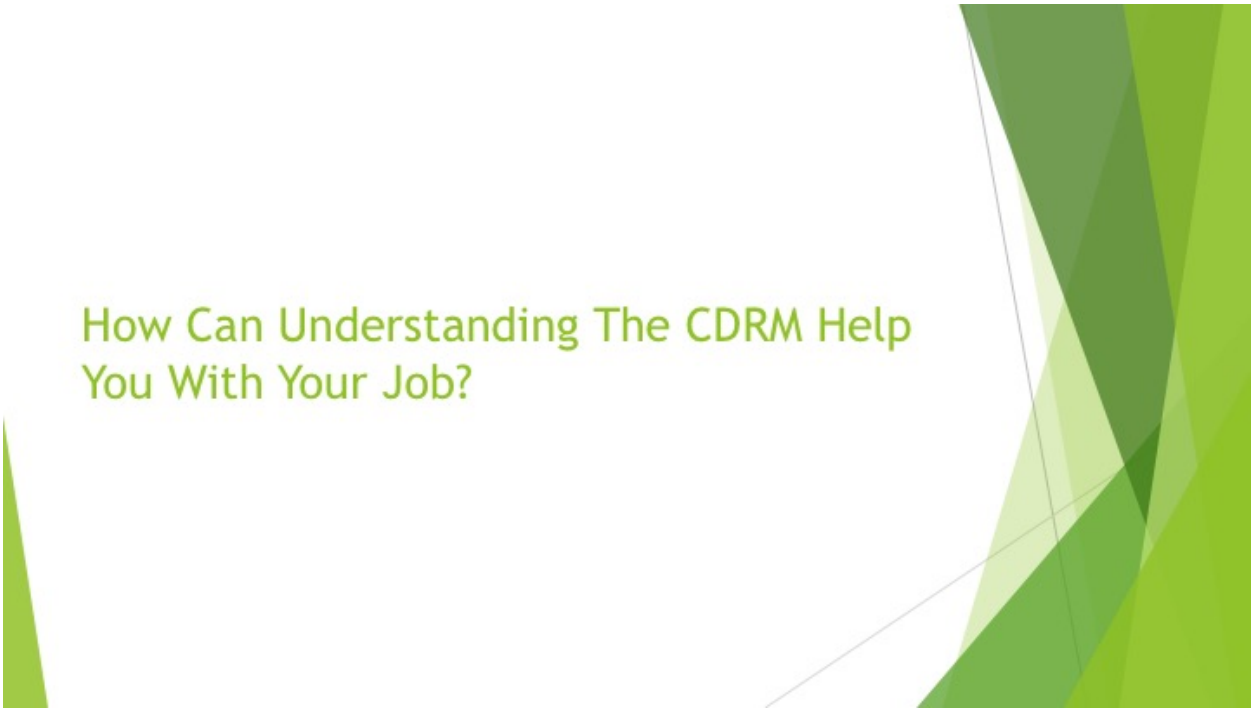
The authors also found that the strongest influence on formal care giver burden was behaviors that were displayed by the resident towards other people (Miyamoto, Tachimori, & Ito, 2010).



Having a basic understanding of this model will allow you to better interact with residents who are diagnosed with dementia.

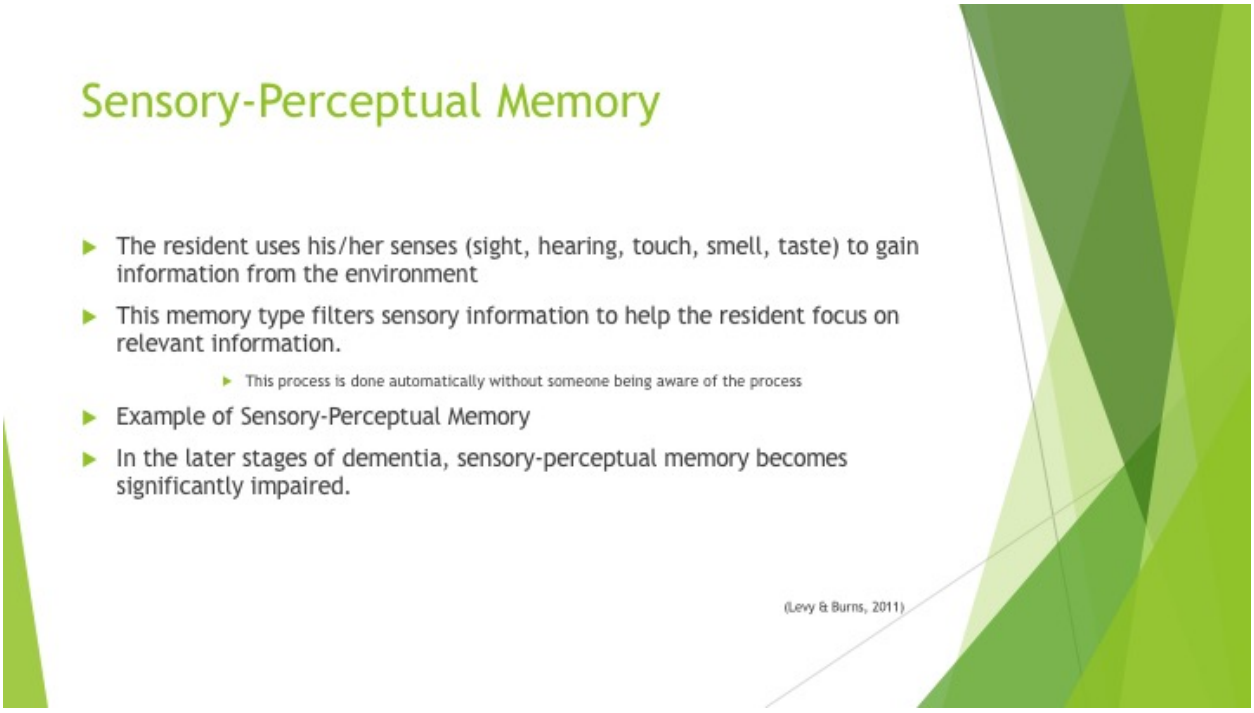


The CPT is a standardized assessment that an occupational therapist must administer for residents who are diagnosed with dementia (Burns, 2013)



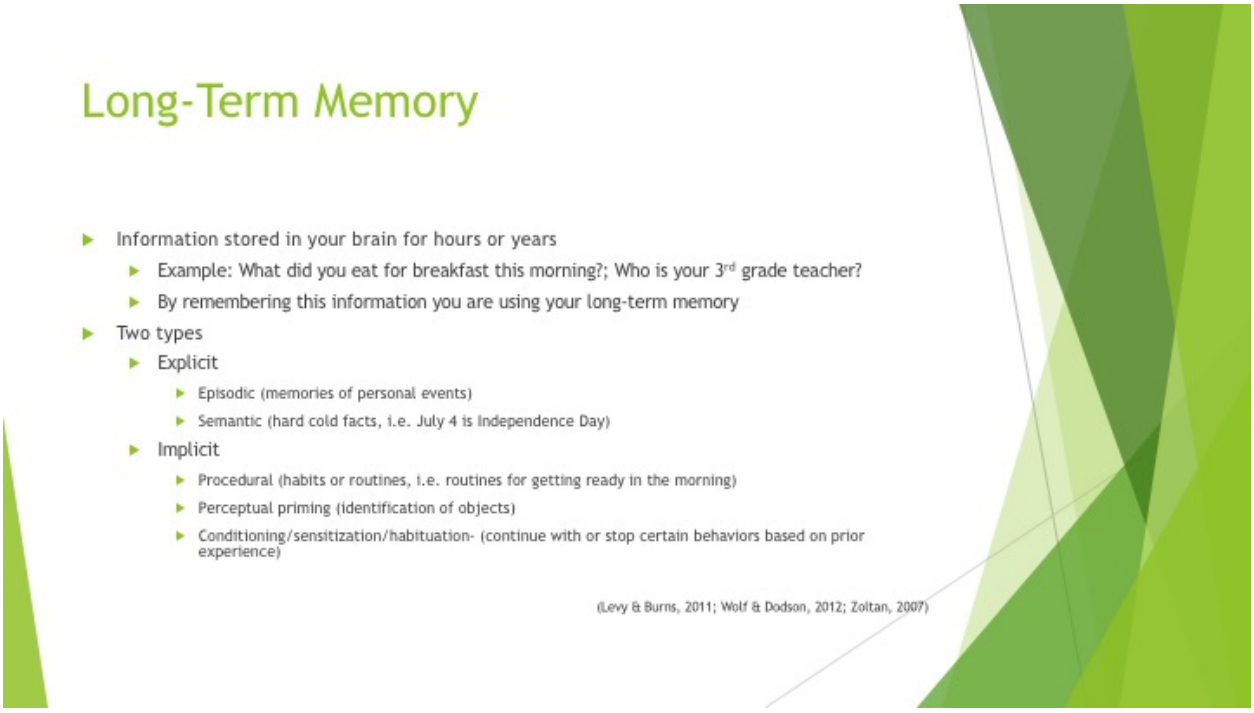
1. Promotes quality of life of your residents.
2. Could allow residents to complete tasks with more independence.
3. Could improve safety of your residents.
4. Provides strategies to help your residents with different daily tasks.

These will be described in the next slides.



This memory is used to help the resident filter a large amount of information from the environment to help the resident process the most relevant information. This type of attention within the memory store is considered to be automatic and unconscious (Levy & Burns, 2011).

Example:
This is like us sitting in the room now. While you are focusing on the learning material being presented by the teacher, you are taking in more information than just the lecture materials. Your body is aware of the temperature in the room, the amount of noise, and past experiences are within your thoughts. This information is used to help encode or spark your brain with other types of memory.



Explicit- is where the resident consciously recalls information.

Episodic- These can be life stories like a fishing story or a birthday. It's the most severely affected form of long-term memory in residents with dementia.

Semantic- This is information like when did WW2 stop or who was the first president. It is much more stable compared to episodic memory and the decline takes a slower course. The resident will still be able to read out loud even though the resident does not understand the meaning. The resident will have a difficult time recalling family members' names, nouns, and verbs at the end of the disease. While at the end stages, the resident will have very impaired or no longer have language skills.

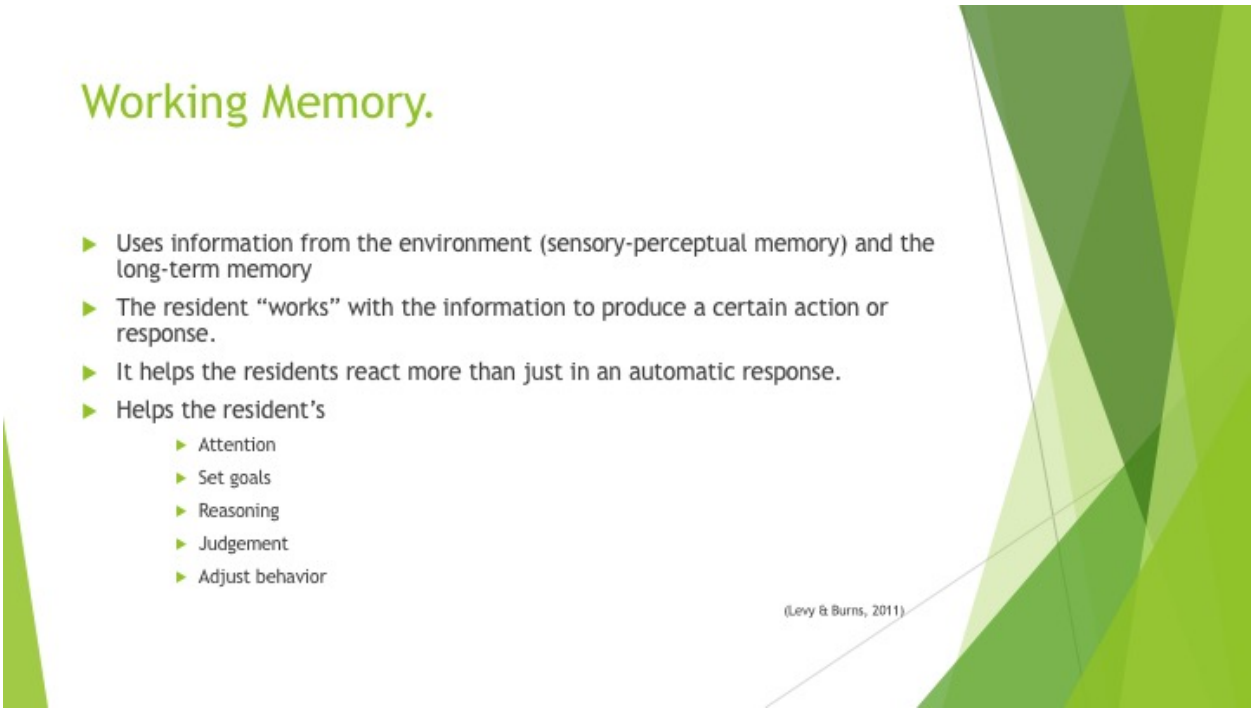
Implicit- This is the information a person takes in that he or she is unaware of and is done unconsciously.

Procedural (habits or routines)- This is the most durable form of memory in residents with dementia.

Perceptual priming- (can perceive items as being the same).

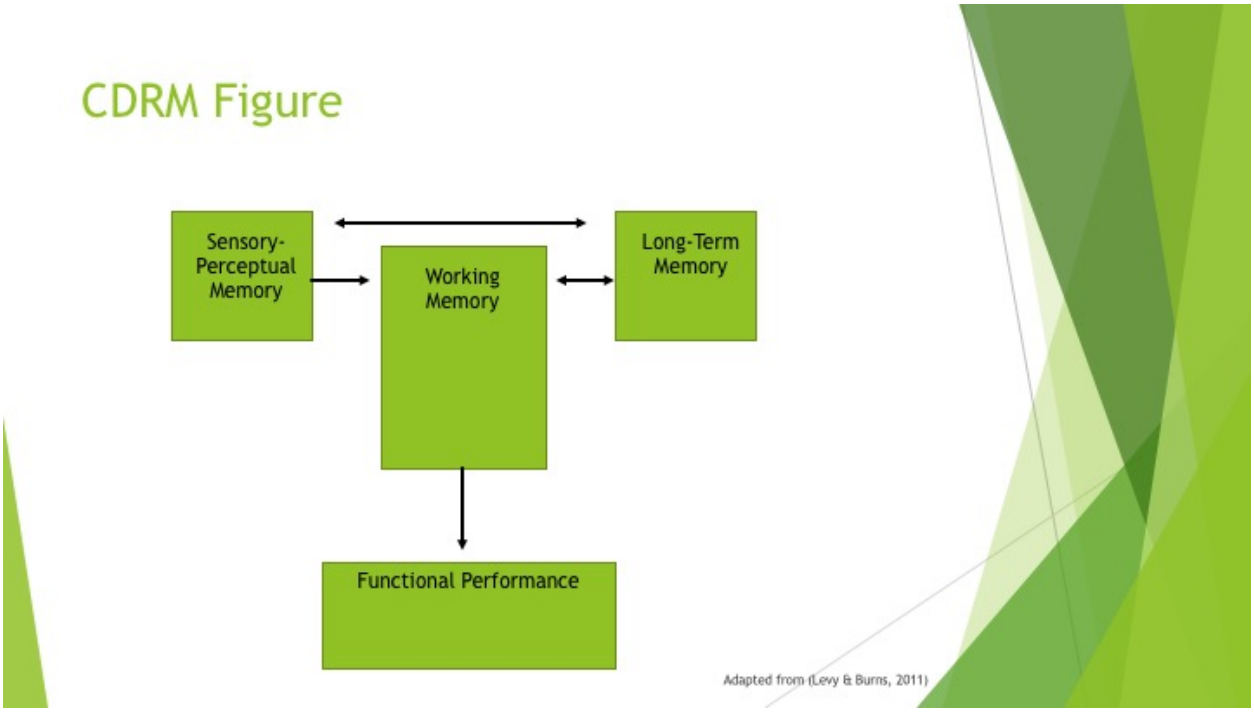
Conditioning/sensitization/habituation- (behavioral responses, reward systems)
i.e. if it was a good experience you will continue with the behavior, if it was a bad experience your will stop the behavior.

(Levy & Burns, 2011; Wolf & Dodson, 2012; Zoltan, 2007)

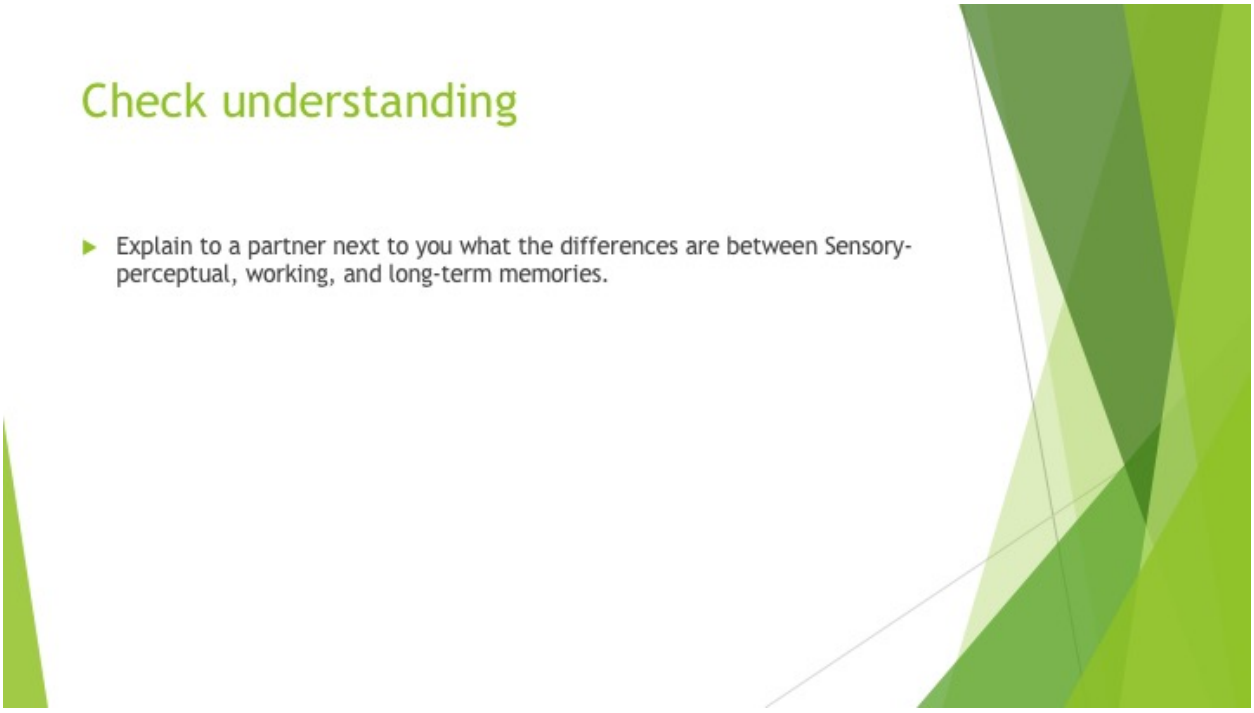


Working memory: is very important to understand when trying to understand information processing. This type of memory is very complex.
Working memory takes the information from the environment and the resident's long-term memory to produce an action or response (Levy & Burns, 2011).

Example: While you are sitting in front of your food your body is taking in the smell of the food, the temperature, and what it looks like (sensory-perceptual memory). You see that you have a piece of steak, green beans, and a pie on your plate (long-term memory). You decide (working memory) to eat the steak first because you know how good it is going to be (long-term memory).



Basic CDRM Visual.



How do you think impairments in these memories would impact a residents' functioning?

Thank You for Participating

- Next time we will explore how to apply the CDRM with residents at different levels
- This will allow you to use the information to help build competence and knowledge when caring for residents diagnosed with dementia.

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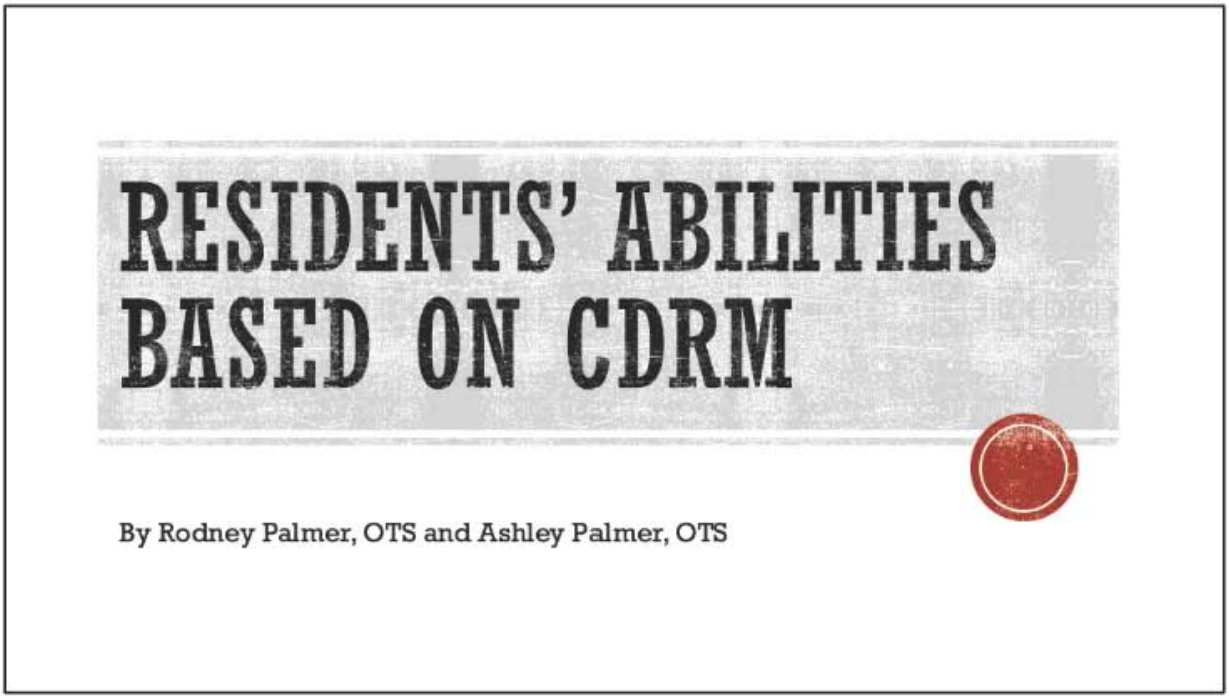
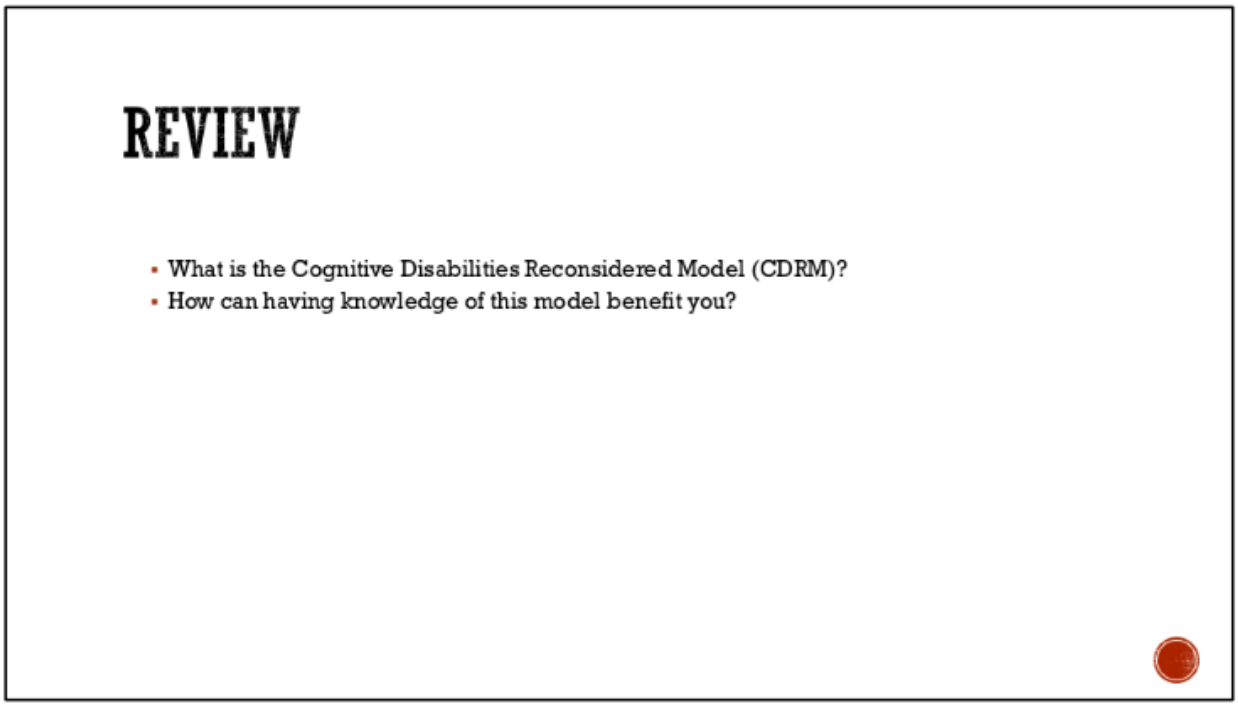

RESIDENTS' ABILITIES BASED ON CDRM
By Rodney Palmer, OTS and Ashley Palmer, OTS

OBJECTIVES

- Understand the functional abilities of residents within each level of the Cognitive Disabilities Reconsidered Model.
- Be able to apply the information to develop ways to assist residents within each functional level.
- Learn possible strategies to assist residents within each functional level.

DISCUSSION QUESTIONS

- Since we have been reviewing the topic of dementia, have your interactions with the residents changed?
- Do you feel like you have a better understanding of what you can expect from someone who has dementia?
- Do you feel like there is additional information you would like to know regarding dementia?



The CDRM categorizes individuals by functional abilities. It provides a framework for what functional abilities you can generally expect from a resident within a certain level. The CDRM will inform you of the level of assistance residents need and safety considerations (Levy & Burns, 2011).

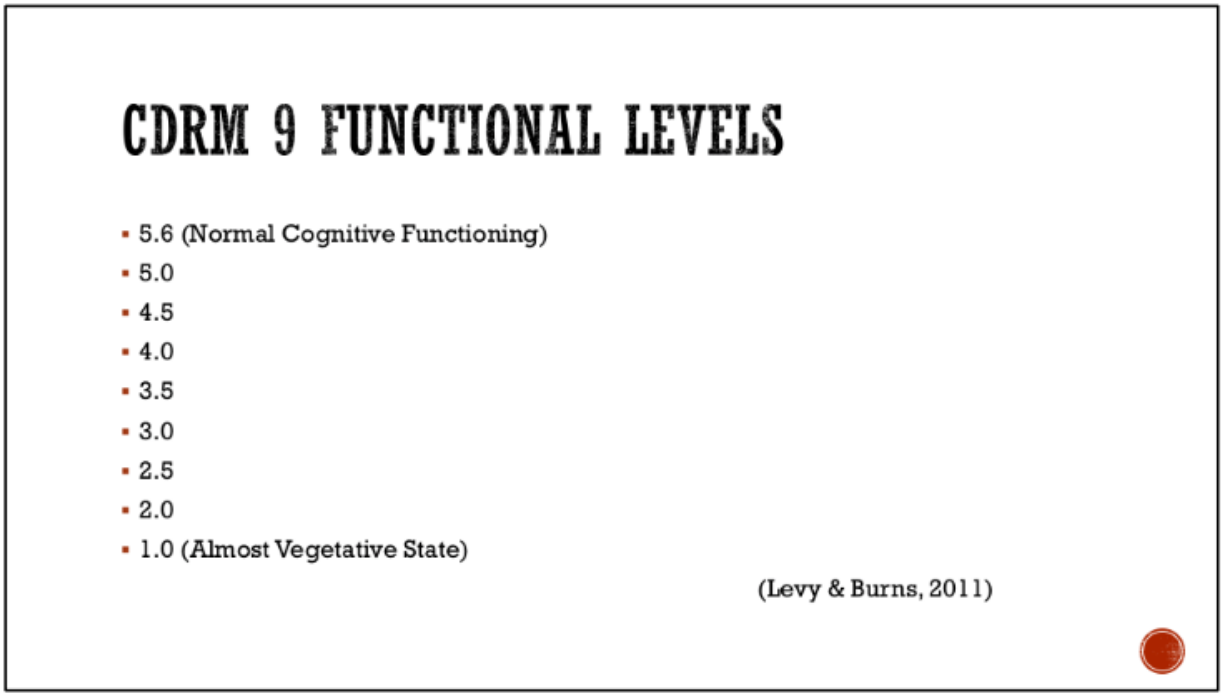
Benefits:

Promotes quality of life of your residents

Could allow residents to complete tasks with more independence

Could improve safety of your residents

Provides strategies to help your residents to complete tasks



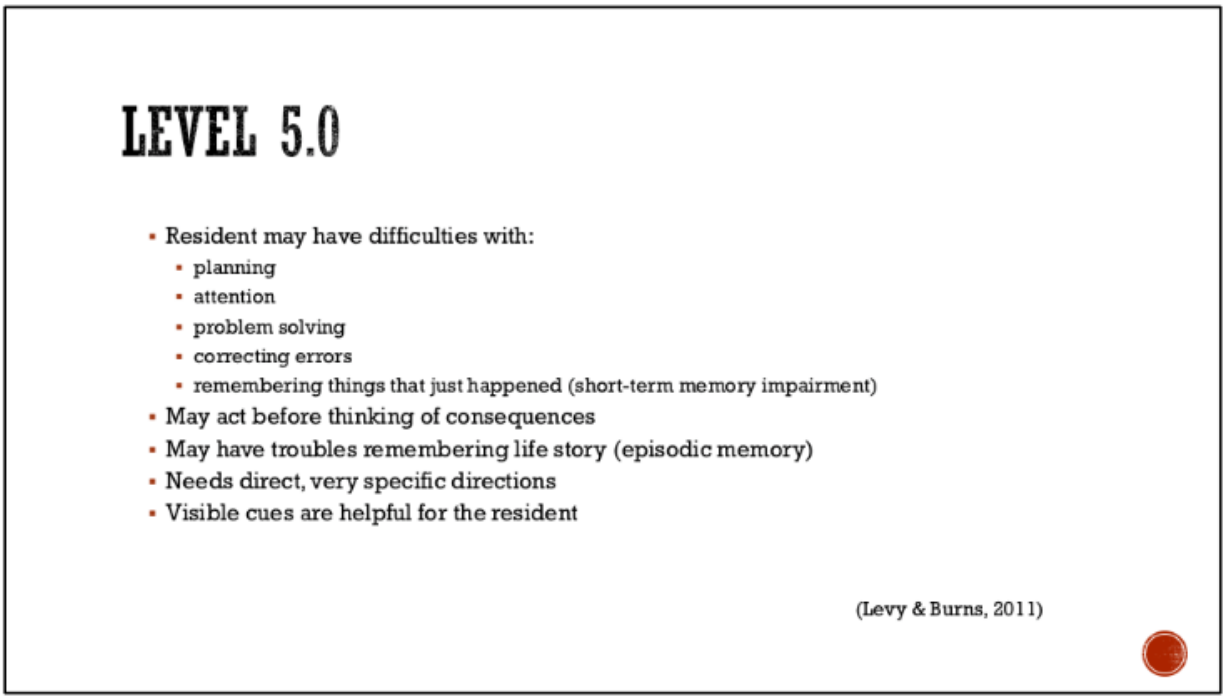
Assisted Living Staff will typically only see residents who are at a functional level of 3.0 or above. All the levels will be covered in this PowerPoint, but levels 1-2.5 will be brief explanations.

Note that the functional levels described within this PowerPoint are just guidelines of what to expect. The assisted living staff also needs to consider other age-related changes (vision loss, hearing impairments, etc.) and other diagnoses the individual may have.

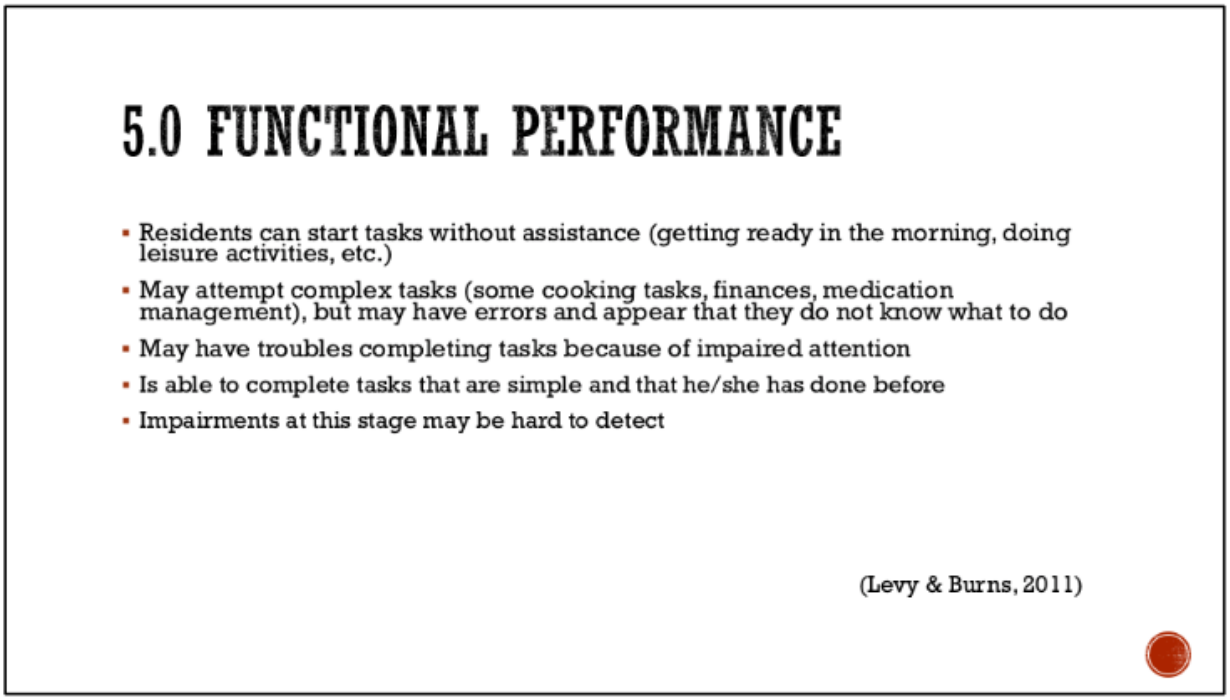
5.6 FUNCTIONAL PERFORMANCE

- At this level the person is considered to be free of a cognitive disability.
- Residents can start tasks without assistance (getting ready in the morning, doing leisure activities, etc.)
- Can complete activities such as:
  - Managing medications
  - Reading
  - Writing
  - Managing finances
  - Cooking meals
- Can learn new tasks through written and verbal methods
- Has self-awareness
- Understands consequences of actions

(Levy & Burns, 2011)



At this level the resident is experiencing difficulties with a lot of memory impairments and understanding information coming in from the environment. The residents will need "direct, concrete, and visible cues" to help the resident reason and make judgments (Levy and Burns, 2011, p 422).



It is important to understand in this level that the resident's attention is decreased so the newer and more complex tasks are more difficult to complete thus increasing possible errors.

Examples include: A person at this level is more likely to successfully take a pill to control his/her diabetes but would have a difficult time checking insulin levels and adjusting the shot accordingly (Levy & Burns, 2011).

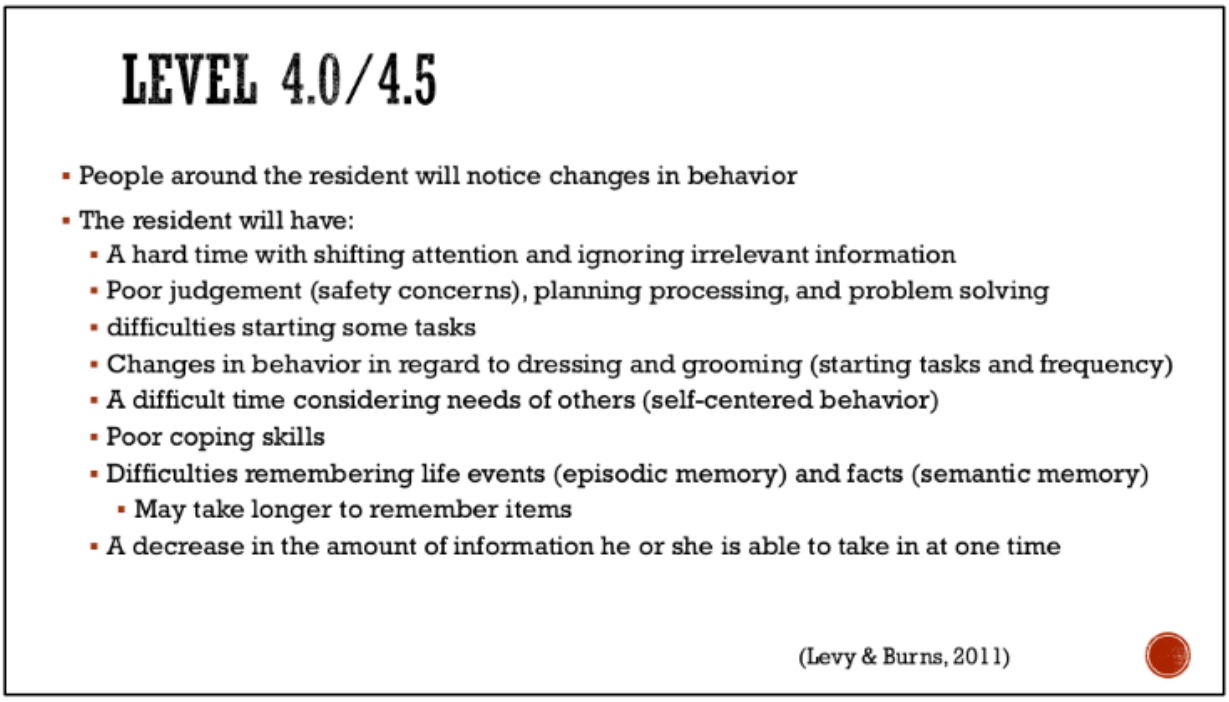
Has anyone had experiences with someone who would be functioning at this level?

Do you have any strategies that may help residents at this level?

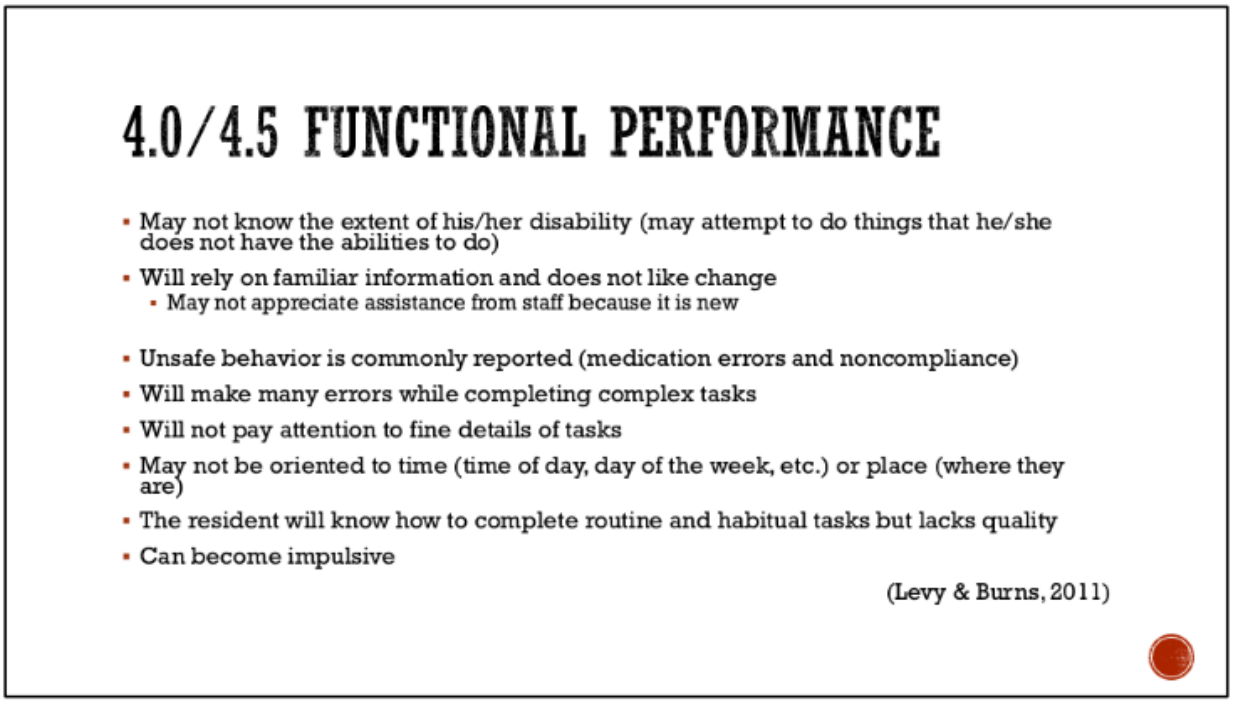
-For complex, use a step-by-step handout, possibly with pictures

-Resident may need redirected during a task due to impaired attention

-Watch for signs of frustration and/or anxiety and be willing to help



Level 4.0 and 4.5 are very similar, however residents at level 4.0 will have more pronounced symptoms than 4.5.
Residents at this level can have a difficulty with keeping a conversation with people while others can continue a conversation. Although, the conversations become about the person and repetitive.



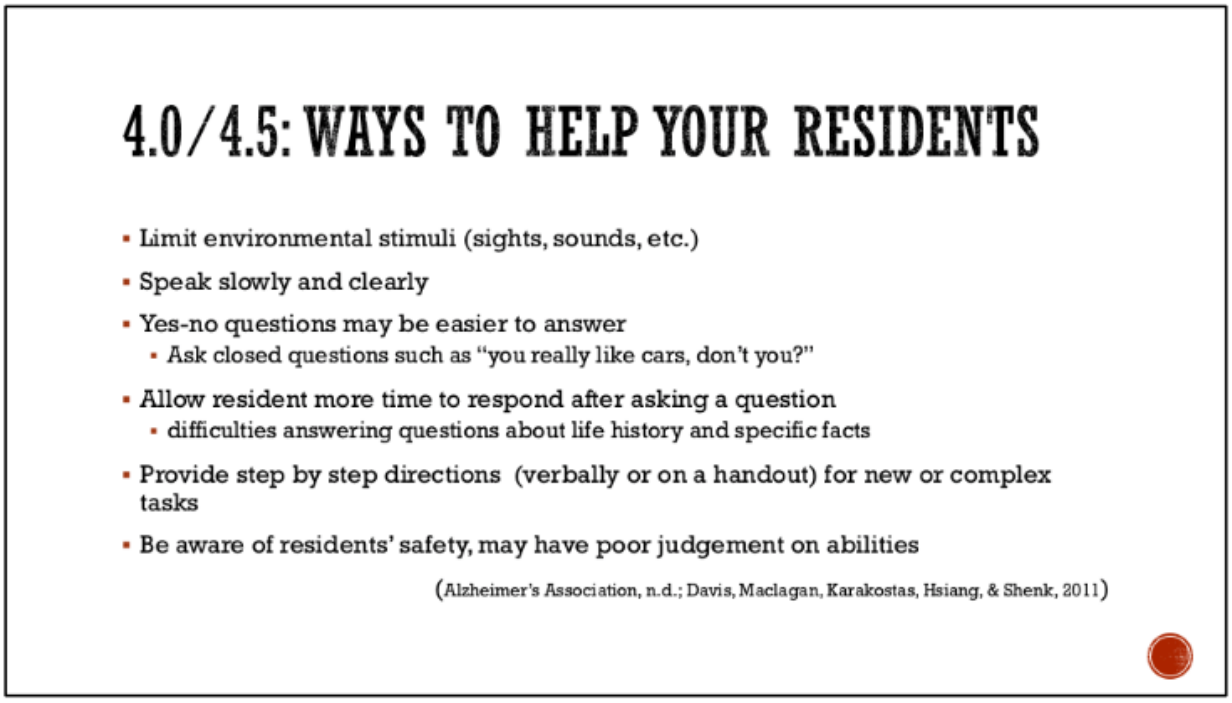
The resident can become demanding and know what he or she wants to do but it is based of poor judgements and planning skills. They want the here and now and do not consider the future (Levy & Burns, 2011).

Behaviors start to expose themselves at this level (Levy & Burns, 2011).

How do you think this information impacts the way you interact with residents?

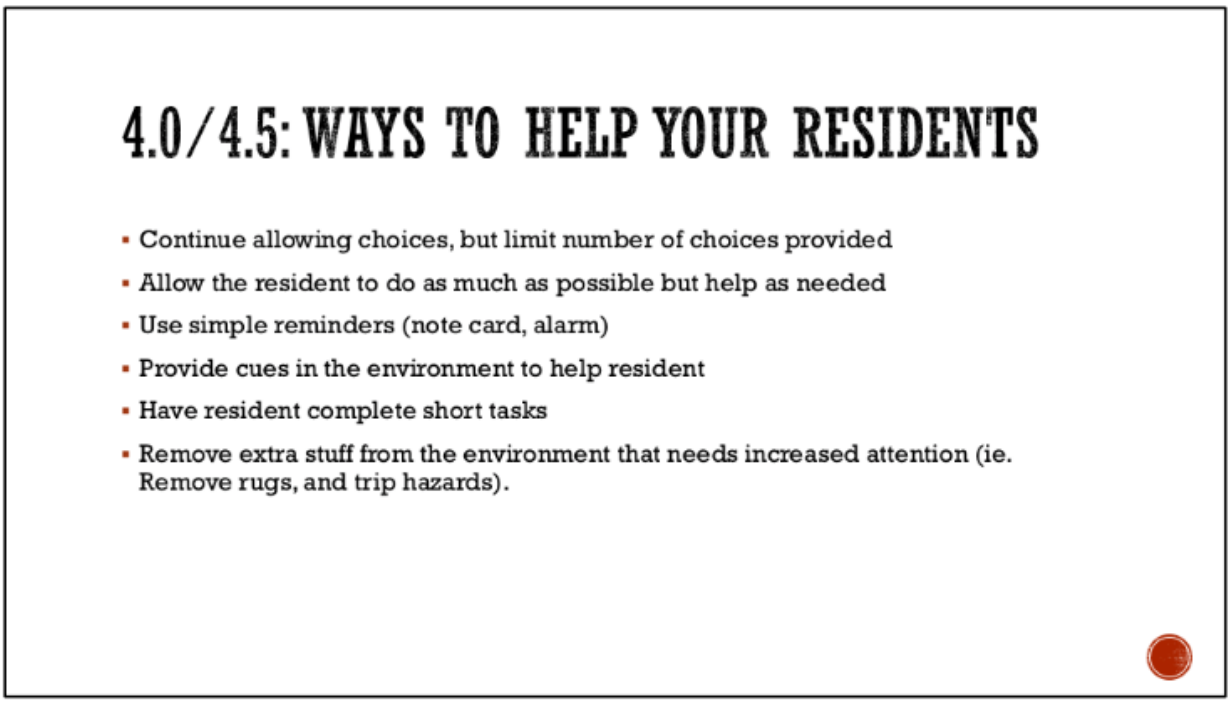
Do any of you have experiences of working with someone who had similar disabilities?

Do you have any techniques to help residents at this level?



Limit environmental stimuli (sights, sounds, etc.) to help with attention
Speak slowly and clearly to help resident understand what you are saying
Yes-no questions may be easier to answer
Possibly ask closed questions such as "you really like cars, don't you?"
These types of questions allow the resident to answer in a yes-no fashion or add more detail if he/she is able
Allow resident more time to respond after asking a question
Resident may have difficulties answering questions about life history and specific facts
Provide step by step directions (verbally or on a handout) for new or complex tasks
Be aware of residents' safety, may have poor judgement on abilities
Continue allowing choices, but limit number of choices provided
Allow the resident to do as much as possible but help as needed
Use simple reminders (note cards, alarms) may help resident initiate tasks such as showering, brushing teeth, or going to a meal

Note cards may be written or pictures depending on abilities



Provide cues in the environment to help the resident

know where to go

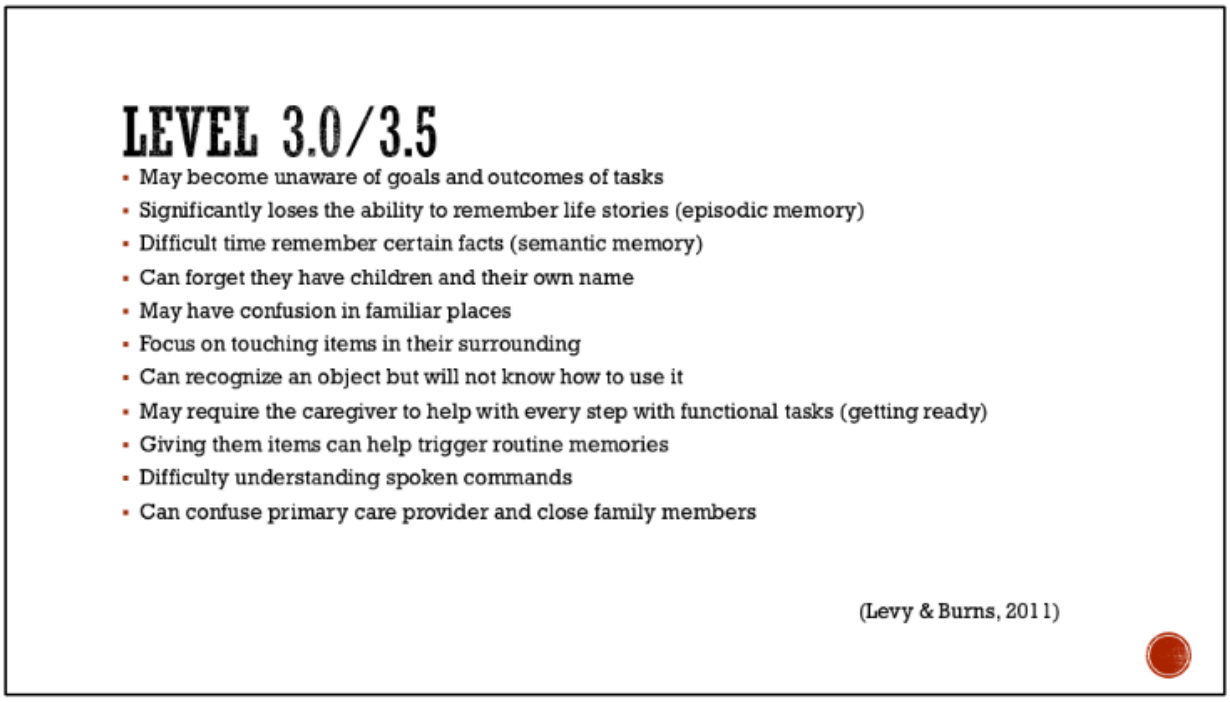
what is the next step in the sequence?

Limit amount of environmental stimuli (sounds, visual distractions, etc.) to help with sustaining attention

Have resident complete short tasks due to short attention span

4.0/4.5 REVIEW

- Within your group, complete the case study provided.
- Share examples of how they what kind of behaviors you could expect from the resident. Also talk about ways you could help the resident.



May become unaware of goals and outcomes of tasks

Why I am going to the dining room?

Why did I come to this room?

Why did I decide to get dressed?

Focus on touching items in their surrounding explore his/her effects on environment

These actions are not planned, but may be repeated to see if similar results occur

Giving them items can help trigger routine memories

Giving the resident a toothbrush encourages resident to brush teeth.

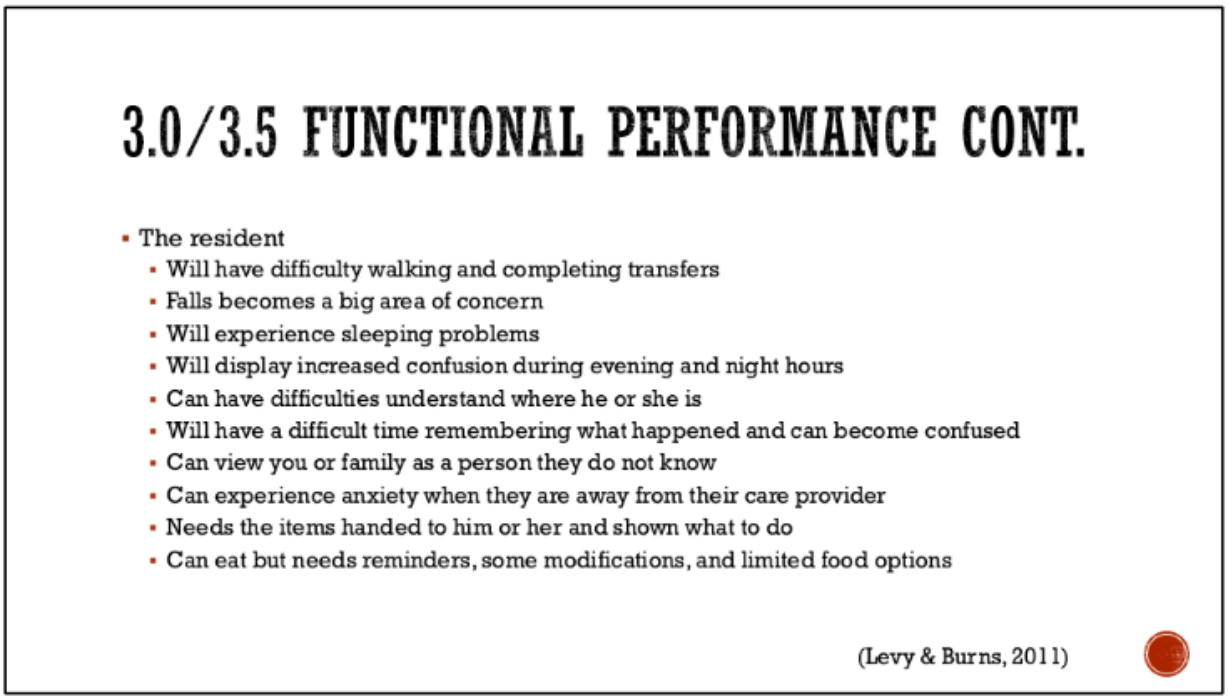
Complex tasks- This is because the person does not know how to do it and it can lead to a outburst in behaviors.

When a client is expressing concerns about time, place, or person it is because there needs to be more structured tasks need to be given to help the client (Levy & Burns, 2011).

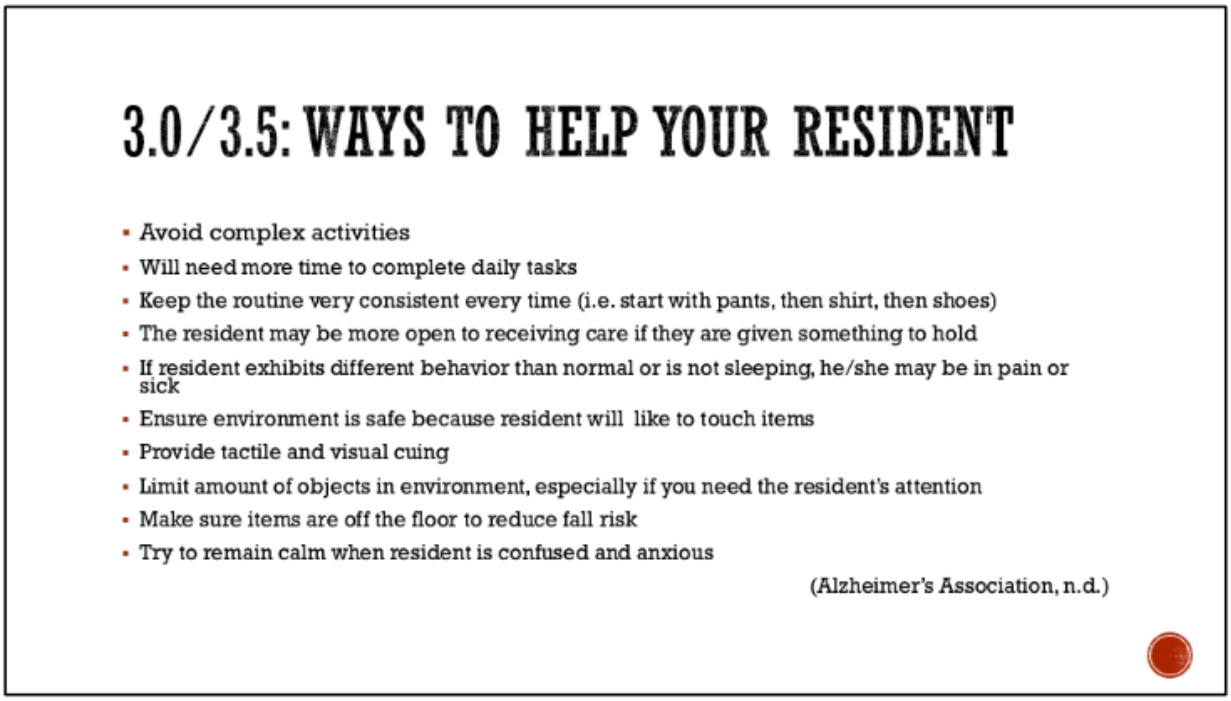
3.0/3.5 FUNCTIONAL PERFORMANCE

- The resident
  - Requires help completing most activities
  - Should not be left alone
  - Medications need to be given to them
  - Will display behaviors if in pain or sick
  - Need set-up to complete ADL tasks with guidance
    - Limit amount of objects
  - Does not understand what clothes to wear
  - May complete urination and defecation in places other than the bathroom
    - Needs to start using incontinence briefs

(Levy & Burns, 2011)



At this level it is important to understand the current changes that are happening. It is important to understand to improve the safety of the clients and also the care giver (Levy & Burns, 2011).

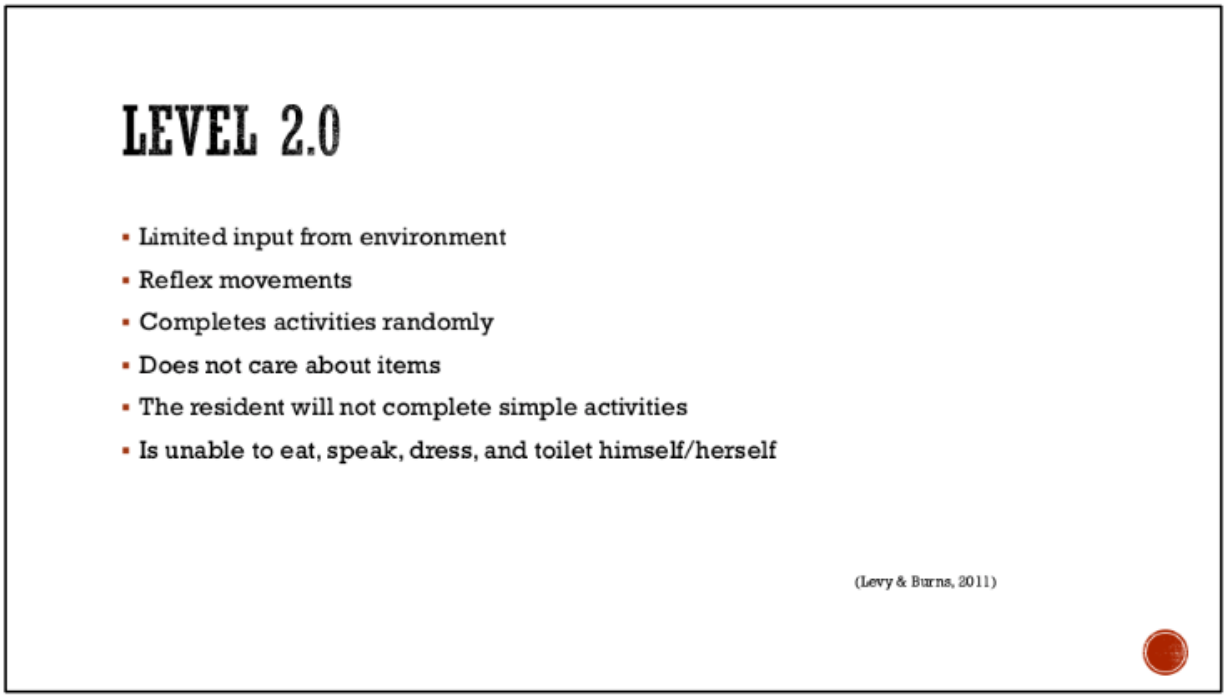


Because of the increase in wondering behaviors, it is important to keep in mind the amount of energy the client is eating. They may need more to maintain body weight (Levy & Burns, 2011).

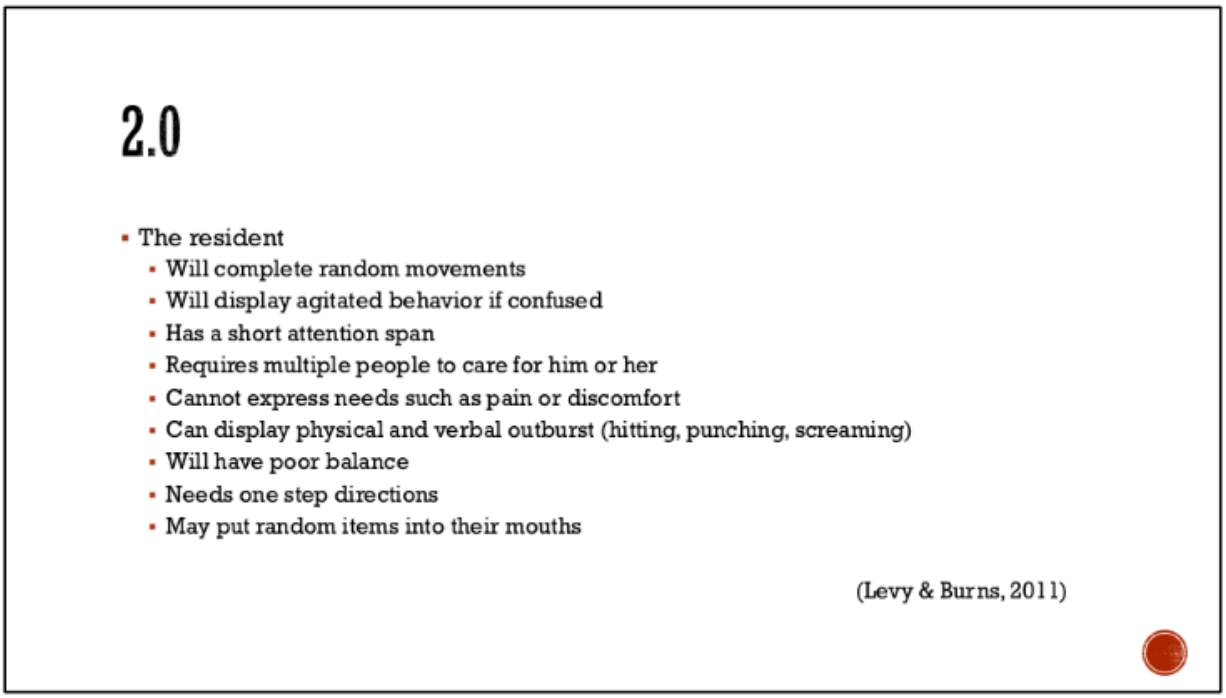
Do you have any other suggestions about ways to help these residents?

3.0/3.5 REVIEW

- Within your group, complete the case study provided.
- Share examples of how they what kind of behaviors you could expect from the resident. Also talk about ways you could help the resident.
- Do you have any personal experiences of working with someone who may have been functioning at this level?



The next two levels will more than likely be seen in a skilled nursing facility. However, encourage learners to talk about personal experiences while working with these individuals.

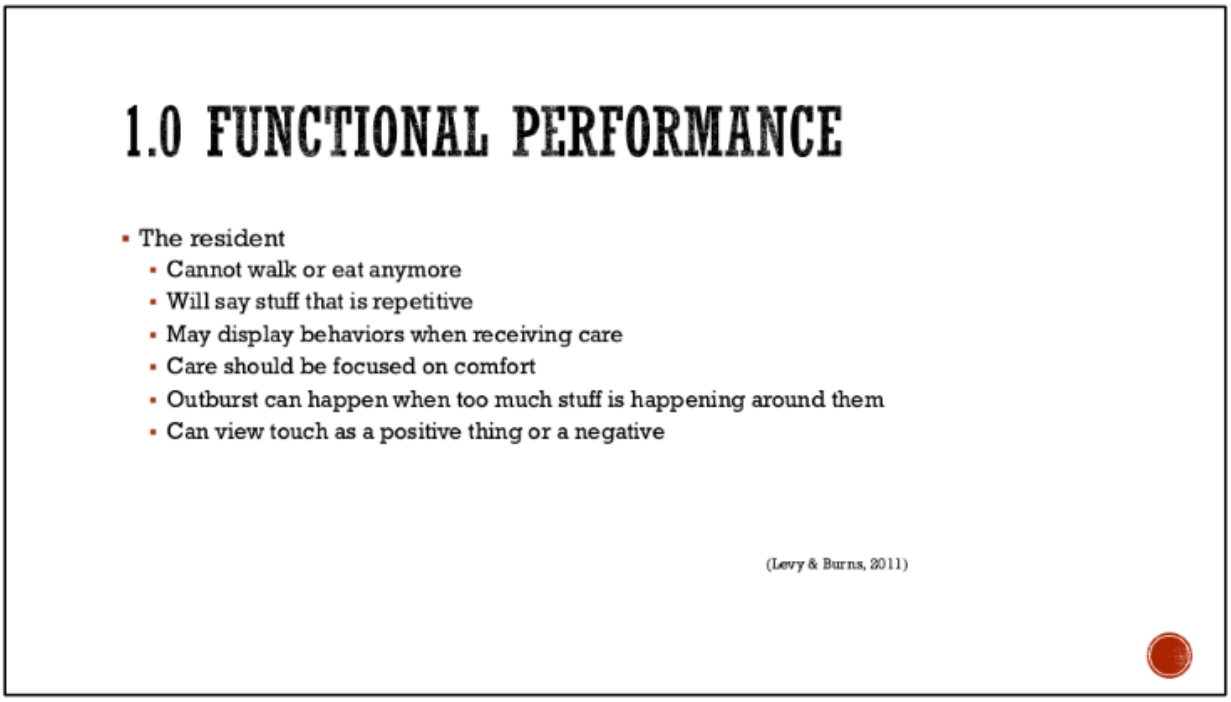


Attention span- since they have a small attention span it is easy to redirect them if they display behaviors.
Outburst- these can happen if the client does not know what is going on or are sick. The care provider needs to provide the client will rest breaks and to ensure the environment is not over stimulated (Levy & Burns, 2011).

LEVEL 1.0

- Only understands information about hunger, taste, and smell.
- Does not respond to people around them
- Can only attend to one word items
- Health complications due to resident not being able to express needs
- Attention is on movements and direct contact with the person

(Levy & Burns, 2011)



It is important to focus on the resident's comfort at this stage. Ensure the environment is controlled and has limited distractions in it. Medication use needs to be considered because the resident may experience pain and discomfort with certain medication use (Levy & Burns, 2011).

CONCLUSION

- Understand what level the resident is functioning at
- Know what tasks they can or cannot do
- Limit the environment to prevent outburst
- Provide the resident with the best care possible
- Keep the resident and yourself safe

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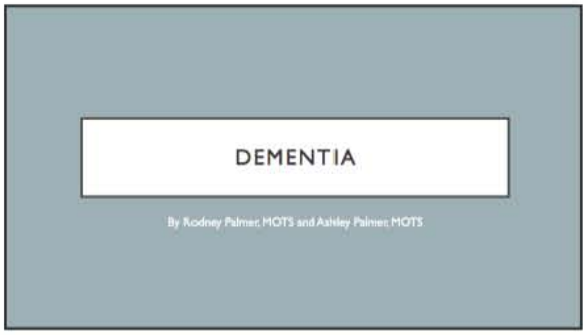
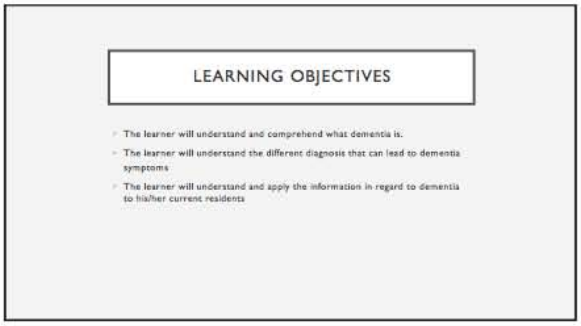
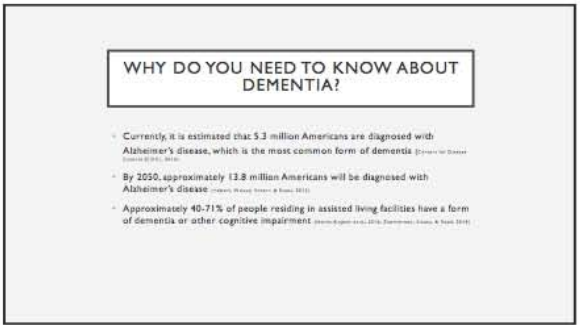
Learner Handouts


DEMENTIA
By Rodney Palmer, MOTS and Ashley Palmer, MOTS


LEARNING OBJECTIVES
The learner will understand and comprehend what dementia is.
The learner will understand the different diagnosis that can lead to dementia symptoms
The learner will understand and apply the information in regard to dementia to his/her current residents


WHY DO YOU NEED TO KNOW ABOUT DEMENTIA?
Currently, it is estimated that 5.3 million Americans are diagnosed with Alzheimer's disease, which is the most common form of dementia
By 2050, approximately 13.8 million Americans will be diagnosed with Alzheimer's disease
Approximately 40-71% of people residing in assisted living facilities have a form of dementia or other cognitive impairment

WHAT IS DEMENTIA?

- It is not a specific disease.
- Dementia is a term that describes a moderate to significant decline in mental abilities.
- Reduces an individual's ability to complete everyday tasks.
- Also known as neurocognitive disorder.
- Not a normal part of aging

DECLINE IN MENTAL ABILITIES

- Memory
- Comprehension
- Judgment
- Language
- Thinking
- Learning capacity
- Orientation
- Social behavior
- Emotional control
- Motivation

DEMENTIA FACTS

- Dementia usually occurs in individuals 60 years of age and older with the risk of developing dementia doubling every five years after the age of 60
- Approximately 40% of people residing in assisted living facilities have a form of dementia

WHAT CAUSES DEMENTIA?

- Dementia is caused by damaged brain cells
- Damage to different areas of the brain cause different symptoms/impairments
- Different types of dementia are associated with cell damage to specific parts of the brain

(Alzheimer's Association, 2014a)

TYPES OF DEMENTIA

- Alzheimer's disease
- Vascular dementia
- Dementia with Lewy Bodies
- Mixed dementia
- Parkinson's disease
- Frontotemporal dementia
- Creutzfeldt-Jakob disease
- Normal pressure hydrocephalus
- Huntington's disease
- Wernicke-Korsakoff Syndrome

(Alzheimer's Association, 2014b)

ALZHEIMER'S DISEASE

- Most common form of dementia
- Represents 60% to 80% of all dementia cases.
- Generally occurs in people 65 years and older.
- Seldom occurs in people in their 40's or 50's
- Gets worse over time
- Survival rate is 8-10 years after symptom onset

(Alzheimer's Association, 2014d; Wheeler & Crossley, 2014)

ALZHEIMER'S DISEASE CONT.

- Risk Factors
  - Inherit risk factor
  - Increased age
  - Inflammatory factors
  - Head trauma

(Wheeler & Grossman, 2014)

ALZHEIMER'S DISEASE CONT.

- Symptoms
  - Short-term memory loss (Wheeler & Grossman, 2014)
  - Decreased ability to remember conversations, events, or names
  - Depression and apathy (lack of interest)
  - Difficulty with communication
  - Decreased judgement
  - Confusion
  - Behavioral changes
  - Difficulty walking and eating.

(Alzheimer's Association, 2014a)

VASCULAR DEMENTIA

- Also known as multi-infarct or post-stroke dementia (Alzheimer's Association, 2014b).
  - Loss or reduced blood supply to brain (Ischemic) (Wheeler & Grossman, 2014)
  - A swelling of blood in the area of the brain (hemorrhagic) (Wheeler & Grossman, 2014)
  - Approximately 10% of dementia cases (Alzheimer's Association, 2014a).

VASCULAR DEMENTIA CONT.

- Risk Factors
  - Increased age
  - Hypertension
  - Arrhythmias
  - Heart attack
  - Peripheral vascular disease
  - Lipid abnormalities
  - Diabetes mellitus
  - Autoimmune and infectious vasculitis
  - Smoking

(Wheeler & Grossman, 2014)

VASCULAR DEMENTIA CONT.

- Symptoms (Vary depending on severity of damage to blood vessel and the area of the brain impacted)
  - Decreased judgement
  - Difficulty with planning
  - Confusion
  - Disorientation
  - Trouble Speaking
  - Vision loss
- This type of dementia does not typically have memory loss like Alzheimer's disease

(Alzheimer's Association, 2016b; Alzheimer's Association, 2016c)

FRONTOTEMPORAL DEMENTIA

- Rare
- Affects the fontal and anterior temporal lobes of the brain
- Also known as Pick's disease

(Alzheimer's Association, 2016b; Wheeler & Grossman, 2014)

FRONTOTEMPORAL DEMENTIA CONT.

- Onset is~ 20-75 years old
- Two types
  - Behaviors
    - More common
    - Changes in personality
    - Impulsive
    - Apathy
    - Inappropriate social behaviors
  - Language
    - Difficulties with expressing language
    - Difficulties understanding language
    - No memory loss

CREUTZFELDT-JAKOB DISEASE

- Very Rare
  - One person per million every year
- Causes significant degenerative dementia
- Four categories
  - Sporadic
  - Hereditary
  - Acquired
  - New variant
- Very fast course of action

CREUTZFELDT-JAKOB DISEASE

- Death can happen within months of onset
- Symptoms include:
  - Abnormal personalities
  - Visual-spatial dysfunctions
  - Impaired memory
  - Uncoordinated movement
  - Impaired judgment
  - Insomnia
  - Blindness

WERNICKE-KORSAKOFF SYNDROME

- Wernicke Symptoms
  - Weakness
  - Inability to use eye muscles
  - Repetitive uncontrolled eye movements
  - Uncoordinated movements
  - Confusion
  - Peripheral neuropathy
  - Unsteady gait
  - Double vision
- Korsakoff
  - Major impairment with short-term memory
  - Difficulty with abstract thinking
  - Difficulty learning
  - Production of false memories
  - Social skills are likely unaffected

(Alzheimer's Association, 2014b; Wheeler & Grossman, 2014)

HUNTINGTON'S DISEASE

- Purely hereditary
  - Autosomal dominant disorder
- Commonly diagnosed in 4th and 5th decades of life
- Can have a juvenile onset
- Might be caused by an imbalance of dopamine and acetylcholine

(Alzheimer's Association, 2014b; Wheeler & Grossman, 2014)

HUNTINGTON'S DISEASE CONT.

- Symptoms
  - Depression
  - Personality changes
  - Memory loss
  - Impulsive behavior
  - Antisocial behavior
  - Emotional outburst
  - Loss of initiative behavior
  - Difficulty concentrating
  - Reduction in spontaneous behavior
  - Difficulty performing voluntary movement
  - Dystonic posture
  - Involuntary movements
  - Irritability

(Alzheimer's Association, 2014b; Wheeler & Grossman, 2014)

DEMENTIA WITH LEWY BODIES

- 10-25% of dementia cases
- Symptoms
  - Changes in alertness and attention
  - Visual hallucinations
  - Parkinson's disease-like motor movements
  - Memory loss
  - Difficulty with cognitive processing
  - Changes in sleep patterns

(Alzheimer's Association, 2014b; Wheeler & Grossman, 2014)

PARKINSON'S DISEASE

- Around 20% of clients with Parkinson's disease have dementia
- Risk increases with age
- Dementia symptoms are seen after the client develops the classic symptoms of Parkinson's disease
- Symptoms can appear like dementia with Lewy bodies

(Alzheimer's Association, 2014b; Wheeler & Grossman, 2014)

MIXED DEMENTIA

- It is where there are multiple abnormalities within the individual's brain that are contributing to dementia.
- It is a combination of the causes of dementia

(Alzheimer's Association, 2014b)

NORMAL PRESSURE HYDROCEPHALUS

- Caused by an increase of fluid within the brain
- Can be fixed by surgically implanting a shunt
- Symptoms
  - Decreased ability with walking
  - Memory loss
  - Incontinence

(Alzheimer's Association, 2016b)

DISCUSSION

- How do you think these symptoms could impact everyday life of a resident?
- Have you noticed these symptoms in the residents you work with?
- What are some strategies you have used to help the residents?
- Do you feel like having a better understanding of dementia will impact the care provided to the residents? Why or why not?
- What information did you find most surprising/interesting?

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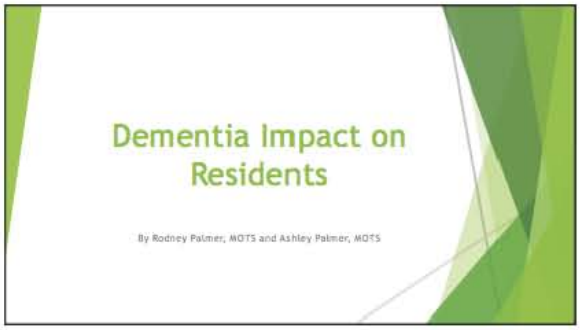
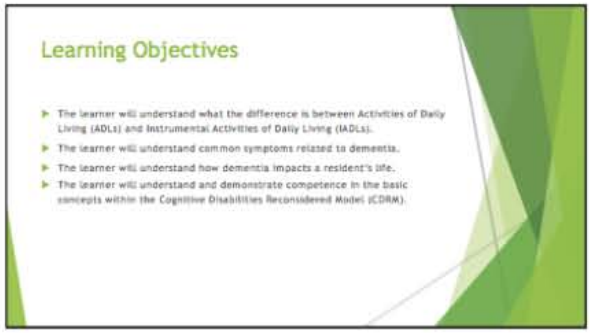
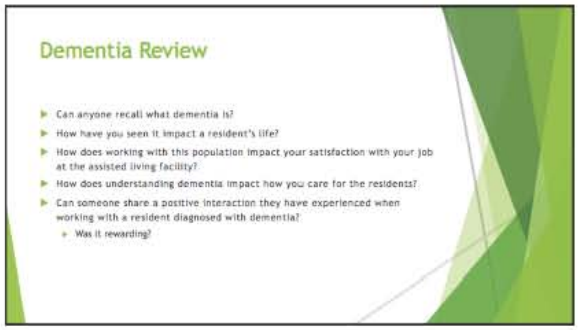
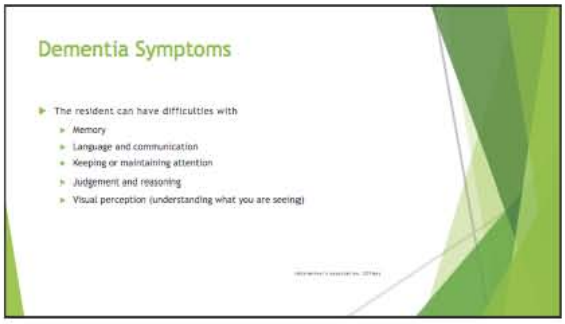
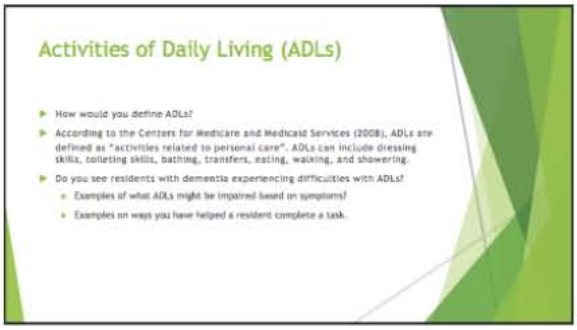

Dementia Impact on Residents
By Rodney Palmer, MOTS and Ashley Palmer, MOTS


Learning Objectives
The learner will understand what the difference is between Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs).
The learner will understand common symptoms related to dementia.
The learner will understand how dementia impacts a resident's life.
The learner will understand and demonstrate competence in the basic concepts within the Cognitive Disabilities Reconsidered Model (CDRM).


Dementia Review
Can anyone recall what dementia is?
How have you seen it impact a resident's life?
How does working with this population impact your satisfaction with your job at the assisted living facility?
How does understanding dementia impact how you care for the residents?
Can someone share a positive interaction they have experienced when working with a resident diagnosed with dementia?
Was it rewarding?


Dementia Symptoms
The resident can have difficulties with
Memory
Language and communication
Keeping or maintaining attention
Judgement and reasoning
Visual perception (understanding what you are seeing)


How Symptoms Impact Residents' Life
The following slides are definitions of important terms and ways how dementia impacts a resident's life.
It is important to know how dementia impacts a resident's life because you are the ones working for and with them.
It will help you complete your job more effectively and efficiently
It will provide you and the resident with a positive experience in regard to his or her care.


Activities of Daily Living (ADLs)
How would you define ADLs?
According to the Centers for Medicare and Medicaid Services (2008), ADLs are defined as "activities related to personal care". ADLs can include dressing skills, toileting skills, bathing, transfers, eating, walking, and showering.
Do you see residents with dementia experiencing difficulties with ADLs?
Examples of what ADLs might be impaired based on symptoms?
Examples on ways you have helped a resident complete a task.

Activities of Daily Living or ADLs Impairments

- Residents diagnosed with dementia were found to have very high needs in the areas of ADLs (Neville & Teri, 2011).
- In a study, majority of the residents with
  - Mild dementia needed assistance with completing three ADLs
  - Moderate dementia needed assistance with completing 0-6 ADLs, and displayed the greatest amount of impairments of all three groups.
  - Severe dementia needed assistance with 5-6 ADLs, and all of the participants in this group displayed impairments completing ADLs.

([Lowe, Donnelly, & Clarke, 2011; Neville & Teri, 2011a;

Instrumental Activity of Daily Living (IADL)

- It is an activity that allows a person to live independently.
- These include:
  - Being able to fix meals
  - Managing finances
  - Shopping for items
  - Completing housework
  - The use of a telephone

(Centers for Medicare and Medicaid Services, 2008)

Dementia in Instrumental Activities of Daily Living or IADLs

- Neville and Teri (2011) found residents with dementia had a high need when completing IADLs.
- It has been shown that residents with very mild subcortical vascular dementia had difficulty with shopping, food preparation, and information related to mode of transportation based on the Lawton IADL assessment.
- Residents with very mild Alzheimer's disease demonstrated difficulty in the IADL of shopping compared to residents with no impairments based on the Lawton IADL assessment.
- Residents with very mild dementia and very mild subcortical vascular dementia had difficulties with shopping, food preparation, and choosing a mode of transportation based on a qualitative IADL assessment.

(Neville & Teri, 2011; Ouchi, Kasai, Nakamura, Nakatsuka,& Meguro, 2016)

Dementia and Fall Risk Factors

- Risk Factors for Increased Fall Risk
  - Independent with eating
  - Independent with walking
  - Independently can rise from a chair
  - Walk with a assistive device (cane and walker)
  - Go on outdoor walks
  - Behavioral/psychiatric symptoms
    - If the resident is hyperactive
    - Wanders
    - Displays escape behaviors.

Dementia and Depression

- Neville and Teri (2011) found that in assisted living facilities 25% of the residents experienced depressive symptoms and 8.8% were classified as having probable major depression.
- The Diagnostic and Statistic Manual of Mental Disorders, 5th ed displays that people with dementia commonly have depressive symptoms.
  - And it is more common in the early to middle stages

Dementia and Anxiety

- Feelings of paranoia, anxiety, and elation may be experienced by the residents.
- Specifically in Assisted Living Facilities
  - Anxiety prevalence was found to be 11%-18%
  - 48% to 49% of the residents experienced at least one symptom of anxiety (Neville & Teri, 2011).
- Why is anxiety and dementia important to talk about while caring for this population?

Other Dementia Symptoms

- Bipolar disorders
- Agitation (with moderate to severe stages)
- Combative Behaviors
- Sleep Disturbances (sleeping too much/little)
- Apathy
- Wandering/Wayfinding
- Disinhibition
- Hyperphagia
- Hoarding
- Sundowning

How Does This Relate to You?

- Miyamoto, Tachimori, and Ito (2010) found in Japan when residents who are diagnosed with dementia displayed behavioral and psychological symptoms, had a decreased ability to perform ADLs, and were female, it increased formal caregiver burden.
- What do you think about these findings?
  - Agree/disagree
  - Do you have examples of how these might increase care giver burden?

Understanding Residents With Dementia

- Now since you know the impact that dementia can have on a resident, what are ways to better help them and to decrease formal care giver burnout?
- The Cognitive Disabilities Reconsidered Model (CDRM) by Levy and Burns (2011).

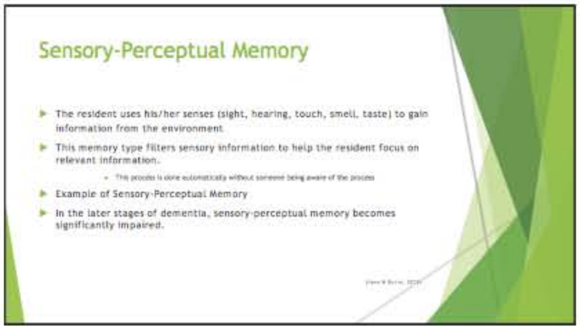
The Cognitive Disabilities Reconsidered model (CDRM)

- The resident is assessed using the Cognitive Performance Test (CPT)
- The CPT score rates the skills of someone who have dementia
  - Scale of 1-5-6
- The CDRM uses the score from the CPT to describe:
  - Safety concerns for the resident
  - What tasks the resident will have difficulty with
  - What tasks the resident will be able to complete
  - Strategies to help the resident remain as independent as possible

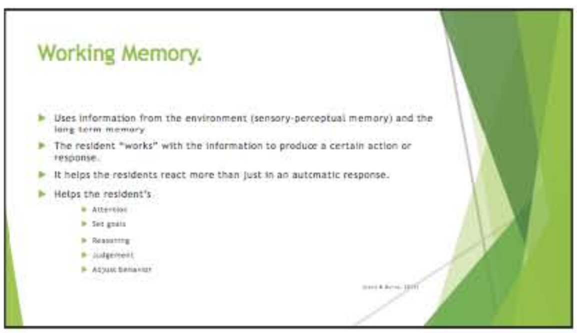
How Can Understanding The CDRM Help You With Your Job?

CDRM Concepts

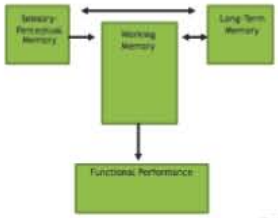
- The CDRM functional levels are based on the functioning of:
  - Sensory-perceptual memory
  - Working memory
  - Long-term memory


Sensory-Perceptual Memory
The resident uses his/her senses (sight, hearing, touch, smell, taste) to gain information from the environment
This memory type filters sensory information to help the resident focus on relevant information.
This process is done automatically without someone being aware of the process
Example of Sensory-Perceptual Memory
In the later stages of dementia, sensory-perceptual memory becomes significantly impaired.


Long-Term Memory
Information stored in your brain for hours or years
Example: What did you eat for breakfast this morning?; Who is your 3rd grade teacher?
By remembering this information you are using your long term memory
Two types
Explicit
Episodic (memories of personal events)
Implicit
Procedural (habits or routines, i.e. routines for getting ready in the morning)
Perceptual priming (identification of objects)
Conditioning/sensitization/habituation- (continue with or stop certain behaviors based on prior experience)


Working Memory.
Uses information from the environment (sensory-perceptual memory) and the long term memory
The resident "works" with the information to produce a certain action or response.
It helps the residents react more than just in an autcmatic response.
Helps the resident's
Attention
Set goals
Reasoning
Judgement
Adjust behavior

CDRM Figure



Check understanding

- Explain to a partner next to you what the differences are between Sensory-perceptual, working, and long-term memories.

Thank You for Participating

- Next time we will explore how to apply the CDRM with residents at different levels
- This will allow you to use the information to help build competence and knowledge when caring for residents diagnosed with dementia.

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RESIDENTS' ABILITIES BASED ON CDRM

By Rodney Palmer, MOTS and Ashley Palmer, MOTS

OBJECTIVES

- Understand the functional abilities of residents within each level of the Cognitive Disabilities Reconsidered Model.
- Be able to apply the information to develop ways to assist residents within each functional level.
- Learn possible strategies to assist residents within each functional level.

DISCUSSION QUESTIONS

- Since we have been reviewing the topic of dementia, have your interactions with the residents changed?
- Do you feel like you have a better understanding of what you can expect from someone who has dementia?
- Do you feel like there is additional information you would like to know regarding dementia?

REVIEW

- What is the Cognitive Disabilities Reconsidered Model (CDRM)?
- How can having knowledge of this model benefit you?

CDRM 9 FUNCTIONAL LEVELS

- 5.6 (Normal Cognitive Functioning)
- 5.0
- 4.5
- 4.0
- 3.5
- 3.0
- 2.5
- 2.0
- 1.0 (Almost Vegetative State)

(Levy & Burns, 2011)

5.6 FUNCTIONAL PERFORMANCE

- At this level the person is considered to be free of a cognitive disability.
- Residents can start tasks without assistance (getting ready in the morning, doing leisure activities, etc.)
- Can complete activities such as:
  - Managing medications
  - Reading
  - Writing
  - Managing finances
  - Cooking meals
- Can learn new tasks through written and verbal methods
- Has self-awareness
- Understands consequences of actions

(Levy & Burns, 2011)

LEVEL 5.0

- Residents may have difficulties with:
  - planning
  - attention
  - problem solving
  - correcting errors
  - remembering things that just happened (short-term memory impairment)
- May act before thinking of consequences
- May have troubles remembering life story (episodic memory)
- Needs direct, very specific directions
- Visible cues are helpful for the resident

(Levy & Burns, 2011)

5.0 FUNCTIONAL PERFORMANCE

- Residents can start tasks without assistance (getting ready in the morning, doing leisure activities, etc.)
- May attempt complex tasks (some cooking tasks, finances, medication management), but may have errors and appear that they do not know what to do
- May have troubles completing tasks because of impaired attention
- Is able to complete tasks that are simple and that he/she has done before
- Impairments at this stage may be hard to detect

(Levy & Burns, 2011)

LEVEL 4.0/4.5

- People around the resident will notice changes in behavior
- The resident will have:
  - A hard time shifting attention and ignoring irrelevant information
  - Poor judgement (safety concerns), planning processing, and problem solving
  - Difficulties starting some tasks
  - Changes in behavior in regard to dressing and grooming (starting tasks and frequency)
  - A difficult time considering needs of others (self-centered behavior)
  - Poor coping skills
  - Difficulties remembering life events (episodic memory) and facts (semantic memory)
    - May take longer to remember items
  - A decrease in the amount of information he or she is able to take in at one time

(Levy & Burns, 2011)

4.0/4.5 FUNCTIONAL PERFORMANCE

- May not know the extent of his/her disability (may attempt to do things that he/she does not have the abilities to do)
- Will rely on familiar information and does not like change
  - May not appreciate assistance from staff because it is new
- Unsafe behavior is commonly reported (medication errors and noncompliance)
- Will make many errors while completing complex tasks
- Will not pay attention to fine details of tasks
- May not be oriented to time (time of day, day of the week, etc.) or place (where they are)
- The resident will know how to complete routine and habitual tasks but lacks quality
- Can become impulsive

(Levy & Burns, 2011)

4.0/4.5: WAYS TO HELP YOUR RESIDENTS

- Limit environmental stimuli (sights, sounds, etc.)
- Speak slowly and clearly
- Yes-no questions may be easier to answer
  - Ask closed questions such as "you really like cars, don't you?"
- Allow resident more time to respond after asking a question
  - difficulties answering questions about life history and specific facts
- Provide step by step directions (verbally or on a handout) for new or complex tasks
- Be aware of residents' safety, may have poor judgement on abilities

([illegible])

4.0/4.5: WAYS TO HELP YOUR RESIDENTS

- Continue allowing choices, but limit number of choices provided
- Allow the resident to do as much as possible but help as needed
- Use simple reminders (note card, alarm)
- Provide cues in the environment to help resident
- Have resident complete short tasks
- Remove extra items from the environment that needs increased attention (ie. Remove rugs, and trip hazards).

4.0/4.5 REVIEW

- Within your group, complete the case study provided.
- Share examples of what kind of behaviors you could expect from the resident. Also talk about ways you could help the resident.

LEVEL 3.0/3.5

- May become unaware of goals and outcomes of tasks
- Significantly loses the ability to remember life stories (episodic memory)
- Difficult time remembering certain facts (semantic memory)
- Can forget they have children and their own name
- May have confusion in familiar places
- Focus on touching items in their surrounding
- Can recognize an object but will not know how to use it
- May require the caregiver to help with every step with functional tasks (getting ready)
- Giving them items can help trigger routine memories
- Difficulty understanding spoken commands
- Can confuse primary care provider and close family members

(Levy & Burns, 2011)

3.0/3.5 FUNCTIONAL PERFORMANCE

- The resident
  - Requires help completing most activities
  - Should not be left alone
  - Medications need to be given to them
  - Will display behaviors if in pain or sick
  - Need set-up to complete ADL tasks with guidance
    - Limit amount of objects
  - Does not understand what clothes to wear
  - May complete urination and defecation in places other than the bathroom
    - Needs to start using incontinence briefs

(Levy & Burns, 2011)

3.0/3.5 FUNCTIONAL PERFORMANCE CONT.

- The resident
  - Will have difficulty walking and completing transfers
  - Falls becomes a big area of concern
  - Will experience sleeping problems
  - Will display increased confusion during evening and night hours
  - Can have difficulties understanding where he or she is
  - Will have a difficult time remembering what happened and can become confused
  - Can view you or family as a person they do not know
  - Can experience anxiety when they are away from their care provider
  - Needs the items handed to him or her and shown what to do
  - Can eat but needs reminders, some modifications, and limited food options

(Gerry & Burns, 2011)

3.0/3.5: WAYS TO HELP YOUR RESIDENT

- Avoid complex activities
- Will need more time to complete daily tasks
- Keep the routine very consistent every time (i.e. start with pants, then shirt, then shoes)
- The resident may be more open to receiving care if they are given something to hold
- If resident exhibits different behavior than normal or is not sleeping, he/she may be in pain or sick
- Ensure environment is safe because resident will like to touch items
- Provide tactile and visual cuing
- Limit amount of objects in environment, especially if you need the resident's attention
- Make sure items are off the floor to reduce fall risk
- Try to remain calm when resident is confused and anxious

(Alzheimer's Association, n.d.)

3.0/3.5 REVIEW

- Within your group, complete the case study provided.
- Share examples of what kind of behaviors you could expect from the resident. Also talk about ways you could help the resident.
- Do you have any personal experiences of working with someone who may have been functioning at this level?

LEVEL 2.0

- Limited input from environment
- Reflex movements
- Completes activities randomly
- Does not care about items
- The resident will not complete simple activities
- Is unable to eat, speak, dress, and toilet himself/herself

(Levy & Burns, 2011)

2.0

- The resident
  - Will complete random movements
  - Will display agitated behavior if confused
  - Has a short attention span
  - Requires multiple people to care for him or her
  - Cannot express needs such as pain or discomfort
  - Can display physical and verbal outburst (hitting, punching, screaming)
  - Will have poor balance
  - Needs one step directions
  - May put random items into their mouths

(Levy & Burns, 2011)

LEVEL 1.0

- Only understands information about hunger, taste, and smell.
- Does not respond to people around them
- Can only attend to one word items
- Health complications due to resident not being able to express needs
- Attention is on movements and direct contact with the person

(Levy & Burns, 2011)

1.0 FUNCTIONAL PERFORMANCE

- The resident
  - Cannot walk or eat anymore
  - Will say stuff that is repetitive
  - May display behaviors when receiving care
  - Care should be focused on comfort
  - Outburst can happen when too much stuff is happening around them
  - Can view touch as a positive thing or a negative

(Levy & Burns, 2011)

CONCLUSION

- Understand what level the resident is functioning at
- Know what tasks they can or cannot do
- Limit the environment to prevent outburst
- Provide the resident with the best care possible
- Keep the resident and yourself safe

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Case Studies

Case Study for CDRM level 3.0-3.5: John is a 90-year-old male who is diagnosed with Alzheimer's disease. You have noticed John becoming lost within your assisted living facility and he cannot locate his room. He continuously walks into other resident's rooms and becomes angry when people tell him that this is not "his" room. You also notice John calls you by the name of one of his close family members. John has a difficult time with verbal commands. You have also noticed that John voids himself in containers other than the toilet. Finally, John touches everything within his environment. This includes items that he should not be touching such as the housekeepers cart and items that can fall off of the wall and injure himself or others.

1. Based on your knowledge on the Cognitive Disabilities Reconsidered Model (CDRM) by Levy and Burns (2011) what are some ways you can provide care to John to ensure he is safe while living within the assisted living facility?

2. What are some strategies you can use to help John to perform activities, such as toileting and eating, as independently as possible?

3. Based on his current CDRM level, what tasks would you predict John having difficulties completing while living in your assisted living facility?

4. From the list above, what are some strategies you can employ while caring for John to ensure he can complete tasks safely and effectively?

Case Study for CDRM level 4.0-4.5: Jill is a 79-year-old female who lives within your current assisted living facility. You notice that she completes morning routines such as dressing and grooming with multiple errors and the activities don't turn out as well as they should. She will often skip different parts of the directions while completing the activity. She also does not interact well with everyone within the group while completing the activities.

1. Based on your knowledge on the Cognitive Disabilities Reconsidered Model (CDRM) by Levy and Burns (2011) what are some ways you can provide care to Jill to ensure she is safe while completing activities?

2. What are some strategies you can use to help Jill perform activities, such as getting dressed and brushing her hair, as independently as possible?

3. Based on her current CDRM level, what tasks would you predict Jill having difficulties completing while living in your assisted living facility?

4. From the list above, what are some strategies you can employ while caring for Jill to ensure she can complete tasks safely and effectively?

Evaluation Materials

Dementia Knowledge Pre-Test

1. What is dementia (write answer below)?

2. What is the prevalence of dementia in America?
   a. 5.3 million
   b. 2 million
   c. 1 million
   d. 7.2 million

3. Which symptom below is **NOT** associated with dementia?
   a. Memory deficits
   b. Keeping/maintain attention
   c. Headaches
   d. Agitation

4. What one of the below disorders is the most common form of dementia?
   a. Frontotemporal dementia
   b. Vascular dementia
   c. Alzheimer's disease
   d. Dementia with Lewy Bodies

5. What type of memory store contains information related to information about the person's life stories?
   a. Explicit memory
   b. Semantic memory
   c. Short-term memory
   d. Long-term memory

6. What type of memory is the most stable in residents with dementia?
   a. Explicit memory
   b. Procedural memory
   c. Retrogenesis
   d. Long-term memory

7. According to Levy and Burns (2011) at what level in the Cognitive Disabilities Reconsidered Model is the person considered to have no impairment?
   a. 5.6
   b. 1.0
   c. 4.5
   d. 3.0

8. According to Levy and Burns (2011) at what level in the Cognitive Disabilities Reconsidered Model is the person considered to need total care and completes automatic/reflexive responses?
   a. 5.6
   b. 2
   c. 1
   d. 4.5

9. What are some symptoms of someone who is within the "middle-stages" of dementia?
   a. Cannot remember certain facts
   b. Can recognize object, but can't use it
   c. Unsafe behavior
   d. All the above

10. Is depression a common symptom for residents who are diagnosed with dementia?
   a. True
   b. False

What do you hope to learn from this course (write below)?

How do you typically like to learn? (discussions, case studies, lecture, videos, etc.)

Dementia Knowledge Post-Test

8. What is dementia (write answer below)?

9. What is the prevalence of dementia in America?
   a. 5.3 million
   b. 2 million
   c. 1 million
   d. 7.2 million

10. Which symptom below is NOT associated with dementia?
   a. Memory deficits
   b. Keeping/maintain attention
   c. Headaches
   d. Agitation

11. What one of the below disorders is the most common form of dementia?
   a. Frontotemporal dementia
   b. Vascular dementia
   c. Alzheimer's disease
   d. Dementia with Lewy Bodies

12. What type of memory store contains information related to information about the person's life stories?
   a. Explicit memory
   b. Semantic memory
   c. Short-term memory
   d. Long-term memory

13. What type of memory is the most stable in residents with dementia?
   a. Explicit memory
   b. Procedural memory
   c. Retrogenesis
   d. Long-term memory

14. According to Levy and Burns (2011) at what level in the Cognitive Disabilities Reconsidered Model is the person considered to have no impairment?
   a. 5.6
   b. 1.0
   c. 4.5
   d. 3.0

8. According to Levy and Burns (2011) at what level in the Cognitive Disabilities Reconsidered Model is the person considered to need total care and completes automatic/reflexive responses?
   a. 5.6
   b. 2
   c. 1
   d. 4.5

9. What are some symptoms of someone who is within the "middle-stages" of dementia?
   a. cannot remember certain facts
   b. can recognize object, but can't use it
   c. unsafe behavior
   d. all the above

10. Is depression a common symptom for residents who are diagnosed with dementia?
   a. True
   b. False

What did you like about the course (write below)?
How do you feel the course could be improved (write below)?

CHAPTER V

SUMMARY

It is currently estimated that 40-71% of people residing in assisted living facilities (ALFs) have a form of dementia or other cognitive impairment (Harris-Kojetin et al., 2016; Zimmerman, Sloana, & Reed, 2014). Despite the high prevalence of dementia and cognitive impairments within ALFs, it has been documented that many care providers have limited education and training on the topic of dementia and how to care for someone who is diagnosed with dementia (Hughes, Bagley, Reilly, Burns, & Challis, 2008; McKenzie, Teri, Pike, LaFazia, & Van Leynseele, 2012; Sharpp, Kayser-Jones, & Young, 2012; Zimmerman et al., 2014). Therefore, the purpose of this scholarly project is to develop educational materials to enhance the knowledge of ALF staff in regard to dementia to ensure residents who are diagnosed with dementia are receiving current, evidenced-based care while they reside within ALFs.

The authors created educational materials based on Knowles Andragogy adult learning model (Knowles, Holton, & Swanson, 2012). The materials addressed aspects of dementia such as symptomatology, types, prevalence, areas of dysfunction, etc. The authors also used the Cognitive Disabilities Reconsidered Model (CDRM) by Levy & Burns (2011) as a guide for creating materials that would help caregivers in ALFs understand the functional abilities of their residents. The entire educational product consists of three 2-hour PowerPoint presentations, an introductory guide for the educator in regard to Knowles principles, a pre-test/post-test outcomes measure, a handout for the learners, and case studies.

The expectations of implementing the dementia educational materials are positive

due to previous research studies documenting that staff believe education is vital when working with people who are diagnosed with dementia (Jones, Moyle & Stockwell-Smith, 2013; Stockwell-Smith, Jones, & Moyle, 2011). Despite the positive expectations, there are some limitations to the product.

A limitation to the product, is the fact that the ALF would need to purchase and use the Cognitive Performance Test (CPT) to assess cognitive abilities and determine the functional level within the CDRM. Currently, many level two ALFs in Wyoming only use the Mini Mental State Examination to determine cognitive abilities (Wyoming Department of Health, 2007), so to implement this educational product the facilities would need to add the CPT to the assessment battery. Furthermore, the CPT requires a licensed occupational therapist to administer the assessment (Burns,2013), therefore the facility would need to hire or contract an occupational therapist. Another limitation to the scholarly project is having to justify to the ALF administrators why they need to incorporate the use of the CDRM. A final limitation to this scholarly project is that it needs to be taught by someone who has in depth knowledge of the CDRM. This model is not well known, and therefore limits the availability of individuals who can teach the course.

After the facility incorporates the use of the CPT and CDRM, the educational material is intended to be used to complete six of the continuing education hours that are required by the state for level two ALFs. It is highly recommended that the educational sessions be completed in groups of 8-10 staff members to encourage group discussion. Furthermore, it is recommended that each session is presented no longer than a month after the previous session to ensure the staff members are able to remember the

information from the previous session. At the end of the final session, an outcomes measure can be completed to measure the effectiveness of the course and allow the staff members to make recommendations on how the sessions could be improved.

In the future, the product of this scholarly project can be implemented with local ALFs as an additional independent study. An example of a potential study would be examining how increasing staff education in regard to dementia and utilization of specific levels of the CDRM would impact staff members' abilities to work with residents with dementia, satisfaction with work, and level of confidence while working with residents who have dementia. Finally, this project could be adapted in order for the information to be applied within skilled nursing facilities to improve the education and training of the staff members in this setting.

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