



Dementia and Sexual Behavior



Introduction

Dementia and dementia associated inappropriate sexual behavior may be common among older adult patients. Therefore, health care administrators and health care professionals should be familiar with both dementia and dementia associated inappropriate sexual behavior in order to best serve patients. This course will provide insight into dementia and dementia associated inappropriate sexual behavior to equip health care administrators and health care professionals with the necessary knowledge required to adequately care for older adult patients suffering from dementia.

Section 1: Dementia and Dementia Associated ISB

Inappropriate sexual behavior (ISB) may refer to a type of behavior that is characterized by potentially disruptive and/or inappropriate sexually driven actions.¹ ISB is often associated with dementia and caring for older adult patients suffering from dementia-related ISB can be a challenge. Thus, health care administrators and other health care professionals should possess an understanding of dementia, ISB as well as ISB management and dementia treatment. With that in mind, this section of the course will provide insight into dementia and ISB. The information found in this section was derived from materials provided by the United States Department of Health & Human Services and the Centers for Disease Control and Prevention (CDC).^{2,3}

What is Dementia?

- Dementia may refer to a cluster of symptoms centered around an inability to remember, think clearly, and/or make decisions.
- Dementia can dramatically impact individuals' ability to function and carry out daily activities.
- Individuals with dementia commonly experience impairments in occupational and social functioning and may present behavioral disturbances.
- Health care professionals should note that dementia is not a normal part of aging.

What Causes Dementia?

- Evidence suggests that a variety of different factors, such as age, genetics, poor heart health, and traumatic brain injuries, may contribute to dementia.

What Are the Signs and Symptoms of Dementia?

- Symptoms of dementia include problems with memory, attention, communication, reasoning, judgment, and/or problem solving.
- Signs of dementia include: getting lost in a familiar area, forgetting the names of close family and friends, and not being able to complete tasks independently.

The Most Common Types of Dementia

- Health care professionals should understand that there are various types of dementia. Health care professionals should possess insight into the most common types of dementia to best serve patients.
- ***Fronto-temporal dementia*** - fronto-temporal dementia is a type of dementia which primarily affects the regions of the brain associated with planning, social behavior, and language perception. Fronto-temporal dementia is associated with a younger age of onset, when compared to other types of dementia. Health care professionals should note that the behavioral presentation of fronto-temporal dementia may include inappropriate swearing, impulsive decisions and purchases, repetitive actions, changes in personality, as well as ISB. Changes in eating habits and deficits in self-care may also be present in patient populations suffering from fronto-temporal dementia. Health care professionals should also note fronto-temporal dementia may include progressive deterioration of language function (e.g., older adults suffering from fronto-temporal dementia may exhibit difficulties with word usage and reading).
- ***Lewy body dementia*** - Lewy body dementia is a type of dementia characterized by the presence of Lewy bodies in the cerebral cortex and the brain stem (health care professionals should note that the cerebral cortex is a part of the brain responsible for thought processing, memory, perception, and movement; the brain stem is a part of the brain which is responsible for basic body functions and the coordination of movements). Lewy bodies can refer to proteins that may form in the brain. Individuals suffering from Lewy body dementia may experience memory loss, movement problems, balance problems, stiffness, trembling, changes in alertness, daytime sleepiness, confusion, and/or staring spells. Health care professionals should note that individuals suffering from Lewy body dementia may also experience trouble sleeping at night and/or visual hallucinations (e.g., seeing people and/or objects that are not actually there).
- ***Vascular dementia*** - vascular dementia may result from strokes and/or other issues that affect blood flow to the brain. Vascular dementia may also result from diabetes, high blood pressure, and high cholesterol. Health care professionals should note that vascular dementia can result from a blockage of blood vessels in the brain which

yields the death of tissue, or infarction, in the affected region. The symptoms of vascular dementia can vary depending on the area and size of the brain impacted. That being said, symptoms of vascular dementia can include: problems with memory, planning, making decisions, attention, focus, and concentration as well as confusion. Health care professionals should also note vascular dementia progresses in a step-wise fashion - meaning the symptoms of vascular dementia may get worse as an individual experiences strokes, mini-strokes, or other issues that affect blood flow to the brain (i.e., vascular dementia can be progressive in nature).

- **Mixed dementia** - individuals may experience more than one type of dementia at once. Mixed dementia can be prevalent in individuals aged 80 and older. Mixed dementia may be difficult to identify because the symptoms of one type of dementia may be more prominent or may overlap with symptoms of another type of dementia. Health care professionals should note mixed dementia progression may be faster than with one kind of dementia.

- **Dementia associated with Parkinson's disease** - health care professionals should note that dementia may be associated with Parkinson's disease. Parkinson's disease may refer to a progressive disorder that affects individuals' movement.

- **Alzheimer's disease** - Alzheimer's disease may refer to an irreversible, progressive brain disorder that slowly destroys individuals' memory, thinking skills, and ability to carry out simple tasks. Health care professionals should note that Alzheimer's disease is the most common cause of dementia among older adults (the term older adult may refer to individuals 65 years or older).

Alzheimer's Disease

- Due to the prevalence of Alzheimer's disease, health care professionals should possess an understanding of Alzheimer's disease and its presentation. Additional information regarding Alzheimer's disease may be found below.

- Alzheimer's disease typically affects older adults.

- Alzheimer's disease is not a normal part of aging.

- Alzheimer's disease is one of the leading causes of death in the United States.

- Alzheimer's disease negatively affects an individual's ability to function by disrupting the communication between neurons, which results in the loss of function and cell death. Neurons may refer to specialized cells that process and transmit information via electrical and chemical signals. In essence, Alzheimer's disease leads to widespread damage of essential neurons which are responsible for memory, clear

thought, the ability to learn, coordinated movements, and, ultimately, the ability to perform necessary bodily actions. Health care professionals should note the following: due to the widespread damage to essential neurons, individuals' minds and bodies begin to shut down, until they are no longer able to function. Eventually, an individual will deteriorate until Alzheimer's disease leads to death. Health care professionals should also note the following: early detection of Alzheimer's disease is essential to an individual's health care.

- One of the first signs of Alzheimer's disease is memory loss that disrupts daily life (e.g., forgetting important events or activities). Additional early signs of Alzheimer's disease include the following:
 - Having problems planning or solving problems (e.g., having trouble paying bills)
 - Exhibiting difficulty completing familiar tasks at home, at work, or at leisure (e.g., displaying difficulties finding destinations when driving)
 - Exhibiting confusion with time or places (e.g., unable to keep track of dates)
 - Displaying trouble understanding visual images and spatial relations (e.g., an individual suffering from Alzheimer's disease may easily fall over objects at his or her place of residence)
 - Exhibiting problems with words in speaking or writing (e.g., an individual suffering from Alzheimer's disease may have trouble following or joining a conversation)
 - Often misplacing objects (e.g., an individual suffering from Alzheimer's disease may often lose important objects such as car keys)
 - Displaying poor judgment (e.g., an individual suffering from Alzheimer's disease may be often victimized)
 - Social isolation (e.g., an individual suffering from Alzheimer's disease may avoid social interaction)
 - Changes in mood and/or personality (e.g., an individual suffering from Alzheimer's disease may begin to exhibit ISB).
- Alzheimer's disease is progressive in nature - meaning the symptoms of Alzheimer's disease (e.g., mental decline, confusion, agitation, irritability, and hallucinations) may worsen over time.

- One of the first stages of Alzheimer's disease is often referred to as mild Alzheimer's disease. Individuals suffering from mild Alzheimer's disease may experience the following: memory loss, cognitive difficulties, problems with wandering and getting lost, trouble handling money and paying bills, repeating questions, taking longer to complete normal daily tasks, and personality and behavior changes. Health care professionals should note that individuals are often diagnosed with Alzheimer's disease when they are in the aforementioned stage of Alzheimer's disease.
- As an individual's Alzheimer's disease progresses, it can move from the mild Alzheimer's disease stage to the moderate Alzheimer's disease stage. Individuals suffering from moderate Alzheimer's disease may experience the following: increasingly worse memory loss and confusion, problems with recognizing family and friends as well as an inability to learn new things, carry out multistep tasks such as getting dressed, and/or cope with new situations. In addition, individuals suffering from moderate Alzheimer's disease may have hallucinations, delusions, and paranoia. Health care professionals should note that damage in areas of the brain that control language, reasoning, sensory processing, and conscious thought may account for the aforementioned issues.
- The last stage of Alzheimer's disease may be referred to as severe Alzheimer's disease. Typically, individuals suffering from severe Alzheimer's disease have problems communicating and living independently. Essentially, an individual with severe Alzheimer's disease cannot adequately function on his or her own.
- Health care professionals should note that patients suffering from any stage of Alzheimer's disease may have different needs and requirements when compared to other patients. Thus, Alzheimer's disease patients may require special attention and consideration.

Dementia Associated ISB

- As previously mentioned, ISB is often associated with dementia. Therefore, health care professionals should be familiar with some of the hallmarks or characteristics of dementia associated ISB. Characteristics of dementia associated ISB may be found below.
- ***Sexual behavior*** - at the core of ISB is sexual behavior. Older adults may lose the physical abilities to engage in sex, however they may not lose the desire to engage in sexual intercourse. The desire to engage in sexual intercourse may fuel ISB in older adults with dementia.

- ***Inappropriate behavior*** - another core element of ISB is inappropriate behavior. When an individual's behavior reaches a point to where it may be considered unsuitable for the common consensus, then it may be viewed as inappropriate.

- ***Disruptive behavior*** - ISB, by nature, is disruptive. In other words, the sexual behavior exhibited by an individual suffering from ISB may interfere with another individual's life in a way that disturbs his or her natural patterns. Essentially, ISB possesses the potential to be invasive and intrusive. Thus, health care professionals should be cognizant of the disruptive nature of ISB to ensure those suffering from ISB do not disturb other patients.

- ***Personality changes leading to abnormal sexual behavior*** - often individuals suffering from dementia undergo personality changes, which may include decreases in inhibition and/or issues with impulse control. Personality changes associated with dementia may, in turn, lead to ISB. For example, a normally reserved individual may begin making unprovoked sexual advances on individuals due to a dementia related personality change. Health care professionals should be aware of personality changes in older adult patients because they may be an early indication of potential ISB.

- ***Mood changes leading to abnormal sexual behavior*** - in addition to personality changes, individuals suffering from dementia may also experience mood changes. Mood changes related to dementia associated ISB may include heightened sexuality.

- ***Cognitive difficulties which lead to abnormal sexual behavior*** - it is well known that dementia may lead to cognitive difficulties or cognitive impairment. An individual experiencing dementia associated cognitive impairment may have problems making decision or thinking clearly. An inability to make decisions or think clearly may lead to ISB.

- ***Confusion leading to perceived sexual behavior*** - it is also well know that dementia may lead to confusion. An individual experiencing dementia associated confusion may forget where he or she is or may temporally become disoriented, which in turn could lead to ISB. For example, an individual may become confused and think he or she is in the bathroom, and thus begin touching his or her genitalia in front of other individuals. The act of touching one's own genitalia, in front of other individuals, may be perceived as sexual behavior and thus may be considered ISB.

- ***Disorientation leading to perceived sexual behavior*** - dementia may lead to disorientation. Much in the same way as dementia associated confusion, disorientation may lead to perceived ISB.

- ***Memory problems leading to perceived sexual behavior*** - problems with memory is one of the biggest concerns associated with dementia, and much like with dementia

associated confusion, problems with memory may lead to ISB. For example, an individual suffering from dementia may forget who someone is or may think a random individual may be someone they know, prompting the individual suffering from dementia to begin hugging or touching another individual. The act of hugging or touching another individual may be perceived as a sexual behavior and thus may be considered ISB.

- ***Dementia associated stress and frustration, which leads to perceived sexual behavior*** - confusion, disorientation, and problems with memory could cause stress and frustration in individuals suffering from dementia, especially in individuals experiencing the early stages of dementia. Dementia associated stress and frustration could cause individuals to act out in abnormal ways that may be perceived as odd sexual behavior and/or ISB.

- ***Hallucinations and delusions which lead to abnormal sexual behavior*** - some types of dementia may lead to hallucinations and/or delusions. A hallucination may refer to an experience in which an individual sees, hears, smells, tastes, and/or feels something that is not actually there. A delusion may refer to a strong belief that is not true. Hallucinations and/or delusions may lead to ISB. For example, an individual with dementia may see, hear, smell, taste, and/or feel something that is not actually there, which in turn may lead to ISB; or an individual may have a strong belief about someone, like another individual is his or her sexual partner, that may not be true, however the belief leads to ISB. Health care professionals should be aware of dementia patients suffering from hallucinations and/or delusions.

- ***Poor judgment*** - dementia is often associated with poor judgment. Dementia associated poor judgment may play an important role in ISB. For example, an individual may not be able to adequately judge whether his or her behavior is appropriate. Health care professionals should be aware of patients exhibiting dementia associated poor judgment.

- ***Poor reasoning*** - the ability to engage in adequate reasoning is often impacted by dementia. Typically, the ability to reason is diminished by dementia. Poor reasoning may be a characteristic of ISB when it involves sexual behavior.

- ***An abnormal perception regarding sex and/or sexual behavior*** - dementia may affect an individual's perception. In the context of this course, perception may refer to an ability to interpret events, actions, and/or reality. When individuals suffer from dementia, their perceptions may become distorted, thus, they may not be able to adequately perceive their actions or the reality around them, which in turn may lead to ISB. Health care professionals may be able to identify individuals with an abnormal

perception regarding sex and/or sexual behavior by observing patient's comments, actions, and the way they interact with other individuals.

- ***Engaging in conversations regarding sex*** - often individuals exhibiting ISB will engage in conversations regarding sex or make comments related to sex. Health care professionals should note if a patient begins making unprovoked comments regarding sex or engages individuals in conversations related to sex.
- ***Using what may be considered "foul language"*** - in addition to engaging in conversations regarding sex and making comments related to sex, individuals exhibiting ISB may use, what may be considered to be, "foul language" (e.g., intense sexually driven or sexually graphic verbiage). Health care professionals should address any patient concerns regarding the use of "foul language," especially in health care facilities where patients may speak to each other.
- ***Aggressive sexual behavior*** - some types of dementia may lead to aggression, which in turn could cause aggressive ISB such as forceful sexual advances on other individuals. Health care professionals should address any patient concerns regarding aggressive sexual behavior, especially in health care facilities where patients may interact.
- ***Touching and/or grabbing other individuals*** - along with aggressive sexual behavior, individuals exhibiting ISB may touch or grab other individuals. The types of touches and grabs that may be related to ISB can range from a long, extended hung, to body rubbing, to lunges at other individuals' genitalia. Inappropriate touching and/or grabbing may be a safety concern, and should be noted and addressed by health care professionals.
- ***Obscene gestures*** - in the context of this course the term obscene gesture may refer to a movement that may be considered offensive or vulgar. Examples of obscene gestures may include sexually driven hand gesturing and the act of grabbing one's own genitalia. Individuals exhibiting ISB may make obscene gestures towards other individuals. Any such behavior should be addressed by health care professionals.
- ***Disrobing in public*** - individuals exhibiting ISB may remove their clothes in public areas or may expose themselves to other individuals. Any such behavior should be immediately addressed by health care professionals.
- ***Public masturbation*** - individuals exhibiting ISB may engage in public masturbation (i.e., masturbate in front of other individuals). Health care professionals should immediately address any issues related to public masturbation.

- **Requesting health care that involves genital touching** - individuals exhibiting ISB may frequently request health care that involves genital touching or even nudity.
- **Restlessness due to recurrent sexually-driven thoughts** - individuals exhibiting ISB may experience recurrent sexually-driven thoughts, which in turn may lead to restlessness.
- **Sleep disturbances due to recurrent sexually-driven thoughts** - in addition to restlessness, recurrent sexually-driven thoughts may lead to issues with sleep.
- **Hypersexuality**- individuals exhibiting ISB may be hypersexual. Hypersexuality may refer to the presences of recurrent and intense sexually driven fantasies, urges, and actions. Hypersexuality may also include the repetitive engagement in sexual behavior despite the risk for harm. Health care professionals should note that, often, hypersexuality results in significant personal distress or impairment in social, occupational or other important areas of functioning. Health care professionals should note any patients that may appear hypersexual.
- **Changes in sexual behavior** - health care professionals should note that dementia is progressive, thus changes in ISB may be observed.

Section 1: Summary

Inappropriate sexual behavior (ISB) may refer to a type of behavior that is characterized by potentially disruptive and/or inappropriate sexually driven actions.¹ ISB is often associated with dementia and caring for older adult patients suffering from ISB can be a challenge. Thus, health care administrators and other health care professionals should possess an understanding of dementia as well as dementia associated ISB.

Section 1: Key Concepts

- ISB is often associated with dementia.
- Dementia is not a normal part of aging.
- The most common types of dementia include: fronto-temporal dementia, Lewy body dementia, vascular dementia, mixed dementia, dementia associated with Parkinson's disease, and Alzheimer's disease.
- Alzheimer's disease is the most common cause of dementia among older adults.
- Characteristics of dementia associated ISB may include the following: sexual behavior, inappropriate behavior, disruptive behavior, personality changes leading to

abnormal sexual behavior, mood changes leading to abnormal sexual behavior, cognitive difficulties, which lead to abnormal sexual behavior, confusion leading to perceived sexual behavior, disorientation leading to perceived sexual behavior, memory problems leading to perceived sexual behavior, dementia associated stress and frustration, which leads to perceived sexual behavior, hallucinations and delusions which lead to abnormal sexual behavior, poor judgment, poor reasoning, an abnormal perception regarding sex and/or sexual behavior, engaging in conversations regarding sex, using what may be considered "foul language" aggressive sexual behavior, touching and/or grabbing other individuals, making obscene gestures, disrobing in public, public masturbation, requesting health care that involves genital touching, restlessness due to recurrent sexually-driven thoughts, sleep disturbances due to recurrent sexually-driven thoughts, hypersexuality, and changes in sexual behavior.

Section 1: Key Terms

Inappropriate sexual behavior (ISB) - a type of behavior that is characterized by potentially disruptive and/or inappropriate sexually driven actions¹

Dementia - a cluster of symptoms centered around an inability to remember, think clearly, and/or make decisions

Lewy bodies - proteins that may form in the brain

Neurons - specialized cells that process and transmit information via electrical and chemical signals

Parkinson's disease - a progressive disorder that affects individuals' movement

Alzheimer's disease - an irreversible, progressive brain disorder that slowly destroys individuals' memory, thinking skills, and ability to carry out simple tasks

Older adult - individuals 65 years or older

Hallucination - an experience in which an individual sees, hears, smells, tastes, and/or feels something that is not actually there

Delusion - a strong belief that is not true

Perception (in the context of this course) - an ability to interpret events, actions, and/or reality

Obscene gesture (in the context of this course) - a movement that may be considered offensive or vulgar

Hypersexuality - the presence of recurrent and intense sexually driven fantasies, urges, and actions

Section 1: Personal Reflection Question

What are the characteristics of dementia associated ISB?

Section 2: ISB Management

As previously mentioned, caring for older adult patients suffering from ISB can be a challenge. Therefore, health care administrators and health care professionals alike should possess an understanding of dementia, and dementia associated ISB. In addition to possessing an understanding of dementia and dementia associated ISB, health care administrators and health care professionals should possess insight into ISB management to best serve patients. This section of the course will provide insight into ISB-related recommendations that were developed to help health care professionals manage patients suffering from dementia associated ISB. The information found below was derived from materials provided by the United States Department of Health & Human Services and CDC.^{2,3}

ISB Recommendations for Health Care Professionals

- **Health care professionals should be aware of patients suffering from dementia associated ISB** - the first step to managing patients exhibiting ISB is to identify the patients exhibiting ISB. The first recommendation may sound rather straightforward or obvious - however, unfortunately, it is often over looked. Thus, health care professionals should be sure to identify patients exhibiting ISB - doing so can make the ISB management process much easier on health care professionals and patients. Health care professionals should note that some of the most effective ways to identify patients exhibiting ISB include: consulting with other health care professionals, reading related health care professional documentation regarding specific patients' needs, and observing patients behavior. When observing patient's behavior health care professionals should look for some of the key characteristics related to dementia associated ISB such as the following: sexual behavior, inappropriate behavior, disruptive behavior, personality changes leading to abnormal sexual behavior, mood changes leading to abnormal sexual behavior, cognitive difficulties which lead to abnormal sexual behavior, confusion leading to perceived sexual behavior, disorientation leading to perceived sexual behavior, memory problems leading to perceived sexual behavior, dementia associated stress and frustration, which leads to perceived sexual behavior, hallucinations and delusions which lead to abnormal sexual

behavior, poor judgment, poor reasoning, an abnormal perception regarding sex and/or sexual behavior, engaging in conversations regarding sex, using what may be considered "foul language" Aggressive sexual behavior, touching and/or grabbing other individuals, making obscene gestures, disrobing in public, public masturbation, requesting health care that involves genital touching, restlessness due to recurrent sexually-driven thoughts, sleep disturbances due to recurrent sexually-driven thoughts, hypersexuality, and marked changes in sexual behavior.

- ***Health care professionals should monitor patients exhibiting ISB, when applicable*** - along with patient observation, health care professionals should monitor patients exhibiting ISB. Monitoring patients exhibiting ISB can help health care professionals better understand a patient's ISB manifestations as well as help them prevent patient disruptions. Health care professionals should note that ISB, by nature, is disruptive. In other words, the ISB exhibited by a patient possesses the potential to be invasive and/or intrusive on others. Thus, health care professionals should consider monitoring patients exhibiting ISB, when applicable, to help ensure those suffering from ISB do not disturb other patients.

- ***Health care professionals should avoid touching patients exhibiting ISB in a "friendly manner"*** - unless patient touching is necessary for a related health care task or procedure, health care professionals should avoid touching patients exhibiting ISB in a friendly manner. Examples of "touching in a friendly manner" may include the following: a friendly pat on the shoulder or back, a gentle touch on the shoulder or arm, and/or short hugs. Such friendly touching may be misconstrued by patients exhibiting ISB, and thus may lead to further ISB.

- ***Health care professionals should be aware and conscious of their body language***
- health care professionals should be well aware of their body language, including the way they walk, when caring for patients suffering from dementia associated ISB. Evidence suggests that individuals suffering from dementia respond to body language. Therefore, any type of body language that may be perceived as potentially sexual in nature may elicit ISB. Health care professionals should note that the following types of body language, when engaged with a patient, may be perceived or considered sexual in nature: lip touching, lip bighting, lip licking, touching one's chest, backside rubbing, leaning towards an individual, excessive smiling, prolonged eye gazing, provocative, prolonged staring, and walking provocatively (e.g., walking with hips swinging side to side).

- ***Health care professionals should understand patients suffering from dementia associated ISB may misinterpret specific cues or behaviors*** - this recommendation reinforces the previous two recommendations. Essentially, specific gestures, actions,

or behaviors may be misinterpreted by a patient suffering from dementia associated ISB. Thus, health care professionals should be cognizant of their cues, actions, and overall behavior.

- ***Health care professionals should wear health care appropriate attire*** - when caring for patients exhibiting ISB, health care professionals should be sure to wear health care appropriate attire such as scrubs. Health care professionals should note the following: attire that may be considered provocative could trigger ISB.

- ***Health care professionals should avoid patient triggers*** - along with wearing health care appropriate attire, health care professionals should be sure to avoid specific patient triggers that may elicit ISB when caring for patients suffering from dementia associated ISB. Example of patient triggers that may elicit ISB include: watching television programming or films with erotic scenes, reading materials outlining sexual acts, and sitting too close to a patient when having a friendly conversation. Health care professionals should be aware of specific patient triggers for individual patients. Patient observation and monitoring can help health care professionals identify specific patient triggers.

- ***Health care professionals should work to redirect any patient conversations regarding sex or sexual behavior*** - as previously indicated, individuals suffering from dementia associated ISB may engage other individuals in conversations about sex or sexual behavior. If health care professionals find themselves in patient conversations relating to sex, they should work to redirect the conversation. Methods to redirect a conversation include: asking questions regarding other topics, injecting a new topic into the conversation, taking the lead in the conversation, asking individuals their opinions on other topics, and bringing up nonrelated points of interest such as a patient's health care. With that said, if a health care professional cannot redirect a patient conversation regarding sex or sexual behavior it may be best for them to simply excuse themselves and temporarily relocate to another area. Health care professionals should note that engaging patients in any conversation that may be perceived as sexual in nature may be viewed upon as unprofessional behavior and may elicit further ISB from a patient.

- ***Health care professionals should not indulge "foul language"*** - as previously indicated, individuals suffering from dementia associated ISB may use foul language (e.g., intense sexually driven or sexually graphic verbiage). Health care professionals should not indulge foul language by laughing at or simply positively acknowledging such language - doing so could encourage a patient to use further foul language or could elicit further ISB from a patient.

- **Health care professionals should not indulge obscene gestures** - obscene gestures may include sexually driven hand gesturing and acts of grabbing one's own genitalia. Much like with foul language, obscene gestures should not be indulged.

- **Health care professionals should not positively reinforce ISB** - this recommendation reinforces the previous two recommendations. Essentially, it indicates that a health care professional should not positively reinforce any form of ISB. Positive reinforcement may refer to any actions that follow a specific behavior which in turn encourage or make it more likely for the specific behavior to occur again in the future. Examples of positive reinforcement can include: clapping in a positive manner, praise, rewards, and, as previously alluded to, laughing. Health care professionals should note that positive reinforcement may elicit further ISB from a patient or intensify a patient's ISB.

- **Health care professionals should have verbal responses ready to address ISB** - essentially, health care professionals should be aware of patients prone to ISB and should have verbal responses ready to handle any ISB that may occur. For example, if a patient always makes sexually driven comments to a health care professional, then the health care professional in question should be ready to handle any such comments. An example of a verbal response that may be used to handle sexually driven comments is as follows: "Please do not say that to me." The previous example is simple and straightforward, however it may prove to be effective in dissuading any further ISB from occurring.

- **Identify times of day when ISB may occur from a specific patient** - due to the nature of dementia, an individual patient may exhibit ISB at a specific time of day (e.g., during bathing). Identifying the time of day an individual patient may exhibit ISB can help health care professionals prepare for potential ISB and avoid patient disruptions that may result from ISB. Patient observation and monitoring can help health care professionals identify specific times of day when an individual patient may exhibit ISB.

- **Identify patients that are prone to public disrobing** - public disrobing, or taking off one's clothes in public or around people, can be observed in patient populations suffering from dementia associated ISB. Health care professionals should work to identify patients that are prone to public disrobing to help avoid patient disturbances. Additionally, health care professionals may want to consider keeping a blanket or towel nearby when caring for patients that are prone to public disrobing. A nearby blanket or towel could be used to cover a patient if the patient begins to disrobe in public. Health care professionals should note that patient observation and monitoring can help health care professionals identify patients prone to public disrobing.

- **Identify patients that are prone to public masturbation** - patients exhibiting ISB may attempt to masturbate in public. Health care professionals should work to identify patients that are prone to masturbating in public to help avoid patient disturbances. Much like with caring for patients that are prone to public disrobing, health care professionals may want to consider keeping a blanket or towel nearby so they may attempt to cover a patient masturbating in public. Health care professionals should note that patient observation and monitoring can help health care professionals identify patients prone to public masturbation.

- **Health care professionals should be aware that patients suffering from dementia may experience hallucinations and/or delusions** - a patient may exhibit ISB as a result of a hallucinations or delusion. Health care professionals should acknowledge when a patient is experiencing a hallucinations or delusion because health care professionals may have to take steps to ensure the patient's safety, other patient's safety and their own safety.

- **Health care professionals should understand that patients suffering from dementia associated ISB may also be dealing with other health-related conditions or issues** - often patients suffering from dementia have other health-related conditions or issues such as hypertension, diabetes, and/or enlarged prostates. It is important for health care professionals to understand that patients potentially suffering from dementia associated ISB may also be dealing with other health-related conditions or issues. Understanding that a patient may be suffering from multiple health-related conditions can help health care professionals better understand a patient's behavior (i.e., possessing insight into a patient's medical history can help health care professionals determine if a patient's behavior is associated with ISB or another health-related issue). Identifying patient behaviors related to ISB and patient behaviors related to other health-related concerns/issues can help health care professionals adequately address patients' needs.

- **Health care professionals may want to consider using diversionary tactics** - when a patient is exhibiting ISB, health care professionals should consider using diversionary tactics to help divert a patient's interest away from ISB. In the context of this course, a diversionary tactic may refer to any action that brings an individual's attention away from ISB and onto another point of interest. Examples of diversionary tactics may include: encouraging a patient to watch an appropriate television program or film, encouraging a patient to read an appropriate book, encouraging a patient to look at a family photo album. Health care professionals should note that diversionary tactics may be used to prevent patient disturbances.

- **Allow patients to hold a "safe item" in their hands** - evidence suggests that individuals suffering from dementia respond to touching and/or holding specific items such as those made from cotton. Allowing a patient to hold a safe item, such as a pillow, could help prevent ISB.

- **Keep patients busy** - some ISB may be related to inactivity or restlessness. Keeping patients busy and/or active may help prevent ISB.

- **Health care professionals should work to maintain consistency when caring for patients suffering from dementia associated ISB** - as previously mentioned, some ISB may be related to dementia associated confusion. Thus, by working to maintain consistency when caring for patients suffering from dementia associated ISB, health care professionals can potentially help prevent patient confusion and, ultimately, ISB.

- **Engage patients in activities to help reduce dementia associated stress and frustration** - as previously alluded to, some ISB may be a result of dementia associated stress and frustration. Thus, health care professionals should encourage, when applicable, some patients to engage in activities that may help reduce dementia associated stress and frustration in order to help prevent ISB. Activities that may help reduce dementia associated stress and frustration include: breathing exercises, socializing with family and friends, playing games, and listening to calming sounds or music.

- **Ensure patients are comfortable** - along the same lines as the previous recommendation, some ISB may result from patient discomfort. Ensuring patients' comfort could help prevent ISB.

- **Provide patients with appropriate attention** - some patients exhibiting ISB may be doing so, at some level, for attention. Affording patients with appropriate attention could help prevent some forms of ISB.

- **Health care professionals should establish boundaries with patients** - even if a patient is suffering from dementia, a health care professional should work to establish boundaries with patients (i.e., what is appropriate and acceptable). Established boundaries with patients could help prevent ISB.

- **Health care professionals should not meet aggressive sexual behavior from a patient with aggression** - some types of dementia may lead to aggression, which in turn could cause aggressive ISB such as forceful sexual advances on other individuals. When confronted by aggressive sexual behavior from a patient, health care professionals should consider that the patient may not know or understand his or her actions or the consequences of his or her actions. Thus, health care professionals should not meet aggression with aggression. Aggression manifested towards patients

could have a negative impact on their health, overall well-being, and quality of life. Furthermore, it may cause the patient to intensify his or her aggression, which may lead to a confrontation of some kind. Moreover, due to the nature of dementia, aggression from a health care professional could lead to confusion and/or disorientation, which could have potentially negative ramifications for the patient. Also, aggressive behavior may be misunderstood by a patient with dementia, and, thus, could lead to further ISB.

- Health care professionals should remain calm when caring for patients suffering from dementia associated ISB - this final recommendation for health care professionals may be one of the most important, because all of the other previous recommendations may be dependent upon it. When a patient exhibits ISB, no matter how shocking or explicit an ISB-related act may be, a health care professional should remain calm at all times. Remaining calm can help health care professionals address the ISB, any related issues or concerns that may arise because of the ISB, and any necessary patient care that may be required. In other words, remaining calm can help health care professionals follow any of the aforementioned recommendations that may apply to pertinent ISB. Health care professionals should note the following: health care professionals should always remember that they are first and foremost a professional; in the face of adversity, professionals remain calm and remember their education and training in order to complete a necessary and/or an essential task in an efficient and effective manner.

Along with individual health care professionals, health care organizations can also help manage patients suffering from ISB. Recommendations that may be used by health care organizations to help manage patients suffering from ISB may be found below.

ISB Recommendations for Health Care Organizations

- Health care organizations should have policies regarding patient-related inappropriate behavior, when applicable - health care organizations should have policies, regarding patient-related inappropriate behavior, in place to help guide health care professionals. Health care professionals should be aware of such policies. If no such policies exist within a health care organization, health care professionals should consider developing such policies to help manage patient-related inappropriate behavior.

- Health care organizations should ensure health care professionals understand internal policies related to patient associated inappropriate behavior - it is not enough for a health care organization to have policies regarding patient behavior. Health care organizations should ensure health care professionals are aware of such

policies and understand them. Health care professionals should seek out health care organizations' policies regarding patient behavior.

- Health care organizations should have internal guidelines in place to help health care professionals manage patients suffering from dementia associated ISB - along with policies related to patient associated inappropriate behavior, health care organizations should have internal guidelines in place to help health care professionals manage patients suffering from dementia associated ISB. As previously highlighted, patients suffering from dementia associated ISB may experience: personality changes, mood changes, hallucinations and delusions, memory problems, confusion, disorientation, stress and frustration, cognitive difficulties, restlessness, and sleep disturbance. In addition, patients suffering from dementia associated ISB may disrobe in public, engage in public masturbation, engage others in conversations regarding sex, use foul language, make obscene gestures, and act sexually aggressive to other patients. Thus, health care organization should have some type of internal guidelines to help health care professionals manage such aforementioned behavior. Related guidelines could include information regarding: procedures to help manage patient associated inappropriate behavior, information regarding appropriate materials for patients exhibiting ISB (e.g., what types of films patients exhibiting ISB may watch/what activities patients exhibiting ISB may participate in), how to avoid patient triggers, and how to manage patient disturbances. Health care professionals should be aware of such guidelines. If no such guidelines exist within a health care organization, health care professionals should consider developing such guidelines to help manage patient-related inappropriate behavior.

- Health care organizations should ensure health care professionals understand internal guidelines related to patient associated inappropriate behavior - much like with organizational policies, it is not enough for a health care organization to have guidelines regarding patient behavior. Health care organizations should ensure health care professionals are aware of such guidelines and understand them. Health care professionals should seek out any relevant health care organizations' guidelines regarding patient behavior.

- Health care organizations should educate health care professionals regarding patient ISB - education seminars, course, and/or lectures may be used to educate health care professionals regarding patient ISB. Health care professionals are encouraged to participate in any educational offerings to further their knowledge and understanding of dementia and dementia associated ISB.

- Health care organizations should consider including information regarding patient-related inappropriate behavior in employee handbooks or equivalent

materials, when applicable - including information regarding patient-related inappropriate behavior in employee hand books or equivalent materials which could provide a means for employee education.

- **Health care organizations should have safety measures in place to protect health care professionals** - patients exhibiting ISB, at times, may pose a threat to health care professionals' safety. Thus, health care organizations should have safety measures in place to protect health care professionals from any patient-related danger.

- **Health care organizations should have safety measures in place to protect patients** - patients exhibiting ISB, at times, may pose a threat to other patients' safety as well as their own safety. Thus, health care organizations should have safety measures in place to protect patients from any patient-related danger.

- **Health care organizations should have "safe items" on hand for patients suffering from dementia associated ISB** - as previously mentioned, evidence suggests that individuals suffering from dementia respond to touching and/or holding specific items such as those made from cotton. Allowing a patient to hold a safe item, such as a pillow, could help prevent ISB. Thus, health care organizations should have safe items on hand. Health care professionals should be aware of the availability of safe items at their specific health care facility.

- **Health care organizations should offer planned or scheduled activities to patients** - some ISB may be related to inactivity, restlessness, stress, and/or frustration. Thus, health care organizations should have planned or scheduled activities for patients to help them relieve periods of inactivity as well as restlessness, stress, and/or frustration. Health care professionals should be aware of their specific health care facility's offered patient activities.

- **Health care organizations should ensure patient comfort** - some forms of ISB may result from patient discomfort. Thus, health care organizations should work to ensure patient comfort to help prevent patient ISB.

- **Health care organizations should establish measures to ensure patient care consistency** - as previously mentioned, some ISB may be related to dementia associated confusion. Helping to maintain patient care consistency can potentially help health care organizations manage patient ISB.

- **Health care organizations should encourage health care professionals to report inappropriate patient behavior that may warrant investigation** - some patient inappropriate behavior may warrant an investigation from a health care organization to determine the cause and/or end results of the inappropriate patient behavior in

question (e.g., if a patient's inappropriate behavior leads to injuries and/or fear among other patients or health care professionals an investigation by administrators/representatives of a health care organization may be required). If a health care professional observes any inappropriate patient behavior that may warrant investigation, he or she should consider reporting the patient behavior to their health care organization.

- ***Health care organizations should have internal channels for the reporting of inappropriate patient behavior*** - it is not enough for a health care organization to encourage the reporting of inappropriate patient behavior; a health care organization should have established, internal channels or networks for such reporting. Furthermore, health care organizations should make sure individuals are aware of such networks to encourage reporting. Moreover, health care organizations should ensure reporting networks work to efficiently and effectively investigate and resolve any potential reports regarding patient behavior. Health care professionals should be aware of their health care organization's means for reporting inappropriate patient behavior.

- ***Health care organizations should ensure patients suffering from dementia receive adequate nutrition and physical activity*** - evidence suggests patients suffering from dementia respond to both adequate nutrition and physical activity as a form of patient or disease state management. Thus, health care organizations should ensure patients suffering from dementia receive adequate nutrition and physical activity. Specific recommendations regarding nutrition may be found below. Specific recommendations regarding physical activity may be found in Figure 1. The information found below and in Figure 1 was derived from the Dietary Guidelines for Americans 2015 - 2020.⁴

Nutrition and Dietary Recommendations

- Individuals should follow a healthy eating pattern across their lifespan. All food and beverage choices matter. Individuals should choose a healthy eating pattern at an appropriate calorie level to help achieve and maintain a healthy body weight, support nutrient adequacy, and reduce the risk of chronic disease.
- Individuals should focus on variety, nutrient density, and amount. To meet nutrient needs within calorie limits, individuals should choose a variety of nutrient-dense foods across and within all food groups in recommended amounts.
- Individuals should limit calories from added sugars and saturated fats and reduce sodium intake. Individuals should consume an eating pattern low in added sugars,

saturated fats, and sodium. Individuals should cut back on foods and beverages higher in these components to amounts that fit within healthy eating patterns.

- Individuals should shift to healthier food and beverage choices; choose nutrient-dense foods and beverages across and within all food groups in place of less healthy choices; consider cultural and personal preferences to make these shifts easier to accomplish and maintain.
- Individuals should support healthy eating patterns for all. Everyone has a role in helping to create and support healthy eating patterns in multiple settings nationwide, from home to school to work to communities to health care facilities.
- An eating pattern may refer to the combination of foods and beverages that constitute an individual's complete dietary intake over time; an eating pattern may describe a customary way of eating or a combination of foods recommended for consumption.
- Individuals should consume a healthy eating pattern that accounts for all foods and beverages within an appropriate calorie level.
- A healthy eating pattern includes:
 - A variety of vegetables from all of the subgroups - dark green, red and orange, legumes (beans and peas), starchy, and other
 - Fruits, especially whole fruits
 - Grains, at least half of which are whole grains
 - Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverages
 - A variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products
 - Oils
- A healthy eating pattern limits the following: saturated fats and trans fats, added sugars, and sodium.
- Individuals should consume less than 10 percent of calories per day from added sugars.
- Individuals should consume less than 10 percent of calories per day from saturated fats.

- Individuals should consume less than 2,300 milligrams (mg) per day of sodium.
- Adults who are obese should change their eating and physical activity behaviors to prevent additional weight gain and/or promote weight loss. Adults who are overweight should not gain additional weight, and those with one or more CVD risk factors (e.g., hypertension and hyperlipidemia) should change their eating and physical activity behaviors to lose weight. To lose weight, most people need to reduce the number of calories they get from foods and beverages and increase their physical activity. For a weight loss of 1 to 1½ pounds per week, daily intake should be reduced by 500 to 750 calories. Eating patterns that contain 1,200 to 1,500 calories each day can help most women lose weight safely, and eating patterns that contain 1,500 to 1,800 calories each day are suitable for most men for weight loss. In adults who are overweight or obese, if reduction in total calorie intake is achieved, a variety of eating patterns can produce weight loss, particularly in the first 6 months to 2 years.
- Older adults, ages 65 years and older, who are overweight or obese are encouraged to prevent additional weight gain. Among older adults who are obese, particularly those with CVD risk factors, intentional weight loss can be beneficial and result in improved quality of life and reduced risk of chronic diseases and associated disabilities.
- Vegetables are important sources of many nutrients, including dietary fiber, potassium, vitamin A, vitamin C, vitamin K, copper, magnesium, vitamin E, vitamin B6, folate, iron, manganese, thiamin, niacin, and choline.
- The recommended amount of vegetables in the Healthy U.S.-Style Eating Pattern at the 2,000-calorie level is 2½ cup-equivalents of vegetables per day.
- Individuals should include a variety of vegetables from all five subgroups - dark green, red and orange, legumes (beans and peas), starchy, and other.
- Individuals may include all fresh, frozen, canned, and dried vegetable options in cooked or raw forms, including vegetable juices.
- Vegetables should be consumed in a nutrient-dense form, with limited additions such as salt, butter, or creamy sauces.
- When selecting frozen or canned vegetables, choose those lower in sodium.
- Fruits are important source of many nutrients, including dietary fiber, potassium, and vitamin C.

- The recommended amount of fruits in the Healthy U.S.-Style Eating Pattern at the 2,000-calorie level is 2 cup-equivalents per day. One cup of 100% fruit juice counts as 1 cup of fruit.
- Healthy eating patterns also limit the intake of refined grains and products made with refined grains, especially those high in saturated fats, added sugars, and/or sodium, such as cookies, cakes, and some snack foods.
- The recommended amount of grains in the Healthy U.S.-Style Eating Pattern at the 2,000-calorie level is 6 ounce-equivalents per day. At least half of this amount should be whole grains.
- The most direct way to meet the whole grain recommendation is to choose 100 percent whole-grain foods for at least half of all grains consumed.
- The recommended amount of dairy for adults is 3 cup-equivalents per day.
- Fat-free and low-fat (1%) dairy products provide the same nutrients but less fat (and thus, fewer calories) than higher fat options, such as 2% and whole milk and regular cheese.
- Fat-free or low-fat milk and yogurt, in comparison to cheese, contain less saturated fats and sodium and more potassium, vitamin A, and vitamin D.
- Individuals who are lactose intolerant can choose low-lactose and lactose-free dairy products.
- Those who are unable or choose not to consume dairy products should consume foods that provide the range of nutrients generally obtained from dairy, including protein, calcium, potassium, magnesium, vitamin D, and vitamin A (e.g., fortified soy beverages [soymilk]).
- Soy beverages fortified with calcium, vitamin A, and vitamin D, are included as part of the dairy group because they are similar to milk based on nutrient composition and in their use in meals.
- The recommendation for protein foods in the Healthy U.S.-Style Eating Pattern at the 2,000-calorie level is 5½ ounce equivalents of protein foods per day.
- A specific recommendation for at least 8 ounce equivalents of seafood per week also is included for the 2,000-calorie level.
- Healthy eating patterns include a variety of protein foods in nutrient-dense forms including meat and poultry.

- Processed meat and processed poultry include all meat or poultry products preserved by smoking, curing, salting, and/or the addition of chemical preservatives. Additionally, processed meats and poultry include all types of meat or poultry sausages (bologna, frankfurters, luncheon meats and loaves, sandwich spreads, viennas, chorizos, kielbasa, pepperoni, salami, and summer sausages), bacon, smoked or cured ham or pork shoulder, corned beef, pastrami, pig's feet, beef jerky, marinated chicken breasts, and smoked turkey products.
- Lean meats and poultry contain less than 10 g of fat, 4.5 g or less of saturated fats, and less than 95 mg of cholesterol per 100 g and per labeled serving size (e.g., 95% lean ground beef, pork tenderloin, and skinless chicken or turkey breast).
- Lean meats and poultry are recommended.
- Research suggests that eating patterns which include lower intake of meats as well as processed meats and processed poultry are associated with reduced risk of CVD in adults.
- The recommendation for the meats, poultry, and eggs subgroup in the Healthy U.S.-Style Eating Pattern at the 2,000-calorie level is 26 ounce-equivalents per week.
- Oils are fats that contain a high percentage of monounsaturated and polyunsaturated fats and are liquid at room temperature.
 - The recommendation for oils in the Healthy U.S.-Style Eating Pattern at the 2,000-calorie level is 27 g (about 5 teaspoons) per day.
 - The main sources of saturated fats in the U.S. diet include mixed dishes containing cheese, meat, or both, such as burgers, sandwiches, and tacos; pizza; rice, pasta, and grain dishes; and meat, poultry, and seafood dishes.
 - Added sugars provide sweetness that can help improve the palatability of foods, help with preservation, and/or contribute to functional attributes such as viscosity, texture, body, color, and browning capability.
 - Added sugars include syrups and other caloric sweeteners. Specific examples of added sugars that can be listed as an ingredient include: brown sugar, corn sweetener, corn syrup, dextrose, fructose, glucose, high-fructose corn syrup, honey, invert sugar, lactose, malt syrup, maltose, molasses, raw sugar, sucrose, trehalose, and turbinado sugar. Healthy eating patterns limit added sugars to less than 10 percent of calories per day.
 - The intake of saturated fats should be limited to less than 10 percent of calories per day.

- Trans fats occur naturally in some foods and also are produced in a process called hydrogenation. Hydrogenation is used by food manufacturers to make products containing unsaturated fatty acids solid at room temperature (i.e., more saturated) and therefore more resistant to becoming spoiled or rancid.
- Individuals should limit intake of trans fats to as low as possible by limiting foods that contain synthetic sources of trans fats, such as partially hydrogenated oils in margarines, and by limiting other solid fats.
- Solid fats should be reduced or avoided.
- Strategies to avoid solid fats include the following: choosing packaged foods lower in saturated fats; shifting from using solid fats to oils in preparing foods; choosing dressings and spreads that are made from oils rather than solid fats; reducing overall intake of solid fats by choosing lean or low-fat versions of meats, poultry, and dairy products; and consuming smaller portions of foods higher in solid fats or consuming them less often.
- The body uses cholesterol for physiological and structural functions but makes more than enough for these purposes. Therefore, people do not need to obtain cholesterol through foods.
- Dietary cholesterol is found only in animal foods such as egg yolk, dairy products, shellfish, meats, and poultry.
- Individuals should eat as little dietary cholesterol as possible while consuming a healthy eating pattern.
- Evidence shows that eating patterns that include lower intake of dietary cholesterol are associated with reduced risk of CVD.
- Sodium is an essential nutrient and is needed by the body in relatively small quantities, provided that substantial sweating does not occur.
- Sodium is primarily consumed as salt (sodium chloride).
- Sodium is found in foods across the food supply, including mixed dishes such as burgers, sandwiches, and tacos; rice, pasta, and grain dishes; pizza; meat, poultry, and seafood dishes; and soups.
- Evidence shows linear dose-response relationship between increased sodium intake and increased blood pressure in adults.
- Individuals should make efforts to lower sodium intake.

- The recommendation for adults and children ages 14 years and older to limit sodium intake to less than 2,300 mg per day.

- Estimated calorie intake per day for individuals ages 61 - 65 years - males who are sedentary should take in approximately 2,000 calories; males who are moderately active should take in approximately 2,400 calories; males who are active should take in approximately 2,600 calories; females who are sedentary should take in approximately 1,600 calories; females who are moderately active should take in approximately 1,800 calories; females who are active should take in approximately 2,000 calories.

- Estimated calorie intake per day for individuals ages 66 - 70 years - males who are sedentary should take in approximately 2,000 calories; males who are moderately active should take in approximately 2,200 calories; males who are active should take in approximately 2,600 calories; females who are sedentary should take in approximately 1,600 calories; females who are moderately active should take in approximately 1,800 calories; females who are active should take in approximately 2,000 calories.

- Estimated calorie intake per day for individuals ages 71 - 75 years - males who are sedentary should take in approximately 2,000 calories; males who are moderately active should take in approximately 2,200 calories; males who are active should take in approximately 2,600 calories; females who are sedentary should take in approximately 1,600 calories; females who are moderately active should take in approximately 1,800 calories; females who are active should take in approximately 2,000 calories.

- Estimated calorie intake per day for individuals 75 years and older - males who are sedentary should take in approximately 2,000 calories; males who are moderately active should take in approximately 2,200 calories; males who are active should take in approximately 2,400 calories; females who are sedentary should take in approximately 1,600 calories; females who are moderately active should take in approximately 1,800 calories; females who are active should take in approximately 2,000 calories.

- Patient menus should include offering more vegetables, fruits, whole grains, low-fat and fat-free dairy, and a greater variety of protein foods that are nutrient dense, while also reducing sodium and added sugars, reducing saturated fats and replacing them with unsaturated fats, and reducing added refined starches.

- Those developing patient menus should consider the range of offerings both within and across food groups and other dietary components to determine whether the healthy options offered reflect the proportions in healthy eating patterns.

FIGURE 1: RECOMMENDATIONS REGARDING PHYSICAL ACTIVITY⁴

- Physical activity may refer to any bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above a basal level; generally refers to the subset of physical activity that enhances health.
- Individuals ages 18 - 64 years
 - All adults should avoid inactivity. Some physical activity is better than none, and adults who participate in any amount of physical activity gain some health benefits.
 - For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Aerobic activity should be performed in episodes of at least 10 minutes, and preferably, it should be spread throughout the week.
 - For additional and more extensive health benefits, adults should increase their aerobic physical activity to 300 minutes (5 hours) a week of moderate-intensity, or 150 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity activity. Additional health benefits are gained by engaging in physical activity beyond the aforementioned amount.
 - Adults should also include muscle-strengthening activities that involve all major muscle groups on 2 or more days a week.
- Individuals 65 years and older
 - Older adults should follow the adult guidelines. When older adults cannot meet the adult guidelines, they should be as physically active as their abilities and conditions will allow.
 - Older adults should do exercises that maintain or improve balance if they are at risk of falling.

- Older adults should determine their level of effort for physical activity relative to their level of fitness.
- Older adults with chronic conditions should understand whether and how their conditions affect their ability to do regular physical activity safely.

Section 2: Summary

Caring for older adult patients suffering from dementia associated ISB can be a challenge. Thus, health care administrators and health care professionals should possess insight into ISB management to best serve patients. With that said, health care professionals can help manage patients suffering from ISB by adhering to the following recommendations: health care professionals should be aware of patients suffering from dementia associated ISB, health care professionals should monitor patients exhibiting ISB, health care professionals should avoid touching patients exhibiting ISB in a "friendly manner," health care professionals should be aware and conscious of their body language, health care professionals should understand patients suffering from dementia associated ISB may misinterpret specific cues or behaviors, health care professionals should wear health care appropriate attire, health care professionals should avoid patient triggers, health care professionals should work to redirect any patient conversations regarding sex or sexual behavior, health care professionals should not indulge "foul language", health care professionals should not indulge obscene gestures, health care professionals should not positively reinforce ISB, health care professionals should have verbal responses ready to address ISB, identify times of day when ISB may occur from a specific patient, identify patients that are prone to public disrobing, identify patients that are prone to public masturbation, health care professionals should be aware that patients suffering from dementia may experience hallucinations and/or delusions, health care professionals should understand that patients suffering from dementia associated ISB may also be dealing with other health-related conditions or issues, health care professionals may want to consider using diversionary tactics, allow patients to hold a "safe item" in their hands, keep patients busy, health care professionals should work to maintain consistency when caring for patients suffering from dementia associated ISB, engage patients in activities to help reduce dementia associated stress and frustration, ensure patients are comfortable, provide patients appropriate attention, health care professionals should establish boundaries with patients, health care professionals should not meet aggressive sexual behavior from a patient with aggression, and, perhaps most importantly, health care professionals should remain calm when caring for patients suffering from dementia associated ISB.

Along with health care professionals, health care organizations can also help manage patients exhibiting ISB. Recommendations that may be used by health care organization to help manage patients exhibiting ISB include the following: health care organizations should have policies regarding patient-related inappropriate behavior, health care organizations should ensure health care professionals understand internal policies related to patient associated inappropriate behavior, health care organizations should have internal guidelines in place to help health care professionals manage patients suffering from dementia associated ISB, health care organizations should ensure health care professionals understand internal guidelines related to patient associated inappropriate behavior, health care organizations should educate health care professionals regarding patient ISB, health care organizations should consider including information regarding patient-related inappropriate behavior in employee hand books or equivalent materials, health care organizations should have safety measures in place to protect health care professionals, health care organizations should have safety measures in place to protect patients, health care organizations should have "safe items" on hand for patients suffering from dementia associated ISB, health care organizations should offer planned or scheduled activities for patients, health care organizations should ensure patient comfort, health care organizations should establish measures to ensure patient care consistency, health care organizations should encourage health care professionals to report inappropriate patient behavior that may warrant investigation, health care organizations should have internal channels for the reporting of inappropriate patient behavior, and health care organizations should ensure patients suffering from dementia receive adequate nutrition and physical activity.

Finally, health care professionals and health care organizations should work together to ensure that patients exhibiting ISB receive the adequate level of care they require.

Section 2: Key Concepts

- Older adult patients suffering from dementia associated ISB can present challenges to both health care professionals and health care organizations.
- Health care professionals and health care organizations can help manage patients exhibiting ISB by following related recommendations.

Section 2: Key Terms

Positive reinforcement - any actions that follow a specific behavior which in turn encourage or make it more likely for the specific behavior to occur again in the future

Diversionary tactic (in the context of this course) - any action that brings an individual's attention away from ISB and onto another point of interest

Eating pattern - the combination of foods and beverages that constitute an individual's complete dietary intake over time; a customary way of eating or a combination of foods recommended for consumption⁴

Physical activity - any bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above a basal level; the subset of physical activity that enhances health⁴

Section 2: Personal Reflection Question

How can health care professionals as well as health care organizations effectively manage patients exhibiting ISB?

Section 3: Dementia/Dementia Associated ISB Treatment

Individuals suffering from dementia associated ISB often require treatment. Thus, health care professionals should possess insight into ISB treatment options. As previously alluded to, non-pharmacological treatment options, such as diet and physical activity, may be used to manage and treat patients suffering from dementia associated ISB. With that said, the beginning of this section of the course will highlight additional non-pharmacological treatment options that may be used to treat patients suffering from dementia associated ISB.

Non-Pharmacological Treatment Options for Dementia/Dementia Associated ISB Psychotherapy

One of the first non-pharmacological treatment options that may come to mind is psychotherapy. Psychotherapy, also known as talk therapy, may refer to the use of psychological techniques and/or psychotherapeutic approaches to help individuals overcome problems and develop healthier habits.⁵ Health care professionals should note that many different forms of psychotherapy may be used to treat patients suffering from dementia associated ISB. Health care professionals should also note that health care-related outcomes associated with psychotherapy may vary among patients and depend on an individual patient's stage of dementia.

Cognitive Behavioral Therapy

Another non-pharmacological treatment option that may initially come to mind is cognitive behavioral therapy. Cognitive behavioral therapy may refer to a form of psychotherapy which focuses on helping individuals solve problems and create positive outcomes by changing unrealistically negative patterns of thought and behavior.⁶ In

other words, cognitive behavioral therapy works to identify unrealistically negative thoughts and their relationship to negative behavior patterns and outcomes in order to develop constitutive ways of thinking that will ultimately lead to more positive behavior patterns and outcomes.

Support Groups

Support groups may also be used as a therapeutic option for those suffering from dementia/dementia associated ISB. Support groups can be used to help patients avoid isolation and make connections with other individuals to improve upon symptoms and their quality of life. Health care professionals should be aware that various types of support groups exist. Health care professionals should also note that an individual may participate in one or more support groups at a time to cope or manage his or her ISB.

Psychoeducation

Psychoeducation may refer to the process of providing information and education to patients seeking or receiving treatment for mental health-related conditions.¹

Psychoeducation may be used to inform patients about their conditions and/or disease states, so they may better understand their state of health, overall well-being, treatment, and desired health care outcomes. Health care professionals should note that psychoeducation, or education centered around mental health-related conditions such as dementia associated ISB, may also be beneficial and useful to those caring for patients with mental health-related conditions (i.e., the more a health care professional understands and knows about various mental health-related conditions and disease states, the better equipped he or she may be to care for patients in need).¹

Sleep Routines

Routines involving sleep or bedtimes may also be beneficial to patients suffering from dementia associated ISB. As previously mentioned, some ISB may be related to dementia associated confusion and disorientation. Thus, by creating routine schedules centered around activities like sleep and bedtimes, health care professionals can help maintain consistency, which in turn could help limit ISB. That being said, age-related sleep recommendations may be found in Figure 2.

FIGURE 2: SLEEP RECOMMENDATIONS³

Sleep Recommendations for Newborns

- Newborns should sleep 14 - 17 hours per 24 hours.

Sleep Recommendations for Infants

- Infants should sleep 12 - 16 hours (including naps) per 24 hours.

Sleep Recommendations for Individuals 1 - 2 Years Old

- Individuals 1 - 2 years old should sleep 11 - 14 hours (including naps) per 24 hours.

Sleep Recommendations for Individuals 3 - 5 Years Old

- Individuals 3 - 5 years old should sleep 10 - 13 hours (including naps) per 24 hours.

Sleep Recommendations for Individuals 6 - 12 Years Old

- Individuals 6 - 12 years old should sleep 9 - 12 hours per 24 hours.

Sleep Recommendations for Individuals 13 - 18 Years Old

- Individuals 13 - 18 years old should sleep 8 - 10 hours per 24 hours.

Sleep Recommendations for Individuals 18 - 60 Years Old

- Individuals 18 - 60 years old should sleep 7 or more hours per night.

Sleep Recommendations for Individuals 61 - 64 Years Old

- Individuals 61 - 64 years old should sleep 7 - 9 hours.

Sleep Recommendations for Individuals 65 Years Old or Older

- Individuals 65 years old or older should sleep 7 - 8 hours.

Pharmacological Treatment Options for Dementia Associated ISB

Pharmacological treatment options may also be used to treat patients suffering from dementia/dementia associated ISB. That being the case, this subsection of the course will highlight medications that may be used to treat patients suffering from dementia/dementia associated ISB. The information found below was derived from materials provided by the United States Food and Drug Administration (FDA).⁷ When reviewing the highlighted medications, health care professionals should keep in mind that the following medications may be used alone or in combination with other medications, as well as additional therapeutic options to treat dementia/dementia associated ISB.

Memantine (Namenda)

Medication notes - Namenda is an N-methyl-D-aspartate (NMDA) receptor antagonist indicated for the treatment of moderate to severe dementia of the Alzheimer's type. The typical, initial adult dose of Namenda is 5 mg once daily. Namenda doses may be increased in 5 mg increments to a maintenance dose of 10 mg twice daily (health care professionals should not the following: a minimum of 1 week of treatment with the previous dose should be observed before increasing the dose). Common side effects associated with Namenda include: dizziness, headache, confusion, and constipation.

Safety notes - Namenda is contraindicated in patients with a known hypersensitivity to memantine hydrochloride or to any excipients used in the formulation. Warnings and precautions associated with Namenda include the following: conditions that raise urine pH may decrease the urinary elimination of memantine, resulting in increased plasma levels of memantine.

Considerations for special patient populations - A target dose of 5 mg twice daily is recommended in patients with severe renal impairment. Namenda should be administered with caution to patients with severe hepatic impairment.

Donepezil (Aricept)

Medication notes - Aricept is an acetylcholinesterase inhibitor indicated for the treatment of dementia of the Alzheimer's type. Health care professionals should note that the efficacy of Aricept has been demonstrated in patients with mild, moderate, and severe Alzheimer's Disease. Typically, the recommended dose of Aricept for individuals with mild to moderate Alzheimer's Disease is 5 mg or 10 mg once daily. The recommended dose of Aricept for individuals with moderate to severe Alzheimer's Disease is 10 mg or 23 mg administered once daily. Health care professionals should note the following: a dose of 10 mg once daily can be administered once patients have been on a daily dose of 5 mg for 4 to 6 weeks; a dose of 23 mg once daily can be administered once patients have been on a dose of 10 mg once daily for at least 3 months. Common side effects associated with Aricept include: nausea, diarrhea, insomnia, vomiting, muscle cramps, fatigue, and anorexia.

Safety notes - Aricept is contraindicated in patients with a known hypersensitivity to donepezil hydrochloride or to piperidine derivatives. Warnings and precautions associated with Aricept include the following: cholinesterase inhibitors are likely to exaggerate succinylcholine type muscle relaxation during anesthesia; cholinesterase inhibitors may have vagotonic effects on the sinoatrial and atrioventricular nodes manifesting as bradycardia or heart block; Aricept can cause vomiting, patients should be observed closely at initiation of treatment and after dose increases; patients

should be monitored closely for symptoms of active or occult gastrointestinal (GI) bleeding, especially those at increased risk for developing ulcers; the use of Aricept in a dose of 23 mg once daily is associated with weight loss; cholinomimetics may cause bladder outflow obstructions; cholinomimetics are believed to have some potential to cause generalized convulsions; cholinesterase inhibitors should be prescribed with care to patients with a history of asthma or obstructive pulmonary disease.

Considerations for special patient populations - Health care professionals should be aware that Aricept may cause fetal harm.

Galantamine hydrobromide (Razadyne and Razadyne ER)

Medication notes - Razadyne and Razadyne ER are cholinesterase inhibitors indicated for the treatment of mild to moderate dementia of the Alzheimer's type. The recommended starting dosage for Razadyne is 4 mg twice daily. Razadyne does may be increased to an initial maintenance dosage of 8 mg twice daily after a minimum of 4 weeks. Health care professionals should note that, based on clinical benefit and tolerability, Razadyne dosages may be increased to 12 mg twice daily after a minimum of 4 weeks at 8 mg twice daily. The recommended starting dosage for Razadyne ER is 8 mg/day in the morning. Razadyne does may be increased to a maintenance dose of 16 mg/day after a minimum of 4 weeks. Health care professionals should note that, based on clinical benefit and tolerability, Razadyne ER dosages may be increased to 24 mg/day after a minimum of 4 weeks at 16 mg/day. Health care professionals should also note that Razadyne and Razadyne ER should be taken with meals, and that patients should be sure to hydrate adequately while receiving treatment. Common side effects associated with Razadyne and Razadyne ER include: nausea, vomiting, diarrhea, dizziness, headache, decreased appetite, and weight decreases.

Safety notes - Razadyne and Razadyne ER are contraindicated in patients with a known hypersensitivity to galantamine hydrobromide or any excipients. Warnings and precautions associated with Razadyne and Razadyne ER include the following: serious skin reactions, discontinue at first appearance of skin rash; all patients should be considered at risk for adverse effects on cardiac conduction, including bradycardia and AV block, due to vagotonic effects on sinoatrial and atrioventricular nodes; active or occult gastrointestinal bleeding, monitor, patients especially those with an increased risk for developing ulcers; cholinomimetics may cause bladder outflow obstruction; monitor for respiratory adverse events in patients with a history of severe asthma or obstructive pulmonary disease.

Considerations for special patient populations - Health care professionals should be aware that Razadyne and Razadyne ER may cause fetal harm. Razadyne and

Razadyne ER should not be used in patients with severe hepatic impairment and in patients with a creatinine clearance less than 9 mL/min.

Rivastigmine tartrate (Exelon)

Medication notes - Exelon capsules for oral use are acetylcholinesterase inhibitors indicated for the treatment of mild to moderate dementia of the Alzheimer's type as well as the treatment of mild to moderate dementia associated with Parkinson's disease. The recommended initial dose of Exelon for Alzheimer's disease is 1.5 mg twice a day. Health care professionals should note that after a minimum of 2 weeks, if tolerated, Exelon doses may be increased to 3 mg twice a day and further to 4.5 mg twice a day and 6 mg twice a day if tolerated with a minimum of 2 weeks at each dose. The recommended initial dose of Exelon for Parkinson's disease is 1.5 mg twice a day. Health care professionals should note that after a minimum of 4 weeks, if tolerated, Exelon doses for Parkinson's disease may be increased to 3 mg twice a day and further to 4.5 mg twice a day and 6 mg twice a day if tolerated with a minimum of 4 weeks at each dose. Common side effects associated with Exelon include: nausea, vomiting, anorexia, dyspepsia, and asthenia.

Safety notes - Exelon is contraindicated in patients with a known hypersensitivity to rivastigmine, other carbamate derivatives or other components of the formulation. Warnings and precautions associated with Exelon include the following: gastrointestinal adverse reactions may include significant nausea, vomiting, diarrhea, anorexia/decreased appetite, and weight loss, and may necessitate treatment interruption; dehydration may result from prolonged vomiting or diarrhea and can be associated with serious outcomes; discontinue rivastigmine in case of disseminated allergic dermatitis, which may occur after oral administration.

Considerations for special patient populations - Health care professionals should note the following: patients with moderate to severe renal impairment may be able to only tolerate lower doses; patients with mild or moderate hepatic impairment may be able to only tolerate lower doses.

Rivastigmine transdermal system (Exelon Patch)

Medication notes - Exelon Patch contains rivastigmine, an acetylcholinesterase inhibitor indicated for the treatment of mild to moderate dementia of the Alzheimer's type as well as the treatment of mild to moderate dementia associated with Parkinson's disease. The recommended initial dose of Exelon Patch is one Exelon Patch (4.6 mg/24 hours) daily. The recommended Exelon Patch maintenance dose is one Exelon Patch (9.5 mg/24 hours) daily. Health care professionals should note the following: a minimum of 4 weeks of treatment and good tolerability with the previous

dose should be observed before increasing the dose of Exelon Patch. Common side effects associated with Exelon Patch include: nausea, vomiting and diarrhea.

Safety notes - Exelon Patch (rivastigmine transdermal system) is contraindicated in patients with a known hypersensitivity to rivastigmine, other carbamate derivatives or other components of the formulation. Warnings and precautions associated with Exelon Patch include: gastrointestinal adverse effects including nausea and vomiting, which can be significant and at times severe at higher than recommended doses; weight should be monitored during the Exelon Patch therapy; as with other cholinomimetics, caution is recommended in patients with sick sinus syndrome, conduction defects (sino-atrial block, atrio-ventricular block), gastroduodenal ulcerative conditions (including those predisposed to such conditions by concomitant medications), asthma or chronic obstructive pulmonary disease, urinary obstruction, and seizures; extrapyramidal symptoms may appear or may be exacerbated (particularly tremor).

Considerations for special patient populations - Health care professionals should note the following: caution is advised in patients with body weight below 50 kg; the safety of the Exelon Patch is not established in pregnant and lactating women; Exelon Patch is not recommended for use in children.

Sertraline (Zoloft)

Medication notes - Patients suffering from dementia may be on medications referred to as selective serotonin reuptake inhibitors (SSRIs). Zoloft is an example of an SSRI. The mechanism of action of Zoloft is presumed to be linked to its inhibition of the CNS neuronal uptake of serotonin. Zoloft should be administered once daily, either in the morning or evening. Common side effects of Zoloft include: nausea, diarrhea/ loose stool, tremor, dyspepsia, decreased appetite, hyperhidrosis, ejaculation failure and decreased libido.

Safety notes - Zoloft is contraindicated in patients with a hypersensitivity to sertraline or any of the inactive ingredients in Zoloft. Concomitant use in patients taking MAOIs is contraindicated. Concomitant use in patients taking pimozide is contraindicated. Additionally, Zoloft oral concentrate is contraindicated with disulfiram (Antabuse) due to the alcohol content of the concentrate. Warnings and precautions associated with Zoloft include the following: increased risk of serotonin syndrome when co-administered with other serotonergic agents; increased risk of bleeding when used with aspirin, nonsteroidal anti-inflammatory drugs (NSAIDs), other antiplatelet drugs, warfarin, and other anticoagulants may increase risk; screen patients for bipolar disorder due to activation of mania/hypomania; use with caution in patients with seizure disorders and avoid use of antidepressants, including Zoloft,

in patients with untreated anatomically narrow angles. Other warnings associated with Zoloft include the following: antidepressants increase the risk of suicidal thoughts and behaviors in pediatric and young adult patients, closely monitor for clinical worsening and emergence of suicidal thoughts and behaviors.

Considerations for special patient populations - The use of Zoloft in patients with liver disease should be approached with caution. Zoloft falls into Pregnancy Category C. Health care professionals should also consider the following pregnancy related precaution - third trimester use of Zoloft may increase risk for persistent pulmonary hypertension and withdrawal in the neonate.

Citalopram (Celexa)

Medication notes - Celexa is another example of an SSRI. Celexa may be used to treat a variety of mental health disorders. Celexa is an orally administered medication. The mechanism of action of Celexa as an antidepressant is believed to be linked to potentiation of serotonergic activity in the central nervous system (CNS) resulting from its inhibition of CNS neuronal reuptake of serotonin. A typical initial adult dose of Celexa is 20 mg daily. Celexa may be increased to a maximum dose of 40 mg/day at an interval of no less than one week. Doses above 40 mg/day are not recommended due to the risk of QT prolongation. More common side effects of Celexa may include: nausea, dry mouth, somnolence, insomnia, increased sweating, diarrhea, tremor, and sexual dysfunction.

Safety notes - Celexa is contraindicated in patients with a hypersensitivity to citalopram or any of the inactive ingredients in Celexa. Concomitant use in patients taking monoamine oxidase inhibitors (MAOIs) and/or pimozide is also contraindicated. Warnings associated with Celexa include the following: patients with major depressive disorder, both adult and pediatric, may experience worsening of their depression and/or the emergence of suicidal ideation and behavior (suicidality) or unusual changes in behavior, whether or not they are taking antidepressant medications, and this risk may persist until significant remission occurs. Suicide is a known risk of depression and certain other psychiatric disorders, and these disorders themselves are the strongest predictors of suicide. There has been a long-standing concern, however, that antidepressants may have a role in inducing the worsening of depression and the emergence of suicidality in certain patients during the early phases of treatment. All patients being treated with antidepressants for any indication should be monitored appropriately and observed closely for clinical worsening, suicidality, and unusual changes in behavior, especially during the initial few months of a course of drug therapy, or at times of dose changes, either increases or decreases.

Considerations for special patient populations - Celexa is not approved for use in pediatric patients. 20 mg/day is the maximum recommended dose for patients who are greater than 60 years of age, patients with hepatic impairment, and for CYP2C19 poor metabolizers or those patients taking cimetidine or another CYP2C19 inhibitor. No dosage adjustment is necessary for patients with mild or moderate renal impairment. Celexa should be used with caution in patients with severe renal impairment. Celexa falls in Pregnancy Category C.

Paroxetine (Paxil)

Medication notes - Paxil is a SSRI. A typical initial adult dose of Paxil is 20 mg daily. Common side effects of Paxil may include: weakness, dizziness, sleep problems, sexual dysfunction, and dry mouth.

Safety notes - Contraindications associated with Paxil include the following: concomitant use in patients taking either monoamine oxidase inhibitors (MAOIs), including linezolid, an antibiotic which is a reversible non-selective MAOI, or thioridazine; concomitant use in patients taking pimozide; in patients with a hypersensitivity to paroxetine or any of the inactive ingredients in Paxil. Warnings associated with Paxil include: antidepressants increased the risk compared to placebo of suicidal thinking and behavior (suicidality) in children, adolescents, and young adults in short-term studies of major depressive disorder (MDD) and other psychiatric disorders. Anyone considering the use of Paxil or any other antidepressant in a child, adolescent, or young adult must balance this risk with the clinical need. Short-term studies did not show an increase in the risk of suicidality with antidepressants compared to placebo in adults beyond age 24; there was a reduction in risk with antidepressants compared to placebo in adults aged 65 and older. Depression and certain other psychiatric disorders are themselves associated with increases in the risk of suicide. Patients of all ages who are started on antidepressant therapy should be monitored appropriately and observed closely for clinical worsening, suicidality, or unusual changes in behavior. Families and caregivers should be advised of the need for close observation and communication with the prescriber. Paxil is not approved for use in pediatric patients.

Considerations for special patient populations - Health care professionals should note the following: in a multiple-dose study in the elderly at daily paroxetine doses of 20, 30, and 40 mg, concentrations were about 70% to 80% greater than the respective concentrations in nonelderly subjects; thus, the initial dosage in the elderly should be reduced.

Escitalopram (Lexapro)

Medication notes - Lexapro is also a SSRI. A typical adult dose of Lexapro is 10 mg once daily. Common side effects associated with Lexapro include: insomnia, ejaculation disorder (primarily ejaculatory delay), nausea, increased sweating, fatigue and somnolence, decreased libido, and anorgasmia.

Safety notes - Lexapro is contraindicated in patients with a known hypersensitivity to escitalopram or citalopram or any of the inactive ingredients. Additional contraindications of Lexapro include: concurrent use of Lexapro with a MAOI (Lexapro should not be used within 14 days of stopping a MAOI intended to treat psychiatric disorders) as well as concurrent use of Lexapro with linezolid, intravenous methylene blue and pimozide. Warnings and precautions associated with Lexapro include the following: increased risk of suicidal thinking and behavior in children, adolescents and young adults taking antidepressants for major depressive disorder and other psychiatric disorders; Lexapro is not approved for use in pediatric patients less than 12 years of age; monitor patients for clinical worsening, suicidality and unusual change in behavior, especially, during the initial few months of therapy or at times of dose changes; serotonin syndrome has been reported with SSRIs and SNRIs, including Lexapro, both when taken alone, but especially when co-administered with other serotonergic agents, if such symptoms occur, discontinue Lexapro and initiate supportive treatment; a gradual reduction in Lexapro dose rather than abrupt cessation is recommended whenever possible; prescribe with care in patients with a history of seizures; use cautiously in patients with a history of mania; use caution in concomitant use with NSAIDs, aspirin, warfarin or other drugs that affect coagulation; angle closure glaucoma has occurred in patients with untreated anatomically narrow angles treated with antidepressants; use caution in patients with diseases or conditions that produce altered metabolism or hemodynamic responses.

Considerations for special patient populations - Lexapro should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. Caution should be exercised when administered to a nursing woman.

Trazodone (Desyrel)

Medication notes - Patients suffering from dementia/dementia associated ISB may be treated, in some capacity, with Desyrel. Desyrel is a selective serotonin reuptake inhibitor. Health care professionals should note the following: a typical adult starting dose of Desyrel is 150 mg in divided doses daily; Desyrel may be increased by 50 mg per day every three to four days; maximum recommended dose is 400 mg per day in divided doses. Common side effects of Desyrel include: edema, blurred vision, syncope, drowsiness, fatigue, diarrhea, nasal congestion, and weight loss.

Safety notes - Contraindications associated with Desyrel include: concomitant use of monoamine oxidase inhibitors (MAOIs), or use within 14 days of stopping MAOIs. Warnings associated with Desyrel include: concomitant use of aspirin, nonsteroidal anti-inflammatory drugs (NSAIDs), other antiplatelet drugs, warfarin, and other anticoagulants may increase risk of bleeding; cases of painful and prolonged penile erections and priapism have been reported; immediate medical attention should be sought if signs and symptoms of prolonged penile erections or priapism are observed; screen for bipolar disorder and monitor for mania or hypomania; Desyrel has the potential to impair judgment, thinking, and motor skills; advise patients to use caution when operating machinery; avoid use of antidepressants, including Desyrel, in patients with untreated anatomically narrow angles.

Considerations for special patient populations - Health care professionals should note the following: reported clinical literature and experience with trazodone has not identified differences in responses between elderly and younger patients; however, the experience in the elderly with trazodone hydrochloride is limited, it should be used with caution in geriatric patients; serotonergic antidepressants have been associated with cases of clinically significant hyponatremia in elderly patients, who may be at greater risk for this adverse reaction.

Clomipramine (Anafranil)

Medication notes - Patients exhibiting ISB may be treated, in some capacity, with Anafranil. Anafranil belongs to the group of medications referred to as tricyclic antidepressants. Health care professionals should note the following: treatment with Anafranil should be initiated at a dosage of 25 mg daily and gradually increased, as tolerated, to approximately 100 mg during the first 2 weeks. During initial titration, Anafranil should be given in divided doses with meals to reduce gastrointestinal side effects. Thereafter, the dosage may be increased gradually over the next several weeks, up to a maximum of 250 mg daily. After titration, the total daily dose may be given once daily at bedtime to minimize daytime sedation. Side effects associated with Anafranil include the following: dry mouth, constipation, nausea, dyspepsia, anorexia; somnolence, tremor, dizziness, nervousness, changed libido, ejaculatory failure, impotence, micturition disorder; fatigue, sweating, increased appetite, weight gain, and visual changes.

Safety notes - Contraindications associated with Anafranil include the following: Anafranil is contraindicated in patients with a history of hypersensitivity to Anafranil or other tricyclic antidepressants; the use of MAOIs intended to treat psychiatric disorders with Anafranil or within 14 days of stopping treatment with Anafranil is contraindicated because of an increased risk of serotonin syndrome; the use of

Anafranil within 14 days of stopping an MAOI intended to treat psychiatric disorders is also contraindicated; starting Anafranil in a patient who is being treated with linezolid or intravenous methylene blue is also contraindicated because of an increased risk of serotonin syndrome; Anafranil is contraindicated during the acute recovery period after a myocardial infarction. Warnings associated with Anafranil include: antidepressants increased the risk compared to placebo of suicidal thinking and behavior (suicidality) in children, adolescents, and young adults in short-term studies of major depressive disorder (MDD) and other psychiatric disorders; anyone considering the use of clomipramine hydrochloride or any other antidepressant in a child, adolescent, or young adult must balance this risk with the clinical need; short-term studies did not show an increase in the risk of suicidality with antidepressants compared to placebo in adults beyond age 24; there was a reduction in risk with antidepressants compared to placebo in adults aged 65 and older; depression and certain other psychiatric disorders are themselves associated with increases in the risk of suicide; patients of all ages who are started on antidepressant therapy should be monitored appropriately and observed closely for clinical worsening, suicidality, or unusual changes in behavior; families and caregivers should be advised of the need for close observation and communication with the prescriber; clomipramine hydrochloride is not approved for use in pediatric patients except for patients with obsessive compulsive disorder.

Considerations for special patient populations - Health care professionals should note the following: clinical studies of Anafranil did not include sufficient numbers of subjects age 65 and over to determine whether they respond differently from younger subjects; 152 patients at least 60 years of age participating in various U.S. clinical trials received Anafranil for periods of several months to several years. No unusual related adverse events were identified in this population; other reported clinical experience has not identified differences in responses between the elderly and younger patients; in general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function and of concomitant disease or other drug therapy.

Risperidone (Risperdal)

Medication notes - Patients suffering from dementia may be treated, in some capacity, with antipsychotic agents. Risperdal is an example of an atypical antipsychotic agent. Health care professionals should note that the use of antipsychotic agents in older adults with dementia may be considered an "off label" use. With that said, health care professional should possess some insight into antipsychotic agents such as Risperdal. Common side effects of Risperdal include:

somnolence, appetite increases, fatigue, rhinitis, upper respiratory tract infection, vomiting, coughing, urinary incontinence, saliva increased, constipation, fever, Parkinsonism, dystonia, abdominal pain, anxiety, nausea, dizziness, dry mouth, tremor, rash, akathisia, and dyspepsia.

Safety notes - Contraindications associated with Risperdal include a known hypersensitivity to the product. Warnings associated with Risperdal include: elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death; Risperdal is not approved for use in patients with dementia-related psychosis. Additional warnings associated with Risperdal include the following: leukopenia, neutropenia, and agranulocytosis have been reported with antipsychotics, including Risperdal; patients with a history of a clinically significant low white blood cell count (WBC) or a drug-induced leukopenia/neutropenia should have their complete blood count (CBC) monitored frequently during the first few months of therapy and discontinuation of Risperdal should be considered at the first sign of a clinically significant decline in WBC in the absence of other causative factors.

Considerations for special patient populations - Health care professionals should note the following: for elderly or debilitated patients, or patients with severe renal or hepatic impairment, or a predisposition to hypotension or for whom hypotension poses a risk, lower, initial doses (0.5 mg twice daily), followed by increases in dose increments of no more than 0.5 mg twice daily are recommended; increases to dosages above 1.5 mg twice daily should occur at intervals of at least 1 week.

Section 3: Summary

Individuals suffering from dementia/dementia associated ISB often require treatment. Treatment options for dementia/dementia associated ISB may include: psychotherapy, cognitive behavioral therapy, support groups, psychoeducation, establishing routines centered around sleep and bedtimes as well as the use of medications. Medications that may be used to treat patients suffering from dementia/dementia associated ISB include: Namenda, Aricept, Razadyne, Razadyne ER, Exelon, Exelon Patch, Zoloft, Celexa, Paxil, Lexapro, Desyrel, Anafranil, and, potentially, antipsychotic agents (e.g., Risperdal). Health care professionals should possess insight into the aforementioned treatment options to safely and effectively administer health care to patients.

Section 3: Key Concepts

- Health care professionals should possess insight into the dementia-related non-pharmacological and pharmacological treatment options to safely and effectively administer health care to patients.
- Dementia-related non-pharmacological treatment options may include the following: psychotherapy, cognitive behavioral therapy, support groups, psychoeducation, and establishing routines centered around sleep and bedtimes.
- Dementia-related pharmacological treatment options may include the following medications: Namenda, Aricept, Razadyne, Razadyne ER, Exelon, Exelon Patch, Zoloft, Celexa, Paxil, Lexapro, Desyrel, Anafranil, and, potentially, antipsychotic agents (e.g., Risperdal).

Section 3: Key Terms

Psychotherapy (also known as talk therapy) - the use of psychological techniques and/or psychotherapeutic approaches to help individuals overcome problems and develop healthier habits⁵

Cognitive behavioral therapy - a form of psychotherapy which focuses on helping individuals solve problems and create positive outcomes by changing unrealistically negative patterns of thought and behavior⁶

Psychoeducation - the process of providing information and education to patients seeking or receiving treatment for mental health-related conditions¹

Section 3: Personal Reflection Question

What therapeutic options may be used to treat patients suffering from dementia/dementia associated ISB?

Case Study: Dementia Associated ISB

An ISB-related case study is presented below to review the concepts found in this course. A case study review will follow the case study. The case study review includes the types of questions health care professionals should ask themselves when considering patients exhibiting ISB and how it relates to health care. Additionally, reflection questions will be posed, within the case study review, to encourage further internal debate and consideration regarding the presented case study and ISB. The information found within the case study and case study review was derived from materials provided by the United States Department of Health & Human Services, the CDC, and the FDA.^{2,3,7}

Case Study

A 78-year-old male patient with Alzheimer's disease associated dementia is admitted to a health care facility. The patient has no known drug allergies and is currently on a variety of medications including: lisinopril, warfarin, and Namenda 5 mg once daily. A few days after the patient's admission into the health care facility, the patient begins to exhibit the following behavior: genital touching, inappropriate touching of other patients (e.g., initiating extended hugs with other patients that include body rubbing), engaging health care professionals and other patients in conversations regarding sex, and the use of foul language which accompanies disruptive outbursts. Health care professionals note that the patient's aforementioned behaviors are disturbing other patients. Health care professionals would like to address the patient's recent inappropriate and disturbing behaviors- however, they are not sure how to proceed.

Case Study Review

What patient details may be relevant to the possible presence of dementia associated ISB?

The following patient details may be relevant to the presence of potential dementia associated ISB: the patient is 78 years old, the patient is suffering from Alzheimer's disease associated dementia, the patient is currently on lisinopril, warfarin, and Namenda 5 mg once daily, the patient exhibits the following behavior: genital touching, inappropriate touching of other patients (e.g., initiating extended hugs with other patients that include body rubbing), engaging health care professionals and other patients in conversations regarding sex, and the use of foul language which accompanies disruptive outbursts, the patient's aforementioned behaviors are perceived to be inappropriate, disruptive, and disturbing, and the patient's behavior reaches a point to wear it requires possible health care intervention.

Are there any other patient details that may be relevant to the possible presence of dementia associated ISB; if so, what are they?

How are each of the aforementioned patient details relevant to the possible presence of dementia associated ISB?

Each of the previously highlighted patient details may be potentially relevant to the possible presence of dementia associated ISB. The potential relevance of each patient detail may be found below.

The patient is 78 years old - the patient's age is potentially relevant because dementia-related ISB and, specifically, Alzheimer's disease associated dementia-

related ISB typically affects older adults (i.e., individuals 65 years or older). Thus, the patient's age potentially supports the presence of dementia associated ISB.

The patient is suffering from Alzheimer's disease associated dementia - the previous patient detail is relevant because it provides a context for understand the patient's behavior. Also, it establish the following: the patient is suffering from dementia.

The patient is currently on lisinopril, warfarin, and Namenda 5 mg once daily - often patients suffering from dementia have other health-related conditions or issues such as hypertension, diabetes, and/or enlarged prostates. It is important for health care professionals to understand that patients potentially suffering from dementia associated ISB may also be dealing with other health-related conditions or issues. Understanding that a patient may be suffering from multiple health-related conditions can help health care professionals better understand a patient's behavior (i.e., possessing insight into a patient's medial history can help health care professionals determine if a patient's behavior is associated with ISB or another health-related issue). Identifying patient behaviors related to ISB and patient behaviors related to other health-related concerns/issues can help health care professionals adequately address patients' needs. With that said, the patient included in the above case study is currently on lisinopril and warfarin, which is a relevant note because the previous mediations indicate the presence of multiple health-related conditions/issues that may account for the patient's recent behavior. Health care professionals should consider reviewing a patient's medical history, relevant patient documentation, and medication profile when a attempting to address patient behavior.

The patient included in the above case study is also taking Namenda 5 mg once daily. The previous patient detail is relevant because it indicates that the patient is receiving treatment for Alzheimer's disease associated dementia. The previous patient detail is also relevant because it may provide a context for the patient's behavior. Health care professionals should note the following points of interest regarding Namenda: Namenda is a NMDA receptor antagonist indicated for the treatment of moderate to severe dementia of the Alzheimer's type; the typical, recommended initial adult dose of Namenda is 5 mg once daily; Namenda doses may be increased in 5 mg increments to a maintenance dose of 10 mg twice daily (health care professionals should not the following: a minimum of 1 week of treatment with the previous dose should be observed before increasing the dose).

The patient exhibits the following behavior: genital touching, inappropriate touching of other patients (e.g., initiating extended hugs with other patients that include body rubbing), engaging health care professionals and other

patients in conversations regarding sex, and the use of foul language which accompanies disruptive outbursts - the previous patient detail is relevant because the outlined patient behaviors represent behaviors consistent with ISB. Health care professionals should note that characteristics of dementia associated ISB may include the following: sexual behavior, inappropriate behavior, disruptive behavior, personality changes leading to abnormal sexual behavior, mood changes leading to abnormal sexual behavior, cognitive difficulties which lead to abnormal sexual behavior, confusion leading to perceived sexual behavior, disorientation leading to perceived sexual behavior, memory problems leading to perceived sexual behavior, dementia associated stress and frustration which leads to perceived sexual behavior, hallucinations and delusions which lead to abnormal sexual behavior, poor judgment, poor reasoning, an abnormal perception regarding sex and/or sexual behavior, engaging in conversations regarding sex, using what may be considered "foul language," aggressive sexual behavior, touching and/or grabbing other individuals, making obscene gestures, disrobing in public, public masturbation, requesting health care that involves genital touching, restlessness due to recurrent sexually-driven thoughts, sleep disturbances due to recurrent sexually-driven thoughts, hypersexuality, and changes in sexual behavior. Health care professionals should also note that patient monitoring and patient observation may be necessary to identify the aforementioned characteristics of dementia associated ISB.

The patient's aforementioned behaviors are perceived to be inappropriate, disruptive, and disturbing - the previous patient detail is relevant because it highlights behavior that represents core elements of ISB. Thus, the perceived nature of the patient's behavior support the presence of dementia associated ISB.

The patient's behavior reaches a point to where it requires possible health care intervention - the aforementioned patient detail is relevant because it provides insight into the severity of the patient's behavior. Health care professionals should note the following: understanding a patient's behavior may be essential to the safe and effective administration of health care.

What other ways, if any, are the patient details relevant to the possible presence of dementia associated ISB?

Is the patient exhibiting dementia associated ISB?

Based on the information provided in the case study, it does appear that the patient may be exhibiting dementia associated ISB?

How can health care professionals use patient monitoring and patient observation to confirm the presence of dementia associated ISB?

How can health care professionals help manage the patient from the above case study?

The patient's team of health care professionals can help manage the patient by adhering to the following recommendations: health care professionals should be aware of patients suffering from dementia associated ISB, health care professionals should monitor patients exhibiting ISB, health care professionals should avoid touching patients exhibiting ISB in a "friendly manner," health care professionals should be aware and conscious of their body language, health care professionals should understand patients suffering from dementia associated ISB may misinterpret specific cues or behaviors, health care professionals should wear health care appropriate attire, health care professionals should avoid patient triggers, health care professionals should work to redirect any patient conversations regarding sex or sexual behavior, health care professionals should not indulge "foul language," health care professionals should not indulge obscene gestures, health care professionals should not positively reinforce ISB, health care professionals should have verbal responses ready to address ISB, identify times of day when ISB may occur from a specific patient, identify patients that are prone to public disrobing, identify patients that are prone to public masturbation; health care professionals should be aware that patients suffering from dementia may experience hallucinations and/or delusions; health care professionals should understand that patients suffering from dementia associated ISB may also be dealing with other health-related conditions or issues; health care professionals may want to consider using diversionary tactics, allow patients to hold a "safe item" in their hands, keep patients busy; health care professionals should work to maintain consistency when caring for patients suffering from dementia associated ISB, engage patients in activities to help reduce dementia associated stress and frustration, ensure patients are comfortable, provide patients appropriate attention; health care professionals should establish boundaries with patients; health care professionals should not meet aggressive sexual behavior from a patient with aggression and, perhaps most importantly, health care professionals should remain calm when caring for patients suffering from dementia associated ISB.

How can health care administrators or other individuals representing a health care organization help manage patients exhibiting dementia associated ISB, like the patient included in the above case study?

What non-pharmacological treatment options may be used to address the patient's dementia associated ISB?

The following non-pharmacological treatment options may be used to address the patient's dementia associated ISB: psychotherapy, cognitive behavioral therapy,

support groups, psychoeducation, and/or establishing routines centered around sleep and bedtimes. Additional non-pharmacological treatment options that may be used to address the patient's dementia associated ISB include the following: ensuring the patient is receiving adequate nutrition and physical activity. When considering physical activity for older adult patients, health care administrators/professionals should consider the following points of interest:

- Older adults should follow the adult guidelines for physical activity. When older adults cannot meet the adult guidelines for physical activity, they should be as physically active as their abilities and conditions will allow.
- Older adults should do exercises that maintain or improve balance if they are at risk of falling.
- Older adults should determine their level of effort for physical activity relative to their level of fitness.
- Older adults with chronic conditions should understand whether and how their conditions affect their ability to do regular physical activity safely.

Are there any other non-pharmacological treatment options that may be used to address the patient's dementia associated ISB; if so, what are they?

What pharmacological treatment options may be used to address the patient's dementia associated ISB?

There are many pharmacological treatment options that may be used to address the patient's dementia, including the following medications: Namenda, Aricept, Razadyne, Razadyne ER, Exelon, Exelon Patch, Zolof, Celexa, Paxil, Lexapro, Desyrel, Anafranil, and, potentially, antipsychotic agents (e.g., Risperdal). When considering the aforementioned pharmacological treatment options, health care professionals should weigh the benefits and risks of each medication, as well as analyze patient specific factors such as: weight, renal function, hepatic function, and current medications to determine the most appropriate pharmacological treatment strategy, which may include adding additional medications and/or increasing current patient medication doses. That being said, it should be noted that the patient, included in the above case study, is on Namenda. As previously mentioned, Namenda is a NMDA receptor antagonist indicated for the treatment of moderate to severe dementia of the Alzheimer's type. It should also be noted that the patient's Namenda dose is 5 mg once daily. Health care professionals should note that Namenda doses may be increased, in 5 mg increments, to a maintenance dose of 10 mg twice daily. Thus, for the patient included in the above case study, it may be a potential option to increase his Namenda dose. When considering an increase in Namenda doses health care

professionals should note the following: a target dose of 5 mg twice daily is recommended in patients with severe renal impairment; Namenda should be administered with caution to patients with severe hepatic impairment.

Are there any other non-pharmacological treatment options that may be used to address the patient's dementia associated ISB; if so, what are they?

Conclusion

ISB may refer to a type of behavior that is characterized by potentially disruptive and/or inappropriate sexually driven actions. ISB is often associated with dementia and caring for older adult patients suffering from ISB can be a challenge. Thus, health care administrators and other health care professionals should possess an understanding of dementia, dementia associated ISB as well as ISB management and dementia treatment. That being said, ISB-related recommendations were developed to help both health care professionals and health care organizations manage patients exhibiting ISB. Health care professionals and health care organizations may help adequately manage patients exhibiting ISB by following such recommendations.

Treatment options for dementia/dementia associated ISB may include: psychotherapy, cognitive behavioral therapy, support groups, psychoeducation, establishing routines centered around sleep and bedtimes as well as the use of medications. Medications that may be used to treat patients suffering from dementia/dementia associated ISB may include: Namenda, Aricept, Razadyne, Razadyne ER, Exelon, Exelon Patch, Zoloft, Celexa, Paxil, Lexapro, Desyrel, Anafranil, and, potentially, antipsychotic agents (e.g., Risperdal). Health care professionals should possess insight into the aforementioned treatment options.

Finally, health care professionals and health care organizations should work together to care for patients exhibiting dementia associated ISB. A united effort by individual health care professionals and health care administrators, representing health care organizations, can help ensure the safe and effective care of older adult patients in need.

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