Nutrition and Mental Health in Long Term Care

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Objectives

- Discuss the mental health diagnoses we are most likely to see in long-term care as well as their definitions
- Consider the different nutrition challenges for Residents with mental health diagnoses
- Explore options for nutrition interventions in this population

About Me

- Have been an RD since Oct 2010
- Have worked in inpatient, outpatient, and LTC psychiatric clinical situations
- Nearly 1 in 5 US adults has a mental illness [2]
  - I am one of them

Mental Health Stigma

- It is estimated that the majority of people (up to 80+%) will experience some form of mental disorder in their lives, with most people recovering from these disorders [43]
- In one study looking at mental illness in the news media, 55% of stories mentioned violence [44]
  - These depictions can increase the stigma towards mental illness
- People with severe mental illness are over 10x more likely to be the victim of a violent crime compared to the general population [9]
- Violence perpetrated by someone with mental illness is often related to another co-occurring factor, such as substance abuse [45]
  - In one study, crimes committed by people with a mental illness were only directly related or mostly related to their symptoms (hallucinations, delusions, impulsivity, etc.) 18% of the time [46]

Mental Health Diagnoses [2]

Diagnosis	Prevalence	Symptoms
Depression	Up to 5% of elderly adults living in the community [1] but up to 49% of those in nursing homes as of 2012 [35]	May include memory difficulties, personality changes, fatigue, loss of appetite, isolation, SI [6]
Anxiety	14.5% of people aged 82 or older living in the community are found to have anxiety [3]	May include feeling nervous/restless/tense, panic attacks, difficulty concentrating/ sleeping, GI issues, having the urge to avoid things that trigger anxiety [7]
Alzheimer’s Disease	Estimated to affect 1 in 9 adults 65 or older [5]	Memory loss affecting daily life, difficulty completing familiar tasks, and decreased or poor judgement are a few of the potential symptoms [8]
Posttraumatic Stress Disorder	Lifetime prevalence of 6.8%	Causes intense, disturbing thoughts and feelings related to a traumatic experience

Mental Health Diagnoses [2, 5]

Diagnosis	Prevalence	Symptoms
Borderline Personality Disorder	Prevalence of 1.4% in the US	Noted pattern of instability in moods, behavior, etc. that can result in impulsive actions and unstable relationships
Eating Disorders	Lifetime prevalence of 2.7% and twice as prevalent among women	Cause severe disturbances in eating behaviors and related thoughts and emotions
Obsessive Compulsive Disorder	Lifetime prevalence in U.S. of 2.3%	Causes recurring, unwanted thoughts, ideas, or sensations that make a person feel driven to do something repetitively
Schizophrenia	Affects <1% of the US population	Can cause delusions, hallucinations, trouble with thinking and concentration, and lack of motivation
Bipolar Disorder	Lifetime prevalence of 4.4% in the US	Cause changes to someone's mood, energy, and ability to function

COVID and Mental Health

- One cohort study showed that people who have a prior psychiatric diagnosis and were hospitalized for COVID had a higher mortality rate than those without psychiatric conditions [51]
- Having a recent dx of a mental disorder increases risk of COVID infection [52]
  - Even higher risk for African-Americans and women
  - Hospitalization and death rates higher for men

COVID and Mental Health (cont.)

- A dx of Schizophrenia is one of the comorbidities that puts someone at higher risk for severe COVID outcomes [50]
- Depression and anxiety increasing d/t COVID [38, 39]
  - Inpatient stays for eating disorders increased during the latter half of 2020 [53]
- 18% of COVID survivors were dx with a mental illness within 3 months [41]
- A study of Italians showed that 17.8% of people had decreased appetite while 34.4% had increased appetite during COVID lockdown [40]
  - Almost 50% of respondents thought they had gained weight during COVID lockdown [40]

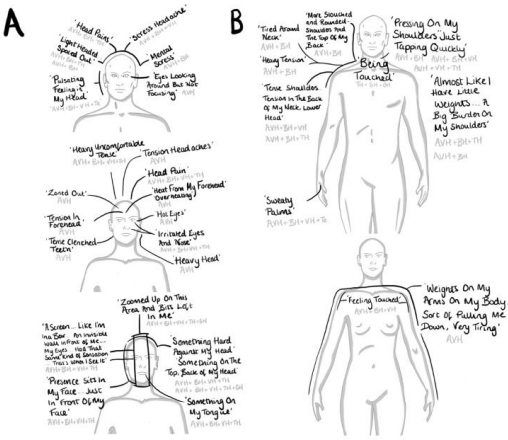
A few more facts

- Depression
  - In 2017, approximately 7.1% of all US adults had a major depressive episode [2]
  - Dysthymia is "a continuous long-term … form of depression" [59]
- Anxiety
  - Anxiety and depression often co-occur [3]
  - 18.1% of the U.S. adult population has an anxiety disorder [4]
    - Most common mental illness [12]
  - Multiple types of anxiety disorders: Generalized Anxiety Disorder, Panic Disorder, Phobias, Agoraphobia, Social Anxiety Disorder, Separation Anxiety Disorder [5]

A few more facts

- Schizophrenia
  - Many misconceptions such as propensity for violence or homelessness, "split personality"
  - Half of people with schizophrenia have co-occurring mental and/or behavioral health disorder [2]
  - One of top 15 causes for disability worldwide and individuals have increased risk of suicide [2]
- Severe mental illness has been found to increase risk for death from coronary heart disease and stroke [69]
  - Related in part to antipsychotic use and elevated BMI [70]

Body Maps of Hallucinations [58]



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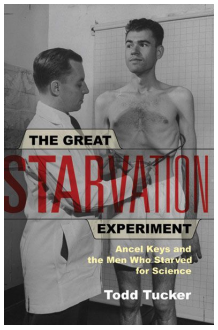
Symptom Effect on Nutrition

- Appetite changes
  - In one study, trait anxiety scores in women were positively associated with BMI, emotional eating scores, as well as kcal and kcal from fat consumed at a measured buffet [12]
    - Trait anxiety scores for men were also positively correlated with kcal of fat consumed
  - Approx ½ of people with MDD experience decreased appetite while ⅓ have increased appetite [13]
    - Decreased appetite associated with increased nighttime cortisol
    - Increased appetite associated with increased insulin resistance, higher leptin, lower ghrelin
      - If depression is the root cause of decreased appetite, it should be addressed first
  - Changes in eating, mood, sleeping, energy levels, or alcohol consumption can all indicate mental health issues for older adults [55]
- Weight changes
  - Medications and/or disease state may affect appetite and/or metabolism

Nutrition's Effect on Mental Illness

- In a starvation state, such as a restricting-type eating disorder, we see many psychological effects caused by lack of adequate nutrition
  - Food obsessions/dreams [31]
  - Fatigue
  - Irritability
  - Depression
  - Apathy
  - Potential effects on ability to think
- One study found that obesity was associated with an ~25% increase in the odds of mood and anxiety disorders [47]



Some Nutrition-Related Side Effects of Meds [10, 42]

Weight Gain/Increased Appetite	Weight Loss/Decreased Appetite	Weight/appetite changes
Quetiapine (Seroquel)	Fluoxetine (Prozac)	Valproic Acid (Depakote)
Risperidone (Risperdal)	Clonazepam [11] (Klonopin)	Lorazepam (Ativan)
Gabapentin (Neurontin)	Topiramate (Topamax) - may also change ability to taste	Levothyroxine (Synthroid)
Olanzapine (Zyprexa)	Haloperidol (Haldol)	Ziprasidone (Geodon) - weight gain, loss of appetite
Mirtazapine (Remeron)	Duloxetine (Cymbalta)	
Aripiprazole (Abilify)	Lamotrigine (Lamictal)	
Paliperidone (Invega)	Citalopram (Celexa)	

Medication Notes

- Many psychiatric medications take weeks or months to have a full effect [14]
  - Look for med changes that occurred 1-2 months earlier
- Can work with PharmD to see if there are alternative meds that may combat current side effects
  - May be able to help figure out alternatives based on insurance coverage

Nutrition Sidebar [30]

Nutrient	Function Examples	Source Examples
Vitamin C	Makes collagen, protein metabolism	Citrus fruits, tomatoes, potatoes
Vitamin B6	Involved in many enzyme reactions, biosynthesis of neurotransmitters	Fish, poultry, organ meats, starchy vegetables (including potatoes), non-citrus fruits
Folate (Vit B9)	Making DNA and RNA, amino acid metabolism	Plant foods such as dark green leafy vegetables, fruits, nuts, beans
Vitamin B12	Important for nerves, blood cells, and DNA. Note- Increased age, decreased stomach acidity, and pernicious anemia may make absorption difficult.	Primarily animal foods- fish, meat, poultry, eggs, dairy- but is fortified in other foods such as cereals or nutritional yeast
Vitamin D	Primarily affects bone health, however, many cells have Vitamin D receptors	Fatty fish, fortified milk, and other fortified products. Can obtain from sun exposure.

Nutrition Sidebar [30]

Nutrient	Function Examples	Source Examples
Iron	Helps transfer oxygen to tissues, supports muscle metabolism, necessary for neurological development	Lean meat, seafood, nuts, beans, vegetables, and fortified grain products
Zinc	Cell metabolism, sense of taste and smell	Red meat, poultry, beans, nuts
Magnesium	Involved in protein synthesis, muscle and nerve function, blood glucose control, blood pressure regulation	Green leafy vegetables, most foods that contain fiber, legumes, nuts, seeds
Omega-3 fatty acids	Help form the structure of cell membranes, perform other functions	Fish and certain oils such as fish, flaxseed, canola and soybean

Food Consumption and Depression

- When depressed, people are more likely to skip meals, have poor appetite, and/or prefer sweet foods [17]
- SSRIs can inhibit calcium uptake by bones and lower BP leading to falls [17]
- Another study found that "greater appetite and weight loss symptoms during a period of LLD (late-life depression) predicted risk of...dementia" [16]

Some of the Research

Diagnosis	Nutrient/Diet	Effect
Depression	Zinc	Levels often lower [17]; supplementation may enhance mood [62] Low intake of zinc and copper associated with 3x increased risk for depression and anxiety symptoms [61]
	Folate	Levels avg 25% lower [17] Increased dietary intake associated with 75% reduced risk in Hispanics [64]
	Low Carb Diet	May affect production of serotonin and tryptophan [17]
	Vitamin D	8.4% lower serum concentration [15]
	Omega 3 fatty acids	May play a role [24]
	Vit B6	Appears to be an inverse relationship between depressive symptoms and consumption of Vit B6 from food for women [32, 56]
	Magnesium	Low levels may be associated with symptoms [63]

Some of the Research

Diagnosis	Nutrient	Effect
Schizophrenia	Vit D	Deficiency r/t psychosis, supplementation may help [21] Neonatal def in ethnic Danes was associated with a 44% increased risk of dx [66] A UK study showed that only 8.7% of adult psychiatric inpatients were Vit D sufficient and people with schizophrenia had the lowest mean serum Vit D out of the "most common diagnostic groups" [67]
	Folic acid	An Egyptian study showed 41.5% of patients had low folate levels [68] Supplementation may help [21]
	Vit B12	Same Egyptian study showed 39% of patients with low B12 levels [68] Supplementation may help [21]
	Iron	Low serum ferritin levels associated with more negative symptoms in first episode psychosis [65]

Some of the Research

Diagnosis	Food/herb/Vitamin	Effect
Anxiety	Fruits and Vegetables	At least 5 servings/day may decrease risk [36]
	Ashwagandha	May provide reduction of symptoms [54]
Dementia	Vit B12	Supplementation may delay onset [17]
Mental Illness or Substance Use Disorder	Vit C	The 25% of adults with these dx are responsible for 40% of cigarettes smoked in US [22] increasing need for Vit C by 35 mg/day [23]

Vitamin D Supplementation

- Average cost of vit D test is $50 [25]
  - Insurance only covers certain diagnoses such as osteoporosis, CKD stages 3 and 4, hyperparathyroidism, and Vit D def [26]
  - The Institute of Medicine found that, on average, most people have adequate Vit D levels [27]
    - However, in a study of postmenopausal women, 52% had suboptimal Vit D levels [71]
  - Mayo Clinic rec to draw Vit D levels for elderly people, esp if they do not get much sun [37]

Other Vitamin Supplementation

- Vitamin B12 and folate levels can be checked together and also cost ~$50 [28]
  - American Society for Clinical Pathology doesn't rec to check folate levels, but to instead just supplement with folic acid [29]
  - A B complex supplement can cost $0.068/day ($24.82/year) [33]
- Request for lab draws and recommendation for vitamin supplementation are forms of nutrition intervention that may be beneficial to Residents
  - Try to draw with next scheduled labs
- MVI or prenatal might be better option for some

Nutrition Interventions

- To slow weight gain
  - 1 portion at a time
  - Smaller portions to start
  - Discourage Calorie-dense foods
  - Watch the drinks
  - Reconsider the snack cart
  - Have activities focus less on food-related activities if possible
  - Consider recommending an appetite suppressant
- To slow weight loss
  - Supplements- between or at meals, with med pass
  - Snacks
  - Food interventions
  - Med changes
  - Encouraging Res to eat with others [57]

Nutrition Interventions

- To help with meal choices
  - Visual plates- Regular texture regardless of diet
- To potentially reduce symptoms
  - Encourage diet balance/variation
  - Encourage consumption of fruits and vegetables
    - This may or may not work for everyone, depending on dx
    - Consider how food is being prepared
      - Steamed vs sauteed vs boiled vegetables
  - MVI
- To potentially help with paranoia regarding food
  - Serve pre-packaged items in their packaging to the Resident
  - Allow Residents to keep fridges in their rooms for personal food
    - Need to be checked for temp and cleanliness regularly
  - Allow Residents to order take out if they are more comfortable

Mindfulness

- "Mindfulness is a type of meditation in which you focus on being intensely aware of what you're sensing and feeling in the moment, without interpretation or judgment." [48]
- Increased mindfulness may reduce emotional eating [49]
- Try mindfulness exercises
  - Eating an item with all your senses

Additional Intervention Recommendations

- Exercise may have an anti-depressant effect for older adults, especially moderate-intensity exercise [20]
  - Rec to be in a group setting and include both aerobic exercise and strength training
- Diet education is an option but Resident must be agreeable
- Encourage diet balance as able
- Can consider therapeutic diet if facility provides
  - CCHO
  - NAS

Nutrition Intervention Considerations

- Do you have Residents who need additional protein for wound healing or fluid balance management but who are obese?
  - Consider protein powders or liquid supplements
- Do you have behaviors that need to be managed at meal times?
  - Decide the what, how, and why as a team
- Is your time worth the cost of a different/unique product?
- Resident rights are primary, regardless of having an invoked POA
  - You have the right to make choices, even if they are bad ones
  - My responsibility is to educate and the Resident may comply if they so choose

Individualized Care

- It is important to get the Resident's opinion on what they want to do
  - If residents are confused or unavailable to talk to, I sometimes will try an intervention for a week or two to see how they like it and then try to talk to them about it, if able
- It is also important to check back to see if someone still wants the intervention or if they are still declining one
- Documented meal intakes may not show the whole picture
  - People might prefer to eat in their room - room tray intake documentation not always available
  - Resident may prefer to snack versus eating full meals
  - Resident may choose to consume liquid supplements instead of eating

Notification

- As with any other LTC Resident, must update PCP re: weight loss/gain
  - May be helpful to ask if weight gain is felt to be unavoidable r/t potential side effects of needed meds
    - Need to know which meds to look for and confirm their potential side effects
    - Does not necessarily help MDS
  - In general, I find that weight gain r/t meds eventually levels off
- Better to notify on nothing than assume it's not important

Teamwork is Critical

- Nursing is responsible for acute/critical needs
  - Can help determine if a re-weigh is needed and if MD/PCP or RD needs immediate notification
- Dietitian is responsible for big picture, long-term needs

Additional Thoughts

- Put yourself in their shoes
- Be aware of triggering language
  - Weight discussions for people with eating disorders
  - "I'm keeping an eye on you"
- It is generally up to the therapist or psychiatrist to determine which behaviors should be challenged and which should be worked around
- As of 2019, "over 2 million people received SSDI benefits due to a mood, psychiatric, or other mental disability, amounting to one in five SSDI beneficiaries" [18]
- Resources:
  - https://www.psychologytoday.com/us/blog/happiness-is-state-mind/202201/stigmatizing-language-in-mental-health-and-addiction
  - https://www.tiktok.com/@xoradmagical/video/7057277960176422150?is_from_webapp=1&sender_device=pc&web_id7057538059215455749

Self-Care is Important for Providers, Too

- 67% of healthcare workers screened positive for burnout in a pandemic study [19]
- You can't take care of your Residents if you aren't taking care of yourself
  - Avoid activities which may increase stress
    - Doomscrolling
    - Drug/alcohol abuse
  - Set aside time for yourself daily or weekly and put it on your calendar
    - Can be as simple as a self-imposed "time out"
    - Schedule a massage or lunch with a friend
  - Learn your personal "benchmarks" to help determine when you are too stressed vs doing well
  - Don't be afraid to get therapy for yourself if you need it

Find Healthy Coping Mechanisms

- Write up a list of all your best coping mechanisms
    - Journaling
    - Exercise
    - Healthy eating
    - Talking to a friend
    - Grounding
    - Deep breathing
  - When we are stressed, we sometimes forget
    - i.e. painting my nails when I need to sit still
  - We have to have multiple tools in the toolbox
    - Not every tool works for every situation
    - Sometimes something isn't available to us at the present time
- Write down all of your personal signs of stress to remind you to check in with yourself
  - Can even prioritize them by stress level
- Be forgiving of yourself

Questions?

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