

Clinical Module 9 – Behavioral Health

Module 9 questions:

I. Definitions/Abbreviations

Tardive dyskinesia – a disorder that involves involuntary movements especially of the lower face.

SSRI – stands for Selective Serotonin Reuptake Inhibitors. The drugs in this group are commonly prescribed for depression.

Somatization Disorder – this disorder is defined as having frequent complaints of physical symptoms to the point that it affects the person emotionally and affects their ability to function. The patient is so preoccupied with their symptoms that they make constant visits the doctor to find treatment.

Bipolar Disorder – also called manic depressive disorder. This disorder causes a person to have unusual shifts in mood, energy, and activity levels which in turn affect a person's ability to perform day-to-day tasks.

Munchausen Syndrome – a type of mental illness in which an individual acts like he/she has a mental or physical illness but, he/she does not. This person has made up all the symptoms.

Malingering – a disorder in which a person pretends to have physical or psychological symptoms in order to take advantage of incentives/rewards such as missing work, getting money or insurance settlements, avoiding punishment, etc.

II. Pathophysiology

A. Describe the clinical symptoms which are manifested by patients with anorexia nervosa. How do these differ from the clinical symptoms of patients with bulimia? What criteria are used to diagnose anorexia nervosa, bulimia and EDNOS?

Clinical symptoms of anorexia nervosa are extreme weight loss, thin appearance, abnormal blood counts, elevated liver enzymes, fatigue, dizziness or fainting, seizure, brittle nails, amenorrhea, lanugo, constipation, irregular heart rhythm, low blood pressure, dehydration, and osteoporosis.

Clinical symptoms of bulimia nervosa are abnormal bowel function, bloating, dehydration, fainting, seizures, fatigue, dry sin, irregular heartbeat, amenorrhea, tingling in the hands or feet, and muscle cramps. Other symptoms include obsession with body weight and dieting, repeated eating episodes, inability to control bingeing, and purging behaviors following a binge.

The DSM-5 diagnostic criteria for anorexia nervosa are:

1. Restriction of energy intake relative to requirement, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health.
2. Intense fear of gaining weight/becoming fat, or persistent behavior that interfere with weight gain, even though that person is at a significantly low weight.
3. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of current low body weight.

The DSM-5 diagnostic criteria for bulimia nervosa are:

1. Recurrent episodes of binge eating.
2. Recurrent inappropriate compensatory behaviors (self-induced vomiting, misuse of laxative, fasting, or excessive exercise) in order to prevent weight gain.
3. Binge eating and inappropriate compensatory behaviors both occur, on average at least once a week for 3 months.
4. Self-evaluation is unduly influenced by body shape and weight.
5. The disturbance does not occur exclusively during episodes of anorexia nervosa.

The DSM-5 diagnostic criteria for EDNOS or OSFED state that to be diagnosed with this disorder, a person must present with a feeding or eating behaviors that cause clinically significant distress and impairment in areas of functioning but do not meet the full criteria for any of the other eating disorders.

B. Describe the clinical symptoms of depression. How might diet impact the neurophysiological factors associated with this disorder?

Some clinical symptoms of depression include persistent feeling of sadness or anxiousness, feeling of hopelessness or pessimism, irritability, decreased energy or fatigue, moving or talking more slowly, feeling restless or trouble sitting still, difficulty concentrating, remembering, or making decisions, difficulty sleeping, waking up early, or oversleeping, appetite and/or weight changes, thoughts of deaths or suicide or suicide attempts. Lastly, aches or pains, headaches, cramps, or digestive problems without a clear cause and/or are not eased with treatment.

According to research, individuals who follow a diet high in intakes of fruits, vegetables, whole grains, fish olive oil, low-fat dairy, antioxidants, and small intakes of animal foods had lower depression risks. On the other hand, those who consumed processed foods, high-fat products, refined grains and had low intake of fruits and vegetables had an increased risk for depression.

C. Describe the most common clinical symptoms of a patient with Bipolar disorder. How might these impact nutritional intake?

The most common clinical symptoms of bipolar disorder include feelings of intense emotion, changes in sleeping patterns, and unusual episodes. Individuals with bipolar disorder experience both manic and depressive episodes. Individuals experiencing manic episodes may show signs of feeling elated, increased energy and activity levels, agitated or irritable, talking very fast, or doing risky things. Individuals experiencing depressive episodes may show signs of feeling sad, having little energy, having decreased activity levels, having trouble sleeping or sleeping too much, forgetting things a lot, feeling tired, thinking suicidal thoughts, and eating too much to too little.

It is important to watch out for weight fluctuations for individuals with bipolar disorder. Depending on how he/she feels, food intake may either be increased dramatically or be nonexistent. This constant change in food intake is not good for the body since it either needs to compensate for low-food intake or would have to deal with an excess of nutrients.

III. Drug Therapy

A. For each of the following classifications of drugs provide: indication/contraindication for use, nutrient/drug interactions, side effects of the drug. The answer to this question may be provided in chart form. Note that examples of specific drugs that fall within each classification are provided.

1. Neuroleptic: Risperidone, olanzapine, clozapine, aripipazole (abilify)
2. TCA (tricyclic antidepressants): Elavil, pamelor
3. Stimulants: Adderall, Ritalin

4. Alcohol deterrent: Antabuse, naltrexone.

Drug Classification	Indication/Contraindication for use	Nutrient/Drug Interactions	Drug Side Effects
Neuroleptic	<p>Indicated for:</p> <ul style="list-style-type: none"> - Treatment of schizophrenia or schizoaffective disorder. - Treatment of acute manic or mixed episodes associated with Bipolar I. - Treatment of irritability associated with autistic disorder in children and adolescents. - Treatment of Tourette's (Abilify) <p>Contraindicated for:</p> <p>Risperidone – anyone with a known hypersensitivity to the product.</p> <p>Olanzapine – If taking Olanzapine with fluoxetine check with doctor. If taking Olanzapine with Lithium or Valproate, check with doctor.</p> <p>Clozapine – History of clozapine-induced agranulocytosis or severe granulocytopenia. Known hypersensitivity to clozapine.</p> <p>Abilify – Known hypersensitivity to Abilify.</p>	<p>Do not take with alcohol.</p> <p>Hyperglycemia may develop when taking these medications.</p> <p>Lipid levels may increase.</p>	<p>Risperidone – Fever, stiff muscles, confusion, sweating, fast heartbeats. Restless muscle movements in the eyes, tongue, jaw, and neck. Uncontrolled shaking or seizures. Mouth sores. Weight gain, headache, nausea, and vomiting.</p> <p>Olanzapine – Side effects include increased risk of death in elderly people, hyperglycemia, high cholesterol and triglycerides, and weight gain.</p> <p>Clozapine – Side effects include blurred vision, confusion, dizziness, irregular heartbeat, sweating, trembling, and unusual tiredness.</p> <p>Abilify – Side effects include dizziness, drowsiness, lethargy, sedation, urinary incontinence, and salivation.</p>
TCA (Tricyclic Antidepressants)	<p>Indicated for:</p> <p>Depression</p> <p>Contraindicated for:</p> <p>If the patient has a known hypersensitivity to TCA's.</p>	Do not take with alcohol	Some side effects include blurred vision, constipation, dry mouth, drowsiness, drop in blood pressure which causes lightheadedness, urine retention, and weight gain.
Stimulants	<p>Indicated for:</p> <p>ADHD and narcolepsy.</p>	Do not take with alcohol	Side effects include: Trouble sleeping, loss of appetite, dry mouth, anxiety, increased

	<p>Contraindicated for:</p> <p>Adderall:</p> <ul style="list-style-type: none"> - Advanced arteriosclerosis, symptomatic cardiovascular disease, moderate to severe hypertension, hyperthyroidism, known hypersensitivity or idiosyncrasy to the sympathomimetic amines, glaucoma. - Agitated states. - Known hypersensitivity or idiosyncrasy to amphetamine. - Patients with a history of drug abuse. <p>Ritalin:</p> <ul style="list-style-type: none"> - Marked anxiety, tension, and agitation are contraindications to Ritalin, since the drug may aggravate these symptoms. - Known Ritalin hypersensitivity, in patients with glaucoma, and in patients with motor tics or with a family history or diagnosis of Tourette's syndrome. - Ritalin is contraindicated during treatment with monoamine oxidase inhibitors. 		<p>heart rate, irritability, headache, dizziness, addiction, and heart rhythm problems.</p>
<p>Alcohol Deterrent</p>	<p>Indicated for: Treatment of alcohol dependence and for the blockade of the effects of exogenously administered opioids.</p> <p>Contraindicated for: Antabuse Patients who are receiving or have recently received metronidazole, paraldehyde, alcohol, or alcohol-</p>	<p>Do not take with alcohol</p>	<p>Antabuse Side effects include drowsiness, tiredness, headache, metallic or garlicky taste in the mouth, skin rash or acne, impotence, and swollen tongue.</p> <p>Naltrexone Side effects include mild to moderate abdominal cramping,</p>

	<p>containing preparations, e.g., cough syrups, tonics.</p> <p>Disulfiram is contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, and hypersensitivity to disulfiram.</p> <p>Naltrexone</p> <ul style="list-style-type: none"> - Patients receiving opioid analgesics. - Patients currently dependent on opioids. - Patients going through acute opioid withdrawals. - Failed naloxone challenge test or has a positive urine screen for opioids. - Anyone with hypersensitivity to alcohol deterrent drugs. 		<p>anxiety, nervousness, restlessness, headache, joint or muscle pain, nausea or vomiting, unusual tiredness.</p>
--	---	--	---

B. Discuss the use of lithium therapy. Include indications/contraindications for use, its effect on sodium balance in relation to dietary implications, and possible complications associated with its use.

Lithium is indicated for the treatment of manic episodes and as a maintenance drug for the treatment of Bipolar I disorder. It is contraindicated for anyone with a known hypersensitivity to any of the ingredients in the drug product.

Taking lithium can cause hyponatremia which is when the level of sodium in the blood is too low. Patients who develop hyponatremia have a higher risk of developing lithium toxicity. Patients taking lithium need to stay hydrated and maintain a diet with normal levels of salt.

Some side effects of Lithium include hand tremors, polyuria, mild thirst, nausea, and general discomfort during treatment.

IV. Nutritional Management

A. What are the nutritional considerations in the management of a patient with major depression?

For individuals with depression, a diet with high-quality protein is essential since many people suffering from depression have a serotonin deficiency. Inadequate protein intake may reflect decreased intake of iron, thiamine, riboflavin, niacin, and Vitamins B₆ and B₁₂. A diet with a mix of carbohydrate and protein provides acceptable amounts of tryptophan which is the precursor of serotonin. The Mediterranean Diet is the recommended diet to follow for depression. Increased intake of Omega-3 fatty acids are recommended. Vitamin D₃ is also recommended. Folate supplementation is also needed by individual with depression since their serum folate

levels are typically low. Depending on what medications patients are on, monitor for potential side effects. For patients taking MAOI's (Nardil, Azilect), a tyramine restricted diet is recommended (no beer, chicken, processed meats, ripe avocados, and fermented soy sauce).

B. Discuss the effects of alcohol abuse on a patient's nutritional status. What dietary recommendations would you give to an alcoholic patient?

Many alcoholics are malnourished, and it is important to monitor the patient's health to prevent liver disease. Dietary recommendations for alcoholic patients include adjusting fluid intake to include nonalcoholic beverages as well as increasing fruits, vegetable, whole grain, and fish intake. Adequate protein is needed. Ensure that the patient is provided with adequate calories since alcoholics tend to become hypoglycemic. Provide adequate intake of thiamin and other B-complex vitamins as well as zinc and Vitamin A. Adequate fiber intake is also important to prevent constipation.

C. What are the nutritional goals for patients with anorexia nervosa? What are the nutritional goals for patients with bulimia nervosa? Describe methods for achieving successful food intake with these patients.

The nutritional goals for patients with anorexia nervosa include restoring and maintaining their weight. Development of neutrality towards food and learning again to understand what it means to be hungry and full. Lastly, regulation of phosphate levels in blood is important and this can be achieved by gradually increasing food intake.

The nutritional goals for patients with bulimia nervosa include stabilizing weight through decreasing binging and compensation cycles. Development of neutrality towards food and learning again to understand what it means to be hungry and full. Since patients with bulimia have varying blood sugar levels, their blood sugar needs to be stabilized. Lastly, potassium levels also need to be regulated and maintained.

When working with patients with eating disorders, it is important to take a multidisciplinary approach. Registered dietitians are not the only ones that need to work with the patient to help them with their recovery. Care for patients with eating disorders involve doctors, therapists, social workers, dietitians, and other members of the interdisciplinary team. As RD's it is important to set attainable goals for patients to increase the motivation for behavior change.

D. What diet recommendations have been given for children on the autism spectrum? What evidence is there to support these recommendations?

Studies have shown that elimination of gluten and casein in diets have improved symptoms for some individuals. However, eliminating gluten and casein can lead to nutrient deficiencies. It has also been found that individuals with autism lack essential fatty acids like Omega 3's. There have been studies that showed that EPA supplementation has been shown to improve behavior, mood, spontaneous speech, sleep patterns, and focus of autistic children.