Follow the instructions for the online assignment attached. The assignment must be completed and placed in Unit 1 Chapter 3: Psychopharmacotherapy Assignment Dropbox by 0800 on 5/28/2025. In order to receive full credit (0.5H class time) for this assignment, it must be completed in its entirety by the due date/time assigned. Any assignment not completed in its entirety will result in missed class time.

Learning Activity 4.1.

Psychotropic Medication Quiz

1. What is the mechanism of action by which antidepressant medications achieve the desired effect (regardless of the different physiological processes by which this action is accomplished)? **The mechanism of action by which antidepressants achieve desired effects is by increasing the concentration of norepinephrine, serotonin, and/or dopamine in the brain.**
2. For what must the nurse be on the alert with the client who is receiving antidepressant medication? **With a client on antidepressants, a nurse should be on alert for discontinuation syndrome because clients may experience sexual dysfunction causing them to abruptly stop the medication. Therefore, nurses should assess and discuss sexual concerns with their client.**
3. As the nurse, when would you expect the client to begin showing signs of symptomatic relief after the initiation of antidepressant therapy? **After initiation of antidepressant therapy, nurses can expect to see client symptomatic relief after 2 weeks for improvement symptoms to show, and up to 4 weeks for full therapeutic benefits.**
4. Name an example of a tricyclic antidepressant **Amoxapine**

   Name an example of an MAOI **Isoniazid**

   Name an example of an SSRI **Sertraline**

5. Describe some common side effects and nursing implications for tricyclic antidepressants. **Tricyclic antidepressants may cause anticholinergic effects and therefore postural hypotension. To help with**

anticholinergic effects such as dry mouth, nurses should offer ice, hard candies, or frequent sips of water. For postural hypotension, it is important to implement fall precautions and encourage the client to change positions slowly.

6. **Discontinuation syndrome** is the most potentially life-threatening adverse effect of MAOIs. Symptoms for which the nurse and client must be on the alert include: **confusion, hypomania, or flu-like symptoms.** What must be done to prevent these symptoms from occurring? (Your answer must include some examples.) **To prevent these symptoms from occurring, the nurse should educate the patient on not stopping the medication abruptly and that it instead should be tapered.**
7. Lithium carbonate is commonly prescribed for **bipolar disorder.** Many times when these individuals are started on lithium therapy, the physician also orders an antipsychotic medication. Why might he or she do so? **A physician may order an antipsychotic medication in adjunction with lithium because lithium has a lag period of 7 to 10 days, so the antipsychotic allows for initial treatment with immediate sedative effects.**
8. There is a narrow margin between the therapeutic and toxic serum levels of lithium carbonate. What is the therapeutic range? List the initial signs and symptoms of lithium toxicity. **The therapeutic range of lithium carbonate is 0.6-1.2 mEq/L, or 0.4-0.6mEq/L when the patient is responding well to therapy. The initial signs and symptoms of lithium toxicity include nausea, diarrhea, anorexia, and CNS symptoms.**
9. Describe some nursing implications for the client on lithium therapy. **One nursing implementation for a client on lithium would be to monitor serum lithium levels. These levels should be monitored 1-2 times a week after initial treatment, then monthly after that. Also, nurses should implement education about the potential for weight loss and monitor the client's weight at regular intervals. Low calorie diets are also an important education topic for nurses to discuss with the client.**

10. What is the mechanism of action for anxiolytics (with the exception of buspirone)? **The mechanism of action for anxiolytics is to depress subcortical levels of the CNS such as the limbic system to potentiate GABA effects in the brain, therefore inhibiting excitation to produce a calmative effect.**
11. What is the most commonly used group of anxiolytics? Give two examples. **The most commonly used group of anxiolytics are benzodiazepines. Two examples of these medications are Clonazepam (Klonopin) and Lorazepam (Ativan).**
12. What are the most common side effects of anxiolytics? **The most common side effects of anxiolytics are impaired cognitive function, psychomotor impairment, and paradoxical increase of anxiety; particularly in older adults.**
13. What must the client on long-term anxiolytic therapy be instructed to prevent a potentially life-threatening situation? **To prevent a potentially life-threatening situation, the client on long term anxiolytic therapy should be instructed not to abruptly stop the medication. This is because over time, the client may develop tolerance/physical dependence and thus withdrawal symptoms will occur if the med is stopped abruptly. Withdrawal symptoms include agitation, nausea, tremors, sweating, etc.; of which the nurse should educate the client on as well.**
14. What is thought to be the mechanism of action that produces the desired effect with antipsychotic medications? **The mechanism of action that is thought to produce the desired effect of antipsychotic medications is blocking postsynaptic dopamine receptors in the brain. These medications also have varying affinity for alpha adrenergic, cholinergic, and histaminic receptors.**
15. Phenothiazines are an example of a "typical" antipsychotic group. Give two examples of phenothiazines and two examples of the newer "atypical" antipsychotics. **Two examples of phenothiazines are Haloperidol and Pimozide. Two examples of "atypical" antipsychotics include Clozapine and Aripiprazole.**

16. Describe potential adverse hormonal effects associated with antipsychotic therapy. **Some potential adverse hormonal effects for males on antipsychotic therapy include gynecomastia or retrograde ejaculation. For females on antipsychotic therapy, hormonal effects such as amenorrhea or galactorrhea may occur.**
17. Agranulocytosis is a potentially very serious side effect of antipsychotic therapy. The nurse and client should be on the alert for symptoms of **sore throat, fever, or malaise.**
18. Neuroleptic malignant syndrome (NMS) is a rare but potentially fatal side effect of antipsychotic drugs. List symptoms for which the nurse must be on the alert when assessing for NMS. **Symptoms of neuroleptic malignant syndrome that nurses should be on alert for include diaphoresis, fever, muscle rigidity, or tachycardia.**
19. Describe the symptoms of extrapyramidal side effects associated with antipsychotic therapy. **The symptoms of extrapyramidal side effects associated with antipsychotic therapy include spasms or muscle stiffness for what the patient should report. Patients may experience akathisia which is continuous restlessness and fidgiting, akinesia- absence/impairment in voluntary movement, dystonia-muscle spasms in arms, legs, face, etc. Patients may also experience oculogyric crisis, which is uncontrolled eye rolling back, pseudo parkinsonism, or tardive dyskinesia which is bizarre tongue and facial movements, difficulty swallowing or stiff neck.**
20. What is the classification of medication that is commonly prescribed for drug-induced extrapyramidal reactions? Give two examples of these medications. **The classification of medication commonly prescribed for drug induced extrapyrimidal reactions is antiparkinsonian agents. Two examples of these medications include carbidopa/levodopa and selegiline.**

21. Describe a potentially life-threatening situation that could occur in the client who abruptly withdraws from long-term use of CNS stimulants. **Abruptly withdrawing long term CNS stimulants could produce**

life threatening withdrawal effects such as suicidal ideation, psychotic behavior, or mental depression.

Less severe side effects that also could occur include abdominal cramping, headache, fatigue,

weakness, or nausea/vomiting.

Homework Assignment Questions and Answers

Please read the chapter and answer the following questions:

1. **Identify three priority safety concerns for each class of psychotropic medications.**

Antianxiety Agents
Three priority safety concerns for antianxiety agents are aggravated symptoms of depression, orthostatic hypotension, or paradoxical excitement (opposite from the intended effect).

Antipsychotics (novel)
Three priority safety concerns for novel antipsychotics include hyperglycemia, sedation, or neuroleptic malignant syndrome.

Antipsychotics (phenothiazines and haloperidol) Three priority safety concerns for antipsychotics such as phenothiazines and haloperidol include extrapyramidal symptoms, prolonged QT interval, or agranulocytosis.

MAO Inhibitors Three priority safety concerns with MAO inhibitors include tachycardia/arrythmias, hyponatremia, or drug interactions such as serotonin syndrome when combined with drugs such as venlafaxine.

SSNRIs
Three priority safety concerns with SSNRIs include sexual dysfunction, photosensitivity, or increased risk for suicide.

SSRIs Three priority safety concerns with SSRIs are hypertensive crisis when combined with MAOIs, lowered seizure threshold when combined with antiepileptics, or discontinuation syndrome-marked by lethargy, headache, nausea or dizziness.

Tricyclic antidepressants
Three priority safety concerns for tricyclic antidepressants include blurred vision, orthostatic hypotension, or tachycardia.

2. **Differentiate primary actions and side effects for traditional versus atypical antipsychotics.**

   The primary action for traditional antipsychotics is to block postsynaptic dopamine receptors in the brain while the action of atypical antipsychotics is to antagonize serotonin type 2A receptors more strongly than dopamine receptors. Typical antipsychotics have a strong risk of causing extrapyramidal side effects while atypical antipsychotics have minimal risk of causing such. A side effect common in atypical antipsychotics, specifically clozapine, is agranulocytosis.

3. **Differentiate primary actions and side effects for tricyclic versus SSRI antidepressants.** Tricyclic antidepressants and SSRIs both act by blocking the reuptake of neurotransmitters dopamine, serotonin, and/or norepinephrine to increase their concentrations. Common side effects of tricyclic antidepressants include anticholinergic effects like dry mouth and thus the potential for postural hypotension, while side effects of SSRIs commonly include hyponatremia.