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)?

   As stated in the reading, most antidepressants work to increase the concentration of norepinephrine, serotonin, and/or dopamine through a series of interactions in the body. This is accomplished in the brain by blocking the reuptake of these neurotransmitters.

2. For what must the nurse be on the alert with the client who is receiving antidepressant medication?

   For a client taking an antidepressant medication, the nurse must be on alert for a risk of suicide related to depressed mood, risk for injury related to the side effects of priapism and hypertensive crisis, social isolation due to their depressed mood, and insomnia related to their elevated level of anxiety and depression.

3. As the nurse, when would you expect the client to begin showing signs of symptomatic relief after the

   initiation of antidepressant therapy?

   All antidepressant therapies take up to two weeks before signs of improvement are noted, and up to four weeks for full therapeutic effect.

4. Name an example of a tricyclic antidepressant – Amitriptyline (Elavil)

   Name an example of an MAOI – Isocarboxazid (Marplan)

   Name an example of an SSRI – Sertraline (Zoloft)

5. Describe some common side effects and nursing implications for tricyclic antidepressants.

   Tricyclic antidepressants can cause postural hypotension, so it is important to educate on changing positions slowly to prevent dizziness. It is also common to experience anticholinergic effects such as dry mouth and increased drowsiness. Due to so, clients taking these medications should take caution and avoid driving or performing activities requiring mental alertness.

6. **Hypertensive crisis** is the most potentially life-threatening adverse effect of MAOIs. Symptoms for which the nurse and client must be on the alert include: **Palpitations, chest pain, occipital headache, nausea and vomiting, and nuchal rigidity.** What must be done to prevent these symptoms from occurring? (Your answer must include some examples.)

   You should avoid foods high in tyramine while taking MAOIs due to being potentially deadly. This includes foods such as wine, aged cheese, and smoked and processed meats. Eating these foods can cause dangerous blood pressure levels.

7. Lithium carbonate is commonly prescribed for **mood stabilizing**. 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 also orders an antipsychotic medication with lithium therapy because of their immediate sedative effects. They also increase the effects of lithium, so it is important to monitor blood serum levels in the initial phase of treatment.

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 for lithium carbonate is 0.6 to 1.2 mEq/L. The initial signs and symptoms of lithium toxicity include increased nausea, anorexia, diarrhea, and CNS symptoms such as muscle weakness, ataxia, tremors, and muscle twitching. Even higher levels can lead to delirium, seizures, cardiovascular collapse, or death.

9. Describe some nursing implications for the client on lithium therapy.

   Some nursing implications for the client on lithium therapy are to give the medication with food to decrease stomach upset, monitor lithium levels regularly before giving dose, and educate the client on diet to prevent weight gain.

10. What is the mechanism of action for anxiolytics (with the exception of buspirone)?

    The mechanism of action for anxiolytics is CNS depression. This refers to the slowing down of brain activity, affecting physical and mental functions in the body.

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 include alprazolam (Xanax) and Chlordiazepoxide (Librium).

12. What are the most common side effects of anxiolytics?

    The most common side effects of anxiolytics are extrapyramidal symptoms (EPS) that interfere with normal movements that can be life threatening. This includes restlessness, muscle spasms, tremors, rigidity, tongue movements, and more.

13. What must the client on long-term anxiolytic therapy be instructed in order to prevent a potentially life-threatening situation?

    For a client on long-term anxiolytic therapy, do not stop the medication abruptly. This can lead to serious withdrawal symptoms.

14. What is thought to be the mechanism of action that produces the desired effect with antipsychotic medications?

    Antipsychotic medications are supposed to decrease levels of dopamine.

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 Fluphenazine (Prolixin) and Chlorpromazine (Thorazine). "Atypical" antipsychotics include Ziprasidone (Geodon) and Clozapine (Clozaril).

16. Describe potential adverse hormonal effects associated with antipsychotic therapy.

    Potential adverse hormonal effects associated with antipsychotic therapy include decreased libido, retrograde ejaculation, gynecomastia, amenorrhea, and galactorrhea.

17. Agranulocytosis is a potentially very serious side effect of antipsychotic therapy. The nurse and client should be on the alert for symptoms of **malaise, fever, and sore throat.**

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.

    The nurse should be on alert for symptoms such as diaphoresis, fever, tachycardia, tachypnea, and muscle rigidity which indicates neuroleptic malignant syndrome.

19. Describe the symptoms of extrapyramidal side effects associated with antipsychotic therapy.

    Symptoms of extrapyramidal side effects include acute dystonias (muscle spasms), parkinsonian-like symptoms, and tardive dyskinesias that primarily develops in the tongue, lips, and jaw.

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 that is commonly prescribed for drug-induced extrapyramidal reactions are the antiparkinsonian drugs, benztropine (Cogentin) and trihexyphenidyl (Artane).

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

    CNS stimulants should not be withdrawn abruptly because they can produce serious withdrawal symptoms such as restlessness, anorexia, and insomnia. Clients can also experience depression and suicidal thoughts.

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 concerns for antianxiety agents include risk for dependence and withdrawal, sedation or CNS depression, and a risk for suicidal thoughts.

   Antipsychotics (novel)

   Extrapyramidal symptoms are a concern, as well as neuroleptic malignant syndrome and agranulocytosis.

   Antipsychotics (phenothiazines and haloperidol)

   Priority concerns regarding these medications include extrapyramidal symptoms, anticholinergic effects, and orthostatic hypotension.

   MAO Inhibitors

   Hypertensive crisis is a priority concern due to eating foods high in tyramine, risk for suicidal thoughts, and serotonin syndrome.

   SSNRIs

   Three priority concerns for these medications include sexual dysfunction, tremors, and insomnia.

SSRIs

A client with diaphoresis, nausea, and tremors are priority safety concerns for SSRIs.

Tricyclic antidepressants

Three priority safety concerns for these medications include anticholinergic effects (dry mouth, constipation), sedation, and postural hypotension.

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

Primary actions for traditional antipsychotics are to block and reduce dopamine in the body, and side effects include sedation and extrapyramidal symptoms. However, atypical antipsychotic's primary action is on serotonin, but on dopamine as well. A common side effect often includes weight gain and metabolic system.

3. **Differentiate primary actions and side effects for tricyclic versus SSRI antidepressants.**

Tricyclic antidepressant's primary action is to inhibit reuptake of norepinephrine. Side effects for this medication include sedation, which is very common due to its antihistamine effects. For SSRI antidepressants, they reduce the reuptake of serotonin. A very common side effect that can occur includes sexual dysfunction, which is shown as a decreased libido and delayed orgasm.