

### 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 by which antidepressants achieve that desired effect is by blocking the reuptake of biogenic amines and it increases the concentration of norepinephrine and/or dopamine.

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

What the nurse must be on high alert for with a client on an antidepressant is suicide or suicidal ideations.

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

The patient will begin to show signs of symptomatic relief after 2-4 weeks of initiation of the antidepressant therapy.

4. Name an example of a tricyclic antidepressant \_\_\_\_\_ amitriptyline \_\_\_\_\_.

Name an example of an MAOI \_\_\_\_\_ selegiline \_\_\_\_\_.

Name an example of an SSRI \_\_\_\_\_ fluoxetine \_\_\_\_\_.

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

Some common side effects of tricyclic antidepressants are blurry vision, low blood pressure(hypotension), constipation, and sedative effects. Nursing implications are education about when to take the medication such as at night time avoid day time drowsiness or fatigue

during the day. The patient should also be educated to not stop this medication abruptly because it could cause seizures.

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: \_\_Severe headache with confusion and blurred vision, nausea/vomiting, severe anxiety, seizures, and unresponsiveness\_\_.

7. What must be done to prevent these symptoms from occurring? (Your answer must include some examples.)

Avoid foods that are high in tyramine such as wines, aged cheeses, or foods that have been fermented as well as any caffeine.

8. Lithium carbonate is commonly prescribed for \_\_\_\_Bipolar mania\_\_\_\_. Many times when these individuals are started on lithium therapy, the physician also orders an antipsychotic medication. Why might he or she do so?

They could do this to decrease the hyperactivity while the lithium therapy begins.

9. 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 is 0.5-1.5 mEq/L. Signs of lithium toxicity are blurry vision, ataxia, tinnitus, persistent nausea/vomiting, and diarrhea.

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

Some nursing implications for a patient on lithium therapy is monitoring for side effects, I/O's, monitor for any electrolyte imbalances, for any early signs of toxicity, to take with meals, avoid becoming pregnant on this medication, and make sure to stay adequately hydrated.

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

The mechanism of action for anxiolytics is they depress the central nervous system.

12. 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 are alprazolam (Xanax) and lorazepam (Ativan).

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

The most common side effects of anxiolytics are drowsiness, sedation, lethargy, amnesia, and orthostatic hypotension.

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

A patient on long-term anxiolytic therapy must be instructed to never stop taking the medication abruptly.

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

What is thought to be the mechanism of action that produces the desired effect with antipsychotic medications is that they block dopamine and other receptors from working in the brain.

16. 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 loxapine, and two examples of “atypical” antipsychotics are clozapine and risperidone.

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

Potential adverse hormonal effects associated with antipsychotic therapy include depression, sexual dysfunction, gynecomastia, retrograde ejaculation, or suicidal ideations.

18. 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\_\_\_, and \_\_\_malaise\_\_\_.

19. 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.

Fever, tachycardia, muscle rigidity, altered mental status, pallor, incontinence, hypertonicity, and dyskinesia.

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

The symptoms of extrapyramidal side effects associated with antipsychotic therapy are akathisia, akinesia, dystonia, oculogyric crisis, pseudoparkinsonism, and tardive dyskinesia.

21. 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 benzodiazepines and antiparkinsonians. Two examples of benzodiazepines are alprazolam (Xanax) and clonazepam (Klonopin). Two examples of antiparkinsonians are orphenadrine and procyclidine.

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

A potentially life threatening situation that could occur in the patient who abruptly withdraws from long-term use of CNS stimulants is suicide.

## 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**

*-Risk for injury related to seizures, panic anxiety, acute agitation from alcohol withdrawal (indications), abrupt withdrawal from the medication after long-term use, effects of medication intoxication or overdose.*

*-Anxiety related to threat to physical integrity or self-concept*

*-Risk for activity intolerance related to side effects of sedation, confusion, and/or lethargy*

### **Antipsychotics (novel)**

*- Risk for other-directed violence related to panic anxiety and mistrust of others*

*- Risk for activity intolerance related to medication side effects of sedation, blurred vision, and/or weakness*

*- Risk for injury related to medication side effects of sedation, photosensitivity, reduction of seizure threshold, agranulocytosis, EPS, tardive dyskinesia, neuroleptic malignant syndrome, and/or QT prolongation*

### **Antipsychotics (phenothiazines and haloperidol)**

*- Risk for other-directed violence related to panic anxiety and mistrust of others*

*- Risk for activity intolerance related to medication side effects of sedation, blurred vision, and/or weakness*

*- Risk for injury related to medication side effects of sedation, photosensitivity, reduction of seizure threshold, agranulocytosis, EPS, tardive dyskinesia, neuroleptic malignant syndrome, and/or QT prolongation*

### **MAO Inhibitors**

*-Sedation*

*-Hypertensive crisis*

*-Dizziness*

### **SSNRIs**

*-Nausea*

*-Insomnia*

*-Tremors*

### **SSRIs**

*-Nausea*

*-Agitation*

*-Headache*

***Tricyclic antidepressants***

- Sedation
- Blurry vision
- Postural hypotension

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

The difference between traditional and atypical antipsychotics is that traditional antipsychotics mainly affect the amount of dopamine in your body while atypical antipsychotics mainly affect your serotonin. Traditional psychotics have more side effects including chronic and extrapyramidal. On the other hand atypical antipsychotics have less effects like weight gain and diabetes.

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

The difference between tricyclic and SSRI's is that the tricyclic antidepressants also inhibit the reuptake of norepinephrine and also block the NE, ACh, and histamine receptor while the SSRI's only block the reuptake of serotonin. There are also more side effects with the tricyclic antidepressants such as sedation, weight gain, constipation, urinary retention, postural hypotension, and tachycardia.