

## 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)?

Antidepressants work to increase the concentration of norepinephrine, serotonin, and/or dopamine through complex series of interactions in the body.

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

Increased risk of suicide for children, adolescents, and adults up to 25 years of age. The effect of antidepressants can cause a lifted mood and bring more energy in which a patient might implement a suicide plan.

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

Up to 2 weeks before signs of improvement and 4 weeks before full therapeutic effect.

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

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

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

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

-Orthostatic hypotension – monitor BP, assess symptoms, educate patient to rise slowly from sitting to standing.

-Tachycardia, arrhythmias – Monitor vital signs, especially in the elderly with preexisting heart conditions.

-Blurred vision – Educate patients to avoid driving and that symptoms will usually subside within 3 weeks, monitor BP.

6. \_\_\_\_\_ **Suicidal idealizations** \_\_\_\_\_ is the most potentially life-threatening adverse effect of MAOIs.

Symptoms for which the nurse and client must be on the alert include: \_\_\_\_\_ **Sudden lifts or other dramatic changes in mood.** \_\_\_\_\_.

What must be done to prevent these symptoms from occurring? (Your answer must include some examples.) **Monitor patients' mood. Talking with doctor to stop or change medication or dosage.**

7. 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? **Lithium carbonate and antipsychotic medication work together to stabilize the mood and reduce the roller-coaster of "ups and downs".**

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.

**0.6 – 1.2 mEq/L Early signs of toxicity include vomiting and diarrhea. Increased levels of toxicity above 1.5 mEq/L include increases GI issues, such as nausea, anorexia, diarrhea, as well as CNS effects such as drowsiness, ataxia, coarse tremor, and muscle twitching.**

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

**Educate patients to report all medications, herbals, and caffeine use to physician or nurse practitioner to evaluate for drug interactions.**

**Encourage patients to maintain fluid intake of 2000-3000 mL/day and to avoid activities with excess sweating because that can impact lithium levels.**

Educate patient on the importance of regular monitoring of Lithium levels, and blood levels should be drawn 12 hours after the last dose.

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

Depress subcortical levels of the central nervous system, particularly the limbic system and reticular formation. They may potentiate the effects of the powerful inhibitory neurotransmitter GABA in the brain producing a calmative effect.

11. What is the most commonly used group of anxiolytics? Give two examples.

Benzodiazepine – Clonazepam, Lorazepam.

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

Dependence (long term use), confusion, memory impairment, motor incoordination.

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

If taken with alcohol or other drugs it can increase the effects of antianxiety medication.

Educated on the black box warning if taken with opioid pain medication or cough syrup.

Increased effects if taken with herbal supplements such as melatonin.

Smoking and caffeine consumption can decrease the effects of the medication.

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

First generation typical antipsychotics are antagonists that work by blocking postsynaptic dopamine receptors in the basal ganglia, hypothalamus, limbic system, brainstem, and medulla. They also demonstrate varying affinity for cholinergic, alpha1- adrenergic, 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.

1.) Chlorpromazine

2.) Haloperidol

Atypical antipsychotics

1.) Risperidone

2.) Clozapine

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

Decreased libido, retrograde ejaculation, gynecomastia, amenorrhea, 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 \_\_\_\_\_ Sore throat \_\_\_\_\_, \_\_\_\_\_ Fever \_\_\_\_\_, and \_\_\_\_\_ 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.

Fever, muscle rigidity, diaphoresis, tachycardia.

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

Akathisia – occurs usually within 50 to 60 days of therapy and is classified as restlessness and fidgeting.

Akinesia- absence or impairment in involuntarily movement.

Dystonia – Occurs usually in younger adults and is involuntarily muscle spasms in the face, arms, legs, and neck.

Oculogyric crisis – Classified as uncontrolled rolling back of the eyes and can be mistaken as a seizure.

Pseudo parkinsonism – Symptoms can occur 1-5 days following therapy. Signs and symptoms include tremors, shuffling gait, drooling, and rigidity.

Tardive dyskinesia – Bizarre facial and tongue movements, stiff neck, and difficulty swallowing.

20. What is the classification of medication that is commonly prescribed for drug-induced extrapyramidal reactions? Give two examples of these medications.

Phenothiazines

1.) Chlorpromazine

2.) Haloperidol

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 have a potential for physical and psychological dependence. Abruptly stopping these can result in a life-threatening withdrawal syndrome, with common side effects such as drowsiness, confusion, and lethargy.

**This part is optional but encouraged!!**

### **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*

*Antipsychotics (novel)*

*Antipsychotics (phenothiazines and haloperidol)*

*MAO Inhibitors*

*SSNRIs*

*SSRIs*

