MEDICATION ISSUES IN MENTAL HEALTH

Series 636

Preventing Adverse Drug Reactions (636.1)

This Instructor's Guide contains:
Brief Description, Objectives, Discussion Questions, Pretest, Post-test, Clinical Application Questions, and Answer Keys for this program, Preventing Adverse Drug Reactions. The questions included in this Guide follow the NCLEX model. Institutions that have purchased this program from Concept Media have permission to duplicate any of the contents of this Instructor's Guide for teaching purposes.
**Preventing Adverse Drug Reactions**

**Program Description:**

This program addresses the costly and potentially tragic adverse drug reactions seen in the treatment of mental illness. It explores the various disorders that can arise from the use of psychotropic medications, including neuroleptic malignant syndrome, lithium toxicity, atropinic overload, and extrapyramidal side effects. The early warning signs of an adverse drug reaction are outlined, as well as ways to identify and prevent adverse reactions through awareness, communication, assessment, and early intervention.

**Objectives:**

Upon completion of this program, the learner will be able to:

- List disorders that can develop from the use of psychotropic medications.
- Identify the symptoms of these disorders.
- Discuss the early warning signs of an adverse drug reaction.
- Describe ways to utilize standard assessment skills to identify and prevent adverse drug reactions.
- Discuss the need for early intervention to provide effective treatment.
Preventing Adverse Drug Reactions

Previewing Questions:

True or False

1. The incidence of adverse drug reactions is lower in mental health facilities.
2. The World Health Organization states that adverse drug reactions occur at doses much higher than usually used.
3. Difficulties in identifying drug related movement disorders may be compounded by the presence of non-drug related behavioral problems.
4. Combining lithium with other medications can make it more difficult for the body to eliminate it.
5. Lithium toxicity has no specific signs or symptoms.
6. Excessive levels of lithium can be life-threatening.
7. Patients on lithium should avoid direct sunlight and excessive heat.
8. An important intervention in significant lithium toxicity is hydration.
9. People in atropinic overload are said to be “hungry as a logger.”
10. Patients with high lithium levels may complain of memory loss.
11. People in atropinic overload often have a strong desire for candy.
12. Giving antihistamines can help overcome atropinic overload.
13. Tricyclic antidepressants can contribute to atropinic overload.
14. Neuroleptic malignant syndrome (NMS) is relatively harmless.
15. Symptoms of neuroleptic malignant syndrome include increased heart rate and BP.
16. Lab results in NMS indicate an increase in iron.
17. NMS takes 2 weeks to develop after the first early signs.
18. Dystonia means movements that indicate inner restlessness.
19. Patients who show an increase in abnormal movements should be placed alone in a darkened room to reduce stimulation.
20. Left untreated, extrapyramidal side effects often go away by themselves.
Preventing Adverse Drug Reactions

Previewing Questions: Answer Key

Correct Answer Blacked Out

1. True
2. True
3. False
4. False
5. True
6. False
7. False
8. False
9. True
10. False
11. True
12. True
13. False
14. True
15. False
16. True
17. True
18. True
19. True
20. True
Preventing Adverse Drug Reactions

Discussion Questions:

1. What are some of the global effects of adverse drug reactions on the health care system?

2. What types of symptoms can be indicative of adverse reactions to psychotropic medications?

3. What aspects of the care of mental health patients can cause staff to overlook or misinterpret adverse drug reactions?
Preventing Adverse Drug Reactions

Post-Test Questions:

Select the INCORRECT response

1. Adverse drug reactions:
   a. cause 4 out of 10 hospital admissions.
   b. affect up to 20% of all hospitalized patients during their stay.
   c. are lower in mental health settings.
   d. prolong hospital stays, increase costs, and make the hospital liable for lawsuits.

2. The World Health Organization’s definition of an adverse drug reaction includes the stipulation that the response:
   a. is noxious.
   b. involves doses much higher than used for prophylaxis, diagnosis or therapy.
   c. is unintended.
   d. occurs at doses normally used.

Select the CORRECT response

3. Difficulties in identifying adverse drug reactions occur because the signs and symptoms may be:
   a. attributed to an unrelated physical problem.
   b. confused with a psychiatric problem.
   c. confused with a behavioral problem.
   d. overlooked by busy staff.
   e. All of the above.

4. Patients on lithium who take additional medication can compromise their body’s ability to eliminate the drug through the:
   a. skin
   b. liver
   c. respiratory tract
   d. kidney

5. Signs of lithium toxicity include:
   a. vomiting
   b. slurring of speech
   c. unsteady walk
   d. fine motor tremor.
   e. All of the above
Preventing Adverse Drug Reactions

Post-Test Questions continued:

6. Lithium reaction can become toxic and life-threatening when blood levels exceed:
   a. 0.2 mEq/L
   b. 0.1 mEq/L
   c. 0.5 mEq/L
   d. 1.5 mEq/L

7. With lithium levels above 2.0 mEq/L the patient may:
   a. have seizures, lapse into a coma, or die.
   b. have a lessening of symptoms.
   c. have an increase in appetite.
   d. complain of memory problems.
   e. All of the above

8. All patients on lithium should avoid:
   a. carrots and asparagus.
   b. excessive heat or sunlight.
   c. lotions with PABA.
   d. bath oils.
   e. All of the above

9. When a patient has signs of lithium toxicity, the staff:
   a. withholds the medication
   b. checks the lithium level.
   c. provides hydration in extreme cases.
   d. All of the above

10. Common descriptive phrases for atropinic overload are:
    a. fat as a hog, at the bottom of the well, and blue as the sky.
    b. smelly as a dog, crazy as a loon, and blue as the sky.
    c. mad as a wet hen, hungry as a logger, and slow as a snail.
    d. red as a beet, dry as a bone, and mad as a hatter.

11. Often the patient with atropinic overload has a desire for:
    a. candy
    b. liquids.
    c. vegetables.
    d. fruits.
Preventing Adverse Drug Reactions

Post-Test Questions continued:

12. Staff can help a person with atropinic overload by:
   a. giving antihistamines.
   b. withholding fluid.
   c. increasing the dosage of the patient’s antipsychotic medication.
   d. withholding the medication.

13. Medications which contribute to atropinic overload include:
   a. some topical medications for rashes.
   b. tricyclic antidepressants.
   c. some neuroleptics.
   d. antiparkinson agents.
   e. All of the above

14. Neuroleptic malignant syndrome:
   a. occurs when excessive doses are given.
   b. occurs in 0.5% to 11% of patients on neuroleptic medications.
   c. is relatively harmless.
   d. causes flaccidity.

15. Symptoms of neuroleptic malignant syndrome (NMS) include:
   a. alteration in mental status.
   b. decrease in appetite.
   c. fever.
   d. increased heart rate, decreased BP
   e. All of the above

16. Lab results in NMS indicate:
   a. CPK elevation.
   b. decreased iron.
   c. increased electrolytes.
   d. dehydration.
   e. All of the above

17. After the first signs are seen, the onset of NMS develops:
   a. within 24-72 hours.
   b. within 1 week.
   c. within 2 weeks.
   d. within 1 month.
Preventing Adverse Drug Reactions

Post-Test Questions continued:

18. Treatment of NMS includes:
   a. removal of offending agents.
   b. stabilization with fluids.
   c. reduction of fever.
   d. All of the above

19. If untreated, extrapyramidal side effects can:
   a. lead to lithium toxicity.
   b. become chronic or lead to a more serious drug reaction.
   c. go away by themselves.
   d. cause addiction.

20. Dystonia:
   a. describes abnormal involuntary movements.
   b. are movements that depict inner restlessness.
   c. involves contraction of major or focal muscle groups.
   d. causes a dramatic slowing of movements and pill rolling of fingers.

21. Whenever there is any change in a patient’s mental or physical status, the staff should:
   a. increase the dose of antipsychotic medication.
   b. restrain the patient.
   c. be alert for signs of a potential negative side effect of a medication.
   d. leave the patient alone in his/her room to avoid excess stimulation.

22. In interacting with doctors and other colleagues concerning a patient’s mental or physical status, the staff should be:
   a. in communication with pharmacists.
   b. persistent in their quest for help for the patient.
   c. assertive.
   d. All of the above
Preventing Adverse Drug Reactions

Post-Test Questions Answer Key:

1. a b | d e
2. a | c d e
3. a b c d |
4. a b c | e
5. a b c d |
6. a b c | e
7. | b c d e
8. a | c d e
9. a b c | e
10. a b c | e
11. a | c d e
12. a b c | e
13. a b c d |
14. a | c d e
15. a b c d |
16. a b c d |
17. | b c d e
18. a b c | e
19. a | c d e
20. a b | d e
21. a b | d e
22. a b c | e
Preventing Adverse Drug Reactions

Clinical Application Questions:

Joe Emmons is a 43 year old man with a long history of mental illness. Although he has done well on medication and is married and employed full time, recent increases in life stresses have precipitated a relapse of his psychosis, and he is a voluntary admission to your inpatient psychiatric unit. The psychiatrist has decided to add a new medication to Joe’s regimen.

1. What is NOT your responsibility regarding Joe’s new medication?
   a. Observe and document Joe’s behavior.
   b. Observe and document any unusual movements or behaviors.
   c. Ask Joe how he is feeling and document his responses.
   d. Research any drugs with which you are not familiar in an approved drug reference.
   e. Begin the new medication at half the ordered dose and ramp up slowly to decrease adverse reactions.

On the second day of Joe’s new medication regimen, you notice he is acting fearful whenever he enters the patient dining room.

2. What action should you take regarding this change?
   a. Ask Joe what is frightening in the dining room and document his response.
   b. Notify the physician that Joe has had an increase in symptoms.
   c. Stop the new medication and see if the new symptoms go away in 24 hours.
   d. a and b
   e. All of the above
Preventing Adverse Drug Reactions

Clinical Applications Answer Key

1. a  b  c  d  
2. a  b  c  e  e
Preventing Adverse Drug Reactions

Glossary

Abnormal Involuntary Movement Scale (AIMS): A systematic checklist developed by the National Institute of Mental Health to determine whether a patient is developing any permanent side effects from psychotropic medications.

Akathisia: A syndrome in which the patient is unable to sit quietly due to motor restlessness and a feeling of muscular quivering.

Barnes Akathisia Scale: Assessment process which utilizes a brief verbal interview regarding symptoms, the patient’s own perception of his or her disorder, and how the akathisia might be affecting the patient’s daily living.

Bradykinesis: Extreme slowness of movement.

Dyskinesia/dyskinetic: Difficulty in performing normal movements; involuntary abnormal movements, including facial movements and tics.

Dystonia/Dystonic: A state of either hyper- or hypotonicity of the tissues.

Extrapyramidal System (EPS): All brain structures affecting body movement except the motor neurons, motor cortex, and the pyramidal tract.

Extrapyramidal Side Effects: Physical symptoms, including tremor, slurred speech, akathisia, dystonia, anxiety, distress, paranoia, and slowing of thought, associated with unusual reactions to, or improper dosing of, neuroleptic medications.

Glabellar Reflex: An abnormal blinking reflex seen in pseudoparkinsonism which is elicited by tapping the patient lightly on the glabella, the slight protuberance just above the bridge of the nose.

Modified Angus Simpson Scale: A hands-on technique of evaluating alterations in range of motion found in pseudoparkinsonism.

Movement Disorders: Abnormal, involuntary movements which may be experienced by patients on psychotropic medications.

Opisthotonos: A severe dystonic spasm in which the body is arched backwards, the body resting only on the head and heels.

Paroxysms: The rarest form of the movement disorders, they primarily manifest as body spasms or pseudo seizures.
Preventing Adverse Drug Reactions continued

Glossary continued

Pill Rolling: A form of tremor in which the tips of the thumb and forefinger are rubbed together in a circular motion.

Pseudo-Parkinsonism: A syndrome of side effects seen in patients on psychotropic medications that mime Parkinson’s disease. The possible symptoms include slowed movement, slowed speech and thought, flat affect, forward cant to the head and shoulders when walking, and oily skin combined with seborrheic dermatitis.

Psychiatry: The diagnosis and treatment of disorders in mental health.

Psychosis: A mental disorder causing significant disorganization in, or distortion of, a person’s mental functioning.

Schizophrenia: The most common type of psychosis, it is a group of mental disorders that disrupt the thinking processes, and includes delusions, visual and auditory hallucinations, and withdrawal from the world.

Seborrhea: Excessive activity of the sebaceous glands, resulting in excessive sebum on the skin.

Stigma: A mark of shame or discredit.

Tardive: Late or tardy. In describing medication-related movement disorders, it applies to symptoms that may develop without early intervention and are often difficult or even impossible to eradicate.