

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF COMMUNITY HEALTH NURSING SCIENCE
FINAL EXAMINATION: MAY 2016

COURSE TITLE: PSYCHOPHARMACOLOGY

COURSE CODE: CMH 404

TIME ALLOCATED: 2 HOURS

TOTAL MARKS ALLOCATED: 75

INSTRUCTIONS:

- 1. PLEASE WRITE LEGIBLY**
- 2. PLEASE ANSWER ALL THREE QUESTIONS**
 - i. SECTION A: MULTIPLE CHOICE [25 MARKS]**
 - ii. SECTION B: SHORT STRUCTURED QUESTIONS [50 MARKS]**
- 3. USE THE PROVIDED ANSWER BOOKLET FOR ALL YOUR ANSWERS**
- 4. START A NEW QUESTION ON A NEW PAGE**
- 5. MAKE SURE THAT ALL YOUR ANSWERS ARE NUMBERED CORRECTLY**

DO NOT OPEN THE QUESTION PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR OR HIS/HER REPRESENTATIVE

QUESTION ONE

For each of the following questions, each question has only one correct option as an answer. Choose the most correct answer. Write clearly the question number and the letter that corresponds with the most appropriate or correct answer, e.g. 50. J. Each correctly answered question carries one (1) mark

1. are also called Neuroleptic agents
 - a. Antidepressant agents
 - b. Anxiolytics
 - c. Antipsychotic agents
 - d. Mood stabilisers

2. All of the following are drug characteristics that can affect absorption of drugs, except:
 - a. Solubility of the drug
 - b. Formulation of the drug
 - c. Molecular weight of the drug
 - d. Functioning of the liver

3. The process involved with the absorption, distribution, metabolism, and excretion of drugs in the body
 - a. Pharmacokinetics
 - b. Pharmacodynamics
 - c. Polymorphism
 - d. None of the above

4. The nurse decides to reduce the dose of a drug given to a patient after noticing that the patient sleeps almost throughout the day after taking it. This is an example of
 - a. Therapeutic monitoring
 - b. Therapeutic milieu
 - c. Both A and B
 - d. None of the above

Sdumo is brought to the outpatient department of the psychiatric hospital by police. He is handcuffed, dirty, talking on top of his voice and generally violent. The nurse gives Sdumo a stat dose of chlorpromazine 100mg intramuscularly, and puts him in a seclusion room. After an hour the nurse notices that Sdumo is still wide awake and decides to give him another dose of chlorpromazine.

5. What could be the possible reason for the failure of the drug to induce drowsiness in Sdumo?
 - a. It could be the drug had expired

- b. It could be that Sdumo is using substances
 - c. It could be that the drug is poorly absorbed
 - d. All of the above
6. What should the nurse take into consideration when deciding to repeat the dose of chlorpromazine for Sdumo
- a. The possible toxic effects of CPZ
 - b. The storage and expiry date of the CPZ
 - c. Sdumo's blood pressure
 - d. All of the above
7. Anxiolytic agents should be given with caution to pregnant women because
- a. They can induce abortion
 - b. They cross the placental barrier and can be dangerous to the foetus such as respiratory failure
 - c. They can delay labour during delivery
 - d. None of the above
8. To enhance drug absorption, the nurse would take into consideration all of the following except
- a. The route of administration
 - b. The age of the patient
 - c. The nutritional status of the patient
 - d. The half-life of the drug
9. -----is an example of a Selective serotonin reuptake inhibitor
- a. Fluoxetine
 - b. Amitriptyline
 - c. Carbamazepine
 - d. Epilim
10. Which of the following is the goal of drug monitoring:
- a. To enhance therapeutic response of the drug
 - b. To make clinical decisions with regards to dosing of patient
 - c. Both A and B
 - d. None of the above
11. Pharmacodynamics is concerned with
- a. The drug mechanism at the cellular level
 - b. Drug efficacy and safety profile
 - c. Movement of the drug in the circulatory system
 - d. A and B

12. Patient adherence to prescribed psychiatric drugs can be primarily affected by all of the following except
- The structure of the drug
 - The route of administration
 - Ignorance about the illness and drug action
 - Side effects
13. To promote adherence to prescribed psychiatric drugs, the mental health nurse first should
- Establish a routine for taking the drugs and involve the patient and family in the care
 - Simplify the regimen
 - Changing the route of administration of the drug
 - Highlight the possible side effects of the drug
14. To reduce the likelihood of side effects, the nurse should advise the patient to do all of the following except:
- Take all medications on a full stomach and with lots of fluids
 - Avoid taking over the counter drugs as they may interact with his medication
 - Maintain a routine for taking the drugs
 - Avoid altering the prescribed dose

Mr. Sibandze is a 55 year old outpatient at the psychiatric hospital and is being treated for depression. He is also taking antidiabetic and antihypertensive treatment. During his monthly visit for refill of his medication he complains of low sexual drive and thinks it is because of the antidepressants.

15. In response to Mr. Sibandze, the most appropriate response by the mental health nurse should be to:
- Acknowledge that antidepressants can cause low libido as well as the antidiabetic and antihypertensive drugs
 - Inform Mr. Sibandze that the low sexual drive will improve over time
 - Inform Mr. Sibandze that his life is more important than the sexual drive therefore he must continue to take all his medications and ignore the side effect as there is nothing that can be done about it
 - Refer Mr. Sibandze to the psychiatrist
16. The most appropriate nursing intervention for Mr. Sibandze is to
- Reassure and educate him about other ways of deriving sexual pleasure
 - Reduce his dose of antidepressant
 - Take him off the antidepressants and observe if his depression relapses
 - Refer him to the psychotherapist for counselling

17. Senzo has been on haloperidol for a year when during one of his monthly visits at the hospital, the nurse notices a twitch on his right side of the face and tongue movements. The signs exhibited by Senzo suggest that he could be having:
- Tardive dyskinesia
 - Akathisia
 - Motor excitability
 - Echopraxia
18. Which nursing intervention takes priority for Senzo?
- Administer haloperidol along with artane 2mg daily
 - Assess for other signs of hyperglycaemia resulting from the use of haloperidol
 - Check Senzo's temperature and assess his mental status
 - Hold the haloperidol and inform the psychiatrist
19. Which atypical antipsychotic medication has the most potential for a patient to experience sedation, weight gain and hyper-salivation?
- Haloperidol
 - Chlorpromazine
 - Risperidone
 - Clozapine
20. A patient is exhibiting sedation, auditory hallucinations, dystonia and grandiosity. He is put on haloperidol 5mg tid and artane 4mg bid. Which statement about these medications is accurate?
- Artane would assist the patient with sedation
 - Artane would assist the patient with auditory hallucinations
 - Haloperidol would assist the patient to decrease grandiosity
 - Haloperidol would assist the patient with dystonia
21. All of the following are examples of anticholinergic effects from tricyclic antidepressants, except?
- Urinary hesitancy
 - Constipation
 - Blurred vision
 - Sedation
22. A patient admitted at the psychiatric hospital with suicidal ideation is prescribed paroxetine. The patient has a nursing diagnosis of knowledge deficit related to newly prescribed medication. Which nursing intervention addresses the patient's problem?
- Teaching patient regarding the risk of discontinuation syndrome
 - Maintaining safe milieu and monitoring suicidal ideation
 - Assessing for mood swings
 - Reinforcing the need to take the medication on an empty stomach

23. A patient is newly prescribed lithium carbonate. Which teaching point by the nurse takes priority?
- “make sure your salt intake is consistent”
 - “limit your fluid intake to 2000 ml/day
 - “Monitor your calorie intake because of the potential for weight gain”
 - “ get yourself in a daily routine to assist in avoiding a relapse”
24. A patient diagnosed with bipolar disorder is prescribed carbamazepine. The patient complains of nausea, vomiting and anorexia. Which is the appropriate nursing intervention at this time?
- Stop the medication and notify the psychiatrist
 - Hold the next dose until symptoms subside
 - Administer the next dose with food
 - Reduce the dose of carbamazepine and inform the psychiatrist
25. A client prescribed lithium carbonate 300mg in the morning and 600mg in the evening is brought to the OPD experiencing impaired consciousness, nystagmus, and arrhythmias. Earlier in the day the patient is reported to have had two seizure attacks. Which serum level would the nurse expect to assess
- 3.7 mEq/L
 - 3.0 mEq/L
 - 2.5 mEq/L
 - 1.9 mEq/L

[TOTAL MARKS: 25]

QUESTION TWO

A.

State whether the statements below are true or false. Write the alphabet representing your answer against the question sequence, e.g 50=T. Each correct answer carries 1 mark.

1. Ideally patients with epilepsy should be managed in psychiatric facilities.
 2. A patient diagnosed with depression confides to a nurse that she was a survivor of sexual abuse, but asks the nurse not to tell anyone about it. The nurse has a responsibility to withhold the information even though it could help in the holistic management of the patient.
 3. Mental health services should be an integral part of the national health response to the HIV epidemic in the country.
 4. Only females are at risk of anxiety disorders.
 5. Patients with alcohol-related social problems are better off managed as inpatients in a psychiatric unit.
 6. Promoting community based mental health services can promote understanding of mental health at community level and help reduce stigma of mental illness.
 7. Patients with mental illness deserve to be treated with dignity like all patients; it is their right.
 8. Patients with mental illness have a right to refuse admission to hospital and to refuse treatment. This right should be withheld for all patients.
 9. Psychosocial stressors are the major contributors to most psychiatric illnesses
 10. Comorbidity refers to a situation where the patient presents with more than one illness at the same time.
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B. MATCHING, Write the alphabet that represents your answer against the question number e.g. 50=T. each correct answer carries 1 mark.

	Terminology	Description
11.	Clinical pharmacokinetics	A. A side effect of antipsychotic drugs
12.	Cognitive behavioural therapy	B. An approach used with patients and their families which emphasize the goals of 1) decreased parents' vulnerability to environmental stimulation through educated psychopharmacology, 2) increasing family stability by increasing both knowledge and coping strategies
13.	Psycho-education	C. Chlorpromazine and thus should administered with caution in patients with history of seizures
14.	Dry mouth	D. Refers to the science of the rate of movement of drugs within biological systems, as affected by the absorption, distribution, metabolism, and elimination of medications
15.	Reduces seizure threshold	E. the relationship between drug concentration at the site of action and the resulting effect, including the time, course and intensity of therapeutic and adverse effects
16.	Pharmacodynamics	F. The use of drug assays procedures for determination of drug concentration in plasma, and the interpretation and application of the resulting concentration data to develop safe and effective drug regimens
17.	Therapeutic drug monitoring	G. Strongly recommended and preferred therapeutic approach in the management of patients with anxiety disorders

C. DRUG CALCULATIONS

18. A patient is prescribed clozapine 12.5 mg mane and 50mg nocte. The clozapine is available in 25 mg tablets. How many tablets would be administered daily to the patient? Show your calculation? (3 marks)
19. 60 year old Mr. X is prescribed chlorpromazine 50mg QHS for aggression. The target dose is 200mg/day. The chlorpromazine is to be increased by 50mg/day. On what day of the treatment would Mr. X reach the target dose? Show your calculations. (2 marks)
20. Simile is an inpatient at the psychiatric hospital with a diagnosis of anorexia nervosa. Today she presents with dehydration and the doctor has ordered intravenous administration of D5W to run at 150cc/hour. Because of her tiny body, the nurse uses an IV set that delivers 15 gtt/cc. The nurse should adjust the rate of flow to how many gtt/minute to achieve 150cc/hour? Show your calculation (3 marks)

[TOTAL MARKS: 25]

QUESTION THREE

Poor adherence to treatment after discharge from the hospital is one of the main reasons for readmission of patients at the national psychiatric centre. You are given a job to design strategies to address this challenge. State the process you would follow to come up with the strategy. (25 marks)

[TOTAL MARKS: 25]