

ATI Real Life Student Packet  
N201 Nursing Care of Special Populations  
2024

Student Name: \_\_Nicholas Vitella\_\_

ATI Scenario: \_\_Schizophrenia\_\_

**To Be Completed Before the Simulation**

\*Blue boxes should be completed using textbook information. What do you expect to find? This information should be collected before you start the ATI simulation\*

Medical Diagnosis: \_\_Schizophrenia\_\_

**NCLEX IV (8): Physiological Integrity/Physiological Adaptation**

**Anatomy and Physiology**

**Normal Structures**

The nervous system is divided into two major parts: 1. Central Nervous System (CNS): Includes the brain and spinal cord.

Peripheral Nervous System (PNS): Comprises the nerves that extend to and from the CNS, including the autonomic nervous system (sympathetic and parasympathetic divisions)

The brain is the control center of the CNS. Cerebrum: thought, memory, emotion, and voluntary movement. Frontal Lobe: reasoning, motor skills, higher-level cognition, and expressive language. Parietal Lobe: sensory information, including touch, temperature, and pain. Temporal Lobe: auditory processing, language, and memory. Occipital Lobe: visual processing. Cerebellum: coordinates fine motor movement, balance, and posture. Brainstem: Controls vital functions heart rate, breathing, and sleep. It includes the midbrain, pons, and medulla. Diencephalon: Contains the thalamus (sensory relay) and hypothalamus (regulates autonomic functions, hormones, and homeostasis). Limbic System: the hippocampus (memory) and amygdala (emotions). Ventricular System: Filled with cerebrospinal fluid (CSF), which cushions the brain and spinal cord.

Cellular Composition of the Nervous System The nervous system is composed of specialized cells: Neurons: The functional cells responsible for transmitting information through electrical and chemical signals. Cell Body (Soma): Contains the nucleus and organelles. Dendrites: Branching extensions that receive signals from other neurons. Axon: Long projection that transmits signals to other neurons or target tissues. Axon Terminal: The endpoint of the axon where neurotransmitters are released into the synapse. Glial Cells (Neuroglia): Supportive cells that provide structural and functional support to neurons. Astrocytes: Maintain the blood-brain barrier and regulate the environment around neurons. Oligodendrocytes: Produce myelin in the CNS to insulate axons. Schwann Cells: Produce myelin in the PNS. Microglia: Act as the immune cells of the CNS, cleaning up debris and pathogens.

Neurotransmitters are chemicals released by neurons to transmit signals across synapses (gaps between neurons). Key neurotransmitters include: Acetylcholine (ACh): Involved in muscle contraction, autonomic nervous system regulation, and attention. Dopamine: Regulates motor control, motivation, reward, and addiction pathways. Serotonin: Affects mood, appetite, and sleep. Imbalances are linked to depression and anxiety. Norepinephrine (NE): Involved in the fight-or-flight response, arousal, and attention. GABA (Gamma-aminobutyric acid): The main inhibitory neurotransmitter, reduces neuronal excitability. Glutamate: The primary excitatory neurotransmitter, crucial for learning and memory.

Synaptic transmission is the process by which neurons communicate with each other or with target cells (muscles, glands). Resting Membrane Potential: A neuron at rest has a negative charge inside the cell due to the distribution of ions, mainly sodium (Na<sup>+</sup>) and potassium (K<sup>+</sup>). Depolarization: When a neuron is stimulated, voltage-gated sodium channels open, allowing Na<sup>+</sup> to flow into the cell, making the inside more positive. Propagation of Action Potential: This change in electrical charge travels down the axon as an action potential. Repolarization: Potassium channels open, allowing K<sup>+</sup> to exit the cell, restoring the negative charge inside. Refractory Period: After an action potential, the neuron temporarily cannot fire again, allowing for the reset of ion concentrations.

**NCLEX IV (7): Reduction of Risk**

**Pathophysiology of Disease**

Schizophrenia is a neurobiologic disorder of the brain categorized as a thought disorder with disturbances in thinking, feeling, and relating to others and the environment. It is a mixture of both positive and negative symptoms that are present for a significant part of a 1 month period but with continuous signs of disturbances persisting for at least 6 months. It is characterized by delusions, hallucinations, disorganized speech and behavior, and other symptoms that cause social or occupational dysfunction. Schizophrenia is considered one of the most profoundly disabling of the major mental disorders, with less than 1% of the population suffering. It can occur at any age, but it tends to first develop between adolescence and young adulthood.. Risk factors include maternal starvation and infections during fetal development, complications during childbirth, and living in an urban environment. Theories of causation include genetics, autoimmune factors, neuroanatomic changes, psychological factors and especially excessive dopamine levels. Schizophrenia is classified as positive (type I) or negative (type II). Positive schizophrenia are traits of agitation, delusions, bizarre behavior, grandiosity; hallucinations, excitement, hostility, insomnia, or suspiciousness. Negative traits are having a lack of energy, lack of social interactions or withdrawal, blunted affect, poor grooming and hygiene, or attention deficits.

**To Be Completed Before the Simulation**

Anticipated Patient Problem: Disturbed Sensory Perception

Goal 1: PT will demonstrate decreased auditory/visual hallucinations end of week one as evidenced by reduced reported hallucinations

<p align="center"><b>Relevant Assessments</b></p> <p>(Prewrite) What assessments pertain to your patient's problem? Include timeframes</p>	<p align="center"><b>Multidisciplinary Team Intervention</b></p> <p>(Prewrite) What will you do if your assessment is abnormal?</p>
<p align="center">Assess nature, content, and frequency of hallucinations q shift</p>	<p align="center">Establish trust and rapport as well as utilizing therapeutic communication for questioning PRN</p>
<p align="center">Assess for triggers causing increased anxiety/agitation q shift</p>	<p align="center">Provide calm environment with low stimuli and reduction of other external stressors q 2 hr</p>
<p align="center">Assess response/reactions to hallucinations q 2 hr</p>	<p align="center">Teach/aid in distraction techniques q 2 hr and PRN</p>
<p align="center">Assess use of coping mechanisms q 2 hr</p>	<p align="center">Educate on coping/relaxing techniques q 4 hr</p>
<p align="center">Assess knowledge between reality and hallucinations q 4 hr</p>	<p align="center">Educate on disease and connection to personal disturbances q 4 hr</p>
<p align="center">Assess medication adherence q 6 hr</p>	<p align="center">Educate importance of adhering to medication management q 6 hr</p>

Goal 2: PT will verbalize and utilize two effective coping strategies for managing hallucination by the end of week one

**To Be Completed Before the Simulation**

Anticipated Patient Problem: Risk for Violence

Goal 1: PT will not engage in violence or aggressive behavior during my care

<p align="center"><b>Relevant Assessments</b></p> <p align="center">(Prewrite) What assessments pertain to your patient's problem? Include timeframes</p>	<p align="center"><b>Multidisciplinary Team Intervention</b></p> <p align="center">(Prewrite) What will you do if your assessment is abnormal?</p>
<p align="center">Assess for signs of escalating aggressive/violent behavior q 1 hr and PRN</p>	<p align="center">Early intervention with de-escalation strategies PRN</p>
<p align="center">Assess response to hallucinations/delusions that contribute to aggressive/violent behavior q 3 hr</p>	<p align="center">Provide/aid in reality orientation techniques q 2 hr and PRN</p>
<p align="center">Assess triggers that contribute to aggressive/violent behavior q shift</p>	<p align="center">Develop a crisis intervention plan q shift</p>
<p align="center">Assess ability for verbal expression of feelings q 2 hr and PRN</p>	<p align="center">Encourage verbalization of feelings and communication skills q 4 hr and PRN</p>
<p align="center">Assess levels of stress q 3 hr</p>	<p align="center">Provide a schedule of structured activities/routines q shift</p>
<p align="center">Assess medication adherence q shift</p>	<p align="center">Educate on the importance of medication adherence and any other additional info. on medication PRN</p>

Goal 2: PT will demonstrate coping strategies to manage feelings of anger/agitation by end of week one

**To Be Completed During the Simulation:**

Actual Patient Problem #1: Disturbed Sensory Perception

Goal: KJ will demonstrate decreased auditory/visual hallucinations as evidenced by reduced reported hallucinations by the end of my care Met:  Unmet:

Goal: KJ will verbalize and utilize two effective coping strategies for managing hallucinations by the end of my care Met:  Unmet:

Actual Patient Problem #2: Deficient Knowledge

Goal: KJ will verbalize and understanding of their condition including signs and symptoms of worsening disease or relapse Met:  Unmet:

Goal: KJ will demonstrate knowledge of treatment plan including medication, coping strategies, relaxation techniques, and resources by the end of my care Met:  Unmet:

Additional Patient Problems:

#3 Disturbed thought process

(Risk for) Imbalanced nutrition, Insomnia, Social isolation

Below will be your notes, add more lines as needed. **Relevant Assessments:** Indicate pertinent assessment findings.

**Multidisciplinary Team Intervention:** What interventions were done in response to your abnormal assessments?

**Reassessment/Evaluation:** What was your patient's response to the intervention?

Patient Problem (#)	Time	Relevant Assessments	Time	Multidisciplinary Team Intervention	Time	Reassessment/Evaluation
	1st visit	Associative looseness, weight loss, withdraw	1st visit	educated on s/sx of schizophrenia	1st visit	"I don't want it to get worse"
	1st visit	no medication adherence, auditory hallucinations "poisoned by the pharmacist" delusion of persecution, past hx of cocaine	1st visit	therapeutic communication and collaboration with provider on medication  Injectable medication Paliperidone and educated on medication	2nd visit	"still hear voices but not as often" gone out with friends no adverse effects of medication
	1st visit	s/sx schizophrenia trouble swallowing dizziness, mumbling/music audio hallucinations	1st visit	SAFE-T educated on decreasing anxiety and improve social interaction, group therapy	2nd visit	gone out with friends, trusts sister
	2nd visit	more severe audio hallucinations	2nd visit	educated on distraction techniques	2nd visit	"helps listen to music with my headphones"
	2nd visit	positive marijuana drug test paranoia	2nd visit	educated on marijuana effects and relaxing strategies	2nd visit	"yeah I can give those things a try"
	2nd visit	deficient knowledge on s/sx of relapse	2nd visit	educated on warning signs of relapse and contacting healthcare team	2nd visit	"okay I will"

**To Be Completed After the Simulation**

\*The orange boxes should be filled out with your simulation patient's actual results, assessments, medications, and recommendations\*

**NCLEX IV (7): Reduction of Risk**

Actual Labs/ Diagnostics

Positive for marijuana use  
Negative for cocaine use

**NCLEX II (3): Health Promotion and Maintenance**

Signs and Symptoms

Associative looseness  
Weight loss  
Withdraw from work and social interactions  
Loss of appetite  
Auditory hallucinations  
Delusions of persecution

**NCLEX II (3): Health Promotion and Maintenance**

Contributing Risk Factors

Previous drug use  
Social isolation  
Self care deficit  
Insomnia/disturbed sleep pattern  
Imbalanced nutrition

**NCLEX IV (7): Reduction of Risk**

Therapeutic Procedures

Non-surgical

Music  
Social interaction  
Verbalize feelings  
Relaxation techniques

Surgical

Prevention of Complications

(Any complications associated with the client's disease process? If not what are some complications you anticipate)

Psychosis  
Harm to self/others

**NCLEX IV (6): Pharmacological and Parenteral Therapies**

Medication Management

Risperidone (discontinued)  
Paliperidone Injection

**NCLEX IV (5): Basic Care and Comfort      NCLEX III (4): Psychosocial/Holistic Care Needs**

Non-Pharmacologic Care

Measures

therapeutic communication (education on disease, treatment, and therapies)

Stressors the client

experienced?

Delusions of percussion  
(anxiety and fear)

**Client/Family Education**

Document 3 teaching topics specific for this client.

- Medication
- S/Sx of disease
- Treatment therapies

**NCLEX I (1): Safe and Effective Care Environment**

Multidisciplinary Team Involvement

(Which other disciplines were involved in caring for this client?)

NP, Nurse, Pharmacy

Patient Resources

Group therapy, healthcare team

## Reflection Questions

Directions: Write reflection including the following:

1. What was your biggest “take away” from participating in the care of this client?  
My biggest take away from participating in care of the client is the amount of care and strain it could put on the patient's family. In the scenario, the sister of the patient was very much part of their care. Also how much emotion goes into caring for a family member and making sure they are healthy and getting the care they need. This made me reflect on how this lifelong disease not only hinders on the patient but also the people around them.
2. What was something that surprised you in the care of this patient?  
Something that surprised me was how well the nurse and nurse practitioner performed therapeutic communication and education for the patient and his sister. They were able to provide all essential information, resources, and answer all questions that were asked. As well as making the patient comfortable to answer honestly and the sister to ask all questions she felt like she needed to. Also how they were able to personalize care by switching medication for the patient so he would adhere to the care given.
3. What is something you would do differently with the care of this client?  
I think what I would have done differently with the care of this client is perform a more thorough assessment with the patient. For part of my assessment I would focus more questions directed toward the patient. While I think the sister was very helpful in gathering information to help inform further assessments and interventions, however I think I could get a better holistic view of the patient if I heard from them, if applicable.
4. How will this simulation experience impact your nursing practice?  
This experience impacts my nursing practice by demonstrating to me the scenarios I could be in when dealing with the patient and their families. This shows me how knowledgeable, supportive, and empathetic I should be in the healthcare field. Also how thorough I should be with assessments, not just physically but mentally as well.
5. Discuss norms or deviations of growth and development that was experienced during the simulation, including developmental stage.  
The norms of growth and development I noticed is that the patient was able to live independently, go to college, have a social life, experience with substances, and perform self care. The deviations were the symptoms of the disease. Especially apparent was their physical appearance of avoidance of eye contact and fidgeting with hands. As well as the associative looseness observed in conversation.