

MARGARET H. ROLLINS SCHOOL OF NURSING
N-201 Nursing Care of Special Populations
MENTAL HEALTH NURSING
Class Preparation #1

Directions: Fill in the charts below. Identify what mental health disorders can occur when each neurotransmitter is increased or decreased.

	Functions	Increase	Decrease
Dopamine	A monoamine neurotransmitter known as the "reward center". This affects your A person's fine muscle movement, emotions and thoughts, their decision making and stimulates hypothalamus to release hormones.	<ul style="list-style-type: none"> • Schizophrenia • Mania 	<ul style="list-style-type: none"> • Parkinson's disease • Depression
Norepinephrine	A type of monoamine neurotransmitter responsible for a person's mood also, attention and a person's arousal. This is also initiates the fight or flight in response to stress situations.	<ul style="list-style-type: none"> • Anxiety • Mania • Schizophrenia 	<ul style="list-style-type: none"> • Depression
Serotonin	Serotonin is a type of monoamine neurotransmitter that affects an individual's mood. It can also regulate their sleep cycle. It manages a person's hunger, pain perception, aggression and sexual drive or libido.	<ul style="list-style-type: none"> • Anxiety 	<ul style="list-style-type: none"> • Depression
GABA	Gamma-amino butyric acid (GABA) is an amino acid neurotransmitter is primarily responsible for reducing one's anxiety, aggression. It can also control their perception of pain. This hormone also has many anticonvulsant and muscle- relaxing properties.	<ul style="list-style-type: none"> • Reduction of Anxiety 	<ul style="list-style-type: none"> • Anxiety disorders • Schizophrenia • Mania
Acetylcholine	Acetylcholine is an acetylcholine neurotransmitter that is responsible for a person's main learning and memory. This can also regulate their mood, any mania, sexual aggression and can have a direct effect on the stimulation of the parasympathetic nervous system.	<ul style="list-style-type: none"> • Depression 	<ul style="list-style-type: none"> • Alzheimer disease • Dementia • Parkinson disease • Huntington's Chorea

Structures of the Brain

Brain Structure	Function
The limbic System	The limbic system contains a group of structures in your brain that regulate an individual's emotions, behavior, motivation, and memory. It takes in information, processes it, learns from it and produces reactions. This controls the way a person interacts with the world around them.
Frontal Lobe	The frontal lobe is known for carrying out most executive decisions such as managing a person's thinking, emotions, personality, judgment, self-control, muscle control and voluntary movements. It can also store memory.
Parietal Lobe	The parietal lobe helps a person have self- perception of the world around them. This helps processes sense of touch and gathers input from other senses into a form one can use. The parietal lobe can help an individual understand where they are in relation to other things that their senses pick up.
Temporal Lobe	The temporal lobe has both a left and right side that is primarily working together to play a role in managing your emotions, processing information from the senses, storing and pulling memories, and understanding language.
Occipital Lobe	The occipital lobe is known as the visual processing center of your brain. This area processes visual signals and works with many other areas in the brain. Its known for playing a crucial role in language, reading, storing memories, and recognizing familiar locations and faces.