

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	Fine muscle movement, integration of emotions and thoughts, decision making, stimulates hypothalamus to release hormones	Schizophrenia, mania	Parkinson Disease, Depression
Norepinephrine	Mood, attention and arousal, fight or flight in response to stress	Anxiety, Mania, Schizophrenia	Depression
Serotonin	Mood, sleep regulation, hunger, pain perception, aggression and libido	Anxiety	Depression
GABA	Reduces anxiety, aggression, pain perception, anticonvulsant and muscle-relaxing properties	Reduction of anxiety	Anxiety disorders, schizophrenia, mania
Acetylcholine	Plays a role in learning and memory, regulates mood, mania, sexual aggression, stimulates the PNS	Depression	Alzheimer's, Dementia, Parkinson disease, Huntington's Chorea

Structures of the Brain

Brain Structure	Function
The limbic System	Group of brain structures that control emotions, memory, and motivation. Helps to regulate behaviors such as fear, pleasure, and reward
Frontal Lobe	Controls higher-level thinking, problem-solving, decision-making, and personality. It also helps to regulate emotions, speech, and voluntary muscle movements
Parietal Lobe	Processes sensory information from the body, such as touch, temp, and pain. It also helps with spatial awareness, body orientation, and understanding objects in relation to the environment.

Temporal Lobe	Processes sounds, understanding language, and forming memories. It also plays a role in recognizing faces and interpreting emotions.
Occipital Lobe	Responsible for processing visual information such as color recognition, object recognition, depth perception, motion detection, spatial awareness, and memory formation.