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	Dopamine is a monoamine neurotransmitter that helps regulate fine muscle movement, integration of emotion and thoughts, decision making, and it stimulates the hypothalamus to release hormones.	Schizophrenia and mania	Parkinson Disease and depression
Norepinephrine	Norepinephrine is a monoamine neurotransmitter that helps regulate mood, attention and arousal, and the fight or flight response that associated with stress.	Anxiety, mania, schizophrenia	Depression
Serotonin	Serotonin is a monoamine neurotransmitter that regulates mood, sleep, hunger, pain perception, and aggression/libido.	Anxiety	Depression
GABA	GABA (gamma-amino butyric acid) is an amino acid neurotransmitter that helps reduce anxiety, aggression, helps with pain perception, used as an anticonvulsant and its muscle-relaxing properties.	Reduction of anxiety	Anxiety disorders, schizophrenia, mania
Acetylcholine	Acetylcholine is a neurotransmitter that helps with learning and memory, regulates mood, mania, sexual aggression, and stimulates the PNS.	Depression	Alzheimer disease, dementia, Parkinson disease, and Huntington's chorea

Structures of the Brain

Brain Structure	Function
The limbic System	The limbic system is a variety of different structures in the brain that helps regulate emotions, memory, behavior, and motivation. Some of the structures include the thalamus, hippocampus, hypothalamus, etc.

Frontal Lobe	The frontal lobe controls higher cognitive function, memory retention, voluntary eye movements, and motor functions that are involved in speech production.
Parietal Lobe	The parietal lobe interprets spatial information and interprets the sense of thought, touch, pressure, and position.
Temporal Lobe	The temporal lobe enables auditory reception with hearing and interpreting sound.
Occipital Lobe	The occipital lobe is the primary receptive area for vision and visual associations.