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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 involved in fine muscles, the integration of emotions and thoughts, and decision-making. It also stimulates the hypothalamus to release hormones.	Schizophrenia, Mania	Parkinson's 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	It plays a role in learning and memory, regulates mood, mania, and sexual aggression, and stimulates the parasympathetic nervous system.	Depression	Alzheimer's disease, dementia, Parkinson's disease, Huntington's disease

Structures of the Brain

Brain Structure	Function
The limbic System	A set of brain structures on each side of the thalamus, beneath the medial temporal lobe of the cerebrum, is primarily in the forebrain. It supports functions like emotion, behavior, long-term memory, and olfaction. It includes the amygdala (fear/pleasure) and hippocampus (memory).
Frontal Lobe	This controls the higher cognitive functions, memory retention, voluntary eye movements, voluntary motor movements, and motor functions involved in speech production.
Parietal Lobe	This interprets speech information.
Temporal Lobe	This integrates somatic (r/t body), visual, and auditory data and contains the Wernicke receptive speech area (language comprehension center).
Occipital Lobe	This is where the processing of sight takes place.