

**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.

	<b>Functions</b>	<b>Increase</b>	<b>Decrease</b>
<b>Dopamine</b>	Fine muscle movement, decision making, stimulates hypothalamus to release sex, thyroid, and adrenal hormones, integration of emotions and thoughts	Psychosis Mania	Parkinson's disease Depression
<b>Norepinephrine</b>	Mood, Attention and arousal Stimulates fight or flight in response to stress	Mania Anxiety Psychosis	Depression
<b>Serotonin</b>	Mood, sleep regulation, hunger, pain perception, aggression, libido, hormonal activity	Anxiety states	Depression
<b>GABA Inhibitory neurotransmitter</b>	Reduce anxiety, excitation, aggression, play role in pain perception, anticonvulsant, muscle relaxing properties, impair cognition and psychomotor functioning	Reduction of anxiety	Mania Anxiety psychosis
<b>Acetylcholine</b>	Learning, memory, mood: mania, sexual aggression, sexual/aggressive behavior, stimulates PNS	Depression	Alzheimer Huntington Parkinson's

Structures of the Brain

<b>Brain Structure</b>	<b>Function</b>
The limbic System	Regulates activities such as emotions, physical and sexual drives and stress response as well as processing, learning, and memory
Frontal Lobe	Thought process Goals, actions, decision making, insight, motivation, social judgement, voluntary motor ability starts
Parietal Lobe	Sensory and Motor Sensory information, concept formation/abstraction, proprioception, body awareness, reading, math, right/left orientation
Temporal Lobe	Auditory Language comprehension, store sound into memory, connects with limbic system for expression
Occipital Lobe	Vision Interprets images, visual association/memories, help language formation

