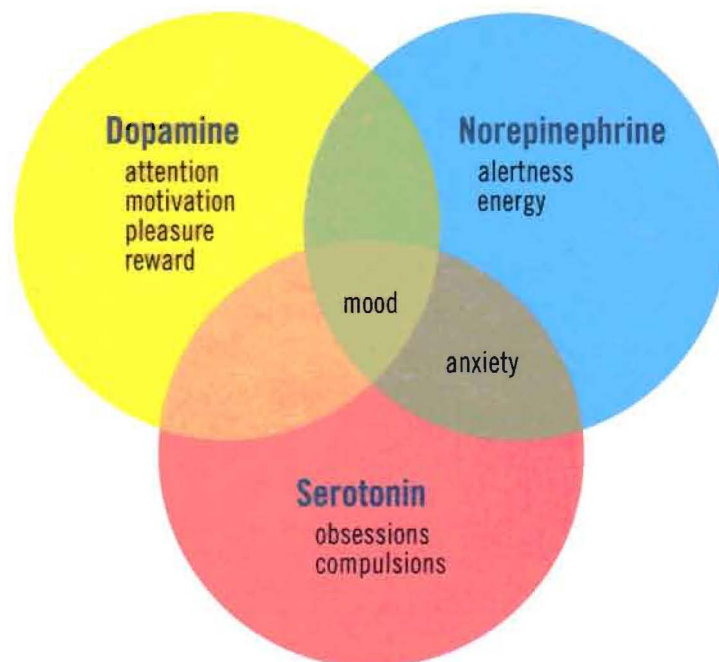


INSIGHTS ON NEUROTRANSMITTERS

Neurotransmitters regulate different aspects of mood, cognition, and behavior^{1,2}



Abnormalities of neurotransmitter function are associated with depressed mood... and a range of different symptoms^{1,2}

Serotonin	<ul style="list-style-type: none">• Obsessive-compulsive behavior
Norepinephrine	<ul style="list-style-type: none">• Decreased alertness• Low energy and lethargy
Dopamine	<ul style="list-style-type: none">• Decreased attention• Decreased motivation• Decreased ability to experience pleasure• Cognitive slowing

NEUROTRANSMITTER-SPECIFIC EFFECTS

Potential consequences of enhancing activity of different neurotransmitters

Serotonergic side effects	<ul style="list-style-type: none">• Sexual dysfunction³• Weight gain (with long-term enhancement)^{4,5}• Suppression of dopamine neurotransmission, which may result in^{1,6}:<ul style="list-style-type: none">– decreased ability to experience pleasure– apathy and decreased motivation– decreased attention– cognitive slowing• Gastrointestinal upset³• Sleep disturbance³
Noradrenergic side effects	<ul style="list-style-type: none">• Tremor• Tachycardia• Dry mouth• Insomnia
Dopaminergic side effects	<ul style="list-style-type: none">• Psychomotor activation• Aggravation of psychosis

APA* Practice Guideline for the Treatment of Adult Patients with Major Depressive Disorders

“The effectiveness of antidepressant medications is generally comparable between classes and within classes of medications. Therefore, the initial selection of an antidepressant medication will largely be based on the anticipated side effects, the safety or tolerability of these side effects for individual patients, patient preference, quantity and quality of clinical trial data regarding the medication, and its cost.”⁷

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*American Psychiatric Association, 2000.