

Symptoms

Sadness and Crying
Feelings of Worthlessness
Irritability and Aggression
Excessive Worry
Negative Thoughts
Insomnia
Obsessive Thoughts
Increased Pain Sensitivity

Lack of Attention
Lack of Motivation
Lack of Pleasure
Lack of Reward
Lack of Alertness
Lack of Energy
Lack of Memory
Emotional Numbness

Neurotransmitters Targeted

To treat above symptoms

*Selective Serotonin Reuptake
Inhibitor (SSRI) & Gamma
-Aminobutyric Acid (GABA)*

> Examples: Paxil, Lexapro, Luvox,
Celexa, Zoloft, Prozac

> Serotonin regulates mood, appetite, &
anxiety

> GABA calm and slow down; acts as
"inhibitory neurotransmitter"

> Side effects of Serotonin: sleep disturbances,
sexual problems, and upset stomach

> Have same effect as Opiates which
are alkaloids that produce "calming effect"

> Recreational drugs: Marijuana, Heroin, Barbiturates

Dopamine and Norepinephrine

> Examples: Welbutrin, Adderall, Stratera

> Dopamine ("pleasure chemical") helps to boost
our mood like amphetamines with cocaine

> Norepinephrine helps with controlling
moods, alertness, energy, and ability to pay
attention

> Side effects of Dopamine: feeling wound up, nervous,
or restless; of Norepinephrine: rapid heartbeat,
dry mouth, high blood pressure, tremors

> Have same effect as Catecholamines which
are hormones that produce "rush effect"

> Recreational drugs: Cocaine/crack, Caffeine, Nicotine

*Selective Serotonin Norepinephrine
Reuptake Inhibitors (SNRI)*

> Examples: Cymbalta, Effexor XR, Pristiq,
Elavil (mostly Serotonin), Remeron

> Side effects of Dopamine: nausea, sleepiness,
dizziness, nervousness, increased blood pressure