

# MOOD DISORDERS (p.1)

## 1. Types of mood disorders

mania

depression

    reactive depression vs. endogenous depression

dysthymia

    “double depression”

bipolar mood disorder (1% lifetime risk)

unipolar mood disorder (6% lifetime risk)

risk of suicide: about 10% of Ss with a mood disorder commit suicide

## 2. Causal Factors

moderate to high genetic factors

    60% concordance for MZ twins vs. 15% for DZ twins

    bipolar > unipolar in concordance/genetics

severe chronic stressors can also trigger depression in susceptible Ss

## 3. Neural Mechanisms

Monoamine theory of depression

    Underactivity in 5HT, nor-epi, & DA synapses

    Which may lead to an “up-regulation” of RSs for monoamines

    (Mania is presumably the overactivity in 5HT, nor-epi, & DA synapses)

Diathesis-Stress Model of Depression

    Some Ss inherit a genetic susceptibility (diathesis) for depression, but disorder only occurs if S also exposed to stressors --- which then precipitates the whole mood disorder

    Ss prone to mood disorders, esp. depression, do have stronger stress-related responses (e.g. elevated levels of CRF, ACTH, & glucocorticoids)

fMRIs & PETs show reduced activity in amygdala & frontal lobes in depressed Ss; increased activity in same regions during mania

## **MOOD DISORDERS (p.2)**

### **4. Drug Therapy for Mood Disorders**

for treatment of **depression** (unipolar or dysthymia)

**MAOIs** (monoamine oxidase inhibitors)

Block MAO, thus increasing amounts of 5HT/nor-epi/DA

“cheese reaction” (foods high in tyramine, like aged cheeses, cured meats, red wines, pickles)

high levels on monoamines --- HBP --- strokes

**Tricyclic (heterocyclic) antidepressants**

e.g. imipramine (Tofranil)

block the reuptake of both 5HT and norepi

generally considered safer to use than MAOIs, but can have some bad cardiovascular effects

**SSRI's** (selective serotonin reuptake inhibitors)

e.g. fluoxetine (Prozac)

because is more specific, generally fewer side-effects than TCAs  
gastritis, headaches, impotence

5HT agonists are also useful in Tx of aggression, rage, explosive personality

note: antidepressants are also good for treatment of **anxiety**, fear of failure, low self-esteem, **dysthymia**, **panic attacks**  
(depression and anxiety may be linked neurologically)

note: **ECT (electroconvulsive therapy)** is also very useful for Tx of severe depression & shows benefits almost immediately (vs. 3 – 6 weeks for drug therapy)

note: complete **sleep deprivation** also treats depression but is impractical!

note: **vigorous exercise** (esp. aerobic) --- helps depression (endorphins?, improved sleep?, blood flow/oxygenation of CNS?, sense of control?)

for treatment of **mania**: “mood stabilizers” (tx both mania & depression)

**Lithium**

**Antiseizure drugs** (e.g. Tegretol/carbamazepine, Depakote/valproic acid)