

Claims & Underwriting



Mental Nervous Disorders

Organic or Non-Organic?

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14th Annual Intercompany Long Term Care Insurance Conference

- To Review LTCl Mental/Nervous Disorder Contract Language Examples
- To Understand the Concept of Organic vs. Non-Organic Brain Disorders
- To Understand Common Mental/Nervous Disorders
- To Understand the Implications of Mental/Nervous Disorders to the LTCl Industry

Organic Defined



- a: of, relating to, or arising in a bodily organ
- b: affecting the structure of the organism

First Known Use of the Word: 1517

- “We will not pay the benefits of the policy for that portion of any expense which is:.....
 - Caused by mental or nervous disorder or alcoholism, or drug abuse without demonstrable organic disease. This exclusion does not apply to senile dementia, including Alzheimer’s Disease.”
- “The Policy will not pay benefits for any Nursing Home stay....which results from mental, nervous, psychotic or psychoneurotic deficiencies or disorders without demonstrable organic disease. The Policy will, however, cover qualifying stays which result from Alzheimer’s disease or similar forms of senility or irreversible dementia.”

Organic Brain Disorders



- Brain Injury
 - Intracranial bleeding
 - Traumatic Brain Injury
- Cerebrovascular Disorders
 - Stroke
- Degenerative Disorders
 - Dementia
 - Huntington's Disease
 - Multiple Sclerosis
 - Parkinson's Disease
- Mental Disorder Due to A Medical Condition
 - Endocrine Disorders
 - Immune Disorders
 - Metabolic Disorders
 - Nutritional Disorders
 - Toxins
- Other
 - CNS Tumors
 - Developmental Disorders
 - Infections

Non-Organic Brain Disorders



- Psychiatric Disorders
 - Psychotic Disorders
 - schizophrenia
 - Mood Disorders
 - Depressive Disorders
 - Bipolar
 - Anxiety Disorders
 - Panic Disorders
 - Obsessive-Compulsive Disorders
 - Somatoform Disorders
 - Pain Disorder
 - Hypochondriasis
 - Dissociative Disorders
 - Fugue States
 - Adjustment Disorders

- **Depressive symptoms, cognitive decline, and risk of Alzheimer's Disease (AD) in older persons**
 - 650 Catholic Clergy (Religious Orders Study); average age 75
 - Followed over 7 years
 - Annual assessment for depression and dementia
 - 108 developed dementia
 - For each depressive symptom, risk of developing AD increased by 19% and annual decline in cognitive function increased by 24%
 - Conclusion: depressive symptoms in older persons may be associated with risk of developing AD

Wilson RS. *Neurology* 2002;59:364

Depression and Cognitive Impairment

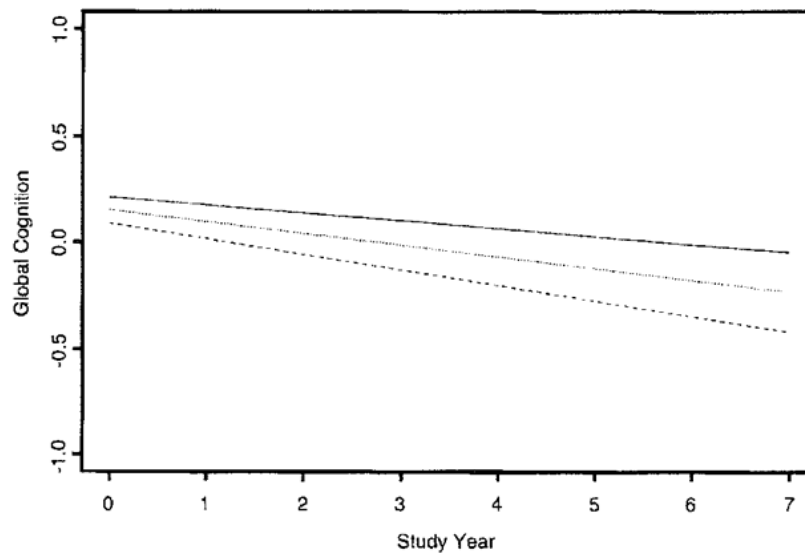


Figure 2. Average rate of change in the global measure of cognitive function in typical participants with Center for Epidemiologic Studies Depression Scale (CES-D) scores of 0 (solid line), 2 (dotted line), or 4 (dashed line).

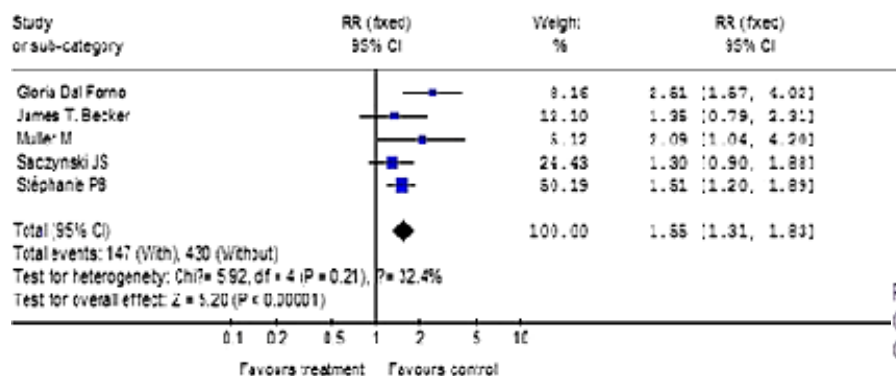
Wilson RS. *Neurology* 2002;59:364

Depression and Cognitive Impairment



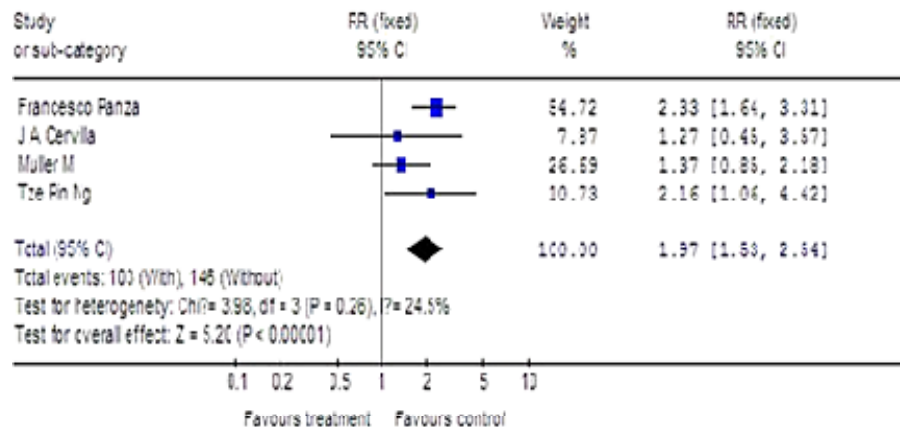
Depression as a risk factor for dementia and mild cognitive impairment: a meta-analysis of longitudinal studies

Review: depression
 Comparison: 01 Depression for dementia
 Outcome: 03 Dementia



Relative risk (RR) of dementia between subjects with or without depression

Review: depression
 Comparison: 01 Depression for dementia
 Outcome: 04 Depression for MCI



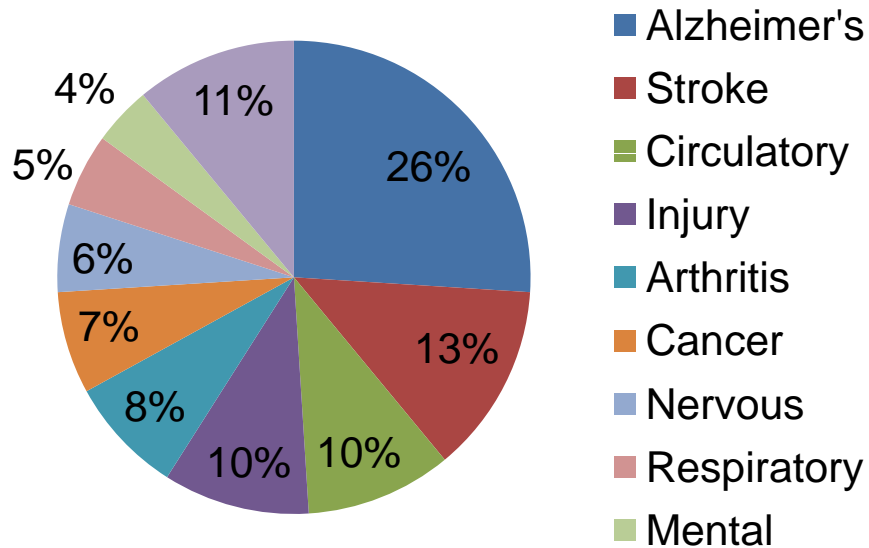
Relative risk (RR) of mild cognitive impairment between subjects with or without depression

Gao Y, et al. *Int J Geriatr Psychiatry* 2013;28:441

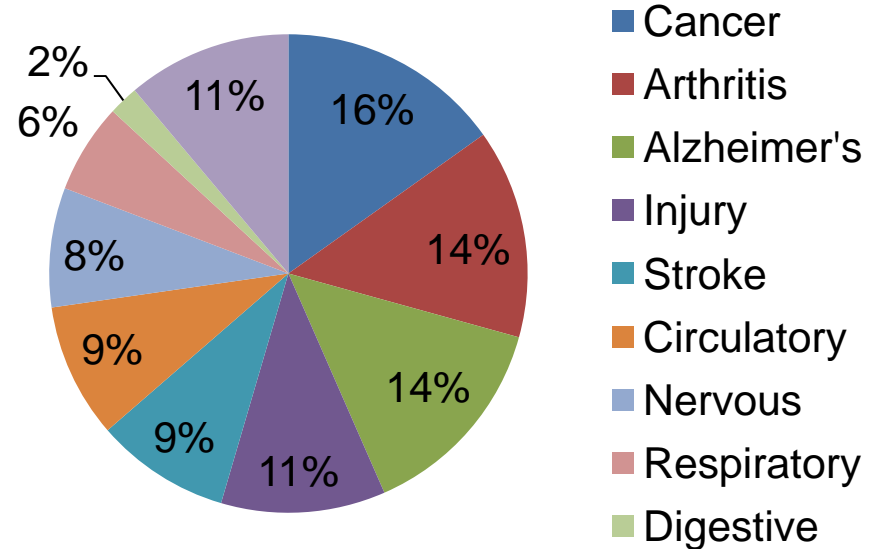
Mental Disorders and LTC Insurance Claims



Nursing Home Claims



Home Care Claims



SOA LTC Intercompany Study 6 – 1984-2007; June 2011

Mental/Nervous Disorders

Prevalence of Mental Disorders



- National Institute of Mental Health:
- 25 Percent of Adults
- 13 Percent of Children
- Are Diagnosed With a Mental Disorder

- Major Depression
- Bipolar Disorder
- Generalized Anxiety
- Obsessive Compulsive Disorder (OCD)
- Post Traumatic Stress Disorder (PTSD)
- Borderline Personality Disorder
- Schizophrenia

Depression

- 6.7 % Annual Prevalence
- 16.5% Lifetime Incidence
- 2% Classified as Severe
- Women 70% More Likely than Men (8.1/4.6)
- Average Age of Onset 32yo

Symptoms of Depression



- Loss of Energy
- Difficulty Thinking or Concentrating
- Muscle Tension
- Fatigue
- Feeling Slowed Down or Restless
- Change in Appetite
- Sleep Pattern Alteration
- Loss of Interest

Depression – Diagnostic Criteria



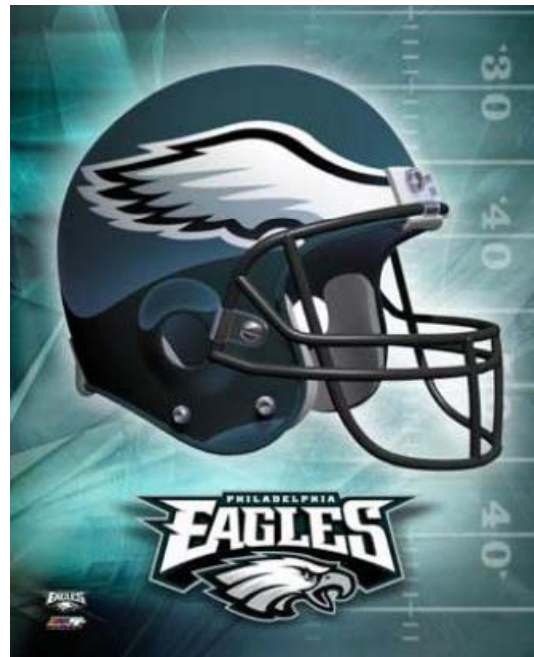
2 Weeks of Depressed Mood and Lack of Pleasure plus 5 of the following:

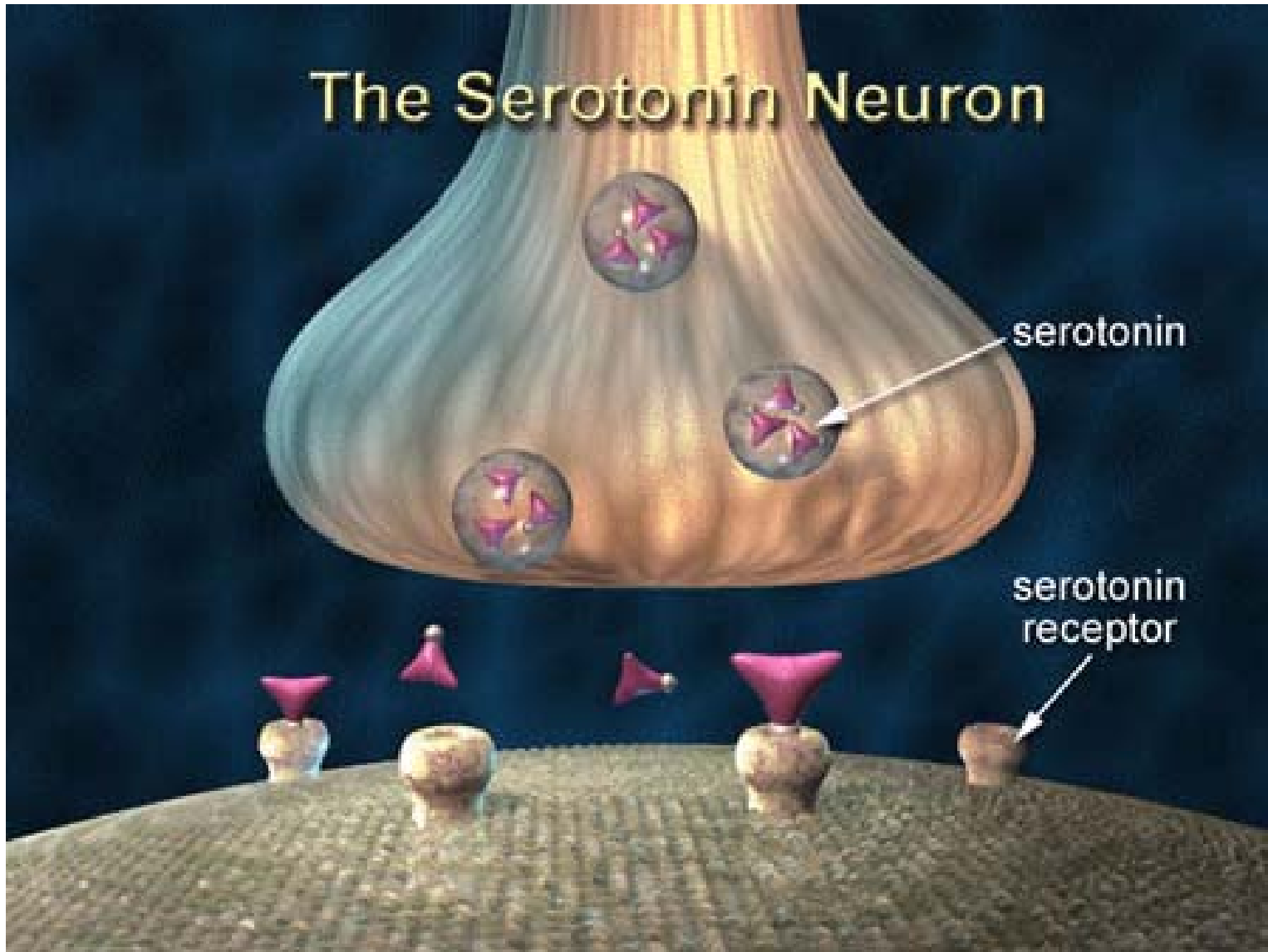
1. Depressed mood most of the day.
2. Diminished interest or pleasure in all or most activities.
3. Significant unintentional weight loss or gain.
4. Insomnia or sleeping too much.
5. Agitation or psychomotor retardation noticed by others.
6. Fatigue or loss of energy.
7. Feelings of worthlessness or excessive guilt.
8. Diminished ability to think or concentrate, or indecisiveness.
9. Recurrent thoughts of death

What Causes Depression?



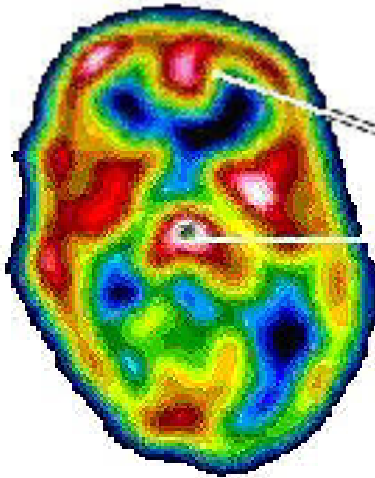
- Disordered Neurotransmitters
- Serotonin
- Norepinephrine
- Eagles Fan ?



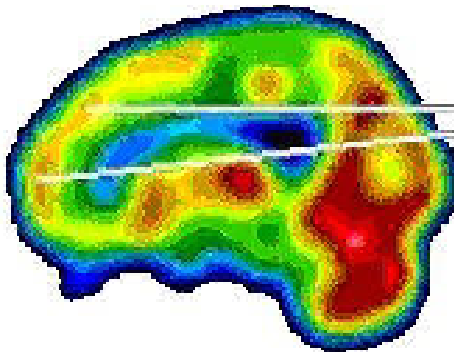


Measurable Changes in Depression

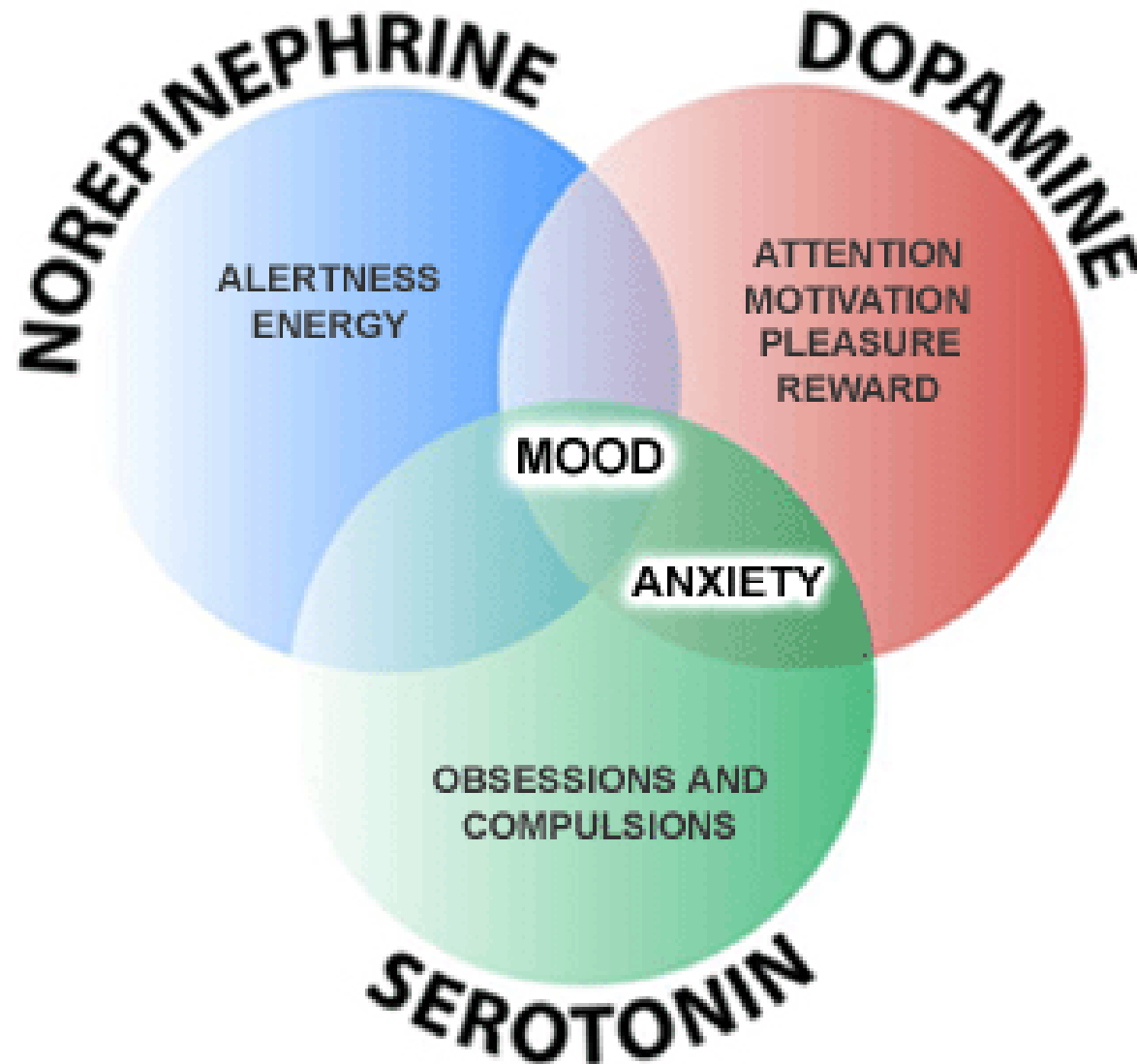
PET Scans - Depression



Increased brain activity in the Cingulate Gyrus and Thalamus causing worry and rumination.



Decreased brain activity in the Frontal Lobes causing poor concentration and a lack of motivation.



SSRI:

(Selective Serotonin Reuptake Inhibitors)

Prozac® , Celexa® , Paxil® , Lexapro®

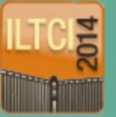
SNRI:

(Serotonin , Norepinephrine Reuptake Inhibitors) Cymbalta® , Effexor® , Pristiq®

- **Norepinephrine and dopamine reuptake inhibitors (NDRIs)** Bupropion (Wellbutrin®)
- **Atypical antidepressants** trazodone (Oleptro®)
mirtazapine (Remeron®) , vilazodone (Viibryd®)
- **Tricyclic antidepressants**
- **Monoamine oxidase inhibitors (MAOIs)**
- Anti-anxiety medications
- Antipsychotic medications

- **Electroconvulsive Therapy (ECT)**
- **Hospitalization and Residential Treatment Programs**
- **Vagus Nerve Stimulation**
- **Transcranial Magnetic Stimulation**
- **Get Exercise**
- **Avoid Alcohol and Illegal Drugs**
- **Get Plenty of Sleep**

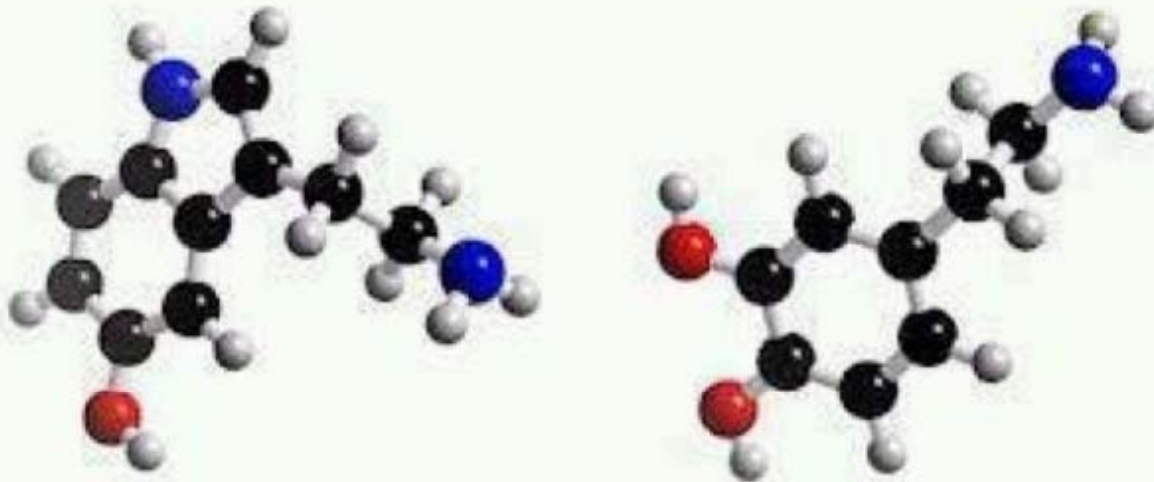
Psychotherapy Treatment for Depression



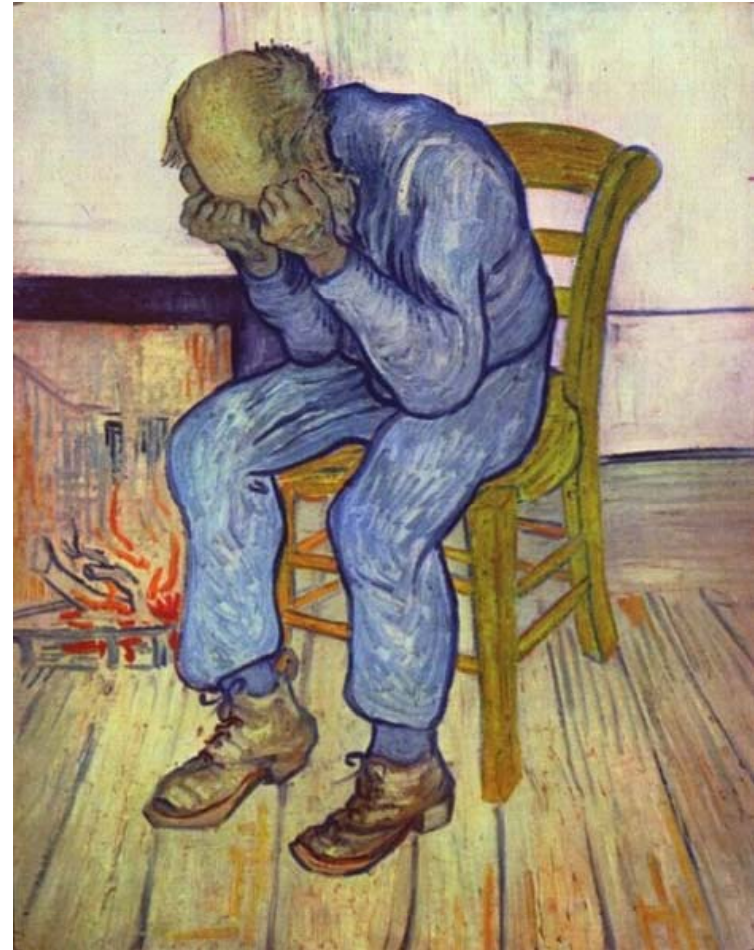
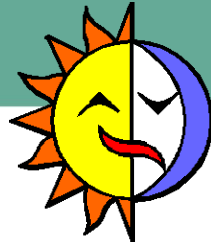
- St. John's wort
- SAMe.
- Omega-3 fatty acids
- Folate
- Acupuncture
- Yoga
- Meditation
- Guided imagery
- Massage therapy



SEROTONIN & DOPAMINE

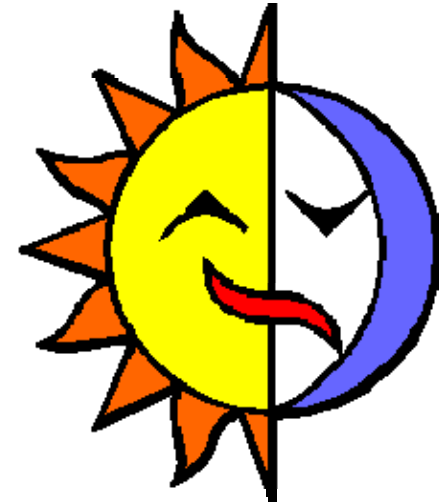


**Technically, the only
two things you enjoy**



Bipolar Disorders

- 4 % Population
- Genetics
- Equal Sex Distribution
- High Suicide Rate 20X Standard Population
- Can be Difficult to Diagnose



Types of Bipolar Disorders



- **Bipolar I Disorder**
 - manic symptoms
- **Bipolar II Disorder**
 - hypomanic episodes
- **Bipolar Disorder Not Otherwise Specified**
 - abnormal range of behavior.
- **Cyclothymic Disorder**
 - hypomania as well as mild depression

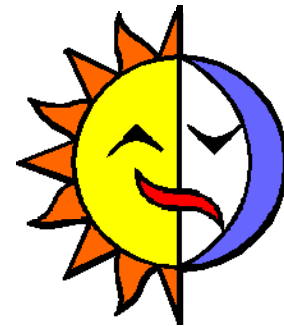


Treatment for Bipolar Illness

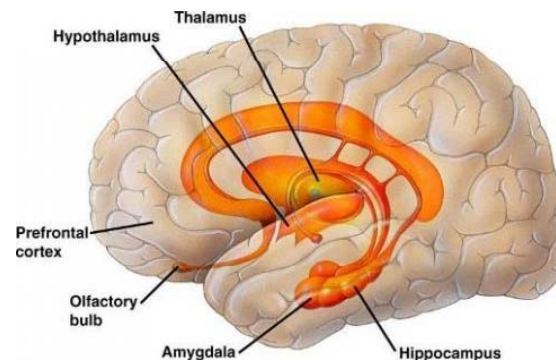


- Lithium
- Valproate (Depakote®)
- Carbamazepine (Tegretol®)
- Lamotrigine (Lamictal®)
- Topiramate (Topamax®)

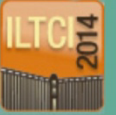
- Counseling and Therapy



- Generalized Anxiety Disorder
- Obsessive Compulsive Disorder
- Panic Disorders
- Post Traumatic Stress Disorders
- Social Anxiety Disorder
- Changes in Amygdala and Hippocampus
- Genetics



Treatment of Anxiety disorders



- Counseling CBT and Psychotherapy
- Antidepressants
- Anti Anxiety medications
- Beta Blockers



- **Organic Disease**
- (noun) Pathology: a disease in which there is a structural alteration (opposed to functional disease).



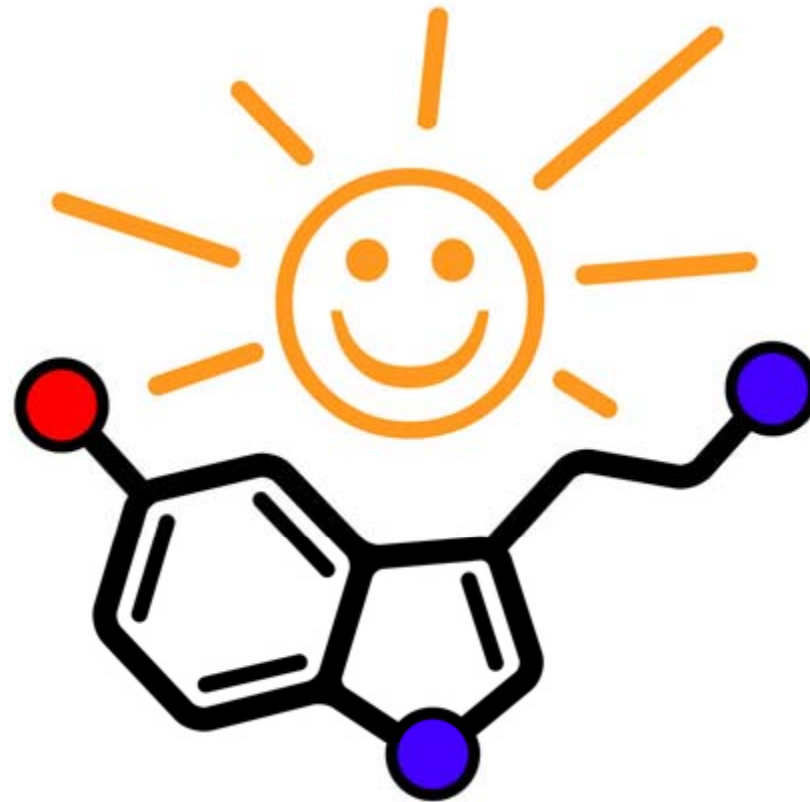
- **Functional Disorder *n.***

A physical disorder in which the symptoms have no known or detectable organic basis but are believed to be the result of psychological factors such as emotional conflicts or stress. Also called *functional disease* .



- "All mental processes are brain processes, and therefore all disorders of mental functioning are biological diseases," he says. "The brain is the organ of the mind. Where else could [mental illness] be if not in the brain?"

Questions and Discussion



serotonin

Questions?