

# Depression in Long Term Care

**WALTER J. NIERI, M.D.**

**Director for the Sun Health Research Institute's  
Center for Healthy Aging  
and**

**Program Director for the Sun Health/St. Joseph's  
Geriatric Fellowship Program**

# PREVALENCE OF DEPRESSION IN LATE LIFE

## Depressive Symptoms

- ✓ 15% of community
- ✓ 25% primary care
- ✓ 25% of medical inpatients
- ✓ 40% of nursing home patients

## Major Depression

- ✓ 1% - 3% of community
- ✓ 10% of primary care
- ✓ 15% of medical inpatients
- ✓ 15% of nursing home patients

# MAJOR RISK FACTORS FOR DEPRESSION IN ELDERLY PATIENTS

- Female
- Unmarried
- Retirement
- Home Relocation
- Diminishing Financial Base
- Collapsing Social Support
- Bereavement: single, conjugal, and multiple
- Chronic Medical Illness
- Dementia

# **RISK FACTORS FOR DEPRESSION IN THE LTC**

- **New to a nursing home environment**
- **New stresses which include loss of autonomy, loss of privacy, loss of functional status, loss of use of body parts, loss of family member or friend**
- **Current use of medication associated with high risk of depression**
- **Personal or family history of depression or mood disorders**

# **RISK FACTORS FOR DEPRESSION IN THE LTC (Cont'd)**

- **Medical diagnosis associated with a high risk of depression (Alzheimer's disease, Parkinson's disease, and certain stroke syndromes)**
- **History of psychiatric hospitalization / History of attempted suicide**
- **Alcohol or substance abuse**

# TYPES OF DEPRESSION

- Major depression
- Dysthymic depression
- Bereavement
- Pseudodementia
- Others (per DSM IV)

# TYPES OF DEPRESSION

## Major Depression

- 2 or more weeks of symptom complex usually characterized by a depressed mood and associated with a variety of other symptoms
- 5 out of 8 S/S

# DIAGNOSIS OF MAJOR DEPRESSION

(SIG E CAPS, or "When to prescribe the energy capsules")

**S** = Sleep Disorder

**I** = Interest Impaired

**G** = Guilt Feelings

**E** = Energy Loss

**C** = Concentration Impairment

**A** = Appetite Disorder

**P** = Psychomotor Disturbance

**S** = Suicidal Thoughts

# TYPES OF DEPRESSION

## Dysthymic (Depressive Neurosis)

- More of chronic disorder lasting  $\pm$  2 years and less severe than major depression
- Results from societal role loss and  $<$  self esteem
- Associated with increasing dependence on others and a loss of usefulness to family members and society
- Often associated with retirement or loss of job, loss of child care responsibility, or move from home into a care facility, etc.

# TYPES OF DEPRESSION

## Bereavement\*

- >Since dealing with migratory population
- Peaks at 6 months, exacerbates 1 year
- Usually complete reintegration into society by 2 years
  - Importance of bereavement support groups.

# SYMPTOMS OF DEPRESSION FROM DSM-IV

- ★ **Withdrawn**
- ★ **Depressed mood most of the day, almost every day**
- ★ **Diminished interest / pleasure in most activities, most of the time**
- **Weight **loss** or gain**
- **Insomnia or hypersomnia nearly every day**
- **Psychomotor agitation or retardation**
- **Fatigue or loss of energy, worse than baseline**

# **SYMPTOMS OF DEPRESSION**

## **FROM DSM-IV *(Cont'd)***

- **Feelings of worthlessness**
- **Feelings of helplessness**
- **Guilt**
- **Change in ability to think or concentrate**
- **Recurrent thoughts of death or suicide**

# ATYPICAL PRESENTATIONS OF DEPRESSION IN THE ELDERLY

- Pain Syndromes
- Somatization
- Anxiety / Irritability
- Alcohol Abuse
- Cognitive Deficit / Pseudodementia

# ATYPICAL PRESENTATIONS

## DEPRESSION AND PAIN

- 65% of patients with depression have one or more pain complaints\*
- Depression present in 5% to 85% of patients with pain\*
- Presence of pain adversely affects the recognition and treatment of depression
- Often on narcotic analgesics or hypnotics (50%\*\*)
- Treat depression and pain symptoms often decrease or disappear.
- Study of 1400 older adults with both depression and chronic pain\*\*
  - 29% received no treatment for either
  - 24% received treatment for both
  - 20% received treatment for depression only
  - 27% received treatment for pain only

\*Bair et. Al. Arch Int. Med, Nov 10,2003

\*\*Unutzer et al, JAGS Nov. 2004

# **Pain and Depression\***

## **Treatment**

### **1. TCA**

- Side effect profile higher

### **1. SSRIs**

### **2. SNRIs**

- SNRIs more effective in pain control than SSRIs
- Diabetic peripheral neuropathy

# ATYPICAL PRESENTATIONS OF DEPRESSION IN THE ELDERLY (Cont'd)

## Somatization

- Fatigue
- G.I. S/S
  - **Weight loss, anorexia,  $\pm$  vague abdominal pain**
    - ✓ Underlying malignancy
    - ✓ Gastric ulcer
    - ✓ Hyperthyroidism

# ATYPICAL PRESENTATIONS OF DEPRESSION IN THE ELDERLY (Cont'd)

## ■ Anxiety - Depression

- May appear to be patient's predominant symptom
- Frequent secondary symptom of depression

## ■ Alcohol Abuse

- Prevalence: 10% - elderly population
- Often associated with depression
- Careful Hx, P.Ex, and laboratory studies to detect alcoholism

# MEDICATIONS REPORTED TO INDUCE DEPRESSION

- Alpha Methyldopa
- Reserpine
- **Beta-blockers**
  - Propranolol (Inderal)
- **Clonidine**
- Thiazide Diuretics
- **Digitalis**
- Oral Contraceptives
- **L-Dopa**
- ACTH and Glucocorticoids
- **Benzodiazepines**
- **Cimetidine, Ranitidine**
- Cyclosporin
- Neuroleptics
- **Non-steroidal Anti-inflammatory Agents**

# MEDICATIONS REPORTED TO INDUCE DEPRESSION (Cont'd)

## DIGITALIS

- Classic S/S toxicity rare
- More often side effects with normal Dig level
  - ▶ **Neuro:**
    - ✓ Others: depression, headaches, drowsiness, confusion
    - ✓ Most common - fatigue
  - ▶ **G.I.: anorexia - M.C.**

# MEDICAL CONDITIONS ASSOCIATED WITH DEPRESSION

- Endocrinologic Disorders
  - ✓ Hypothyroidism
  - ✓ Hyperthyroidism
  - ✓ Hyperparathyroidism
  - ✓ Hypoadrenocorticalism
  - ✓ Hyperadrenocorticalism

# MEDICAL CONDITIONS ASSOCIATED WITH DEPRESSION (Cont'd)

## ■ Neurological

- Parkinson's Disease: 30-60% associated with depression, often predate Parkinson's Disease, associated with a  $\downarrow$  CSF - without hydroxy-indol acetic acid (A serotonin Metabolite)
- Alzheimer's Disease: 20%  $\pm$  depression,  $\pm$  worse early onset
- Stroke: more frequent and severe with left hemispheric lesion  $\pm$  up to 50%, often with vegetative S/S, i.e. anorexia, weight loss

# VASCULAR DEPRESSION

## Silent Strokes and Depression

*Studies by Krishnan (Duke U., Dept. of Psychiatry).*

- **Studies revealed that MRIs done on elderly patients, often show evidence of strokes in the frontal lobe and basal ganglia regions of the brain.**
  - **These silent strokes involve cognition and mood functions, rather than motor or sensory function.**
  - **When such lesions are present, the likelihood of depression increases to 40%.**

# VASCULAR DEPRESSION (Cont'd)

## Characteristics of Vascular Depression

1. Elderly
2. No previous history of depression
3. Psychomotor retardation
4. Apathy / lack of interest
5. No psychotic features

Steffens, Krishnan, Biol. Psych, 1998.

Steffens et al, Stroke, Oct. 1999.

McFall et al, Biol. Psych, 2001.

# **EVALUATION INSTRUMENTS FOR DEPRESSION**

- **Short screening test for depression**
- **Geriatric Depression Scale (GDS)**
- **Cornell Scale for Depression in Dementia**
- **MDS (Minimum Data Set)**
- **Center for Epidemiologic Studies of Depression Scale (CES-D)**
- **Hamilton Depression Rating Scale**

# SHORT SCREENING TEST FOR DEPRESSION

## 2 QUESTIONS

- 1. Have you been feeling depressed/sad lately?  
(If yes sensitivity 90%)**
- 2. Have you lost interest in your usual activities?  
(If yes to both questions, the sensitivity 95%)**

## ABBREVIATED GERIATRIC DEPRESSION SCALE

	<u>Yes</u>	<u>No</u>
1. Are you basically satisfied with your life?	0	1
2. Have you dropped many of your activities and interests?	1	0
3. Do you feel that your life is empty?	1	0
4. Do you often get bored?	1	0
5. Are you in good spirits most of the time?	0	1
6. Are you afraid that something bad is going to happen to you?	1	0
7. Do you feel happy most of the time?	0	1
8. Do you often feel helpless?	1	0
9. Do you prefer to stay at home rather than going out and doing new things?	1	0
10. Do you feel that you have more problems with memory than most?	1	0
11. Do you think it is wonderful to be alive now?	0	1
12. Do you feel pretty worthless the way you are now?	1	0
13. Do you feel full of energy?	0	1
14. Do you feel that your situation is hopeless?	1	0
15. Do you think that most people are better off than you are?	1	0

Total score \_\_\_\_\_ (Please add up all points.)

Maximum = 15    Normal (nondepressed) score = 0-5

# Cornell Scale for Depression in Dementia

NAME \_\_\_\_\_ AGE \_\_\_\_\_ SEX \_\_\_\_\_ DATE \_\_\_\_\_

WING \_\_\_\_\_ ROOM \_\_\_\_\_ PHYSICIAN \_\_\_\_\_ ASSESSOR \_\_\_\_\_

Ratings should be based on symptoms and signs occurring during the week before interview. No score should be given if symptoms result from physical disability or illness.

**SCORING SYSTEM**

a = Unable to evaluate

0 = Absent

1 = Mild to intermittent

2 = Severe

a	0	1	2

**A. MOOD-RELATED SIGNS**

1. Anxiety: anxious expression, rumination, worrying
2. Sadness: sad expression, sad voice, tearfulness
3. Lack of reaction to present events
4. Irritability: annoyed, short tempered

a	0	1	2

**B. BEHAVIORAL DISTURBANCE**

5. Agitation: restlessness, hand wringing, hair pulling
6. Retardation: slow movements, slow speech, slow reactions
7. Multiple physical complaints (score 0 if gastrointestinal symptoms only)
8. Loss of interest: less involved in usual activities (score only if change occurred acutely, i.e., in less than one month)

a	0	1	2

**C. PHYSICAL SIGNS**

9. Appetite loss: eating less than usual
10. Weight loss (score 2 if greater than 5 pounds in one month)
11. Lack of energy: fatigues easily, unable to sustain activities

a	0	1	2

**D. CYCLIC FUNCTIONS**

12. Diurnal variation of mood: symptoms worse in the morning
13. Difficulty falling asleep: later than usual for this individual
14. Multiple awakening during sleep
15. Early morning awakening: earlier than usual for this individual

a	0	1	2

**E. IDEATIONAL DISTURBANCE**

16. Suicidal: feels life is not worth living
17. Poor self-esteem: self-blame, self-depreciation, feelings of failure
18. Pessimism: anticipation of the worst
19. Mood congruent delusions: delusions of poverty, illness or loss

SCORE _____	Score greater than 12 = Probable Depression
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Notes/Current Medications: \_\_\_\_\_

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# MDS Depression Rating Scale

- Section E. 1 – indicators of depression, anxiety, and sad mood.
- Measures 16 depression symptoms
  - positive with score of 7 out of 16
- Reliable and valid measure of depression in nursing home patient (informant rating)
- **Does not** correlate well with the geriatric depression scale (self-reported)

## CES-D Scale

NAME \_\_\_\_\_ AGE \_\_\_\_\_ SEX \_\_\_\_\_ DATE \_\_\_\_\_

WING \_\_\_\_\_ ROOM \_\_\_\_\_ PHYSICIAN \_\_\_\_\_ ASSESSOR \_\_\_\_\_

**INSTRUCTIONS FOR QUESTIONS:** Below is a list of the ways you might have felt or behaved.  
Please tell me how often you have felt this way during the past week.

**Score:** 0 = Rarely or none of the time (less than 1 day)

1 = Some or little of the time (1-2 days)

2 = Occasionally or a moderate amount of time (3-4 days)

3 = most or all of the time (5-7 days)

**During the past week:**

- \_\_\_\_\_ 1. I was bothered by things that usually don't bother me.
- \_\_\_\_\_ 2. I did not feel like eating; my appetite was poor.
- \_\_\_\_\_ 3. I felt that I could not shake off the blues even with help from my family or friends.
- \_\_\_\_\_ 4. I felt that I was just as good as other people.
- \_\_\_\_\_ 5. I had trouble keeping my mind on what I was doing.
- \_\_\_\_\_ 6. I felt depressed.
- \_\_\_\_\_ 7. I felt that everything I did was an effort.
- \_\_\_\_\_ 8. I felt hopeful about the future.
- \_\_\_\_\_ 9. I thought my life had been a failure.
- \_\_\_\_\_ 10. I felt fearful.
- \_\_\_\_\_ 11. My sleep was restless.
- \_\_\_\_\_ 12. I was happy.
- \_\_\_\_\_ 13. I talked less than usual.
- \_\_\_\_\_ 14. I felt lonely.
- \_\_\_\_\_ 15. People were unfriendly.
- \_\_\_\_\_ 16. I enjoyed life.
- \_\_\_\_\_ 17. I had crying spells.
- \_\_\_\_\_ 18. I felt sad.
- \_\_\_\_\_ 19. I felt that people dislike me.
- \_\_\_\_\_ 20. I could not get "going."

# TREATMENT

- **Psychotherapy (in-house)**
- **Non-pharmacological**
- **Antidepressant medication**
- **Electroconvulsive therapy (ECT)**

# Health Care Provider's Role

- Empathic listening – find what is going on with the patient!!
- Explore family and environmental issues
- Discuss options
- Refer to psychologist / psychiatrist

**Caution:** Do not be too quick to start on medication.

# PSYCHOLOGICAL THERAPIES FOR DEPRESSION

## In Depth Therapies

**Cognitive Behavioral Therapy**: Focus on changing thoughts that perpetuate depression. Does better in combination with medication. Focus on what you can do and not what you can't do

**Interpersonal Therapy**: Focus is on role transitions, grief, interpersonal deficits, and interpersonal disputes. Greater improvement when combined with medication.

**Group Therapy**: Therapist works with a group to provide support to one another. Perhaps less effective in the elderly.

# PSYCHOLOGICAL THERAPIES FOR DEPRESSION (Cont'd)

## In Depth Therapies

**Reminiscence / Life Review Therapy**: Reflection on positive features of life to enhance self-esteem.

**Psycho-educational Therapy**: Lectures, handouts, homework assignments to identify (e.g., keep log of dysfunctional behaviors) and to focus on pleasurable behaviors.

**Psychodynamic Therapy**: Utilize psychoanalytic theory to interpret and confront problems in a group setting.

**Expressive Therapy**: Dance/movement, music, art, poetry, or drama utilized as a therapeutic modality.

# PSYCHOLOGICAL THERAPIES FOR DEPRESSION (Cont'd)

## Minimalistic Therapies

**Social Therapy**: Rearrangement of person's social life to increase interaction, e.g., attendance at senior centers or other provided activities.

**Telephone Therapy**: Weekly call to therapist with brief review of positive and negative occurrences.

# Non-pharmacological

## Alternative Treatments\*

<b>TREATMENTS</b>	<b>EXAMPLES</b>
<b>Diet alteration</b>	Limit caffeine Diet with tyrosine and/ tryptophan
<b>Vitamins</b>	Vitamin B's (B12, B1, B2, Be, B6), folic acid, biotin, Vitamin C
<b>Minerals</b>	Calcium, manganese and magnesium
<b>Light exposure</b>	Increase light exposure in low-light areas (Seasonal Affective Disorders)
<b>Exercise</b>	Strength training and aerobics
<b>Herbs (**2) oil</b>	St. John's Wort, DHEA***, oats, basil, peppermint, damiana, neroli evening primrose oil, lady's slipper

\*1 There is varying scientific support for these strategies. This table is not meant as a recommendation or critique of any of these.

\*\*2 Monographs on the German "Commission E" Standards or "Adverse Effects of Herbal Drugs" by Dr. DeSmet.

\*\*\*3 Geriatric Times 11/12, 2004

# Non-pharmacological Alternative Treatments\*

## TREATMENTS

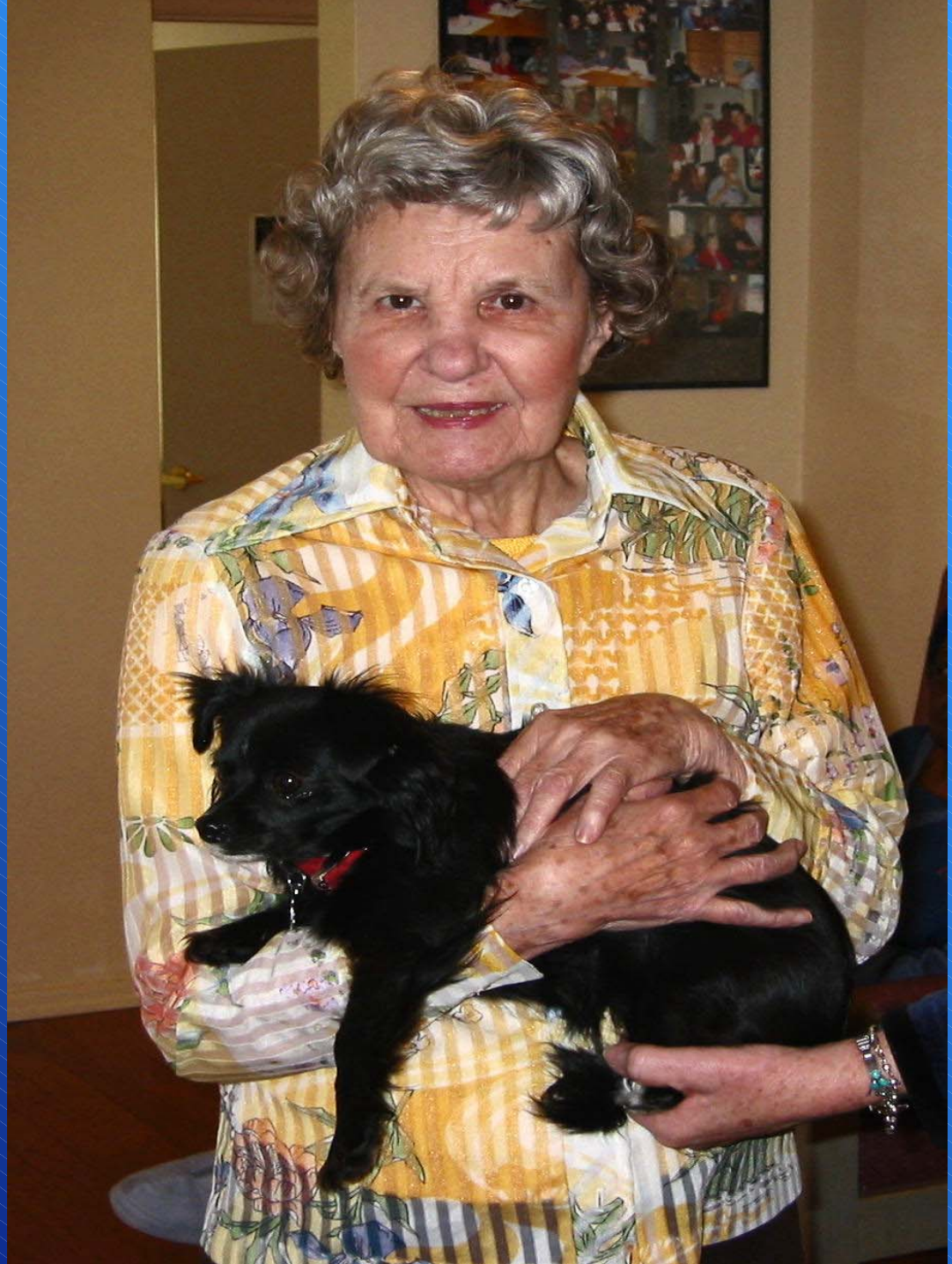
## EXAMPLES

<b>Aromatherapy</b>	Sandalwood, orange, verbena, lemon, and jasmine oils
<b>Meditation</b>	Breathing, relaxation, and sleep
<b>Biofeedback</b>	Practice manipulating brainwaves for mood elevation
<b>Massage therapy/ Acupressure</b>	Progressive relaxation and Chi Lei Jong
<b>Music therapy</b>	Gentle ballads, classical guitar, spiritual compositions, and sounds from nature, such as waves pounding, birds singing, and night crickets chirping
<b>Spiritual healing</b>	Prayer

\*1 There is varying scientific support for these strategies. This table is not meant as a recommendation or critique of any of these.

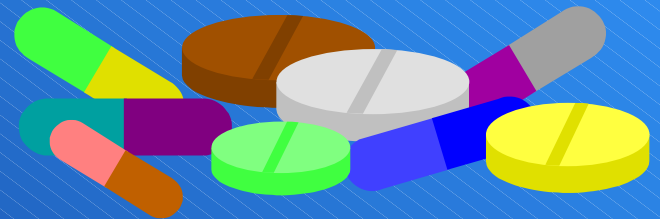
**Animals  
can make a  
big difference!**

**Eden Alternative**



# MEDICATIONS

- **Tricyclics**
- **Non-Tricyclic Antidepressants**
  - SSRIs (Selective Serotonin Uptake Inhibitors)
  - Venlafaxine (Effexor)
  - Trazodone (Desyrel)
  - Nefazodone (Serzone)
  - Mirtazapine (Remeron)
  - Bupropion (Wellbutrin)
  - Buspirone (Buspar)
  - Alprazolam (Xanax)
- **Monoamine Oxidase Inhibitors**
- **Antipsychotics**



# SIDE EFFECTS OF ANTIDEPRESSANTS TRICYCLICS

	<u>Anticholinergic Effect</u>	<u>Sedation</u>	<u>Blood Pressure Changes</u>
Amitriptyline (Elavil)	++++	++++	++++
Amoxapine (Asendin)	+++	+++	++
<b>Despramine (Norpramine)</b>	+	+	++
Doxepin (Sinequan)	++	+++	++
Imipramine (Trofranil)	++	++	++++
Marprotiline (Ludiomil)	+	++	+
<b>Nortriptyline (Pamelar)</b>	+	+	++
Protriptyline (Vivactil)	++++	+	++
Trimipramine (Surmontil)	++++	++	++

# SSRIs AND OTHER ANTIDEPRESSANTS

	<u>Anticholinergic Effect</u>	<u>Sedation</u>	<u>Blood Pressure Changes</u>
Fluoxetine (Prozac)	-	+	-
Paroxetine (Paxil)	-	+	-
Sertraline (Zoloft)	-	+	-
Citalopram (Celexa)	-	+	-
Escitalopram (Lexapro)	-	+	-
Fluvoxamine (Luvox)	-	+	-
Venlafaxine (Effexor)*	-	+	+
Duloxetine (Cymbalta)*	-		+
Traxodone (Desyrel)	+	+++	+
Nefaxodone (Serzone)	-	++	+
Mirtazapine (Remeron)*	-	++	+
Bupropion (Wellbutrin)	-	+	+
Alpraxolam (Xanax)	-	+++	-
Bupirone (Buspar)	-	-	-

\*SNRI's

# Other Indicated Disorders for the use of SSRIs\*

1. Major Depressive Disorder
2. Premenstrual Dysphoric Disorder
3. Panic Disorder
4. Posttraumatic Stress Disorder
5. Obsessive-compulsive Disorder
6. **Anxiety Disorders**

**\* SSRIs are the drug of choice for anxiety disorders  
in the elderly**

# SSRI SIDE EFFECTS

- **Gastrointestinal symptoms**
  - nausea, diarrhea, dry mouth, GI bleed
- **CNS**
  - headaches, nervousness, insomnia/somnolence
- **Sexual dysfunction**
  - decreased libido, erectile failure, delayed ejaculation, orgasm failure
- **Metabolic**
  - weight gain or loss, SIADH syndrome
- **Serotonin syndrome**

# CYP450 Isozyme Inhibition by the SSRI (*in vitro*\*)

	1A2	2C9	2C19	2D6	3A4
Escitalopram	0	0	0	0	0
Citalopram	+	0	0	+	0
Fluoxetine	+	++	+to++	+++	++
Paroxetine	+	+	+	+++	+
Sertraline	+	+	+to++	+	+

0 = minimal or weak inhibition; +, ++, +++ = mild, moderate, or strong inhibition  
 + Clinical significance of *in vitro* data is unknown

There are limited *in vitro* data suggesting a modest CYP2D6 inhibitory effect for escitalopram 20 mg/day.

\* Von Molder et al, 2001, Greenblatt et al, 2002

# MIRTAZAPINE - REMERON

- Agent of choice as an appetite stimulant in patients who are depressed and with anorexia and weight loss
- Associated with a decrease anxiety particularly with dementia patients
  - comparable to Paroxetine

# Venlafaxine (Effexor) vs. Other SSRIs in Older Adults

- Less well tolerated and more often discontinued (DW Oslin J. Clin Psych. 2003; 64:875)
- Associated with more intense and more rapidly appearing withdrawal symptoms than SSRIs
  - may occur with missing a single dose
- Associated with a higher incidence of seizures
- No convincing evidence that it is better than the other SSRIs for the treatment of depression
- Use reserved for patients who fail to respond to other SSRIs

# **CYTOCHROME P450 (CYP450): Enzymes and Selected Substrates**

<b>1A2</b>	<b>2C</b>	<b>2D6</b>	<b>3A4</b>
<b>Theophylline</b>	<b>Phenytoin</b>	<b>Codeine</b>	<b>Antihistamines</b>
<b>Warfarin</b>	<b>Warfarin</b>	<b>Venlafaxine</b>	<b>Calcium Channel blockers</b>
<b>Antipsychotics</b>	<b>Amitriptyline</b>	<b>Trazodone</b>	<b>Carbamazepine</b>
<b>Benzodiazepines</b>	<b>Clomipramine</b>	<b>Risperidone</b>	<b>Corticosteroids</b>
<b>Fluvoxamine</b>	<b>Ormeprazole</b>	<b>Haloperidol</b>	<b>Cyclosporine</b>
		<b>b-blockers</b>	<b>Fentanyl</b>
			<b>Protease inhibitors</b>
			<b>Statins</b>
			<b>Triazolo- benzodiazepine</b>

# ANTICHOLINERGIC EFFECTS (Antimuscarinic)

- Dry mouth
- Blurred vision
- Constipation
- Urinary retention
- Confusion
- > heart rate

# **CONTACT INFO**

**Walter J. Nieri, M.D.**

**Program Director**

**Sun Health/St. Joseph's Geriatric Fellowship Program**

**Director, Center for Healthy Aging**

**Sun Health Research Institute**

**10515 W. Santa Fe Drive**

**Sun City, AZ 85351**

**Phone: 623/815-7661; Fax: 623/815-2981**

**[walter.nieri@sunhealth.org](mailto:walter.nieri@sunhealth.org)**