Depression In CKD

The Time To Act Is Now

Mark A. Meier, MSW, LICSW
My Disclaimer

- I tell jokes that most people don’t find funny
- I sometimes swear…so I will apologize now
- I talk far too much
- I get a little fired up at times
- I still have hero’s
“What do we live for if not to make life less difficult for each other?”

Roger Bannister
Looking Back

“We believe that dialysis patients’ depression and anxiety levels are closely tied to their physiological status”

Kutner, Fair, Kutner (1985) Assessing Depression And Anxiety In Chronic Dialysis Patients. Journal of Psychosomatic Research 29 (1) 23-31:
And Today…

“This (Depression) may be one of the last modifiable risk factors for poor outcomes we as nephrologists and mental health care workers can address.”

Kimmel P, Peterson R. Clinical Journal Depression in Patients with End Stage Renal Disease Treated with Dialysis: Has the Time to Treat Arrived? American Society of Nephrology 1:349-352, 2006
Major Depression - Trend

The Scope of the Problem?

“About 20-30% of dialysis patients present with depression”

Tossani, Cassano, Fava; Seminars in Dialysis, Volume 18, No. 2 (March-April) 2005
And...

“Our results suggesting that almost half (44%) the patients with ESRD starting dialysis therapy were depressed....”

Who Gets Depressed?

- Women tend to have higher rates
More Common In Women

<table>
<thead>
<tr>
<th></th>
<th>Prevalence of Major Depressive Episode (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime</td>
<td>Women: 21.3%  Men: 12.7%</td>
</tr>
<tr>
<td>12-Month</td>
<td>Women: 16.3%  Men: 9.5%</td>
</tr>
</tbody>
</table>
Who Gets Depressed?

- Women tend to have higher rates
- Diabetics
Depression and Diabetes - Prevalence

LI et al. 2008: 8.3%
Anderson, R. et al. 2001: 11%
Gonzalez et al. 2007: 19.3%
Anderson, D. et al. 2007: 30%

Prevalence of depression in diabetes patients across various studies.
Who Gets Depressed?

- Women tend to have higher rates
- Diabetics
- Individuals with Coronary Heart Disease (CHD)
CHD And Depression

“A recent study based on National Health Interview Survey data of 30,801 adults found the 12-month prevalence of major depression to be 9.3% in individuals with cardiac disease as compared with 4.8% in those with no co-morbid medical illness.”

Who Gets Depressed?

- Women tend to have higher rates
- Diabetics
- Individuals with Coronary Heart Disease (CHD)
- Your Speaker Today

equalicare
Complex issues. Human solutions.
Factors Associated With Depression

- Genetics (heritability ~70%)
- Environment
- Chemistry (serotonin, dopamine, norepinephrine)
- Childhood Trauma
Factors Associated With Depression

- Brain Structure (e.g. HPA Axis Dysregulation)
- Stress
  - Cortisol
  - Dopaminergic system
  - Monoaminergic system
  - Hippocampus involvement
Major Depression
“Most clinicians recognize depression when they see it or perhaps feel it. The welling up of tears in a patient’s eyes, sluggishness, demoralization, or a pessimistic attitude attract the experienced clinician’s attention to the possibility of an MDE (Major Depressive Episode)”

Recognition and Treatment of Depression
George E. Tesar
Does MDD Have A Sound?

“What’s the point?”
“I’m such a burden”
“You don’t understand what it’s like”
“Everything seems so hard”
“I feel nothing”
Does MDD Have A Sound?

“People would be better off without me”
“I just want to go away”
“I wish people would just leave me alone”
“I am so irritable”
Does MDD Have A Sound?

“I have so much going for me, how can I be depressed?”

“It’s ridiculous that I can’t shake this, I just need to try harder.”

“It’s not like there is a history of depression in my family.”
The Experience of Depression

“Psychological symptoms of unipolar depressive disorders may also include anxiety, irritability, reduced concentration and motivation, feelings of hopelessness and helplessness, excessive guilt, thoughts of suicide, hypersensitivity to criticism, perfectionism, and indecisiveness.”

Tossani E, Cassano P, Fava M. Depression and Renal Disease. Seminars in Dialysis 2005; 18(2) pp 73-81
DSM-IV: Major Depressive Episode

- 5 or more of the following symptoms
- Present during the same 2 week period
- Represents a change from previous functioning
- At least one of the symptoms:
  - Depressed mood
  - Loss of interest or pleasure
Major Depressive Episode

1. Depressed mood, most of the day, nearly day (subjective report or observed)
2. Markedly diminished interest in all or almost all activities
3. Significant weight loss, or decrease or increase in appetite
4. Insomnia or hypersomnia
5. Fatigue or loss of energy
Major Depressive Episode

6. Psychomotor retardation or agitation
7. Feelings of worthlessness or excessive or inappropriate guilt
8. Diminished ability to think or concentrate, or indecisiveness
9. Recurrent thoughts of death, recurrent suicidal ideation, specific plan for committing suicide, or suicide attempt
A Quick Word From Depression’s Best Friend....

Anxiety
In the National Comorbidity Survey (2005), 58% of patients diagnosed with major depression were found to have an anxiety disorder; among these patients, the rate of comorbidity with GAD was 17.2%, and with Panic Disorder, 9.9%.
“Accumulating evidence indicates that patients with comorbid depression and anxiety tend to have greater illness severity and a lower treatment response than those with either disorder alone. In addition, social function and quality of life are more greatly impaired.”

National Comorbidity Survey, 2005
Depression and The ESRD Professional
“Physical and emotional symptoms are prevalent, can be severe, and are correlated directly with impaired quality of life and depression in maintenance hemodialysis patients. An incomplete understanding of symptom burden by renal providers may lead in turn to the underassessment and under-treatment of bothersome symptoms in this chronically ill patient group.”

“Antidepressants are over prescribed and overused in this country” (n=1408)
The Reality…

According to the National Institute of Mental Health (NIMH) only about 25% of depressed individuals are receiving appropriate therapy for their depression…
What Are Your Beliefs?

- Depression is a weakness
- Depression is something that an individual can overcome if they try hard enough
- Depression is an excuse
- Depression is a critical issue for my clinic to address
Depression and The ESRD Patient
Depression Impacts....

- Patient adherence
“We found an increased level of depressive affect correlated with both laboratory and behavioral markers of poor compliance. Decreased behavioral compliance with the dialysis prescription correlated with an increased level of depressive affect in prevalent HD patients”

## Factors Associated with Nonadherence

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Odds ratios (OR) by nonadherence measure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skip</td>
</tr>
<tr>
<td>Smoker (yes vs. no)</td>
<td>1.53&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Depressed (yes vs. no)</td>
<td>1.62&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Married (yes vs. no)</td>
<td>0.90</td>
</tr>
<tr>
<td>Prior kidney transplant (yes vs. no)</td>
<td>0.79</td>
</tr>
<tr>
<td>Time on ESRD in years (per year)</td>
<td>1.02</td>
</tr>
</tbody>
</table>

ERSD is end stage renal disease; IDWG is interdialytic weight gain

<sup>a</sup>Adjusted for continent of residence, age, sex, race, ethnicity, time on ESRD, 15 comorbid conditions, employment status, living status, marital status, prior kidney TX, and Kt/V

<sup>b</sup>P < 0.05
Depression Impacts....

- Patient adherence
- Mortality and Morbidity
Depression Is Associated With an Increased Risk of Mortality and Hospitalization in Hemodialysis Patients

![Bar chart showing adjusted relative risk for various depression statuses.](chart)

Note: Data are from the US (142 facilities) and Europe (101 facilities) and were restricted to 5,256 patients who had a medical questionnaire completed by the nurse coordinator and a questionnaire completed by the patient. Lopes AA, et al. Kidney Int. 2002;62:199-207.
Depression Impacts…. 

- Patient adherence
- Mortality and Morbidity
- Suicide Rates
Suicide and ESRD

“Persons with ESRD are significantly more likely to commit suicide than persons in the general population”

Kurella, Kimmel, Young, Chertow; Journal American Society of Nephrology, Volume 16, March 2005
The Tragedy of Suicide

- Untreated depression is the number leading cause of suicide
- Suicide is the third leading cause of death in young people (18-24 years)
- Older adults (65+) comprise 12.4% of the U.S. population, but complete 16% of all suicides
- One suicide occurs about every 16 minutes
Suicide vs. Homicide - 2001

Centers for Disease Control, 2004
Suicide Attempts

“While 30,000 Americans die by suicide each year, a staggering 730,000 people attempt suicide each year in the United States”
Suicide Screening Questions
If question 1 is negative and suspicion is low, the subsequent questions can be skipped

1. Have these feelings we’ve been talking about led you to think you might be better off dead? (Y/N)

2. This past week, have you had any thoughts that life is not worth living or that you’d be better off dead? (Y/N)

3. What about thoughts about hurting or even killing yourself? (Y/N)

MacArthur Initiative on Depression
Suicide Screening Questions

4. What have you thought about?

5. Have you actually done anything to hurt yourself?

6. Risk Factors for Suicide
   - History of suicide attempt
   - Social isolation
   - Substance abuse
   - Hopelessness
   - Significant co-morbid anxiety

MacArthur Initiative on Depression
## Assessment Of Suicide Risk

<table>
<thead>
<tr>
<th>Description of Patient Symptoms</th>
<th>Level of Risk</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>No current thoughts; no major risk factors</td>
<td>Low Risk</td>
<td>Continue follow-up visits and monitoring</td>
</tr>
<tr>
<td>Current thoughts, but no plans. With or without risk factors</td>
<td>Intermediate Risk</td>
<td>Assess suicide risk carefully at each visit and contract with patient to call you if suicide thoughts become more prominent. Consult with Mental Health Specialist as needed.</td>
</tr>
</tbody>
</table>
| Current thoughts with plans. | High Risk | **Emergent referral:** Active plan, no self-control or social support  
**Urgent Referral:** Social support & self-control |
Screening the ESRD Patient for Depression
Why?

“The USPSTF found good evidence that screening improves the accurate identification of depressed patients in primary care settings and that treatment of depressed adults identified in primary care settings decreases clinical morbidity.”
Depression Is Frequently Not Diagnosed
# Prevalence of Physician Diagnosis of Depression and CES-D ≥ 10, by Country

<table>
<thead>
<tr>
<th>Country (N)</th>
<th>Physician-diagnosed depression (n/N)</th>
<th>CES-D score ≥10 (n/N)</th>
<th>Ratio of CES-D ≥10 to depression by physician diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia/NZ</td>
<td>17.4 (75/430)</td>
<td>40.2 (173/430)</td>
<td>2.3</td>
</tr>
<tr>
<td>Belgium</td>
<td>18.2 (81/445)</td>
<td>42.3 (188/445)</td>
<td>2.3</td>
</tr>
<tr>
<td>Canada</td>
<td>15.9 (68/428)</td>
<td>42.8 (183/428)</td>
<td>2.7</td>
</tr>
<tr>
<td>France</td>
<td>10.6 (44/416)</td>
<td>43.5 (181/416)</td>
<td>4.1</td>
</tr>
<tr>
<td>Germany</td>
<td>13.3 (66/495)</td>
<td>47.3 (234/495)</td>
<td>3.6</td>
</tr>
<tr>
<td>Italy</td>
<td>15.5 (85/547)</td>
<td>62.3 (341/547)</td>
<td>4.0</td>
</tr>
<tr>
<td>Japan</td>
<td>2.0 (29/1473)</td>
<td>40.0 (589/1473)</td>
<td>20.0</td>
</tr>
<tr>
<td>Spain</td>
<td>14.5 (82/555)</td>
<td>42.2 (233/552)</td>
<td>2.9</td>
</tr>
<tr>
<td>Sweden</td>
<td>19.8 (89/449)</td>
<td>39.4 (177/449)</td>
<td>2.0</td>
</tr>
<tr>
<td>UK</td>
<td>15.5 (70/452)</td>
<td>40.9 (185/452)</td>
<td>2.6</td>
</tr>
<tr>
<td>US</td>
<td>21.7 (282/1300)</td>
<td>39.2 (519/1300)</td>
<td>1.8</td>
</tr>
<tr>
<td>All DOPPS</td>
<td>13.9 (969/6,987)</td>
<td>43.0 (3003/6,987)</td>
<td>3.1</td>
</tr>
</tbody>
</table>

DOPPS II (2002-04): Prevalent cross-section of patients with information on depression diagnosis and who had completed a CES-D instrument. Mean country CES-D scores ranged from 8.4 to 11.7.

Screening Tools

- Beck Depression Inventory (BDI)
- Geriatric Depression Scale
- Zung Self-Rated Depression Scale
- Patient Health Questionnaire (PHQ-9)
Why the PHQ-9

- Free (www.depression-primarycare.org)
- Valid and reliable in ESRD patients
  Watnick, Wang, Demadura, Ganzini, *Validation of 2 depression screening tools in dialysis patients.*
  American Journal of Kidney Diseases, 46(5-November) 2005: pp 919-924
- Self-administered
- Available in multiple languages
- Easy and quick to score
The Zung Self-Rating Scale

- Free and available in the public domain
- Highly utilized and recognized
- Reliable and valid across multiple cultures
- Easy to administer and score
Too Busy?
Ask These Two Questions…

1. Over the past two weeks, have you felt little interest or pleasure in doing things?

2. Over the past two weeks, have you felt down, depressed, or hopeless?

Treatment Options For Depression In ESRD
Depression Is Frequently Not Treated
Antidepressant medication use (%), by indication of depression/symptoms and country

<table>
<thead>
<tr>
<th>Country</th>
<th>Among those with physician-diagnosed depression (n/N)</th>
<th>Among those with CES-D score ≥ 10 (n/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia/NZ</td>
<td>36.0 (27/75)</td>
<td>16.9 (29/172)</td>
</tr>
<tr>
<td>Belgium</td>
<td>37.0 (30/81)</td>
<td>17.1 (32/187)</td>
</tr>
<tr>
<td>Canada</td>
<td>44.1 (30/68)</td>
<td>18.0 (33/183)</td>
</tr>
<tr>
<td>France</td>
<td>40.9 (18/44)</td>
<td>14.5 (26/179)</td>
</tr>
<tr>
<td>Germany</td>
<td>18.2 (12/66)</td>
<td>8.6 (20/234)</td>
</tr>
<tr>
<td>Italy</td>
<td>8.2 (7/85)</td>
<td>2.7 (9/333)</td>
</tr>
<tr>
<td>Japan</td>
<td>Unavailable</td>
<td>Available</td>
</tr>
<tr>
<td>Spain</td>
<td>27.5 (22/80)</td>
<td>12.0 (27/225)</td>
</tr>
<tr>
<td>Sweden</td>
<td>52.8 (47/89)</td>
<td>28.8 (51/177)</td>
</tr>
<tr>
<td>UK</td>
<td>37.1 (26/70)</td>
<td>18.4 (34/185)</td>
</tr>
<tr>
<td>US</td>
<td>38.9 (105/270)</td>
<td>28.9 (151/510)</td>
</tr>
<tr>
<td>All DOPPS</td>
<td>34.9 (324/928)</td>
<td>17.3 (412/2385)</td>
</tr>
</tbody>
</table>
“Antidepressants are over prescribed and overused in this country”  
(n=1408)
Phases of Treatment of Depression

Goal = Remission

Response
Relapse
Recurrence

Increased Severity

Normalcy
Symptoms
Syndrome
Treatment Phases

Progression to disorder

Acute (6-12 wk)
Continuation (4-9 mo)
Maintenance (≥1 y)

Time

Two Options To Consider

- Psychotherapy or Counseling
- Antidepressants
Cognitive Therapy

- Effective on its own in mild and moderate depression
- Beneficial in treating patients who only have a partial response to therapy
- Often preferred by patients
- Critical component in treating major depression
“In patients with renal disease, depression is fairly common and antidepressants have proven to be effective in this population as well, although caution should be exercised in the use of these agents.”

Tossani, Cassano, Fava; Seminars in Dialysis, Volume 18, No. 2 (March-April) 2005
“Fifty percent of patients successfully completed 12 weeks of pharmacologic depression treatment. The mean BDI (Beck Depression Inventory) score of these patients at the start of treatment was 17.4 ± 6.6 (range 11-33). The mean BDI score at the completion of 12 weeks of treatment was 8.4 ± 3.0 (range 6-15).”

Adherence and Antidepressants

- Medication must be taken for minimum 4-6 weeks before gauging effectiveness.
- Medication cannot be stopped because patient feels better.
- Medication must be taken as prescribed.
- Medication might need to be taken for a prolonged period of time.
Poor Adherence

“In recently analyzed adherence data from over 740,000 newly initiated immediate-release SSRI patients, Eaddy and associates found that nearly 50% failed to adhere to therapy for a minimum of 60 days, and only 28% were compliant at 6 months.”

Keene, M. Confusion and complaints: *The true cost of noncompliance in antidepressant therapy.* Medscape Psychiatry & Mental Health. 2005; 10(2)
Poor Adherence=Relapse

“Those who remain on their antidepressant for up to 36 months have relapse rates of only 18%, whereas those who are switched to placebo have relapse rates that exceed 40%”

Keene, M. Confusion and complaints: *The true cost of noncompliance in antidepressant therapy.* Medscape Psychiatry & Mental Health. 2005; 10(2)
Other Medication Issues

- SSRI’s (Selective Serotonin Re-uptake Inhibitors)
  - Tend to be Hepatically metabolized
  - Can have profound side-effects
  - All meds work equally well in broad population studies but individuals may respond better to one than another

- SNRI’s (Serotonin Norepinephrine Re-uptake Inhibitors)
<table>
<thead>
<tr>
<th>Medication</th>
<th>Initial Dose</th>
<th>Usual Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sertraline (Zoloft)</td>
<td>25</td>
<td>25-150</td>
</tr>
<tr>
<td>Paroxetine (Paxil)</td>
<td>10</td>
<td>10-20</td>
</tr>
<tr>
<td>Citalopram (Celexa)</td>
<td>10</td>
<td>10-40</td>
</tr>
<tr>
<td>Bupropion (Zyban)</td>
<td>75</td>
<td>300</td>
</tr>
<tr>
<td>Nefazodone (Serzone)</td>
<td>300</td>
<td>600</td>
</tr>
<tr>
<td>Nortriptyline (Pamelor, Aventyl)</td>
<td>10-25</td>
<td>50-100</td>
</tr>
</tbody>
</table>

Wuerth, Finklestein, Finklestein; Seminars in Dialysis-Vol 18, No. 2 (March-April 2005)
Medication Management

- Dosing adequacy
- Medication efficacy
- Adjustments/Monitoring
- Psychiatry consult
The Lifecycle of Depression
Depression Is A Chronic Illness

“Depression is frequently a recurrent/chronic disorder, with a 50% recurrence rate after the first episode, 70% after the second, and 90% after the third.”

University of Michigan Health Systems: Guidelines for Clinical Care-Depression
Treatment Outcomes in Depression

Response: Clinically significant reduction in baseline symptom severity

Remission: Absence or near absence of symptoms and restoration of functioning

Relapse: Return of symptoms of major depressive episode during continuation treatment

Recurrence: New episode of depression following sustained remission of previous episode
The Goal of Treatment

Remission!
Potential Consequences Of Not Achieving Remission

- Increased risk of relapse and recurrence
- Increased risk of treatment resistance
- Continued psychosocial limitations
- Increased risk of disability or decrease of productivity at work
Potential Consequences Of Not Achieving Remission

- Increased medical/mental health expenditures
- Increased likelihood of substance abuse
- Worsened morbidity or mortality of other conditions
- **Sustained risk of suicide**
Why Won’t People Get Treated?

- Don’t know where to turn
- Lack of recognition of the problem
- Access to care issues
- Cultural Barriers
- Denial
- Embarrassment and Shame
Congratulations… Did I mention I’m depressed?
Educating The Patient
Remember These Issues

- Shame
- Guilt
- Sense of Worthlessness
- Loss of Hope
- Cognitive Distortions
- Stigma
- Embarrassment
Empathy

“is the 'capacity' to share and understand another's 'state of mind' or emotion. It is often characterized as the ability to "put oneself into another's shoes", or in some way experience the outlook or emotions of another being within oneself.”

Wikipedia
Your Approach

1. Energy, Enthusiasm
2. Impart Hope/Optimism

“I have hope right now even if it is hard for you to feel hope.”

“Others have been in your position and they have recovered from this.”
Engaging Techniques

1. Attentive Listening

2. Probing questions
   - Depressed patients have a tendency to mask or hide underlying depression issues.
   - “Is there anything else you might like to discuss”
3. Open-ended questioning
   - “Can you tell me why you are here today”
   - “What do you know about depression”

4. Facilitation of responses
   - Non-verbal affirmation
   - “Tell me more about….”

The MacArthur Initiative on Depression
5. **Summarizing**
   - “Let me see if I have understood all that you have told me…”

4. **Elicitation of client expectations**
   - “What would you like to see happen as a result of this visit?”
   - “What do you think is going on?”

*The MacArthur Initiative on Depression*
Patient Education

- Common illness impacting 20 million Americans
- Complex interplay of environmental, biological, and neurochemical factors
- Treatable
- Not a personal weakness
Patient Education

1. Explain the disease/treatment process
   - Can be chronic
   - Symptoms can change
   - Symptoms can +/- day to day
   - Active treatment approach is important
   - Treatment outcomes
Treatment Outcomes in Depression

Response: Clinically significant reduction in baseline symptom severity

Remission: Absence or near absence of symptoms and restoration of functioning

Relapse: Return of symptoms of major depressive episode during continuation treatment

Recurrence: New episode of depression following sustained remission of previous episode
Antidepressants

- Must be taken as prescribed
- Are not uppers/stimulants
- Take time to work
- Shouldn’t be stopped because you feel better
Antidepressants

- Shouldn’t be stopped abruptly
- Discuss side-effects
- Goal is complete remission, adjustments and additions might be necessary
What I Tell People

- Depression is treatable
- Medication is important
- Therapy is important
- You must take the medication as prescribed
- You need to monitor your mood closely
- You need to bring in support
We Need To

- Embrace the impact of depression
- Actively screen
- Actively treat
- Actively monitor
- Develop resource systems for professional assistance
Moving Forward

- Depression is real and very debilitating
- We need more data about interventions in CKD!
- Depression impacts mortality, morbidity, adherence, and QOL
- Depression disproportionately impacts CKD patients
- The time to act is now.
Questions/Comments

markm@equalicare.com

Or

612.789.9897