Emotional Well-Being and Hemodialysis-Treatment Symptom Burden

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Common Symptoms of Uremia and their Overlap with Psychiatric Symptoms
Common symptoms: Complex Etiologies

**Uremia**
- Anhedonia
- Difficulty thinking
- Low mood
- Sexual dysfunction

**Depression**
- Appetite change
- Fatigue
- Muscle tension
- Sleep Difficulty

**Anxiety**
- Body pain
- Irritability
- Restlessness
<table>
<thead>
<tr>
<th>Symptom</th>
<th>Valid N*</th>
<th>N (%) Patients Experiencing**</th>
<th>Mean*** (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry mouth/thirst</td>
<td>287</td>
<td>221 (77.0%)</td>
<td>1.80 (1.32)</td>
</tr>
<tr>
<td>Itchy skin</td>
<td>295</td>
<td>216 (73.2%)</td>
<td>1.69 (1.34)</td>
</tr>
<tr>
<td>Numbness</td>
<td>284</td>
<td>177 (62.3%)</td>
<td>1.43 (1.40)</td>
</tr>
<tr>
<td>Change in weight</td>
<td>277</td>
<td>171 (61.7%)</td>
<td>1.32 (1.33)</td>
</tr>
<tr>
<td>Muscle cramps</td>
<td>277</td>
<td>192 (69.3%)</td>
<td>1.25 (0.97)</td>
</tr>
<tr>
<td>Muscle weakness</td>
<td>273</td>
<td>148 (54.2%)</td>
<td>1.24 (1.34)</td>
</tr>
<tr>
<td>Constipation</td>
<td>282</td>
<td>161 (57.1%)</td>
<td>1.14 (1.24)</td>
</tr>
<tr>
<td>Food cravings</td>
<td>279</td>
<td>150 (53.8%)</td>
<td>1.10 (1.25)</td>
</tr>
<tr>
<td>Changes in skin</td>
<td>283</td>
<td>118 (41.7%)</td>
<td>1.06 (1.41)</td>
</tr>
<tr>
<td>Muscle soreness</td>
<td>282</td>
<td>146 (51.8%)</td>
<td>1.02 (1.19)</td>
</tr>
<tr>
<td>Bone/joint pain</td>
<td>282</td>
<td>130 (46.1%)</td>
<td>1.00 (1.30)</td>
</tr>
</tbody>
</table>

What is important to dialysis patients?

162 Dialysis patents from 3 centers
Symptom burden 50% of patients

- Mood Issues
- Sexual Issues
- Sleep Difficulty
- Pain
- Skin issues
- GI Issues

*Prevalence, Severity, and Importance of Physical and Emotional Symptoms in Chronic Hemodialysis Patients*
Weisbord, et al. 2005
Sometimes being on dialysis really gets to me!

What in particular is bothering you today?
I can’t provide for my family, what kind of man am I?

In what ways are you not providing for your family?
In any way-
Sexually
Financially
Physically!
I can’t do anything anymore!

All I do is come to dialysis.
I can’t eat what I want,
I can’t sleep when I want to,
I’m always uncomfortable.
AND THIS IS MY FOREVER!
Wouldn’t you also be concerned?
DIALYSIS

- Sexual Difficulty
- Sleep Difficulty
- Pain
- Anxiety
- Depression
Vicious Cycle of Sexual Difficulty

- Low mood
- Increased isolation
- Decreased intimacy
- Avoidance of sexual contact
- Anticipatory anxiety
- Sexual performance issue

Decreased mood leads to isolation, which decreases intimacy, leading to avoidance of sexual contact, which increases anticipatory anxiety, leading to sexual performance issues, which decrease mood.
Vicious Cycle of Sleep Difficulty

- Poor Sleep
- Fatigue
- Increased Sleep Drive
- Napping
- Decreased Sleep Satisfaction
- Anticipatory Anxiety/Low Mood
Vicious Cycle of Pain

- Pain
- Activity Avoidance
- Fatigue
- Atrophy/Hypervigilance
- Increased Pain Sensitivity
- Anticipatory Anxiety/Low Mood

Atrophy/Hypervigilance → Fatigue → Activity Avoidance → Pain
Pain → Increased Pain Sensitivity → Activity Avoidance
Activity Avoidance → Anticipatory Anxiety/Low Mood → Pain
Pain → Increased Pain Sensitivity → Activity Avoidance
Vicious Cycle of Anxiety

- Depression/Anxiety Sensitivity
- Isolation
- Anxiety Relief
- Avoidance of Activities
- Hyper-vigilance
- Somatic/Anxiety symptom
Vicious Cycle of Depression

- Atrophy/Lack of Reinforcements
- Social Isolation
- Low Mood
- Activity Avoidance
- Fatigue

- Negativistic view of life
DIALYSIS

Sexual Difficulty
- Sexual performance issues
- Anticipatory anxiety
- Decreased intimacy
- Increased isolation
- Decreased satisfaction
- Avoidance of sexual contact

Sleep Difficulty
- Poor sleep
- Increased sleep drive
- Napping
- Decreased sleep satisfaction

Pain
- Fatigue
- Increased pain sensitivity
- Anticipatory anxiety
- Low mood

Anxiety
- Activity avoidance
- Depressional/Anxiety sensitivity
- Somatoform anxiety symptoms
- Hyper-vigilance

Depression
- Activity avoidance
- Low mood
- Social isolation
- Anxiety relief
- Atrophy/Lack of reinforcements

Fatigue
- Social isolation
- Negative view of life
In any way—Financially, Sexually, Physically! I can’t do anything anymore!

All I do is come to dialysis. I can’t eat what I want, I can’t sleep when I want to, I’m always uncomfortable. AND THIS IS MY FOREVER! Wouldn’t you also be concerned?
Low Mood

Low mood

Depression/
Anxiety
Sensitivity

Sexual
Performance
Issue

Anticipatory
Anxiety

Avoidance of
sexual
contact

Decreased
Intimacy

Increased
Isolation

Isolation

Fatigue

Activity
Avoidance

Avoidance of
sexual
contact

Avoidance of
Activities

Somatic/
Anxiety
Symptom

Hyper-
Vigilance

Avoidance of
Activities

Depression/
Anxiety
Sensitivity

Sensitivity

Activity
Avoidance

Atrophy/
Lack of
Reinforcements

Social
Isolation

Negativistic
View of Life
How would you treat this complex symptom complex?
Indications for SSRI

• FDA approved uses
  • Depression
  • Anxiety
  • Eating disorders
  • Pre-menstrual pain
  • Pain

• Common off-label uses
  • Insomnia
  • Behavioral agitation
  • IBS
  • Headache
Cognitive Behavioral Therapy

• Can be customized to treat –
  • Depression
  • Anxiety disorders
  • Eating disorders
  • Insomnia
  • Pain
  • Sexual difficulty
  • Adherence
Recent Developments in the Treatment of Depression

• CAST trial

• ASCEND trial
Chronic Kidney Disease Antidepressant Sertraline Trial (CAST) - randomized, double-blind, placebo-controlled trial involving 201 patients with stage 3, 4, or 5 non–dialysis-dependent CKD.

After a 1-week placebo run-in, participants were randomized to sertraline (n = 102) for 12 weeks at an initial dose of 50 mg/d (escalated to a maximum dose of 200 mg/d based on tolerability and response) or matching placebo (n = 99)
Serial Changes in the 16-Item Quick Inventory of Depressive Symptomatology—Clinician Rated (QIDS-C_{16}) Scores

Participants completed at least 1 assessment after randomization and were included in the primary analysis. Error bars indicate SDs, which were calculated separately for each time point. Each of the 16 QIDS-C_{16} items can yield a score of 0 to 3 on a Likert scale. The score range is 0 to 27; higher scores indicate more severe depression; a score of 0 to 5 corresponds to a normal affect; 6 to 10 to a mild affect; 11 to 15 to a moderate affect; 16 to 20 to a severe affect; and 21 or greater to very severe depression.
Goal: to compare the efficacy of cognitive behavioral therapy (CBT) versus sertraline (phase 2) for treating depression in patients receiving hemodialysis.

41 dialysis facilities in 3 U.S. metropolitan areas
Figure 2. Longitudinal data on the primary outcome measure of QIDS-C scores among patients receiving hemodialysis with depression who were randomly assigned to CBT or sertraline treatment.

At each time point, for each treatment group, the data are presented as mean and 95% CI. CBT = cognitive behavioral therapy; QIDS-C = Quick Inventory of Depressive Symptoms-Clinician-Rated.
I’m barely a man!
I’m completely useless
Initial Perspective of the Formulation

Sexual Difficulty → Depression

Depression → Sleep Difficulty

Depression → Anxiety

Anxiety → Pain

Sleep Difficulty → Pain
New Perspective of the Formulation

Sexual Difficulty -> Depression -> Sleep Difficulty

Depression -> Anxiety

Depression -> Pain

Sexual Difficulty -> Pain
I’m barely a man!
I’m completely useless

Wow, I could see how anybody who thought they were useless, would be feeling very depressed
But is that true? Are you ‘useless’ if you don’t make $$$?

Can you build intimacy with your wife, despite the erectile difficulty?

I guess I could help my wife more around the house. I could reach out to the kids and see how they are doing.

You may just need to adjust what you think being a “man” means...your family may like the new you.
What's going on? Did you get bad news? Are you dying?

No, I'm fine! This is me trying something new!

Dinner was delicious, are you feeling up to trying something else new?

I'm sure we can figure something out – together!
Thank you!

Questions?