Psychologic concerns are prominent in chronic illness, such as ESRD, in which patients face significant morbidity, mortality, and complex treatment decisions. However, these symptoms are often not recognized or effectively treated. Because rates of depression and anxiety increase in this population, there is a need for interdisciplinary team collaboration among nephrology, palliative care, and mental health. Here, we present a guide tailored to the kidney care team for identifying and managing depressive and anxious symptoms in ESRD patients.

**Clinical relevance**

One in five patients with ESRD is diagnosed with depression, which is higher than in kidney transplant patients (1). Risk factors include female gender, lower socioeconomic status, age >60 years old, and limited social support. Depression has been associated with worsening renal function, increased hospitalization, and all-cause mortality (2). Patients with depression are less likely to engage in treatment adherence, especially dialysis, which itself seems to drive decreased life satisfaction (3). Furthermore, cognitive and emotional aspects of depression may impair decision-making at particularly important points in care, such as when facing dialysis or transplant (4).

Anxiety disorders are common in ESRD, with rates reported in a range of 12% to 52%. Diagnoses include specific phobia, panic disorder, and generalized anxiety disorder (5). Symptoms vary by treatment modality: conservative care patients may suffer anxiety due to higher physical symptom burden (3), whereas dialysis patients face repeated traumas and a loss of control in the treatment environment. Significant anxiety often manifests as decreased treatment adherence or disruptive behaviors in clinic or dialysis centers, leading to frustration among patients and care teams.

**Screening for depression and anxiety**

*When to screen?*

Current guidelines recommend routinely screening ESRD patients at initiation of dialysis, every 6 months for the first year, and then annually (2, 5). Interval events, such as emerging major life stressors, change in health status or treatment plan, disruptive behaviors at dialysis, or a new mental health diagnosis, should prompt rescreening.

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**Figure 1. Clinical approach to depression and anxiety in ESRD**

*Abbreviations:* BZD = benzodiazepine; CBT = cognitive behavior therapy; DSM-V = Diagnostic and Statistical Manual of Mental Disorders V; HADS = Hospital Anxiety and Depression Scale; SSRI = selective serotonin reuptake inhibitor.
Selective serotonin reuptake inhibitors (SSRIs) are despite high prevalence and clinical implications, treat-
ment of depression and anxiety is poorly studied in the
ESRD population, in part due to exclusion of medi-
cation insurance patients and kidney care teams are resistant to
initiating depression medications (9), emphasizing the importance of exploring beliefs about depression
and antidepresant medications.

What nonpharmacologic treatments exist?
Cognitive behavior therapy (CBT), exercise pro-
grams, and increased diayrines frequency may decrease
diagnosis of depression and anxiety. We advocate a
 collaborative approach to explore mental, emotional,
and physical symptoms, and to devise a management
plan, which may extend beyond the renal setting.

Palliative care teams provide expertise in address-
ing physical symptoms contributing to mood or anxi-
ey as well as strengthening communication and col-
laborative decision-making. For patients experiencing
depressive symptoms as part of declining overall
health, palliative care specialists can work alongside
the kidney care team to help facilitate goals of care
discussions that may include dialysis withdrawal and
transition to hospice (4).

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How to screen?
First, we recommend using a two-question approach
to diagnose the Patient Health Questionnaire:
1) In the past 2 weeks, have you been bothered by
having little interest or pleasure in doing things? 2)
Have you felt down, depressed? A positive response
to either question should prompt screening to iden-
tify more specific depressive or anxious symptoms.
We recommend the Hospital Anxiety and Depression
Scale (HADS), which screens for both conditions.
The HADS is particularly useful in ESRD, because it
minimizes confounding by physical symptoms,
has been validated in the ESRD population, and can
be completed and reviewed quickly by patients and
staff (6, 7). Other options include the Beck Depres-
sion Inventory, Patient Health Questionnaire-9, and
Generalized Anxiety Disorder-7 (2, 5). Of note, all
screening tools show limited sensitivity and specificity,
and validation of screening tools has produced mixed
results (6–8). A positive screen should prompt formal
evaluation for depression or anxiety disorders.

Diagnosing depression and anxiety
in ESRD
For consistency and accuracy, we recommend using
Diagnostic and Statistical Manual of Mental Disor-
ders V diagnostic criteria. Particularly relevant diag-
noses in ESRD are major depressive disorder, panic
disorder, specific phobia, and generalized anxiety dis-
order (8) (Figure 1). Diagnosis may be made by the
nephrologist, trained kidney nurse, or social worker.
However, accurately diagnosing depression and anxie-
ty may prove challenging given symptom overlap with
uremia, including pain, fatigue, sleep disorders, poor
appetite, and reduced concentration (2, 4). Although
not routinely recommended for diagnostic purposes,
psychiatric consultation may be helpful in these more
complex patients.

Treatmen of anxiety and depression
Despite high prevalence and clinical implications, treat-
ment of depression and anxiety is poorly studied in the
ESRD population, in part due to exclusion of medi-
cally complex patients from treatment trials (2, 9).

Which medications to consider?
Selective serotonin reuptake inhibitors (SSRIs) are
best studied; sertraline may be particularly advanta-
geous, requiring no renal dose adjustments, and it is
safe in patients with cardiovascular disease, who share
many risk factors with ESRD patients (10). Limited
data exist for fluoxetine, citalopram, escitalopram,
and paroxetine, as well as for non-SSRI options, in-
cluding mirtazapine, venlafaxine, and bupropion (2).
For episodic anxiety, benzodiazepines and β-blockers
may also be useful for short trials with caution for ad-
verse side effects (5). Special considerations include
adjusting doses for renal function, timing medications
with dialysis, and minimizing drug-drug interactions.
Furthermore, recent evidence suggests that hemodi-
alyst patients and kidney care teams are resistant to
initiating depression medications (9), emphasizing the
importance of exploring beliefs about depression
and antidepresant medications.

Team approach to managing psychologic
issues
Members of the kidney care team caring for dialysis
patients are well positioned to identify and screen pa-
tients at risk for depression and anxiety. We advocate a
collaborative approach to explore mental, emotional,
and physical symptoms, and to devise a management
plan, which may extend beyond the renal setting.

Palliative care teams provide expertise in address-
ing physical symptoms contributing to mood or anxiety
as well as strengthening communication and collabora-
tive decision-making. For patients experiencing
depressive symptoms as part of declining overall
health, palliative care specialists can work alongside
the kidney care team to help facilitate goals of care
discussions that may include dialysis withdrawal and
transition to hospice (4).

Have a tip or idea you’d like to share with your fellow
peers and the broader kidney community?
Send your idea to the Kidney News Fellows Corner column at kidneynews@asn-online.org