

Depression Management for Hemodialysis Patients: Using DOPPS Data to Further Guide Nephrology Social Work Intervention

Stephanie Johnstone, MSW, LCSW, Fresenius Medical Care-North America, San Diego, CA

The future of disease management for the chronic kidney disease population will need to focus beyond the physiological markers of dialysis adequacy, albumin, and blood pressure and include psychosocial and behavioral health variables that also mediate treatment outcomes. A growing body of literature, including the Dialysis Outcomes and Practice Patterns Study (DOPPS), has linked depression to survival and health care utilization in people on hemodialysis. DOPPS identified the need for improved identification and management of depression. It also provides further guidance for nephrology social workers, who will continue to serve as the lead mental health providers to this at-risk population. This article reviews this literature and proposes practice guidelines for nephrology social workers to help manage depression in the dialysis clinic setting.

INTRODUCTION

The future of disease management for the chronic kidney disease population will require that nephrology teams focus on the psychosocial and behavioral health variables that mediate treatment outcomes as well as physiological markers of dialysis adequacy, albumin, and blood pressure. Kidney disease management is likely to follow the trends of cancer, AIDS, and cardiac medicine to develop integrated care models, which have improved survival and quality of life for individuals living with chronic medical illness (Blount, 1998; Herrman et al., 2002; Koopman et al., 1998; Markowitz et al., 1998; Musselman et al., 1998). Depression management strategies for people on hemodialysis will be key to these future disease management models. A growing body of research has linked depression to survival and health care utilization in this population. The Dialysis Outcomes and Practice Patterns Study (DOPPS), an ongoing study of people on hemodialysis in 12 countries that focuses on dialysis practices that contribute to improved outcomes, published research findings suggesting the need for improved identification and management of depression in this patient population (Lopes et al., 2002; Lopes et al., 2004). DOPPS provides further guidance to nephrology social workers, who will continue to serve as the lead mental health providers to this at-risk population.

Nephrology social workers are prepared for these disease management models. In 2007, the National Kidney Foundation (NKF) Council of Nephrology Social Workers (CNSW) Outcomes Training Program (OTP) celebrated its 10th anniversary (National Kidney Foundation, 1996). This program continues to launch

Internet- and video-based trainings to help nephrology social workers fine-tune their disease management skills, which are a natural spin-off from their master's-level training in clinical social work treatment and bio-psycho-social case management. The field now has state-of-the-art, brief interventions it can rely on to improve the psychosocial and behavioral health of people on hemodialysis. Among these social work interventions, those that prevent and manage depression are receiving much attention in some dialysis clinic continuous quality improvement (CQI) forums (Johnstone, 2005). The impact of depression on missed treatments, excess fluid gains, patient-provider conflict, and low quality-of-life scores of people on hemodialysis has been observed by social workers for years. The CNSW OTP entitled "Interventions that Identify and Reduce Depression" guides the nephrology social worker in managing depression to reduce these outcome barriers. The OTP program has also been the catalyst for the NKF/CNSW depression management programs. "Feeling Better Again," one of the cognitive-behavioral programs for depression (funded by a NKF/CNSW research grant), was tested in a Florida dialysis clinic. The study, led by Jessica Cabness, PhD, demonstrated improved mood, social support, and overall health quality when on-site depression programming was provided by the dialysis team social worker (Cabness et al., 2006). Another CNSW depression management series program was included in the "People Like Us: Stepping Back Into Life" program, which was released in October 2006 to Hurricane Katrina survivors on dialysis in Louisiana (Medical News Today, 2006).

DOPPS suggests that the CNSW is right on track. Prior

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to DOPPS' release of data on depression, a steady stream of literature drew attention to the role of depression and its association with treatment outcomes for people on dialysis. This volume of evidence focused on different variables to examine how depression impacted treatment outcomes. Burton et al. was one of the first to link depression to survival in people on hemodialysis (Burton et al., 1986). Sacks et al. linked depression to perception of illness in people with end-stage renal disease (Sacks et al., 1990). DeOreo established links between hospital days and mental health scores on the SF-36 quality-of-life instrument (DeOreo et al., 1997). Kimmel et al. established an association between higher levels of depression and mortality that is on the same magnitude as medical risk factors (Kimmel et al., 2000). Curtin examined the relationship between depression and symptom reporting (Curtin et al., 2002). These investigators, among others, illuminated the association of depression with dialysis treatment outcomes. DOPPS provided the opportunity to explore depression on an international level.

In 2002, data was published from the first phase of DOPPS that examined depression as a predictor of mortality and hospitalization (Lopes et al., 2002). Data was analyzed from a random sample of 243 facilities (5,256 patients) across the United States and 5 European countries. The diagnosis of depression was abstracted from both physician diagnosis (from medical records) and two patient self-report questions (Table 1). The finding on international prevalence of depression in this study was nearly 20% and there were links established between depression, mortality, and hospitalization. After adjusting for time on dialysis, age, race, socioeconomic status, comorbidity, and country, the relative risk of mortality with physician-diagnosed depression was 1.23 (which indicates a 23% increase in the relative risk of death). For patients identified as depressed based on the self-report items, the relative risk of mortality was 1.35 for the question "downhearted and blue" and 1.48 for the question "so down in the dumps." With regard to the relative risk of hospitalization, the results were 1.11, 1.11, and 1.15, respectively. The results were similar for U.S. and European patients on hemodialysis. These associations were statistically significant.

In examining some of the correlates of depression in DOPPS I, the data identified that depressed patients were more likely to be unmarried, white, female, age 60 or older, unemployed, to have lower serum albumins, to have been on dialysis for more than 1 year and to suffer from more medical comorbidities (including coronary artery disease, congestive heart failure, diabetes mellitus, peripheral vascular disease, gastrointestinal

Table 1

Two-Item Depression Self-Screener Used in DOPPS^a

1. "Have you felt downhearted and blue?"
2. "Have you felt so down in the dumps that nothing could cheer you up?"

Possible answers^b:

none of the time

little of the time

some of the time

a good bit of the time

most of the time

all the time

^aQuestions taken from SF-36.

^bBold scores were considered indicative of depression.

bleeding, cancer, lung disease, and other cardiac and neurological disease states). The patient self-report question "so down in the dumps" was more effective in identifying depression in non-whites (excluding blacks) and in patients with differing degrees of education. In the study, blacks had a lower likelihood of depression compared to whites, as measured by both physician diagnosis and the self-report questions. It is notable that only 13.7% of patients had a positive response to both self-report questions, while 26.8% were positive for at least one self-report indicator of depression. This data demonstrates the value of using both self-report items (especially the "so down in the dumps" question) when screening for depression in people on hemodialysis.

In their summary, the authors point out that depression in people on hemodialysis, despite the growing demonstration of its link to mortality and hospitalization, remains a largely under-recognized and under-treated psychiatric disorder. They call on providers to examine the value of early screening and treatment to improve quality of life and survival in people on hemodialysis worldwide.

Following the release of this data from the DOPPS I, research continued to illuminate the prevalence and impact of depression in the U.S. hemodialysis population. A study by Watnick et al. pointed out that many people on hemodialysis suffer from depression at the start of renal replacement therapy; however, their

depression is not identified (2003). Her study also highlighted the lack of medical treatment provided even to patients who were identified as depressed. Guzman and Nicassio focused on the predictors of depression in people on hemodialysis, and found that both negative and positive illness schema were significant in determining whether a person on hemodialysis might suffer from depression (2003). Kimmel and Peterson conducted a review of the literature on depression in ESRD and noted the evidence of both stressors and protective factors in mediating the levels of depression in people with ESRD (2005). They called for well-designed treatment studies and survival analyses in this population using longitudinal techniques. While these and other investigations kept the CNSW's attention on the importance of depression in ESRD outcomes, DOPPS II provided further information.

In 2004, a second article was published on depression using data from DOPPS II (Lopes et al.). This data provided the industry with a look at how the United States and other countries differed in their approach to the identification and treatment of depression in people on dialysis. This study evaluated the impact of both physician-detected depression and detection using a short (10-item) depression screening instrument in people on hemodialysis. It also sought to evaluate patterns of treatment using antidepressant medication in those patients identified as depressed. Finally, the article examined the impact of depression on mortality, hospitalization, and dialysis withdrawal. The study was randomized and focused on 9,382 patients from 12 countries. The Center for Epidemiological Studies Depression Screening Index (CES-D) was used as a screening instrument, with a cut-off value of 10 or higher as a positive depression score.

In this study, the screening instrument was found to be more effective in identifying depression in the people on hemodialysis than physician diagnosis. Depression was under-identified by physicians in all age groups but more so in patients over 63 years, who had a higher prevalence of depression when measured with the CES-D. Other correlates for depression in this study were living alone; single marital status; female sex; less education; comorbidity (especially congestive heart failure, peripheral vascular disease, gastrointestinal bleeding and neurological diseases); and low albumin, hemoglobin, and Kt/V. When the data from DOPPS II was adjusted for several comorbidities, the patients identified as depressed by the CES-D had higher relative risks of death (1.42), hospitalization (1.12), and dialysis withdrawal (1.55). These findings, from the second phase of DOPPS, reinforce those from DOPPS I. Both studies

suggest that depression is undetected as well as under-treated in people on hemodialysis worldwide. They also point clearly to the relationship between depression and survival and hospitalization.

Both phases of DOPPS offered additional support to the association of depression to survival and hospitalization through the examination of the data gathered from the KDQOL-SF.TM This quality-of-life instrument measures domains related to mental, emotional, social, and role functioning. These domains, when combined, can be factored into a mental composite score (MCS) that is often tied to survival in people on hemodialysis (DeOreo, 1997). In DOPPS, patients scoring 10 points lower on the MCS had a 13% higher death risk and a 6% higher risk of first hospitalization. DOPPS found that low MCS scores were at least as powerful in independently predicting hospitalization and death as albumin (Mapes et al., 2003).

When looking back at the DOPPS II data for the United States (1,300 patients), physicians detected depression in 21.7% of the patient sample, which was higher than any other country in the study. This may indicate a lesser stigma in the U.S. population regarding depression, and a tendency for providers to accept it as a medical illness. Despite what may be increased levels of comfort with and confidence in physician approach to depression, it is notable that the CES-D screening tool detected depression in nearly twice as many patients (39.2%) in the United States as did physician diagnosis. Though the authors are careful to point out that physician-identified depression may be underreported in this study due to medical record omission, the use of a depression screening tool in people on hemodialysis appears to be important as an adjunct to physician assessment.

With regard to treatment for depression, 38.9% of patients that were identified by U.S. physicians as depressed received antidepressant medication therapy. Of the patients identified as depressed using the CES-D (a much larger group of patients), only 28.9% had been treated with antidepressant medication. The low treatment rate provided to this at-risk population may have had far-reaching effects. When adjusted for age, sex, socioeconomic factors, length of time on dialysis, and country, there was a 55% higher relative rate of withdrawal from dialysis for patients that were identified as depressed by the CES-D.

There was also an independent and significant association with a higher relative risk of dialysis termination for patients who were diagnosed as depressed by their physicians (Lopes et al., 2004). These data suggest that physicians and other members of the dialysis team can play an important role in improving detection of depression and monitoring treatment access, and that those team functions might impact survival through multiple pathways. They also demonstrate how much still needs to be done to ensure that depression is identified and treated in people on hemodialysis in the United States.

Kimmel and Peterson posed this issue as a challenge to the industry in their 2006 editorial entitled “Depression in Patients with End-Stage Renal Disease Treated with Dialysis: Has the Time to Treat Arrived?” This editorial speaks to the strong correlation displayed between depressive symptoms and both death and cardiovascular events in the Choices for Healthy Outcomes in Caring for ESRD (CHOICE) study in that same issue of the *Clinical Journal of the American Society of Nephrology* (Boulware et al., 2006). The study of 917 people on dialysis over a 2-year period highlights the need to treat persistent and current depressive symptoms, which are most strongly associated with poor medical outcomes. On the heels of the DOPPS data, and in light of the ever-growing body of literature demonstrating the risk of *not* treating, the answer to this question posed by Kimmel and Peterson seems to be a resounding “yes.”

IMPLICATIONS FOR NEPHROLOGY SOCIAL WORKERS

So, where does that leave nephrology social workers as the lead mental health providers of care for people on hemodialysis? How should the profession respond to this sense of urgency? The CNSW’s OTP offers guidance and direction at this most important time. The OTP program entitled “Interventions that Identify and Reduce Depression” points out that successfully managing depression in the hemodialysis population requires focus on four key areas: education, screening, prevention, and response. Each of these areas of focus is discussed later in this article, along with guidelines to direct the nephrology social worker toward effective depression management intervention in the hemodialysis clinic.

Education

Nephrology social workers have been providing psycho-education to people on dialysis since they joined the renal team more than 30 years ago. The task of biopscho-social assessment and identifying potential barriers to patient adjustment are fundamental skills of the

master’s level social worker in the hemodialysis clinic. What is needed, as social workers focus these skills in on depression management, is the addition of a focused, brief time period with all new hemodialysis patients (and possibly their loved ones) to explain the risk for depression as they begin and continue dialysis therapy. This intervention session could include information on self-assessment for depression and the signs and symptoms of depression compared to those of uremia. It could also evaluate a patient’s history of depression and other mood disorders, and identify the signs and symptoms related to any previous episode of depression.

The goal of this educational session could be to reduce stigma and to obtain patient buy-in on the impact of depression on quality of life, wellness, and survival. Additional goals would include helping the patient discuss this risk with family and loved ones, and ritualizing those loved ones into ongoing “surveillance” for the signs and symptoms that would warrant further evaluation (Table 2). The patient and loved ones could be taught what the next steps would be if depression were suspected (further screening) and if depression were detected (the safety of contemporary treatment). Distorted and mythical thinking about depression treatment such as “Depression means I am weak,” or “If I take medication I won’t be myself,” could be solicited and countered to reduce avoidance of the problem. The outline provided in Table 3 is designed to guide a nephrology social work session that addresses these important issues.

Table 2

Does Your Loved One Suffer From Depression?
<p>You may be the first to spot depression in your loved one. If your loved one has the signs and symptoms of depression below don’t blame it on dialysis. See your social worker or doctor right away! It could be depression.</p> <p>Some signs and symptoms of depression:</p> <ul style="list-style-type: none"> • Feeling down all day, nearly every day, for at least 2 weeks • Feeling worthless and bad about oneself • Loss of interest or pleasure in things that used to be pleasurable • Unexplained changes in mood, including irritability • Feeling hopeless, not caring anymore, or having thoughts of “giving up”

Table 3

Nephrology Social Work Approach to Education: Risk of Depression

1. Introduce the talk about depression as a serious matter:

“I have to talk to you briefly about something important: something that could effect how well and long you live.”
2. Discuss the following key points:
 - a. The prevalence of depression (up to 25% of patients)
 - b. The risk if depression goes untreated (a simple review of what studies show)
 - c. The benefits of depression prevention and treatment
 - d. The safety and efficacy of treatment (explaining medication, psychotherapy, and the value of both)
 - e. How to watch for the signs and symptoms of depression (patient and loved ones; ensure comprehension by having patient repeat back)
 - f. The role of screening tools and how the hemodialysis facility may utilize them to further watch for depression (encourage patient acceptance and utilization of screening services)

Screening

When using a depression screening tool with people on hemodialysis, there are many factors for nephrology social workers to consider. Some patients in dialysis centers respond to any type of survey with resistance because of the time and effort required of them to participate in it. In addition, some patients have literacy deficits and may state that they are “not interested” or “too tired” rather than discuss their inability to read or write well enough to complete an instrument. Some patients experience such severe neuropathy that they cannot hold a pen long enough to complete an instrument, and do not want to take valuable time from a family member or dialysis team member by asking for assistance. Other patients find surveys an invasion of their privacy. In addition to all these barriers, there is the significant risk of patients experiencing stigma when the topic of depression is discussed.

Prior to launching a depression screening program, it is important for the nephrology social worker to prepare for these multiple barriers, and grow comfortable with

the stigma, intimacy, language, and process involved with depression screening. Once the social worker achieves a comfort level with the discussion of depression, he or she is likely to be well received by the patient and supported by other members of the renal team when performing screening interventions in the clinic.

When choosing a screening instrument, a person on hemodialysis may benefit from the choice of a brief and easy-to-understand screener with a 1- to 5-minute administration time (Williams et al., 2002; MaCarthur Initiative). It is possible to use the 2-item screener, abstracted from the KDQOL-SF™ instrument, which was used in DOPPS (Table 1). Another 2-item screener, the PHQ-2, has gained attention in medical settings because, like the questions used in DOPPS, it attends only to non-somatic indicators (anhedonia and dysphoria), which may reduce bias (false-positives) related to the disease (Corson et al., 2004; Kimmel et al., 1993; Kroenke et al., 2003). The National Heart, Lung and Blood Institute Working Group Report identified this instrument as the best screener for patients with cardiovascular disease, which presents in nearly 50% of people with ESRD (Davidson et al., 2006). If the brief questions on these screeners produce a positive score for depression, the nephrology social worker can then move toward further evaluation with a more sensitive screener to determine level of depression in people on hemodialysis. Instruments such as the Beck Depression Inventory, Beck Depression Inventory-Fast Screen for Medical Patients, Cognitive Depression Inventory, PHQ-9, CES-D, and Geriatric Depression Scale are among the more sensitive tools that have been used to assess depression in people on hemodialysis (Beck, 1961; Guzman & Nicassio, 2003; Halverson & Chan, 2004; Kroenke et al., 1999; Radloff, 1977; Sharp & Lipsky, 2002; Yesavage et al., 1983). Kimmel cautions that we need more research in the area of reliable measurement, and suggests that only 5 to 10% of hemodialysis patients may suffer from major depression disorder compared to a larger number that suffer from increased levels of depressive affect. The prevalence of depression is likely to vary between hemodialysis clinics, based on the screening tool chosen.

Despite the choice of screener, it should be noted that patients may require assistance with depression screening due to literacy and concentration problems noted in this population (Kurella et al., 2004). This will ensure that the screener chosen will provide an accurate response. In addition, attention must be given to cultural bias when screening. Kimmel points out the possibility that African Americans, though presumed to have the

same prevalence of depression in the general population as others, may under-report depressive symptoms or be inaccurately measured during screening (Kimmel et al., 2002). Discussions with all patients should focus on their comfort with screening activity, and should seek to increase that comfort. Table 4 includes steps that a nephrology social worker might take to implement an effective depression screening program in the dialysis clinic.

Table 4

A Nephrology Social Work Approach to Depression Screening

1. Decide on frequency and inclusion in the screening process.

Patients that screen negative, show good adjustment to illness and have no history of depression may be able to self-screen and/or be screened annually. Others may benefit from more regular screening. Patients beginning any type of treatment for depression would benefit from frequent screening to ensure remission of symptoms.

2. Collaborate with all attending physicians at the hemodialysis facility to involve them in your screening efforts.

Display available screening tools and their scoring protocols to physicians. Provide articles on the risks of depression. Consider a smaller CQI or pilot project to get started with screening. Explore treatment options with all rounding physicians and inquire about their treatment preferences.

3. Re-educate the patient briefly on the value of depression screening.

Focus on the value to their health if depression is identified and treated. Remind them that symptoms of depression are often hidden behind the symptoms of kidney failure, making screening more important. Reassure them that depression is common and, should it be identified, that treatment is safe and effective. Assess for fears or concerns related to the screening process.

4. Track scores and share comparison scores with patient.

Reviewing scores helps patients feel informed and included in the screening process, creating an opening to discuss treatment if needed. It also helps a patient to watch over more subtle changes in mood that might precede an episode of major depression. Identifying smaller mood changes could encourage a problem-solving session with the social worker that might help guard against depression.

5. If the screening scores do not endorse depression, encourage continued self-screening.

Offer tips on how patients can report changes in mood to you or their physician. Thank the patient for allowing you to be a part of this important aspect of their health care.

Prevention

Although more research is needed in the causality area, there is some evidence to guide nephrology social workers when designing interventions to prevent depression. Guzman completed one of the most important studies regarding the predictors of depression among people on hemodialysis. In this study, published in the *Journal of Behavioral Medicine*, Guzman teamed up with a nephrologist to control for medical severity, which helped examine depression without the superimposed symptoms of kidney failure (Guzman & Nicassio, 2003). As a result, several factors were isolated that predicted depression in a person on dialysis. The most significant factors were those related to self-illness schema (both negative and positive schemas were significant), social support (especially in the areas of self-esteem support and belongingness support), body image, and perceived stigma.

The findings from Guzman's study became part of the CNSW OTP and also helped craft the NKF depression management programs. These programs use cognitive, interpersonal, and problem-solving techniques to build internal skills that can help patients guard against depression. This type of brief prevention programming, offered on-site at dialysis clinics, has been shown to improve mood and is likely to reduce depression risk (Johnstone, 2005). This is especially true because patients have been shown to prefer to receive treatment for depression from their nephrology social worker at the dialysis clinic, rather than an outside mental health provider (Roberts et al., 2006). For the smaller group of patients who are willing to pursue a referral to a community provider for depression treatment, barriers to seeking these services outside the clinic are numerous.

When designing an on-site depression prevention program, nephrology social workers might follow the steps displayed in Table 5. This approach to prevention, which focuses on strengthening patient behaviors and skills to reduce their risk of depression, can be used independently or following the initial intervention noted in this article on "Risk Education" (see Table 3).

Response

DOPPS I and II brought attention to the under-recognition of depression in the people on hemodialysis and the medical team's lack of response to the illness once it is identified. There are many reasons for this occurrence in hemodialysis clinics, one of which is likely to be the assumption that depression is a "normal state of distress" in a person on hemodialysis. The lack of training and continuing education received by

Table 5

A Nephrology Social Work Approach to Preventing Depression

1. Share and dialogue about the findings from Guzman's research with patients. Explain the variables that have been shown to predict depression in dialysis patients. Allow the patient to help assess for these predictors in his/her own personal life situation. Teach basic cognitive-behavioral techniques to offset this risk and encourage patients to self-screen and seek support if these areas lose their balance.
2. Maintain focus on these predictors during your quarterly contacts. Do not assume one discussion about these predictive variables is enough. As patients live through the ups and downs of the illness, they need to be challenged to continue to strengthen their emotional and psychological coping skills in this area.
3. Consider offering annual treatment programs on-site at the dialysis facility. One-evening classes or four-week programs are time-saving and can be very valuable to patients who need additional support and skill-building to guard against depression. They can further prevent depression if they factor in live, small-group support.
4. If risk of depression presents, help patients develop an emotional self-care plan. Helping patients learn to reach back out to others when they isolate, expand into their social roles again, strengthen relationships, reduce relationship conflict, and increase self-esteem can be helpful in reducing the risk of depression.

nephrologists in the medication management of depression is also key. Continuing problems with patient access to outpatient psychiatry, due to insurance and transportation barriers, continue to point to nephrologists as the most likely medical team members to initiate and oversee antidepressant therapy. A final barrier to effective medical treatment of depression is the reality of stigma (Antai-Otong, 2006). Patients and medical team members alike carry the societal value that "toughing" out the emotional ups and downs in life is a sign of strength and worth.

The nephrology social worker has often experienced this stigma firsthand from both the patient and the treatment team when discussing medication or other forms of treatment for hemodialysis patients with depression. The team's sense of "not wanting to approach the patient" or "hoping it will go away" most likely contributes to the persistence of mood disorders in this population. Despite all the reasons for under-attending to treatment, depression is far more than a condition of

distress (up to 80% of patients do not measure depressed despite the hardships of life on dialysis). Depression is a medical illness and patients suffer from its symptoms. In that state of suffering, they rely most on their dialysis team for a response to the burden of their discomfort. "Toughing it out" is not likely to produce a remission of symptoms (Soykan et al., 2004). Conversely, it is likely to impede the very survival and quality-of-life outcomes that dialysis teams struggle to achieve (Boulware et al., 2006). To effectively treat depression in people on hemodialysis, the dialysis team must address all of these identified barriers. They must approach patients with comfort and confidence and provide hope that treatment for depression is safe, effective, and medically necessary.

The CNSW OTP "Interventions that Identify and Reduce Depression" (National Kidney Foundation, 1996) provides guidance to nephrology social workers to lead the renal team in this task. This program follows contemporary clinical practice guidelines for depression treatment in medically ill patients by recognizing the value of both antidepressant medication therapy and brief cognitive, behavioral, and interpersonal treatment interventions to reduce depressive symptoms (McCarthur Initiative 2006; National Collaborating Centre for Mental Health, 2004; Spira, 1996; Wexler & Cicchetti, 1992). The depression response protocol found in Table 6 is adapted from the CNSW OTP and can be used to guide nephrology social workers in responding to identified depression. Each step of the protocol will be described in more detail below.

Response: Phase I

In phase one of response, the "acute" phase of treatment, the development of a protocol supported by both the facility nephrologist and the social worker is key. Nephrologists often have preferences regarding treatment of depression in the patients they follow. Some prefer to avoid involvement in this task while others prefer collaborative efforts. Some nephrologists feel more comfortable than others in discussing the benefits of brief psychotherapy or coping skill training. Many are comfortable with the nephrology social worker discussing the benefits of these treatment approaches or the option of combining these with a medication trial, as is often recommended in the literature (American Psychiatric Association, 2000; National Collaborating Centre for Mental Health, 2004). It is essential that these preferences be discussed openly so that social workers and nephrologists can present as an aligned and hopeful team when approaching the patient regarding a

Table 6**Collaborative Nephrology Social Work Roles in Depression Response****Phase 1: “Acute phase” (months 1 to 3):**

Discuss positive screening with patient

Explore treatment options, initiate medication trial/ensure access to care/help patient create plan to ensure adherence

Referral to adjunctive psychosocial skills classes

Phase 2: “Continuation phase” (months 4 to 5):

Speak with patient’s partner to reinforce adherence behavior and monitor for relapse

Rescreen at intervals

Collaborate with physician/pharmacy when necessary to change transplant regimen

Referral to refresher skills classes

Phase 3: “Discontinuation phase” (month 12):

Assessment of need for maintenance therapy

Monitor mood through discontinuation process

Communicate symptoms of relapse. Teach patient/loved ones to monitor for new episode of depression.

positive depression screen and the need for treatment. Given the sensitivity of the topic for patients, the social worker may prefer to invite the patient to discuss the issue in the privacy of their office or to contact him or her by phone. Nephrologists may also benefit from this private approach as they discuss the initiation of medication treatment for depression. With any approach, the nephrology social worker and nephrologist are likely to present as a team when discussing the issue with a patient identified as depressed.

The facility social worker can offer support in many other ways to a nephrologist faced with the task of depression management. Nephrologists may benefit from the social worker’s efforts to obtain information updates from local pharmacists or pharmaceutical company representatives regarding dosing guidelines for antidepressant medications in people on hemodialysis. The wide range of medications available can be a challenge for nephrologists who may have minimal training in this area and little time to seek out information. The nephrologist may choose an agent that can treat a spectrum of symptoms that accompany depression (e.g., anxiety, irritability, sleep disturbance, apathy, anhedonia, amotivation, and lethargy). If these are unsuccess-

ful, it is possible to then move toward an antidepressant with more specific properties. Studies support the use of selective-serotonin reuptake inhibitors and other agents for the treatment of depression in patients with ESRD as well as patients with comorbid cardiac disease (Cohen et al., 2004; Kimmel et al., 2002; Lesperance et al., 2003).

It is possible for nephrologists to intervene with antidepressant medications to reduce symptoms quickly for people on hemodialysis, but they may lack the time or proximity to carefully monitor a patient’s response to the medication. With studies showing a significant degree of nonadherence to medication prescription in the hemodialysis population, social workers’ support in monitoring the trial and providing educational reinforcement regarding the need for strict adherence to the medication can be essential to good outcomes (Curtin et al., 1999). Social workers’ brief contact with patients is perhaps most critical during the first few weeks of therapy when side effects are most pronounced and when patients are the most likely to withdraw from therapy. Social workers can also solicit telephone support for patients from pharmacists during this period. Pharmacists may, in turn, contact nephrologists regarding possible changes in medications or dosing to offset early side effects. These efforts can improve early adherence and prevent patient withdrawal from medication therapy. When adherence behavior appears poor, social workers can notify physicians of the risk so that the use of medication therapy can be re-evaluated or discontinued. In cases in which several agents do not provide a remission from symptoms, psychiatric consultation can be encouraged to reduce nephrologists’ burden. Social workers can help nephrologists coordinate referral and access to psychiatric consultation. Nephrology social work support of nephrologists may also be valuable in insurance coordination for antidepressant medications, should special authorization be needed after unsuccessful formulary medication trials.

Should an individual on dialysis not be a candidate for antidepressant medication therapy, or desire more than medication treatment for depression, brief psychotherapy interventions are available in the NKF-CNSW depression management programs (Cabness et al., 2006, National Kidney Foundation/Council of Nephrology Social Workers, 2006). Based on Guzman’s research that isolated the predictors of depression in people on hemodialysis, these interventions can be led by nephrology social workers in the dialysis clinic classroom or chairside with patients as they undergo dialysis treatment. Using cognitive, behavioral, and

interpersonal interventions, these brief, weekly (for a period of 3 to 6 weeks) social work interventions build psychological tools and coping skills that can help people on hemodialysis gain control of their moods (Johnstone, 2005). In some clinics, these programs are being offered on an annual or biannual basis to provide depression prevention, and depression management services. Physician referral to these on-site programs can improve motivation to attend. Contemporary treatment guidelines support combining this type of treatment with medication to enhance depression treatment outcomes, especially for patients with problems of social adjustment and interpersonal relationship during phase II of treatment following the remission of depressive symptoms (American Psychiatric Association, 2000; Beck, 2005; Fava et al., 2004; Petersen, 2006; National Collaborating Centre for Mental Health, 2004). This team approach between social workers and nephrologists in phase I can help patients to accept and move through the acute phase of treatment for depression. It can also ensure that they are well on their way toward remission. The stabilization period typically lasts 12 weeks for medication therapy. With regard to psychotherapy, although many models of cognitive-behavioral therapy suggest a 10- to 12-week treatment course, people on hemodialysis have demonstrated improvement in mood after 3 to 6 sessions of coping skills training classes (using a cognitive-behavioral approach) when measured by the Cognitive Depression Inventory, the Beck Medical Fast Track, and patient self-report (Blount 1998; Cabness et al., 2006; Johnstone, 2005).

Response: Phase II

In phase two of the depression response process, known as the “continuation phase,” the social worker can help monitor the patient’s response to treatment. This phase typically lasts 4 to 5 months following full remission of symptoms. In this phase, social work inquiry or screening can monitor for the risk of relapse. Relapse during this phase can occur due to a change in response to the medication itself, a reaction to any new medications prescribed during the course of treatment, or use of illicit substances that interfere with medication actions. Improper patient dosing of the medications (nonadherence) can also stimulate a relapse of symptoms. In addition, improper medication use can worsen mood, as neurotransmission is chaotically altered.

Following treatment with psychotherapy, a relapse can also be triggered by a worsening of a patient’s life situation such as a change in medical status, interpersonal relationship stress, or a reactivation of depressive

thinking styles (Kimmel & Patel, 2003; Segal et al., 2006). Nephrology social workers can be invaluable to patients and physicians by ensuring that any changes in patients’ moods or functioning are communicated during the continuation treatment phase. If subsequent changes are made in the treatment regimen, social workers can ensure that patients understand those changes and have access to new therapies prescribed. Monthly contacts or phone calls to patients to track mood and identified symptoms can promote adherence and offset relapse risks to maximize treatment outcomes during this phase. These phone calls can reinforce the importance of medication compliance. If patients have undergone adjunctive psychosocial/coping skills training with nephrology social workers, a monthly follow-up call can reinforce some of the cognitive/behavioral concepts that help manage mood. It can also screen for any barriers to using the tools that were prescribed in their training.

During the continuation treatment phase, nephrology social workers can also effectively serve as “life coaches” to encourage patient re-entry into previous, pleasurable activities. Using materials from the NKF/CNSW OTPs, social workers can guide patients to push back out into the world again, reduce isolation, and regain emotional confidence. These social work interventions can provide the impetus for rehabilitation, which is often needed following the impact of depression on patients and their larger worlds.

Simple tracking tools can be used to assist facility social workers with the clinical case management tasks of the continuation treatment phase. Table 7 displays a tracking tool that was adapted from Sarfaty and the FMCNA Western Massachusetts Social Workers. In addition to tracking activities during this treatment phase, providing helpful assignments to patients and their significant others during this period can also be a helpful social work role. Loved ones often want to participate in patient rehabilitation efforts during this treatment phase but lack guidance in how to be helpful. With the patient’s consent, guiding loved ones to help track mood and participate with the patient in pleasurable activity can give them a sense of being a “partner” in the patient’s recovery from depression.

Table 7

Social Worker Depression Screening, Education and Treatment Activity Tracker			
Patient: _____ Age _____ 1 st Tx ever _____ 1 st Tx this unit _____ Social Worker: _____			
MEDICATION HISTORY and UPDATE: AntiDepressant/AntiAnxiety/Other Psychotropic Med? Y/N Comment: _____ _____ _____ _____			
Date of Depression Screening	Screening Score	SW Interpretation/Comments	
Date of SW Contact	Time Units (15 min units)	Nature of SW Contact/Intervention:(CBT/IPT/Fam. educ, couns/Meds review, other)	Additional Comments
Hospitalization (dates)		Missed Treatments (dates)	
Adapted from C.Sarfaty, MSW, FMCNA, Southern New England			

DEPRESSION RISK FACTORS: (Check all)

Diabetes	GI Bleeding
Cardiac Disease/CHF/CAD	Cancer
Stroke	Lung Disease
Vascular Disease (PVD)	Social Isolation
Amputation	Anxiety
Pt Reported Hx of Depression	
Other: _____	

Response: Phase III

Phase III of the depression treatment process, known as the “maintenance or discontinuation phase,” arrives approximately 1 year after the ongoing remission of symptoms. At that time, nephrology social workers can assist physicians in re-assessing patients’ treatment responses and their recovered level of bio-psycho-social functioning. In patients who have chronic life stressors (including medical illness), previous episodes of depression, or if they have a relapse following discontinuation of medication therapy, maintenance therapy is often medically advisable (American Psychiatric Association, 2000; National Collaborating Centre for Mental Health, 2004; Viguera et al., 1998). Nephrology social workers, who have closely witnessed the patient’s response to treatment over the course of a year, can join the discussion regarding the need to continue medication therapy. This unique relationship between patients and social workers in the dialysis clinic offers a valuable angle of observation, which is perhaps why nephrology social workers are so perfectly posed to help lead the response to depression in the people on hemodialysis.

Should the patient be interested in discontinuing medication following a course of treatment, nephrology social workers can partner with nephrologists to help supervise the discontinuation process. Because symptoms of discontinuation often mimic symptoms of relapse, regular contact with the patient and communication with nephrologists during rounds can help monitor the patient’s discontinuation response. Discontinuation symptoms that do not remit when weaning the dose slowly signal the possibility of relapse and the need to re-establish dosage for continued treatment. This process is one that could take time and benefit from the encouragement and objectivity of social workers, who can assist patients in contacting nephrologists for guidance. If patients feel strongly about discontinuation of treatment, this is another point in time in which social workers can help patients access outside psychiatric consultation at the nephrologists’ request.

If therapy discontinuation is successful, nephrology social workers can help people on hemodialysis understand the risk of a future episode of depression. Patients and their loved ones can be taught how to monitor for signs and symptoms of a recurrence. Regular screening can be combined with patient self-monitoring to detect

the need for re-initiation of treatment (with medication or psychosocial intervention classes) before a new episode of depression worsens.

The three-phase model discussed in the previous paragraphs allows nephrology social workers in dialysis facilities to collaborate with physicians in responding to and ensuring effective depression treatment in people on hemodialysis. This model, which monitors patient response closely from the initiation of treatment until the maintenance or discontinuation phase, is likely to improve nephrologists’ sense of safety with, and encourage utilization of, available medications for people on hemodialysis who have depression. It is also likely to ensure the delivery of adjunctive psychosocial interventions that can improve depression treatment outcomes and guard against relapse.

SUMMARY

DOPPS provided evidence to support the practice of early screening for and treatment of depression to improve the quality of life and survival of people on hemodialysis worldwide. Studies following DOPPS continue to point out the benefits of identifying and treating depression in this population (Boulware et al., 2006; Hedayati et al., 2004). As a modifiable variable in several quality outcomes, it is clearly a target for effective renal disease management. There are methods now available that can effectively screen for and manage depression in people on hemodialysis. There are established relationships in place between patients and mental health providers (nephrology social workers) on the dialysis treatment team. That team member is ready and seated at the CQI table. The trend in health care is to provide these depression management services at sites where patients are more willing to accept them because of the familiarity and trust they have established with their medical providers. This on-site programming is cost-effective (Simon et al., 2001). Finally, as illustrated in this article, there are models and processes available to guide nephrology social workers to help lead depression management programming at the dialysis clinic site and in collaboration with the renal team. The time is now to move forward in implementation of these approaches. According to DOPPS, the costs of *not* doing so, for patients, dialysis providers, Medicare, and the industry, are likely to be significant.

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