Part 2

The promise of Symptom-Targeted Intervention to manage depression in dialysis patients

Improving mood and quality of life outcomes

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Abstract

The Practice Outcome Evaluation of using Symptom Targeted Intervention (STI) to manage depressed mood in dialysis patients reviewed social worker experiences and observations using STI. The evaluation was guided by the following questions:
1. What is the feasibility of STI in nephrology social work?
2. What is nephrology social worker comfort level with clinical assessment, intervention, and tracking?
3. What is the potential efficacy of STI on reducing depression?

Initial results suggest that STI enhances existing nephrology social work skills in identifying, treating, and tracking outcomes of patient issues requiring clinical intervention. Most social workers spent 1.5 hours over a six-week period using STI techniques to address symptoms of depression with a patient. This rather short period of intervention led to a reported improvement in PCS and MCS scores of 51.6% and 61.3% of patients, respectively, and improvement in CES-D scores in 72.1% of patients. While this practice outcome evaluation is limited by how social workers were selected and the small number of patients, it demonstrates options for further study of the efficacy of STI in reducing depression. The brief time invested in training holds promise for impacting nephrology social work and improving patient and dialysis clinic’s outcomes.

Introduction

Despite significant evidence of the burden of depression on dialysis patients, depression is underreported and undertreated in dialysis facilities today. The impact of depression on dialysis patients and dialysis clinics includes clinical outcomes, morbidity, mortality and the cost of care.1-12 Because of this, nephrology social workers are exploring novel ways to treat depression while performing their clinical responsibilities.

Symptom Targeted Intervention (STI) is an innovative approach to treat symptoms of depression in dialysis patients. With STI, once depression is identified, the most problematic symptom of the depression is treated using cognitive, behavioral, and mindfulness techniques. Since the focus is very specific, interactions with the patient are brief and can be done chair-side at the dialysis clinic.

STI builds upon the established, working relationship between the patient and nephrology social worker. Using STI in the dialysis clinic overcomes barriers to community mental health treatment, including stigma, transportation, and insurance coverage. It also promotes a first line or adjunctive form of treatment for depression alongside the nephrologists’ consideration of antidepressant medication. Because the STI intervention is addressing the symptom that is most problematic for the patient, it is irrelevant whether the symptom is caused by an adjustment disorder, dysthymia, a recurrent depressive episode, or another mood disorder.

How STI Works

The intellectual premise for STI is based on systems theory, which considers a system as a set of interacting and independent parts; when one part of the system is disturbed, the whole system is affected.
altered, the entire system changes. If depression is a system comprised of various symptoms, when one of the symptoms improves, the entire trajectory of the depressive episode is transformed.

With STI, once a depressive episode is identified, the social worker and patient, through a series of questions, identify the most problematic symptom of the depression. The social worker and the patient then contract to work together on resolving the symptom. Both parties recognize that it often requires more than one session and may require more than one brief intervention to resolve the symptom. Various cognitive and behavioral techniques are utilized, including behavior activation, cognitive restructuring, relaxation techniques and mindfulness, psychoeducation, and patient homework. The patient-social worker partnership supports an important sense of patient empowerment and self-efficacy, where the patient is in control of his or her own mental health outcomes. While studies show patients prefer to receive mental health services from their nephrology social worker, STI can be used in collaboration with outpatient therapy and psychiatry.15

Description of practice outcome evaluation, method, and tools

Barriers often identified to treating depression in the dialysis clinic include limited nephrology social worker time, the extent of their clinical training, and the perceived impact of treatment in the dialysis clinic. The Practice Outcome Evaluation of STI to manage depressed mood in dialysis patients was designed to evaluate social worker experiences and observations using STI. The outcome evaluation was guided by the following questions:

1. What is the feasibility of STI in nephrology social worker practice?
2. What is nephrology social worker comfort level with clinical assessment, intervention, and tracking?
3. What is the potential efficacy of STI on reducing depression?

A practice outcome evaluation (POE) is a process of evaluating practice or programs that asks and answers the question, “Are clients being helped?” This question is answered by evaluating improvement on high-level outcomes, exploring details of the intervention provided in practice, and identifying feasibility of implement-
Can STI reduce missed treatments?

Depression targeted in patient review

When lead social workers across three states in the Pacific Group of Fresenius Medical Care-NA began working on an initiative to reduce missed hemodialysis treatments, they knew depression was likely to be a key target. Now as the initiative enters its third and final phase, it has become evident that depression has played a role in our sample of patients skipping dialysis treatments.

This initiative began in our FMCNA clinics following completion of a social work root cause analysis of the underlying barriers to treatment attendance in 146 patients that had missed a hemodialysis treatment within the prior 14 days. Among the root causes identified were multiple psychosocial barriers, including emotional detachment, perceived stress, and inability to cope. Sleep disturbance was also identified as a key issue in patients skipping a treatment. Social workers came together to draft interventions to address these root causes, and spent the next two years launching them to patients actually missing treatments. The initiative has been successful, and is now progressing toward its final phase.

To reduce some of the final barriers patients identified for missing treatments, they are receiving Symptom Targeted Intervention to address anxiety and depression.

Across the first phase of the initiative, facility social workers led the interdisciplinary team to provide education about the risk of missing a treatment and make sure each patient made the connection between what the literature said and their own personal health behavior. So many patients, we learned, thought that the risk applied to everyone else except them. This phase of the initiative made them think longer and harder about the risk of missing treatment. When a small sample of the patients across three states were surveyed, 78% of patients (n=400) recalled more of the identified risks four weeks after the education was provided to them compared to baseline. Missed treatment activity trended down in several areas during this phase of the social work initiative.

Missed treatments has an impact on quality outcomes and the bottom line for a dialysis facility, particularly in the bundled environment (see box). Phase II of the initiative demonstrated the value of social work intervention using the KDQOL-36 instrument. By probing further into the KDQOL scores, patients and social workers partnered to set goals in the area of physical, emotional, or social rehabilitation. Of the 61 patients undergoing the four-week, social work intervention, 79% of patients improved scores either on the mental component scale, the physical component scale or both. Improvements in these scales correlate with reduced risk of mortality and hospitalization. 1 Significant improvement was also demonstrated on other scales of the KDQOL-36: 57% of patients improved their scores on the Burden of Kidney Disease scale, 48% on the Symptoms and Problems Scale, and 54% on the Effects of Kidney Disease on their day-to-day life.

Of additional interest was that many of these patients chose to improve their treatment attendance as their personal rehabilitation goal. The barrier was not motivation; these patients were stuck emotionally in their lives. The

Quality and financial outcomes

An FMCNA multi-regional missed treatment initiative

By Bina Baxi

It was the beginning of 2008 and I was in a brainstorming session with my team to make further improvements on key quality outcomes in the three states that were under my operational responsibility. As we reviewed the Fresenius scorecard, our discussion turned towards the quality metric of “Percent of patients with < 1 missed treatment over a period of three months.” These were treatments that were unexcused and patients who skipped treatments due to various reasons. Quality and financial outcomes are not mutually exclusive. We all agreed that focusing on the improvement of the quality metrics would certainly result in the improvement of the financial outcomes and operational efficiency.

The first step was to investigate the reasons why a patient skipped a treatment. Was it the usual assumption of patients having transportation issues? We often hear that excuse from patients, but there are others. From an operational and financial perspective, we certainly have experienced significant growth in our patient census and staffing efficiency. With the reduction of missed in-center treatments, staffing levels had a lot more predictability and thus efficiency. Capturing more treatments led to an increase in growth as well as revenue for the treatments as well as the medications. For the quality metrics we saw a reduction in hospitalizations, improvements in dialysis adequacy, as well as anemia management.

The rollout of this initiative has truly been a win-win for the patient as well as the provider.

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partnership with their social worker allowed them to revisit their personal goals and dreams and notice their strengths again. In a smaller sample of these patients studied, 82% of patients that were missing treatments improved their treatment attendance following this focus on rehabilitation.

Phase III is rolling out now, only in a much larger sample of patients. On the heals of the improvement in the MCS scores in phase II, SWs are now launching an intervention to reduce the impact of depression on missed treatments. The literature demonstrates the link, but only a few outcome studies have focused on nephrology social work intervention in this area. During a comprehensive screening and assessment of patients missing recent hemodialysis treatments, the social workers found that 47% of the patients screened positive for depression using the CES-D 20 (n=74). This is alarming data, compared to the 20% - 25% prevalence of depression normally presented in the ESRD literature. This evidence provided a strong sense of direction for the last and final phase of our initiative. FMCNA social workers will apply STI in an effort to improve mood in hemodialysis patients missing treatments. If improved mood translates to improved energy and emotional endurance this could support the ability to tolerate treatment and improve attendance.

Patients reported early on in the initiative that they had missed a treatment because they “just couldn’t handle it” or “felt too overwhelmed with life.” Fresenius has provided an opportunity for social workers to gather for regional trainings in depression management using STI across the West Division. Not only can restoring emotional and mental health to those patients improve our outcomes, but like with all phases of this initiative, patients that push through to attend each and every treatment, reduce hospital days, and have more energy to rehabilitate in an accountable care and bundled reimbursement environment, these goals are key.

—Stephanie Johnstone, LCSW

References
SOCIAL WORK

[ DEPRESSION MANAGEMENT, continued from page 25 ]

...ing the intervention on a larger scale.

Method

Forty-six nephrology social workers from 17 states completed a training program that included a DVD, training manual, intervention tracking tool, and follow-up conference calls. The social workers introduced STI to patients who met one or more of the following criteria for a depressed mood:
- Patients with KDQOL-36 MCS scores in the low average or below average range on a survey
- Patients with scores > 10 on the CES-D 10
- Patients with self-reported depression or depression-like symptoms to the social worker or dialysis clinic staff
- Clinical interview indicating depression

Over a period of six weeks, nephrology social workers collaborated with patients in addressing symptoms of depression utilizing STI. The social workers shared their experiences via a pre-post survey evaluating their comfort level with clinical assessment and intervention, perception of training, and perception of intervention success.

STI in the Dialysis Clinic

Feasibility of STI

The POE included part-time and full-time nephrology social workers with caseloads ranging from fewer than 50 to more than 150 patients. Over the six-week period of the POE, the majority of participating social workers met with at least one patient greater than four times (see Chart 1).

Most social workers reported a total of 1.5 hours utilizing STI with the patient over the six-week period (see Chart 2). Social workers reported their first session with the patient took the longest, approximately 30-45 minutes, with subsequent sessions averaging 15-30 minutes.

In a follow-up questionnaire, social workers indicated there was no relationship between hours worked and caseload in their plan to use STI with dialysis patients. The social workers described STI as a "good way of strategically using social worker time and energy" to address depression. Social worker caseload was not related to the number of sessions or the time spent collaborating with patients using STI.

Despite significant caseload and clinic responsibilities, these results suggest that nephrology social workers can address complex patient needs strategically and efficiently.

Social workers’ comfort level with clinical assessment, intervention and tracking

The Conditions for Coverage requires dialysis clinics to provide an MSW whose degree, license, or certification allows him or her to counsel patients.14 Master’s-level social workers are trained to autonomously provide diagnostic, preventive, and treatment services for individuals, families, and groups in the context of their respective life situations. Social workers are trained in conducting empirical evaluations of their own practice interventions.15,16

While the majority of social workers participating in the POE reported being “very comfortable” identifying a problem needing clinical intervention and performing a clinical intervention at the pre- and post-survey, only 42% were “very comfortable” tracking outcomes of a clinical intervention on the pre-survey (see Table 1). After completing the STI training and practice, 56.5% of social workers reported being “very comfortable” tracking the outcome of a clinical intervention (see Table 2). This change is considered statistically significant (p=.004).

Social workers who participated in the POE repeatedly...
described the interventions as familiar but acknowledged they have not tracked and reported their past practice and outcomes successfully. The interventions, outcomes, and tracking tool were described by participating social workers as “something tangible to help our patients” and “a much more quantitative approach to help our patients” and described the interventions as familiar but acknowledged they have not tracked and reported their past practice and outcomes successfully. The interventions, outcomes, and tracking tool were described by participating social workers as “something tangible to help our patients” and “a much more quantitative approach to help our patients.”

Social workers used a tracking tool designed to monitor changes in patient adherence, behaviors, and mood and to report these outcomes to the IDT.

**Potential efficacy of STI**

Social workers were asked whether their patients’ KDQOL-36, CES-D and Symptom Severity Scale (see Table 3) scores changed for the better, the worse, or stayed the same following intervention. Social workers reported the CES-D 10 scores improved in 72.1% of patients. Social workers reported PCS scores improved 51.6% and MCS scores improved 61.3% with STI as part of the treatment plan. In cases with improved CES-D 10 scores, the MCS scores improve 51% and PCS scores improved 39.7%. Patients with improved Symptom Severity Scores also demonstrated improved PCS-MCS scores.

An improvement in PCS/MCS was defined as a change of ≥1 point. A one point higher PCS or MCS score reduces the relative risk of death and hospitalization.17 CES-D scores ≥10 are associated with significantly higher relative risks of hospitalization and death.18

Social workers and dialysis center staff recognized change in health risk behaviors in patients who participated in symptom-targeted interventions. These changes include reducing missed treatments, adherence to other treatment prescriptions, improved communication with the treatment team, and improved fluid management. Patients also began to address rehabilitation goals, including returning to work and exercise.

**Implications for practice**

While the majority of those who received the STI training practiced the intervention with at least one patient, there were 10 social workers that were unable to use STI. Barriers to utilizing STI during the six-week practice outcome evaluation were reported to be

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<thead>
<tr>
<th>Symptom</th>
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<tr>
<td>Sleep</td>
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<tr>
<td>Social Isolation</td>
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<tr>
<td>Mood</td>
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<td>10</td>
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<td>Relationship Problems</td>
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**Social workers report on patient outcomes with STI**

“The patient has had difficulty sleeping. She was recently diagnosed with sleep apnea and was ruminating over the death of her father. After the intervention, she reported improved sleep patterns. She is more pleasant during treatment and has begun to work with the treatment team on managing her fluid intake. The patient stated that she feels more hopeful and feels better able to manage the challenges of dialysis.”

“An older male patient reported three separate, very stressful life situations impacting his quality of life. After two weeks of intervention, the patient treatment attendance improved (he went from once a week to twice a week). The patient told the social worker he felt cared about and more engaged with the dialysis center.”

“An in-center dialysis patient described feeling hopeless about the future and was afraid to leave the house due to tearfulness. After the six-week intervention period, the patient returned to work, beginning with two hours of work per week.”

“When we started working together, the patient would miss in-center treatments and not make up these treatments. Now, instead of just missing treatments, he calls and reschedules these appointments. The patient’s sleep habits also improved, she no longer takes frequent naps during the day, and instead she has replaced these with other activities. She has begun to explore local exercise classes as another way to get her out of the house and improve her activity level.”

“In the month prior to intervention, a patient made three formal grievances within the center and requested transfer. In the month since intervention, patient has not made any grievances and has decided to stay. This was despite a significant change in treatment time for which patient was not consulted.”

**Chart 1. Patients and STI sessions**

**Chart 2. Patients and interventions**
related to weather, staffing changes at the center, patient hospitalizations, and other clinic-related issues such as an increase in admissions. At least four of these social workers stated they plan to utilize the model despite the initial barriers to participation.

The future of STI: practice and research

The brief time investment in training and implementation holds promise for impacting the practice of the nephrology social worker and dialysis clinic outcomes, such as morbidity and mortality. The training and STI model have the potential to improve social worker tracking of clinical outcomes and can further develop the social worker’s role in the clinic’s quality assessment and performance improvement (QAPI) program. The model is flexible and teaches the social worker to work with patients strategically and intentionally, promoting profound results in a short period of time.

Social workers’ plan to continue to use STI was not related to hours worked, caseload, or experience.

Limitations of this practice outcome evaluation

While this practice outcome evaluation is limited by how social workers were selected to participate and the small number of patients, it demonstrates options for further study evaluating the efficacy of STI in reducing depression and impacting quality of life. Options for research include comparison of STI with standard care, motivational interviewing alone, or other models of intervention and evaluating STI over a longer period with a larger patient or social worker sample.

References


For more information about Symptom Targeted Intervention, visit http://stiinnovations.com