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Summary and Discussion of "Comparative Efficacy of

Therapies for Treatment of Depression

for Patients Undergoing Maintenance Hemodialysis: A Randomized Clinical Trial"

Many patients find coping with the challenges of hemodialysis (HD) treatment to be demanding, but about one third of patients with end-stage renal disease (ESRD) who are undergoing maintenance dialysis meet criteria for depression. Despite the high rates of depression, many ESRD patients are not receiving treatment for it. One reason that might contribute to the low rate of treatment is the lack of clarity on which treatments for depression are safe and effective for ESRD patients. In the general populations, both cognitive behavioral therapy (CBT) (a form of talk therapy that helps patients learn problem-solving skills and behavioral modification strategies) and antidepressant medicines have been shown to reduce depression. We undertook a study[1] with the primary goal being to compare the effectiveness of CBT and sertraline (an antidepressant medicine) in depressed patients receiving maintenance dialysis. The study was done in patients older than 21 years with ESRD and major depression or dysthymia who were receiving maintenance dialysis at one of 41 dialysis facilities in Dallas, TX; Albuquerque, NM; or Seattle, WA. There were 120 participants in the treatment component of the study.

Patients who were depressed and agreed to take part in the study were randomly assigned to receive either CBT or sertraline. People assigned to CBT had 10 one-hour sessions with a trained therapist over 12 weeks. Standard CBT intervention for depression was modified for the unique challenges of ESRD patients on HD treatment to include education about mental health considerations, adherence with the dialysis prescription, adapting advice about behavioral activation to life on dialysis, and identification and challenging maladaptive thought patterns that may be specific to patients living with kidney failure. The sessions were recorded, and some of them were reviewed to make sure the therapists were doing the treatment as it was intended. CBT treatment was delivered by master's-level study therapists. The therapy was delivered in-person face-to-

face while the patient was undergoing his/her hemodialysis treatment. Patients were given a choice to receive therapy at another time, but virtually all chose to receive therapy while undergoing hemodialysis.

Those in the sertraline group were prescribed a dosage of 25 mg per day to start. It was increased gradually to a stable dosage over six weeks, which was maintained for another six weeks. Patients in both groups completed questionnaires to measure depression symptoms as well as other outcomes of interest at baseline and at six and 12 weeks.

After comparing the groups at 12 weeks, depression scores had improved in both the CBT and sertraline groups, with improvement being slightly greater among the patients who received sertraline. However, side effects were more frequent in the sertraline than in the CBT group.

For patients receiving dialysis who are depressed, both sertraline and CBT seem like reasonable treatment options, as they both reduced depression scores. Patients and providers need to discuss the relative advantages and disadvantages of each approach, including patient's preference for treatment and the availability of resources, but either treatment could be the best one for a patient.

Some really important questions about depression treatment still remain. We are not sure if patients had the ability to choose the treatment they wanted (like in regular clinical care), the results would be any different. We also don't know the effect of combining both treatments together. Would more patients benefit from a combined approach? Would depression scores improve even more? Also, we don't know how long the treatment effects will last. As depression normally waxes and wanes, it is difficult to know if these treatments have fundamentally altered depression's course. Finally, the study did not examine how to practically implement these treatment strategies into usual dialysis care.

Despite all of these still unanswered

questions, we can offer the following tips to patients:

Get involved in research. We strongly believe that this study benefitted from the significant amount of patient and other stakeholder input that we received over the course of the study. One unique element to this study was the formation of patient and stakeholder councils right at the beginning of our designing the study. We discussed all elements of the study's plans and the study's progress once we got started.

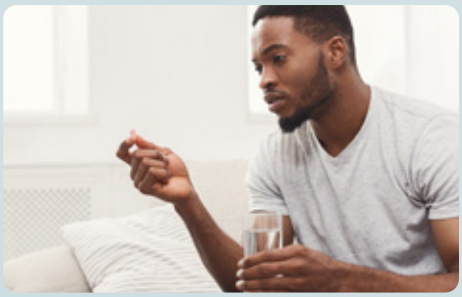
We think that partnerships between patients and the research community are one of the keys to making sure that the most important and relevant questions are being addressed.

Take depression screens. Many dialysis centers have implemented some program to screen for depression. We know you are asked to complete a lot of paperwork, but fill out the questionnaires! Having your center know and document that you are depressed is the first step to getting help.

Consider your care options. Talk with your treatment team about the options for treating your depression. Your social worker can provide counseling and help connect you with local providers. Your nephrologist or primary care doctor may be willing to prescribe an antidepressant or connect you with a specialist.

Don't overthink engaging in treatment. Many folks are not excited to have another doctor appointment, especially if it has to do with mental health. Don't let stigma or bias prevent you from getting the help you need. Pursue treatment—there may be barriers to getting care, but persevere, you will feel so much better once you get help with your depression.

Good feelings tend to spread. While this may seem obvious, people in our studies not only saw improvement in their mood, but both groups also reported reduced anxiety, reduced disability, more energy, improved satisfaction with life and even better sleep.



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Reference

1. Mehrotra, R., Cukor, D., Unruh, M., Rue, T., Heagerty, P., Cohen, S.D., Dember, L.M., Diaz-Linhart, Y., Dubovsky, A., Greene, T. and Grote, N., 2019. Comparative Efficacy of Therapies for Treatment of Depression for Patients Undergoing Maintenance Hemodialysis: A Randomized Clinical Trial. *Annals of internal medicine.*