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Depression Among Dialysis Patients Barriers to Good Care

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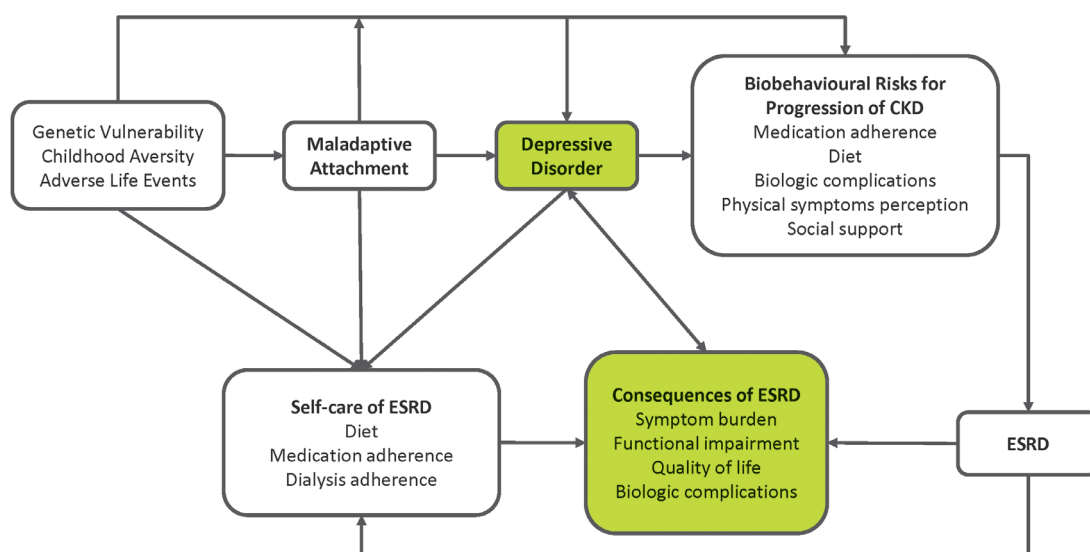
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A patient on dialysis suffers from enormous burden of several somatic symptoms. These are sometimes accompanied with psychological distress; more than 70% have complaints about fatigue, nearly half of the patients experience anorexia and sleep disturbances, and one-fourth of them report ‘feeling down’ or ‘having no interest in doing things.’^{1,2} This puts forward the question to what extent these symptoms are because of an underlying course of depression rather than the uremic state or ‘normal sadness’ because of the

chronic illness. Interestingly, it has been shown that somatic symptoms are the presenting complaint of the majority of patients with chronic conditions who are eventually diagnosed with depression.³ Depression warrants clinical attention as an independent entity among medically ill patients.

The interaction between depression and chronic illnesses is well described by Katon.⁴ Adapting his model for end-stage renal disease (ESRD), we can identify three pathways through which depression and ESRD affect each other (Figure):



A conceptual model for interaction between depression and ESRD. Adapted from the model proposed by Katon.⁴

(1) depression accelerates progression of chronic kidney disease to ESRD through its common biological complications with the kidney disease (inflammation and compromised immunity) and its detrimental effects on care behaviors (nonadherence to treatment, poor diet, etc)^{5,6}; (2) Once ESRD is established, its consequences such as poor quality of life, burden of symptoms, and biological complications can deteriorate depression and be deteriorated by depression⁷⁻⁹; and (3) depression affects self-care of the ESRD patients and thus exacerbates consequences of ESRD through poor diet and nonadherence.¹⁰ Accordingly, we expect that clinical depression to be more common among these patients as compared to the general population. A population-based study demonstrated that compared with adults with no comorbidities, ESRD patients are more likely to have depression. Furthermore, depression was most common in ESRD patients as compared with those who had other comorbidities (odds ratio, 3.56; 95% confidence interval, 2.61 to 4.87).¹¹

The prevalence of depression among dialysis patients varies depending on the measurement method. Based on self-report depression scales, depressive symptoms are present in 29.7% (8.1% to 65.4%) of dialysis patients.¹² A few studies using the gold standard method of structured clinical interview of an entire cohort have reported that 12% to 26% of dialysis patients suffer from depressive disorders and 12% to 26% have major depression.¹³⁻¹⁵ However, a diagnosis of depression is made by the physician in only 16.2% (4.4% to 27.7%) of these patients,¹² indicating underdiagnosis of depression. Furthermore, only 16% to 45% of depressed patients on dialysis receive any treatment.^{16,17} These figures raise concerns together with the evidence that supports Katon's model,⁴ showing strong links between depression and outcomes such as quality of life and hospital admissions in this population.^{7,8,18} Recently, we carried out a meta-analysis on observational studies looking at the association between depressive symptoms and mortality of dialysis patients.¹² Meta-analysis revealed a 45% higher risk of death in those screened positive for depressive symptoms (adjusted hazard ratio, 1.45; 95% confidence interval, 1.27 to 1.65). This hazard ratio was corrected for publication bias due to potentially unpublished studies showing nonsignificant associations.

The importance of the management of depression has recently been the center of focus in the nephrology literature. Screening of the patients and providing appropriate care has been recommended by several authors^{8,19}; however, the large number of undiagnosed and untreated dialysis patients with depression is indicative of the existence of barriers to optimal mental health care of these patients. These barriers can be categorized into three groups of physician-related barriers, patient-related barriers, and methodological and organizational limitations.²⁰ Hedayati and colleagues identified depression in 26.7% of their hemodialysis patients and reported that intervention was made in only 23% of these patients within 4 weeks after informing the primary care nephrologist.¹⁴ Physicians' concerns about the effectiveness and safety of psychiatric interventions are speculated to be a major physician-related barrier. Data on pharmacological treatment of depression in ESRD patients are limited to some small studies, often with methodological limitations.²¹⁻³¹ Antidepressant medications have not been examined by robust randomized controlled trials. Fluoxetine was studied in two clinical trials with very small number of patients.^{22,28} Newer selective serotonin reuptake inhibitors, including citalopram, sertraline, fluvoxamine, and paroxetine have also been studied in observational studies and small clinical trials.^{21,23,25,27,29-31} All of these studies have reported considerable success without imposing serious adverse events. However, lack of enough evidence about drug-drug interactions and dose adjustments for dialysis patients explain reluctance of the physicians to use these medications in ESRD patients.

In the current issue of the *Iranian Journal of Kidney Diseases*, Hosseini and colleagues³² have reported their randomized controlled study comparing psychological training and citalopram for patients with depressive symptoms (Hospital Anxiety and Depression Scale score ≥ 8). After a short follow-up of 2 months, depressive scores improved significantly in both groups. Nonpharmacological interventions have proved effectiveness in a few other reports as well. In one recent randomized controlled trial, cognitive behavioral therapy for 3 months significantly improved depressive symptom scores.³³ Another randomized controlled trial on intradialytic exercise training reported promising results.³⁴ Hosseini and colleagues conclude that

psychological training is an appropriate alternative physician can consider when approaching depressed patients with kidney failure.³²

There are other sources of barriers that can jeopardize success of interventions for identification and treatment of dialysis patients with depression. In addition to the methodological limitations such as accuracy of the screening tools and challenges of a definite diagnosis, patient-related barriers warrant special attention. Patient-perceived barriers to mental health care have been addressed by several studies at the population level,³⁵⁻³⁸ as well as 2 studies on dialysis patients. Johnson and Dwyer³⁹ surveyed barriers to treatment among screen-positive hemodialysis patients for depression and found that more than 70% of their cohort perceived some barriers. Wuerth and colleagues⁴⁰ reported that their screening program was limited by the large number of patients screened positive for depression who refused further assessments (49%). Patients' reasons were disagreement with the screening results and their concerns about medical treatment. Recently, we studied 160 patients on hemodialysis at two dialysis centers in Toronto (unpublished data). The patients were asked to rate 38 possible barriers to participate in a screening program for depression (defined as routine questionnaire assessments, diagnosis and referral, and treatment). Overall, 73% of the participants perceived substantial barriers to screening, mostly because of concerns about side effects of antidepressant medications, being overwhelmed by the load of medications, and feelings that they were not at risk of depression.

Hosseini and colleagues demonstrate that citalopram is safe and effective, while emphasizing the comparable usefulness of psychological interventions.³² Such studies help us reduce physician-related and patient-related barriers by informing physicians and patients of the safety of psychopharmacological interventions and giving them the option of nonpharmacological treatments. Our survey and the current literature on barriers to mental health care utilization indicate that programs such as screening of dialysis patients for depression need to be preceded by assessing the acceptability of these programs, comprehensively evaluating long-term benefits and harms of psychiatric interventions among dialysis patients, and implementing educational programs to ensure

patients about the need for treatment, safety of the currently available therapies, and options other than antidepressants.

CONFLICT OF INTEREST

None declared.

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