



PREVALENCE OF DEPRESSION IN CHRONIC KIDNEY DISEASE

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ABSTRACT Depression is commonly observed in CKD patients. It is usually not identified and treated. We evaluated the prevalence of depression in a cohort of 50 CKD patients. We found that 66% of CKD patients were depressed. Prevalence was more in dialysis patients compared to pre dialysis group. There was no correlation between prevalence of depression and socioeconomic status and education.

KEYWORDS : e-learning, online, quality

Introduction

Chronic kidney disease (CKD) is a progressive disease which has a significant impact on individuals' psychological as well as physical well being. CKD is associated with psychiatric problems such as depression, anxiety, sleep disorders, mixed anxiety and depressive disorder, dementia and adjustment disorder. There are limited studies on prevalence of depression in patients with chronic kidney disease. Aim of this study was to assess the prevalence of depression in patients with CKD.

Due to the irreversible nature of CKD, psychiatric disorders such as depression are commonly observed among CKD patients (3). Depression may be triggered by a number of social, biologic, and psychological factors, and this has been reported to occur at any point during the progression of CKD (4). Factors that affect the risk of depression are socioeconomic factors, education status and the gender of the patient (5). Depression is characterized as one of the most assessed psychological aspects regarding studies on patients with renal failure; however, there is a difficulty in recognizing its true extent in this population. The evaluation of depression in patients during early stages of CKD becomes important, since its influence on quality of life and mortality rates. However, most of the studies evaluating patients in terminal stage of the disease and research assessing patients under pre-dialysis treatment are scarce. This study aimed to evaluate depression in patients CKD not on Dialysis, comparing them with patients undergoing hemodialysis. Sociodemographic and clinical variables were also evaluated.

Materials and methods

This observational, questionnaire based clinical study was done in Father Muller Medical College hospital, Mangalore from May 2016 to august 2016. Fifty adult patients who were diagnosed with chronic kidney disease and were following up in the hospital were studied. After taking consent of the patient, he/she was assessed by using Hamilton score and based on score, severity of depression was diagnosed.

Results of the study

A total of 50 patients were included in the study. Thirty five patients were CKD not on dialysis (CKD- ND) and 15 were on dialysis (CKD-D). The demographic data is shown in table 1.

Table 1. Demographic data of the study population.

Sex	Pre dialysis group	Mean age	Dialysis group	Mean age
Male	25	56.37 +/- 17.07	10	49.49 +/- 17.47
Female	10	49.36 +/- 19.17	5	44.17 +/- 17.83
Total	35	52.64 +/- 18.86	15	47.20 +/- 17.74

Overall 66% of the study population were having depression (table 2). Prevalence was higher in CKD-D (80%) compared to CKD-ND (60%).

Table 2. Prevalence of severity of depression in CKD patients.

Stages of depression	Pre-Dialysis	Dialysis	p-Value
No Depression	14 (40%)	3 (20%)	
Mild Depression	10 (28.57%)	4 (26.6%)	<0.5
Moderate Depression	7 (20%)	6 (40%)	<0.5
Severe Depression	4 (11.42%)	2 (13.3%)	
Total (n)	35	15	

We did not find any correlation with socioeconomic status and educational level with the prevalence of depression.

Discussion

This study was done in a tertiary care hospital on 50 Chronic kidney disease patients. We used the Hamilton Depression Rating Scale to diagnose the different stages of depression. The Hamilton Depression Rating Scale is one of many ways to stage depression, and has recently been shown to be a valid alternative to other methods⁽⁸⁾. We examined the patients signs of depression, and for any associations between depression and education status and income. Sixty six percent of CKD patients were found to be in depression. Among the CKD ND 60% were found to be in depression and among CKD D patients 80% were found to be in depression. The prevalence of depression was higher in the dialysis group. Our study results were similar to Bhatti et al. showed that in the dialysis group, 83.8% were in depression, while in the pre-dialysis group only 61.3% of patients were in depression⁽¹³⁾. Wuerth et al. (2003) study on chronic peritoneal dialysis patients based on the Hamilton Depression Scale and Standard Diagnostic and Statistical Manual of Mental Disorders criteria found that 87% of their patients were diagnosed as being clinically depressed⁽⁹⁾. Study done by Chiang et al showed that prevalence of depression was 22.6%⁽¹²⁾.

Watnick et al. (2003) found that symptoms of depression were frequently observed at the early stages of dialysis treatment⁽¹⁰⁾. We did not study this aspect of depression. Whether depression prevalence and severity changes with duration of dialysis is not clear.

Depressive disorders have been found to be associated with an increased risk of mortality, and poor health-related quality of life⁽⁷⁾. Hedayat et al. (2009) found in their study that 1 in 5 patients with CKD had experienced at least one major depressive episode, and that, for patient with late-stage CKD, there was an independent association between depression and poor survival outcome⁽¹¹⁾. As the study was of short duration we did not study the effect of depression on mortality and morbidity.

Contrary to the belief and findings of other studies we found that depression was not significantly associated with education status. No association was found between depression and income status in this study.

Conclusions

There is high prevalence of depression in CKD patients, more so in

patients on dialysis. Screening for depression should be routinely performed in order to identify and treat depression in its early stages for these patients.

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