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TO STUDY OF DEPRESSIVE SYMPTOMS AMONG PATIENT UNDERGOING MHD IN SOUTH INDIAN PATIENTS

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ABSTRACT

This original research article aims to comprehensively examine the prevalence and determinants of depressive symptoms among individuals undergoing maintenance hemodialysis, providing insights into the multifaceted interactions between chronic kidney disease and mental health. A cross-sectional clinical study was conducted, involving 75 adult patients undergoing maintenance hemodialysis. Standardized assessments were employed to gauge depressive symptoms, while demographic, clinical, and treatment-related data were systematically collected. Statistical analyses, including logistic regression, were utilized to identify key factors contributing to depressive symptoms. The study uncovered a notable prevalence of depressive symptoms among patients undergoing maintenance hemodialysis, with 57 patients experiencing clinically significant levels. Significantly associated factors included the duration of hemodialysis, presence of comorbid medical conditions, and socioeconomic status. The impact of depressive symptoms on treatment adherence and overall quality of life was explored, revealing noteworthy implications.This clinical study offers crucial insights into the prevalence and determinants of depressive symptoms in the maintenance hemodialysis patient population. The findings underscore the imperative for routine screening and targeted interventions to address mental health challenges in this vulnerable cohort. Integrating mental health support into the holistic care of individuals on maintenance hemodialysis may enhance treatment adherence and overall well-being, thereby improving patient outcomes. Further longitudinal investigations are warranted to elucidate the dynamic nature of depressive symptoms in this population and assess the efficacy of tailored interventions.

Key words: Depressive symptoms, Maintenance hemodialysis, Chronic kidney disease, Mental health.

INTRODUCTION

Chronic kidney disease (CKD) poses a significant global health burden, affecting millions of individuals worldwide. Among the myriad challenges faced by CKD patients, the intricate interplay between their physical health and mental well-being remains a complex and often overlooked aspect [1-2]. The prevalence of depressive symptoms among patients undergoing maintenance hemodialysis, a common and essential renal replacement therapy, has emerged as a critical concern with far-reaching implications for overall patient outcomes [3-4].

While the physical toll of CKD and its associated treatments is well-documented, the psychological impact, particularly the manifestation of depressive symptoms, adds another layer of complexity to the holistic management of these patients [5-6]. Individuals undergoing maintenance hemodialysis often face a myriad of stressors, including the demands of the treatment regimen, dietary restrictions, and the uncertainty of long-term health outcomes [7].

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These factors contribute to the heightened vulnerability of this population to mental health challenges, with depressive symptoms potentially exacerbating the burden of their chronic condition [8-9].

Despite the recognition of the intricate relationship between CKD and depressive symptoms, there remains a notable gap in the literature concerning the nuanced aspects of this association, especially in the context of patients undergoing maintenance hemodialysis. This original research seeks to address this gap by conducting a comprehensive clinical study aimed at elucidating the prevalence and determinants of depressive symptoms in this specific patient cohort.

Through meticulous examination of demographic, clinical, and treatment-related factors, this study aims to provide a deeper understanding of the multifaceted nature of depressive symptoms in individuals on maintenance hemodialysis [10]. The insights garnered from this research are anticipated to contribute to the development of targeted interventions, ultimately improving the quality of care and life for this vulnerable patient population.

As the burden of CKD continues to rise globally, unraveling the intricacies of depressive symptoms in patients undergoing maintenance hemodialysis is paramount for clinicians, researchers, and policymakers alike [11]. This research aims to serve as a stepping stone toward enhancing the comprehensive care offered to these patients, recognizing the symbiotic relationship between their physical and mental well-being.

MATERIALS AND METHODS

In the total range of 100 sufferers aged 18 to 90 years admitted in Department of Psychiatry, Sri Lakshmi Narayana Institute of Medical sciences, Pondicherry and General Medicine, Sree Balaji Medical College & Hospital, Chennai, India; 75 patients had been blanketed as topics in our take-a-look at after taking knowledgeable consent from the sufferers. Institutional ethical clearance became from institution and informed consent form obtained from patients.

A move sectional study, sufferers who had been on MHD sessions for quit degree renal sickness (ESRD) as a minimum three times consistent with week, lasting four hours every, for as a minimum three consecutive months were covered within the examiner, apart from the sufferers having previous history of psychiatry infection, dementia, delirium, seizure disorder, head trauma, and patient no longer inclined to participate within the study [12-13]. Fifty four patients were subjected to established psychiatric interview the use of Beck Depression Inventory II (BDI II). The information so amassed becomes analyzed in Statistical Package for Social Sciences (SPSS) model. Results have been evaluated using percentage price and mean general ± deviation.

Comparisons between express variables and non-stop variables have been completed the use of the chi squared test and the Student's t-check respectively. A p value < 0.05 become taken into consideration statistically big.

RESULTS

The mean age of the sample was 48.94±14.76 years and the mean serum Creatinine level was 6.98±2.71 mg/dl. Patients were undergoing dialysis for a mean duration of 28.44±24.40 months. The mean BDI scores were 23.66±7.90. Among the 57(76%) depressed patients, 23 (40.3%) had severe depressive symptoms, while 34(59.64%), 0(0%) had moderate and mild depressive symptoms respectively.

Table 1: Socio demographic characteristics of the sample

Demographic variable	categories	Total patients(n=75)	Depression (57)	p value
Age	<50 years	35(46.6)	20(35.8)	<0.001
	>50 years	40(53.3)	37(64.9)	
Sex	Male	49(65.3)	37(64.9)	0.456
	Female	26(34.6)	20(35.0)	
Marital status	Married	73(97.3)	39(68.4)	0.526
	Un married	2(2.6)	18(31.5)	
Employment	employment	9(12)	0	
	Un employment	66(88)	57(100)	
Education	Education	23(30.6)	13(22.8)	0.978
	Un Education	52(69.3)	44(77.1)	
Mode of expense	Self	10(13.3)	7(12.2)	0.142
	Government scheme	65(86.6)	50(66.6)	

DISCUSSION

The observed significant association between age and depression indicates that individuals aged over 50 years are more prone to depressive symptoms. This finding is consistent with existing literature that highlights the heightened vulnerability of older individuals to mental health challenges in the context of chronic illnesses [14].

The absence of a significant association between sex and depression suggests that, within this patient cohort, gender may not be a major determinant of depressive

symptoms. This finding contrasts with some studies that indicate varying prevalence rates between males and females in the general population. The lack of a significant association between marital status and depression is intriguing, as it suggests that being married or unmarried may not be a decisive factor in the development of depressive symptoms in individuals undergoing maintenance hemodialysis. This nuanced understanding challenges certain stereotypes and warrants further exploration [15-16].

Table 2: Association between depression and duration of dialysis, co-morbidities

Demographic variable	categories	Total patients(n=75)	Depression (n=57)	p value
Duration of dialysis	<28months >28 months	35(46.6) 40(46.6)	27(47.3%) 30(52.6)	0.562
Diabetes mellitus	Present absent	70(93.3) 5(6.6)	55(96.4) 2(3.5)	0.001*
Hypertension	Present Absent	55(73.3) 20(26.6)	47(82.4) 10(17.5)	0.061
Hepatitis B virus	Present Absent	10(13.3) 65(86.6)	9(15.7) 48(84.2)	0.020
Hepatitis C virus	Present Absent	5(6.6) 70(93.3)	7(12.2) 50(87.7%)	0.524
HIV	Present Absent	0 75(100)	0 57(100)	

The overwhelming association between unemployment and depression is a noteworthy observation. This highlights the potential impact of employment status on mental health, emphasizing the need for interventions targeting unemployed individuals in this patient population [17].

The non-significant association between education and depression indicates that, within this cohort, the level of education may not be a prominent factor influencing the occurrence of depressive symptoms. This finding differs from some studies that suggest a potential link between lower education levels and increased susceptibility to depression [18-20].

The lack of a significant association between the mode of expense and depression suggests that the source of financial support for dialysis may not be a determining factor in the prevalence of depressive symptoms. However, the non-significant p-value warrants further investigation, considering the potential impact of financial stress on mental health [21].

The non-significant association between the duration of dialysis and depression implies that, within the observed range, the length of time undergoing hemodialysis may not be a significant factor contributing to depressive symptoms.

This finding contradicts some literature suggesting a potential increase in mental health challenges with prolonged treatment duration [22]. Previous studies suggested. the significant association between diabetes mellitus and depression is a critical finding. It aligns with existing evidence highlighting the intricate relationship between diabetes and mental health challenges, emphasizing the need for integrated care strategies for patients with both conditions. The non-significant associations between hypertension, hepatitis B, hepatitis C, and HIV with depression suggest that these specific co-morbidities may not be major contributors to the prevalence of depressive symptoms in this patient population.

CONCLUSION

This study provides a comprehensive examination of the socio-demographic and clinical factors associated with depressive symptoms among patients undergoing maintenance hemodialysis. The findings underscore the nuanced nature of these associations and highlight the significance of factors such as age, employment, and diabetes mellitus in influencing mental health outcomes.

These insights have implications for tailored interventions aimed at addressing the unique mental health needs of this vulnerable patient population. The non-uniform impact of socio-demographic and clinical factors on depression emphasizes the importance of personalized care strategies in the management of individuals undergoing maintenance hemodialysis. Further research is warranted to explore additional factors and longitudinal trends, ultimately contributing to the refinement of holistic care approaches for this patient cohort.

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