Depression and Anxiety in CKD patients attending Kidney Care Centre, Ondo City

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INTRODUCTION

- Depression and anxiety are the most common psychopathologies that occur in chronic kidney disease (CKD) patients.(1)
- The prevalence of depression in CKD ranges between 27-57.3% in CKD while that of anxiety ranges between 27.6-65.9%.(2-4)
- Adverse effects of these psychopathologies on the CKD patients are reduced quality of life, increase the risk for hospitalization, infections, increased progression of CKD and mortality.(4)

- Despite the existing evidences that these psychopathologies adversely affect the overall outcome in CKD patients, they are not usually addressed.
- These psychopathologies are still underdiagnosed and undertreated in CKD patients.(1)
- This may be because the physicians are more concerned with cardiovascular problems such as anemia, calcium and phosphate abnormalities, hypertension.
- Also, some clinical features such as poor sleep, lack of appetite, fatigue, weight disorders are common to both CKD and depression, hence it may be difficult to distinguish one from the other.

- Management of these psychopathologies involve psychotherapy and or pharmacotherapy.(5,6)
- However, there is still paucity of data on the safety profile of these medications in renal patients because of limited studies on the efficacy and therapeutic dosage of antidepressant.(5,6)
- We studied the effect of non-pharmacologic treatment on depression and anxiety in CKD patients in our hospital.

METHODOLOGY

This was a prospective study that was carried out in Kidney Care Centre, Ondo City between July 2015 and June 2016

This study involved fifty consecutive CKD patients who fulfilled the inclusion criteria.

Inclusion criteria were adult CKD patients receiving **in-patient care** who were diagnosed of depression by clinical psychologists.

Chronic kidney disease patients with uremic encephalopathy, history of substance abuse, those without depression and those who were clinically unstable were excluded from the study

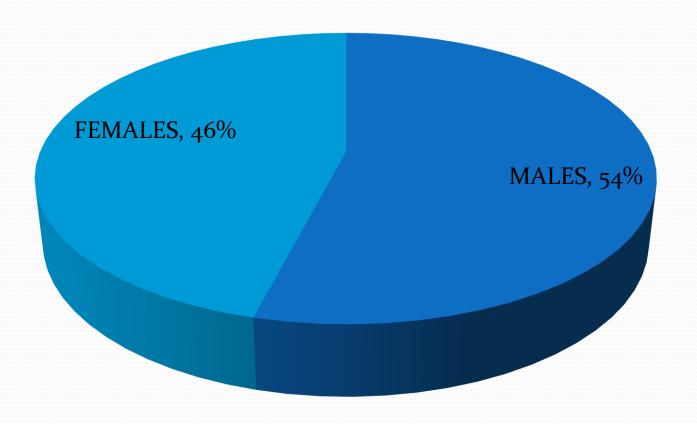
- Diagnosis of depression was made using the Beck Depression Index (BDI) questionnaire while anxiety was assessed in all these CKD subjects with depression using State Trait Anxiety.
- Both instruments have been previously validated and used in other studies.
- The patients were staged according to Kidney Disease Improving Global Outcome guidelines.
- The severity of depression in the CKD subjects were categorized based on their BDI scores as follows; 0-13 (minimal depressive symptoms), 14-19 (mild depression), 20-28 (moderate depression) and ≥ 29 (severe depression)

- These CKD subjects received **6-8 intensive** psychotherapy sessions conducted by Clinical Psychologists over **3-6 weeks**.
- Data generated was analyzed using the statistical package for social sciences (SPSS) version 17.0.
- Student T-test was used to compare the mean depression and anxiety score before and after psychotherapy sessions
- P values < 0.05 were considered significant

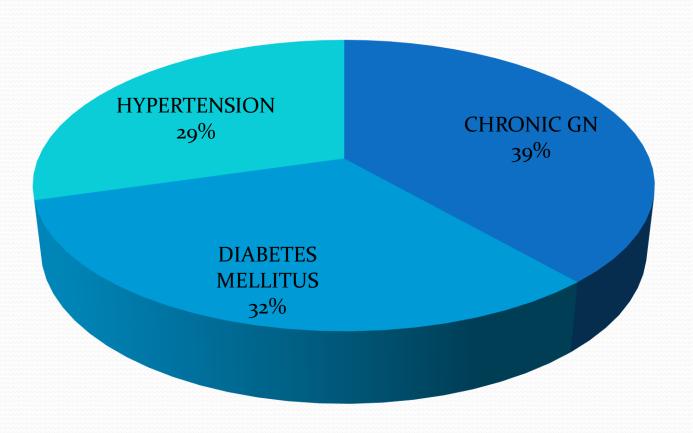
RESULTS

• The study subjects consisted of 23 females and 27 males with a mean age of 47.7±14.6 years.

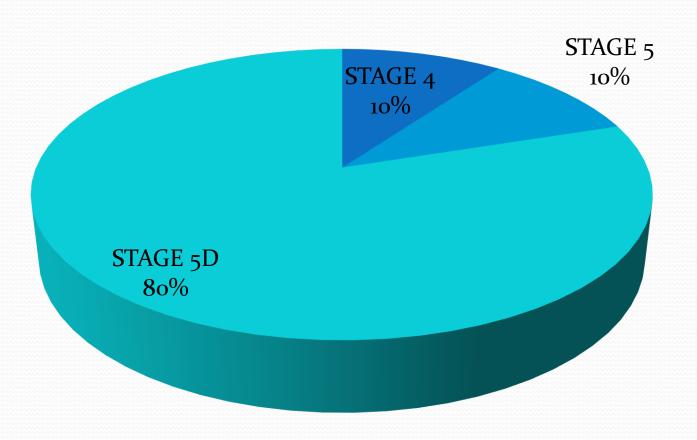
GENDER DISTRIBUTION OF CKD SUBJECTS



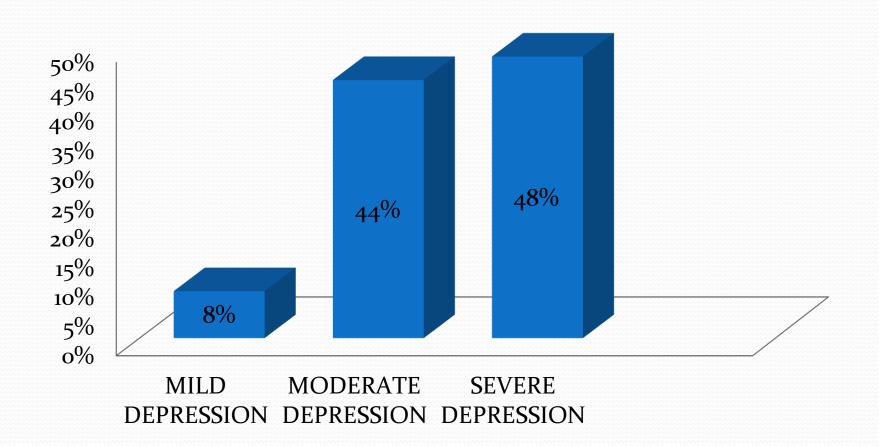
AETIOLOGY OF CKD AMONG SUBJECTS



Stages of CKD



SEVERITY OF DEPRESSION AMONG CKD SUBJECTS



EFFECT OF PSYCHOTHERAPY ON DEPRESSION

SEVERITY OF DEPRESSION	PRE-INTERVENTION	POST-INTERVENTION
Minimal Depressive Symptom	o%	100%
Mild Depression	8%	ο%
Moderate Depression	44%	o%
Severe Depression	48%	ο%

EFFECT OF PSYCHOTHERAPY ON DEPRESSION AND ANXIETY

	Pre-intervention	Post-intervention	P-value
Anxiety Score	19.22±1.43	9.37±5.82	<0.001
BDI SCORE	28.00±7.51	4.76±2.44	<0.001

DISCUSSION

- This study showed that following treatment with psychotherapy the BDI and Anxiety scores reduced significantly in the CKD subjects.
- Also, all the CKD subjects with varying severity of depression prior to treatment had only minimal depressive symptoms after intervention.
- This study therefore shows that psychotherapy is an effective treatment for depressive and anxiety in CKD patients as reported by Hedayati et al.

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