

QUALITY OF LIFE IN CKD PATIENTS ON DIFFERENT TREATMENT REGIMEN

Dissertation Submitted to



The IIHMR University, Jaipur

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Master of Business Administration (MBA)

in

Hospital and Health Management

By

Srishte Saraf

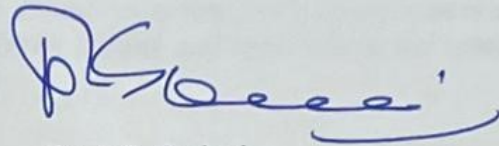
Under the Supervision and Guidance of

Dr P. R. Sodani

2024

CERTIFICATE

This is to certify that Dr. Srishte Saraf in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur has successfully completed her internship at IIHMR University during April 1- June 1, 2024.



Dr. P.R. Sodani,

President, IIHMR University

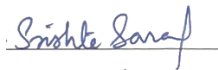
IIHMR University, Jaipur

Place:
Date:

Jaipur
6/7/24

Declaration by Student

I hereby certify that my original research work is embodied in this dissertation entitled The Future of Healthcare Delivery: "**Quality of Life in CKD Patients on Different Treatment Regimen.**" I also certify that it has not been submitted for the award of a degree or diploma to any other university or institution. Wherever necessary, proper acknowledgments have also been done for the information that was taken from other people's published or unpublished works.

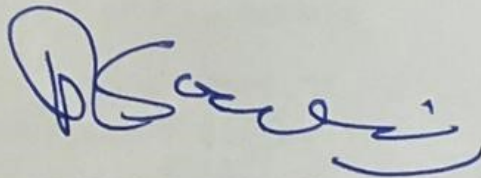
A handwritten signature in blue ink, reading "Srishte Saraf", is written over a horizontal line.

Name of Student: - Dr. Srishte Saraf

Dated: - 30 June 2024

CERTIFICATE

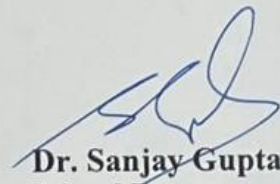
This is to certify that dissertation titled **"Quality of Life in CKD Patients on Different Treatment Regimen"** is a record of the research work undertaken by **Dr. Srishte Saraf** in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur under the guidance and supervision of **Dr. P.R. Sodani, President, IIHMR University Jaipur** and approach to the research study has been sincere, scientific, and analytical.



Dr. P.R. Sodani, President
Faculty Guide
IIHMR University, Jaipur

Date-

6/7/24



Dr. Sanjay Gupta
School Dean
IIHMR University, Jaipur

Date 06/07/2024.

Acknowledgment-

First and foremost, I acknowledge all supporters, sincerely appreciating all those who have enabled the completion of this dissertation one way or another. I deeply want to appreciate all esteemed persons who have supported me in this attempt. Without their proactive guidance, support, collaboration, or encouragement, completing this report could not have been possible. I am deeply indebted to Dr. P.R. Sodani, President, IIHMR University, Jaipur, for giving this wonderful opportunity pertaining to working on the thesis. I extend my thanks to him for his great cooperation, invaluable suggestions, and mentorship. His keen interest and benign nature are substantiated through this report.

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ABSTRACT

Title-Quality of the Life in CKD Patients on Different Treatment Regimens

CKD is a serious disease process that, apart from shortening life expectancy, seriously worsens patients' quality of life. The objective of this study was to find out the quality of life of patients who received different modes of treatment: haemodialysis, peritoneal dialysis, and conservative treatment. In this study, many dimensions related to QoL will be evaluated at length, such as physical, emotional, social, and economic, to give insight into how various treatment modalities affect CKD patients' lives.

CKD has a bearing on the patients' QOL. Hence, it provides adequate assessment of the different treatment modalities. QoL in patients with CKD undergoing haemodialysis, peritoneal dialysis, and those under conservative treatment have been explored in this thesis. The research piece is presented to set out how all treatments impact on the physical, psychological, and well-being areas to gain insight holistically about the patient. A mixed-methods approach was used in this study with the quantitative data augmented by visual data from the interviews with patients.

Preliminary findings indicate that there were significant differences in quality of life scores between treatment groups. Haemodialysis patients, generally, report better physical symptom control but more lifestyle restrictions and isolation. In contrast, peritoneal diabetes patients may have greater flexibility and independence but frequently have problems with difficulty in self-care. Managed care patients, who choose this type of treatment, often emphasize their quality of life rather than longevity, that is already a sign of considerable psychological disturbance. Things that seemed to impact more on well-being issues related to the importance of self-management, burden of treatment-related fatigue, and psychological burden of a diagnosis with CKD. The integration of these insights with quantitative data can offer insight into different treatment options based on patients' quality of life needs. It is important that this research supports patient decision-making and is based on personal preferences and life goals that can provide a basis for treatment and policy to improve patients' quality of life by highlighting the quality-of-life benefits associated with each treatment.

CHAPTER 1-INTRODUCTION

- Overview of Chronic Kidney Disease (CKD): -
- Chronic kidney disease is defined as the progressive loss of renal function over a protracted period. It is usually insidious in onset and development, often silent, and at times progresses over several decades. Most patients remain asymptomatic until late in the course of the disease. Progression of CKD was stratified into five stages based on glomerular filtration rate, which is a measure of kidney function.
- **Stage 1**, can be normal or high GFR, GFR > 90 mL/min
- **Stage 2**, this is Mild CKD, GFR = 60 to 89 mL/min
- **Stage 3-** this includes Moderate CKD, GFR = 45 to 59 mL/min
- **Stage 3(B)** here Moderate CKD, GFR = 30-44 mL/min

- **Stage 4** here severe CKD, GFR = 15 to 29 mL/min
- **Stage 5** Last end Stage of CKD, GFR <15 mL/min)

- The last stage is ESRD, which is end-stage renal disease, when the kidneys are no longer able to sustain the needs of the body and need dialysis or transplanting of the kidney. Other causes include chronic glomerulonephritis and polycystic kidney disease. Early warning signs of kidney disease include changes in urination, fatigue, swelling in legs and ankles, and high blood pressure. When the kidneys progressively function poorly, waste products and extra fluids in the body can aggravate symptoms and cause anaemia, heart diseases, and bone diseases. This is an important consideration regarding a crowd. Treatments are focused on slowing the progression with risk factor modification: making improvements in one's eating and regular exercise habits, with high blood pressure, diabetes, and cholesterol medications. In advanced CKD, therapy may include dialysis or even kidney transplantation in order to preserve the health and quality of life.
- Chronic Kidney Disease-Related Complications: -

Most patients with chronic kidney disease would succumb to cardiovascular disease rather than progress to end-stage renal failure. As such, control of cardiovascular disease is part and parcel of treatment in patients with chronic renal disease. Multidisciplinary care will be required in the management of serious and worrisome complications of renal failure which will develop as chronic kidney disease progresses. These involve hyperkalaemia resulting from hypovolemia, metabolic acidosis and catabolism in combination with excessive fluid intake and drugs, dietary or dialysis failure, which is linked to salt and water retention in the body due to failure in renin-angiotensin-aldosterone system.

Other causes of anemia include diminished synthesis of erythropoietin, reduced survival of red blood cells, hemorrhage related to intestinal toxin formation of ulcer and blood loss from hemodialysate. Poor Outcomes preponderate at each stage of chronic kidney disease with Diabetes Mellitus.

Among major risk factors for cardiovascular disease and death, dyslipidaemia has a higher prevalence in CKD patients. As renal function declines and hypertriglyceridemia increases so does LDL cholesterol; thus, the incidence of hyperlipidaemia increases accordingly.

Furthermore, studies have demonstrated that calcium build up in islet cells and hyperparathyroidism can also contribute to dyslipidaemia in CKD. Patients who experience congestive kidney disease are more prone to definite cardiovascular risks.

Risk components in Patients with Advanced CKD.

RISK components	MANAGING RISK
1. DIET	Less sodium intake
2. WEIGHT	Maintaining proper body mass index (BMI)
3. EXERCISE	30-40 minutes of activity daily for patients who can walk properly.
4. SMOKING	Complete cessation of smoking habit as soon as possible.
5. DIABETES MELLITUS	Target glycosylated haemoglobin should be <7.0% and target fasting blood sugar should be 90 to 160 mg/dL (5.0-8.9 mmol/L); Such usage is intended for the treatment of chronic kidney disease with metformin.
6. HYPERTENSION	The target blood pressure should be lower than 130/80 mm Hg.
7. DYSLIPIDEMIA	LDL cholesterol targets should be based on general population norms.
8. PROTENURIA	Patients with CKD with proteinuria (albumin/creatinine ratio >0.3) should get prompt treatment with an ACE inhibitor or ARB.
9. ANEMIA	Although iron supplements and erythropoiesis-stimulating medicines are advised, they should be used with caution due to potential cardiovascular hazards.

- Management and Effects of Kidney Disease: -

Treatment is aimed at preserving functional mass and homeostasis as long as possible, slowing progression, and reducing the risk of cardiovascular disease by managing all underlying disorders. In the early phases of kidney disease, there are usually no symptoms or signs of kidney involvement because the kidneys can function normally even when they are somewhat damaged. While there is no cure for kidney disease, prevention or minimization of its progression is quite feasible. Treatment is often very effective, and with small changes in lifestyle, people and their kidneys can stay healthier for longer. Except for proper nutrition and drug therapy, frequent physical activities and giving up smoking can act as a means of preventing constant chronic kidney diseases. Indeed, there are evidences that preventive measures can lower it.

- Importance of QoL assessment in CKD patients: -

Assessing the quality of the life (QoL) in patients (CKD) is urgent for the following reasons:

1. Holistic care of the patient—Quality of Life assessment ensures that it extends beyond treatment. Any clinical impact of CKD also underlines emotional, social, and psychological problems a patient face. As a result of this holistic approach greater personal care and, therefore, its benefits are gained. This would mean early intervention that would avoid worsened outcomes of these complications, overall better outcomes for the patients.
2. Patient Compliance and engagement: Patients' engagement in the treatment plan will only be prolonged if their quality of life is recognized. They will follow the recommendations for food changes, medication, and lifestyle adjustments when they believe that their health is being given adequate consideration. The effectiveness of the treatment will be understood from the perspective of the patient.
3. It might initiate better and more appropriate treatments according to the needs and preferences of the patients, thus leading to enhanced treatment outcomes.
4. 3. Offer information for shared decision-making between clients and patients. In this way, the treatment decisions originate in what is best for the interest and life goals of the patient; not least in dialysis and transplantation. Resource

and services of the healthcare system are marinated to those that are going to benefit most to the health of the patients. This may include such services as psychological support to patients or health or educational services.

5. Long-term benefits The better the quality of life, the better the outcome in the long term. This includes fewer hospitalizations and lesser length of stay. Involvement with issues of QOL can help improve the entire course of the disease and in learning to cope with disease by the patient.
6. The improvement of clinical trials must include quality-of-life assessment that puts a value on the incorporation of quality of life in clinical trials of new CKD treatments. They provide information regarding the influence on traditional treatments developed from new treatments for a much more comprehensive understanding of strengths and weaknesses. Comprehensive, patient-centred care improving the clinical outcome and the health of the whole person.

- Objectives and scope of the dissertation: -

The main purpose of this thesis is to investigate the effects of different treatments on (CKD) patients' quality of life. This means the research will be aimed at understanding how different treatments affect the patient physically, spiritually, socially, and emotionally.

Methods: This study will compare the impact of different CKD treatments on quality of life, including:

- Treatment (lifestyle changes and medications)
 - Haemodialysis
 - Peritoneal dialysis
 - Kidney transplant
- Life Assessments: Quality of life survey and semi-structured interview tools will be employed in this study as a means of assessing patients' experiences, experiences, and understanding about health.

CHAPTER 2- LITERATURE REVIEW

<u>SR. NO</u>	<u>TITLE</u>	<u>AUTHOR</u>	<u>OBJECTIVES</u>	<u>KEY FINDINGS</u>
1)	A Systematic Review and Meta-Analysis of Utility-Based Quality of Life in Chronic Kidney Disease Treatments	Melaniee Wyld, Racheael Lisa Morrton, Andreew Hayeen, Kirsten Howarrd, Angeela Clairre Webstere.	It has been demonstrated in numerous researches that patients with end-stage renal disease have a better quality of life measured by radiation after kidney transplantation compared with patients treated by dialysis. However, it is not clear whether the kind of dialysis recommended makes a difference in quality of life. Haemodialysis is an efficient technique which cleanses blood directly. This is typically carried out two to four times a week, and only peritoneal dialysis centers are authorized to provide this treatment. In this research, based on the available evidence reviewed by the researchers, it is indicated whether treatment impacts energy expenditure as a characteristic index that reflects QOL .	They found out that the kidney transplant case had the highest mean yield at 0.82, followed by the pre-dialysis group at 0.80, dialysis patients at 0.71, and the post-care recipients at 0.62. Comparing haemodialysis variants, researchers found a slight difference between haemodialysis and peritoneal dialysis in energy consumption. Peritoneal dialysis patients had higher energy consumption at 0.80 compared to haemodialysis at 0.72. Researchers finally found that diabetics had lower energy consumption than non-diabetics.
2)	Quality of life in end stage renal disease:	Juliee Émelie Boudreeau, Anikk Dubeé	A person-centered strategy would be directed at understanding the lives of these health professionals	People with end-stage renal disease face difficult decisions regarding

A	concept analysis		as it strode forward to understand the specific needs of the patients. In this vein, healthcare providers could work hand in hand with patients to come up with individual care plans, and thus coordinated care that supports them all through renal failure could be implemented. As part of the collaborative team, therapists are present during assessments of client needs and the provision of care tailored to the client's needs, definitely joining the appropriate team to assist clients in accessing services founded upon those needs.	lifestyle changes and treatment. In return, the government also benefits from the implementation of this evaluation concept. Improved health outcomes for RR patients. Teams Collaboration in Nephrology Services for Improved Quality of Care. Physicians can determine in their daily practice the presence, absence or effect of one or all these three behaviours. Thus, is that the patient's self care is not adequate whereas the patient cannot participate in activities and/or self-reported or self-reported isolation from people in the home, relationship and/or work should enable the nurse to assess the quality of people your life.
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3)	A systematic evaluation and meta-analysis of the quality of life of individuals undergoing peritoneal dialysis versus haemodialysis.	Anann Chuaasuwan, Sirriporn Pooripussaraakul, Ammariin Thaakkinstian, Attiporn Inggsathit & Oralluck Pattanaprteep	ESRD mandates renal replacement therapy and has a significant bearing on the HRQoL of patients. Thus, this study focused on reviewing and comparing the EQ-5D, KDQOL, and the 36-item Short Form Health Survey were used to measure HRQoL in PD and HD patients.	This review include twenty-one studies with 29,000 participants. Among them, there were observation groups in which the mean age was 48.1 years. The percentage of females was 54.9, and the percentage of males 45.1. This review has shown that PD patients with chronic kidney disease stage 5 or ESRD had better generic HRQoL measured by SF-36 and EQ-5D compared to HD patients. Besides that, PD demonstrated higher specific HRQoL by KDQOL in subdomains of physical functioning, role limitations because of emotional problems, effects, and burden of kidney disease in comparison with HD patients.
4)	Quality of Life in Hemodialysis Patients	Kousoula Gerasimoula, Lagou Lefkothea, Lena Maria,	To explore the quality of life in haemodialysis long term patients.	The findings in this study portray that the age factor influences the overall quality of life. The

		Alikari Victoria, Theofilou Paraskevi, and Polikandrioti Maria		explanation can be that usually, older patients have physical and cognitive problems, or they simply have lower expectations compared to older people. In relation to Mandoorah et al. convey that patients above the age of 60 had a lower experience of quality of life. A study by Bayoumi et al. concluded that advanced age, duration of dialysis, and male gender all turn out to be bad predictors for quality of life. According to Seica et al., advanced age, male gender, social culture, and higher education are determinants that cause lower quality of life. There was a correlation between older age and better self-reported health with poorer physical performance.
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CHAPTER 3-METHODOLOGY

- **Study design** –The study design of this research paper is quantitative in nature Data will be collected from a representative sample of participants using a structured questionnaire consisting of 15 questions.
- **Type of study:** It is a type of *Cross-sectional*, descriptive study in nature.
- **Type of research** – The type of research done is primary research using mainly one to one interaction with the patient and by the patient records.
- **Study tool-** A questionnaire was formed and asked to patient and their relatives using various parameter related to the treatment they are undergoing and about its significance & awareness to the patient.
- **Study population-** Individuals having CKD stages between *Stage 3 to End stage* between 18-60 years of age were considered for the survey.
- **Inclusion Criteria:** All females and males between 18-60 years were included for the study of the survey circulated.
- **Exclusion Criteria:**
 - 1) Males & females below 18 years or above 70 years of age were excluded for the study of the survey circulated.
 - 2) Patients who were having eGFR greater than 30/ml/min.
 - 3) Serum creatinine level less than 2mg/dL.
- **Duration of study:** The study started on April 2024 and ended on June 2024,

that is 3 months

- **Sample size:** A sample size of 120 was selected for this study, their insights were used as to study the survey.
- **Sampling technique** – convenience sampling method of sampling was used for the study
- **Data analysis plan-** This is a quantitative and cross-sectional study in nature. The questions were formed in order to answer various questions related to their quality of life (**QoL**) after getting the treatment of the chronic kidney disease (CKD) which were asked according to the language (Hindi/English) language.
- **Ethical consideration-** An Informed consent was taken from the participants of the survey.
- **Implications-** This study has several implications for healthcare providers, researchers and policy maker, the findings of this study can help in determining future strategies and initiatives to improve healthcare delivery and quality to enhance patient experiences. Implications such as – enhancing access to healthcare, improving awareness, improving quality, study patient satisfaction, etc by considering these implications stakeholders can make informed decisions and take measures to maximize the advantages of better treatment quality considerations and improve overall healthcare delivery.

CKD AND ITS COMPLICATIONS

➤ **WITH CVS DISEASES: -**

It is undoubtedly accepted that the risk of a serious cardiovascular event is associated with end-stage renal illness, and that, compared to subjects of the general population

matched by age and gender, patients on dialysis have a 16-fold increased rate of cardiovascular death. When illness overshoots expectations, damage increases first. Research suggests that a mild-to-moderate impairment in renal function is linked to a higher risk of cardiovascular events. Cardiovascular risk is increased in individuals with chronic kidney disease (CKD) by several of the conventional risk factors for CV illness that have been found in the general population. Indeed, compared to those with excellent renal function, those with chronic kidney disease (CKD) have higher prevalence of most of the Framingham indicators. The burden of unfavorable cardiovascular risk factors, on the other hand, rises in CKD patients. Patients with stage 2-3 CKD and hypertension showed elevated levels.

➤ **ASSOCIATION WITH DIABETES: -**

The association of diabetes with poor outcomes is observed in all stages of CKD. Left ventricular hypertrophy, or LVH, is a worsened condition in people with chronic kidney disease and poses a risk to the cardiovascular system with increasing eGFR. In addition to anaemia and hypertension, two comorbidities of CKD that can cause the development of LVH, are independent risk factors. This includes an independent risk factor for deaths from cardiovascular causes which belongs to this composite endpoint.

➤ **ANEMIA AND CKD: -**

Anemia is defined as a decrease in one or more of the red blood cell measures. The World Health Organization defines anemia as a hemoglobin content below 13 g/dL in men and postmenopausal women, and below 12 g/dL in premenopausal women.⁶ The National Kidney Foundation defines anemia as hemoglobin concentrations less than 13.5 g/dL in men and 12.0 g/dL in women.⁷ Other anemias account for up to 50% of cases. two thirds of patients with Stage 2 and one-third with Stage 1 CKD Three quarters of CKD patients and half of CKD patients who are started on dialysis suffer from anemia. In view of this, it is necessary that primary care physicians diagnose and deal with anemia correctly in patients suffering from chronic kidney disease (CKD). Renal interstitial fibroblasts produce the glycoprotein erythropoietin, which is critical for now. Anemia is a result of the kidney's reduced capacity to produce erythropoietin due to the atrophied tubules undergoing progressive tubulointerstitial fibrosis in chronic kidney disease. A progressive vicious cycle with heart

failure, thereby increasing morbidity or mortality risk, progressive renal impairment, and finally, "cardiorenal anemia syndrome" sets in. In that, among patients on dialysis, left ventricular hypertrophy is associated with decreased survival. In fact, patients with end-stage renal illness and associated LVH have a strikingly poor five-year survival rate of 30%, when compared to patients without it. Also, in patient with stable cardiovascular disease in CKD, increasing anaemia acts as predictor of death.

➤ **SECONDARY COMPLICATIONS: -**

The secondary complications include the common disease depression in patients with chronic diseases like CKD. These are prevalent in these patients 3X more than the normal or regular population. However, depression is also seen in dialysis patients. Depression in CKD is driven by the psychological and the biological changes in the body. It leads to: -

- Poor quality of life.
- Bad side effects.
- Increased mortality rate.

Other secondary complications in this regard may include:

- i) Infection of Skins causing dry & itchy skin.
- ii) Painful joints, bones and muscles.
- iii) Fluid collection around the lungs- pleural effusion.
- iv. Sleep disorder.

➤ **Things that can be done to help prevent complications includes: -**

- i. Consult with a doctor to make sure that it meets your nutritional requirements.
- ii. Quit smoking if you smoke.
- iii. Your doctor may send you to see a psychologist or recommend a support group.

iv. Nonsteroidal anti-inflammatory drugs (NSAIDs) can aggravate pre-existing damage to the kidneys or kidney disease. Talk to your doctor before taking any new OTC medicines.

CHAPTER-4 RESULTS

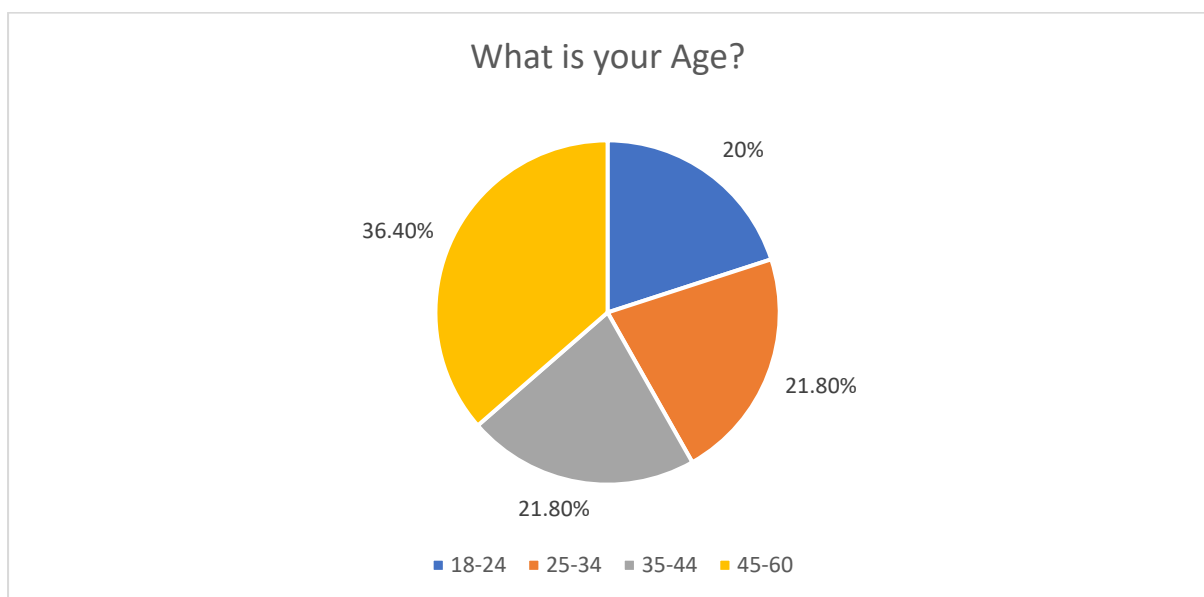
After an in-depth analysis of the data recorded with the help of google forms, I have

Come to the following results SOCIAL DEMOGRAPHICS Social demographics like age and sex were recorded of the participants.

The data analysis was recorded in percentage form.

The total number of participants who responded to the survey was 120.

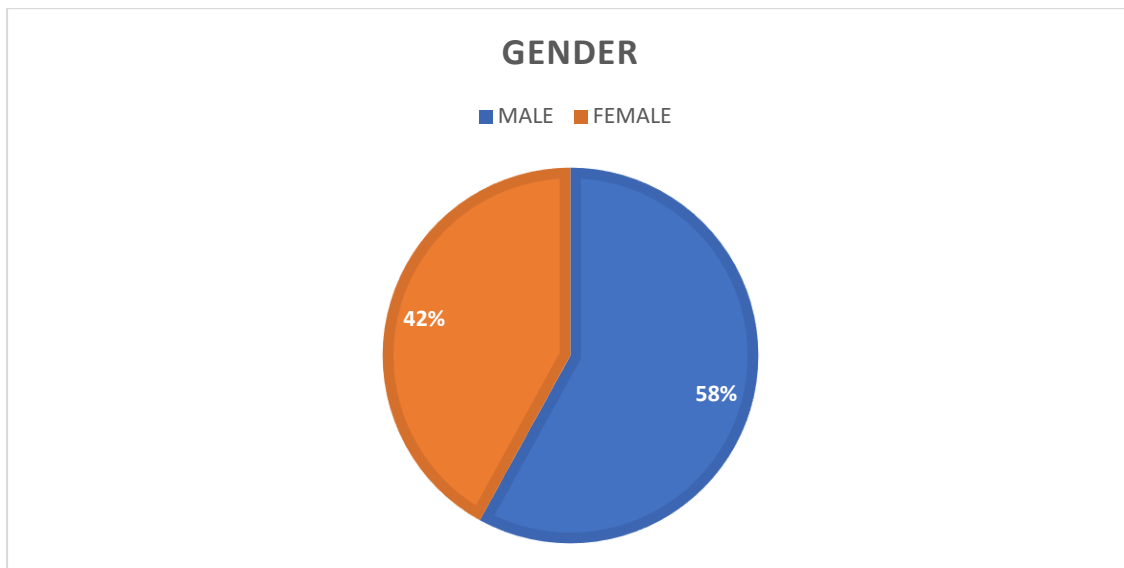
1) AGE OF THE PATIENT–



- Most of the participants of the survey belongs to the age group of 45-60 as this is the most probable age for patient having CKD and going on treatments related to kidney diseases that is 36.40%.
- People of age 25-34 and 35-44 were same that is 21.8%.
- People aged 18-24 were the least that is 20%.

2) WHAT IS YOUR GENDER?

- Gender plays a very important role for this research.

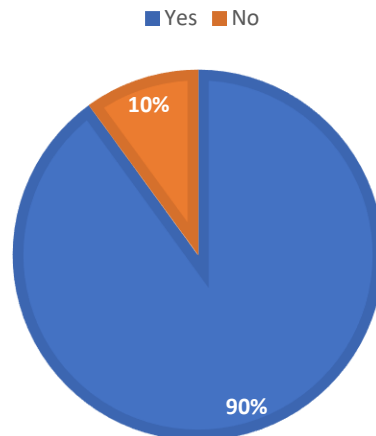


INFERENCE: -

- Overall, 120 participants were the part of the study including both male and female
- Majority of the respondents are males.
- Female respondents are about 42% whereas males constituted 58 %.

3) AWARENESS OF TREATMENT: -

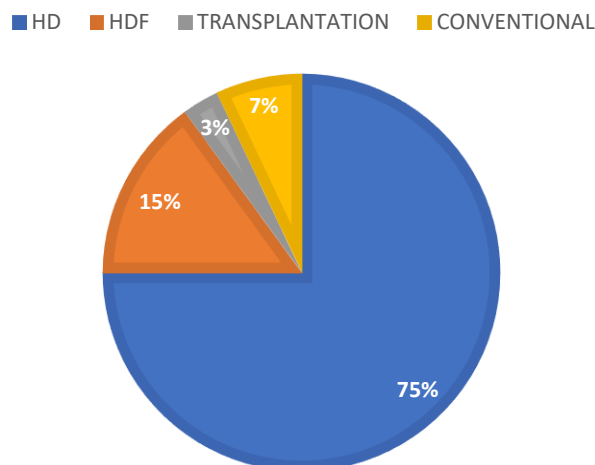
ARE YOU AWARE OF YOUR TYPE OF TREATMENT?



- This shows that majority of the respondents were aware of the type of treatment they were going through.
- About 90% of the respondents were aware and only 10% weren't aware of the treatment type.
- Most of the respondents were aware about the type which means the awareness of treatment is quite good and increasing day by day specially after the covid 19.

4) AWARENESS ABOUT THE MODE OF TREATMENT?

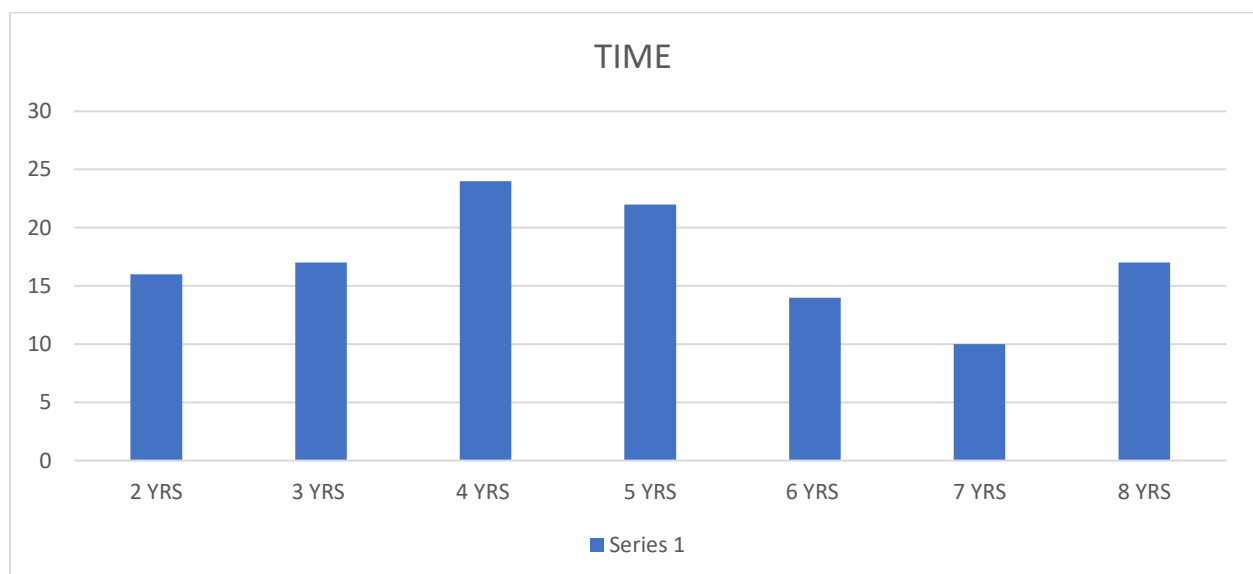
MODE OF TREATMENT.



INFERENCE: -

- Haemodialysis is the process of purifying blood using a dialysis machine and with the help of a special filter called a kidney or dialysis machine. The doctor requires access to the veins so that your blood reaches the filter. This is usually carried out by minor surgery in your arm. It comprises only DIFFUSION.
- Hemodiafiltration is an ultra-safe and effective kidney transplant which filters out and removes uremic toxins above the molecular weight range. This very latest technological advance makes it feasible to use it as a safe routine treatment for long-term dialysis, even in children. This can involve the achievement of the best possible flow rate, which can improve patient outcomes. It includes CONVECTION + DIFFUSION.
- Kidney Transplantation – It is a surgical method to replace a deceased or living donor's healthy kidney in a patient whose kidneys no longer work properly. When the kidneys lose their filtering ability, the body develops risky levels of fluid and waste; these risky materials eventually increase blood pressure and cause kidney failure known as end-stage renal disease. ESRD ensues when there is a loss of approximately 90% of the normal functional capacity of the kidneys. End-stage renal disease occurs when the kidneys have lost around 90% of their normal functional capacity.

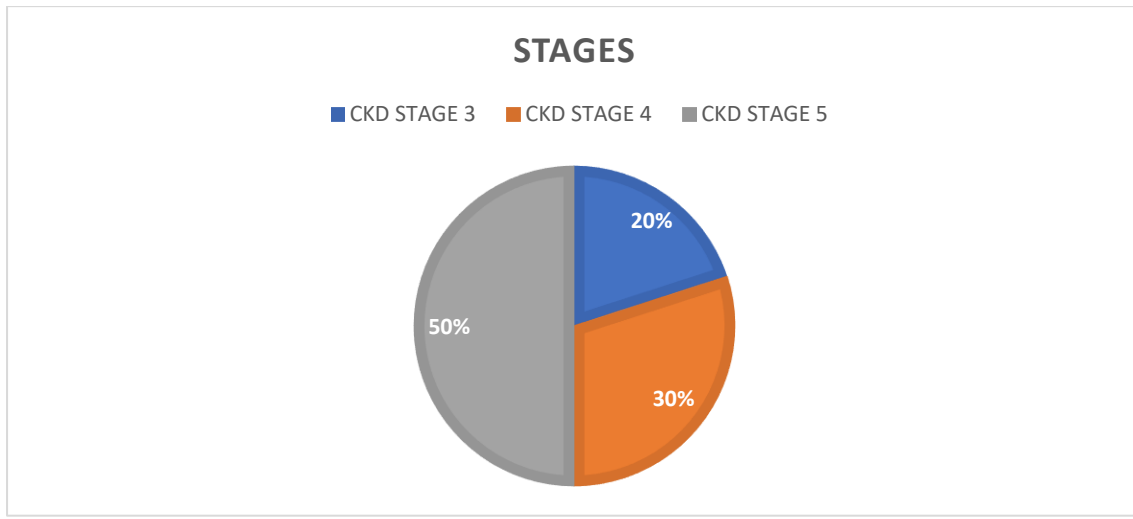
5) How long have you been diagnosed with CKD?



INFERENCE: -

- Most of the people had CKD for the last 4 years which were being interviewed in this project.

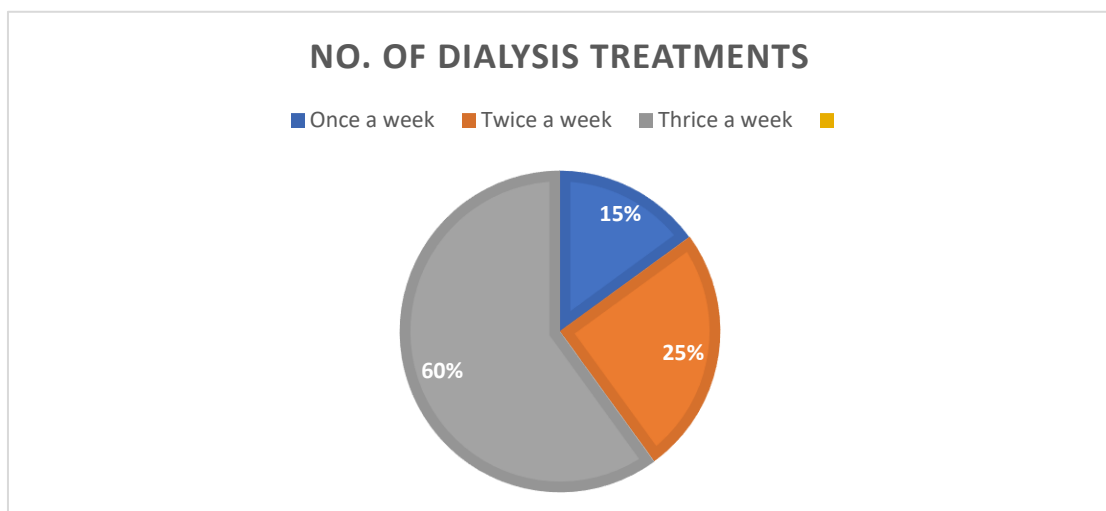
6) STAGE OF CKD



INFERENCE: -

- 1) Most people were in the CKD Stage-5 which is 50%.
- 2) 30% people were in the stage 4 of CKD.
- 3) Only 20% were in the stage 3 of the chronic kidney disease.
- 4) People who were in the 3, 4 and 5 th Stage were only considered.

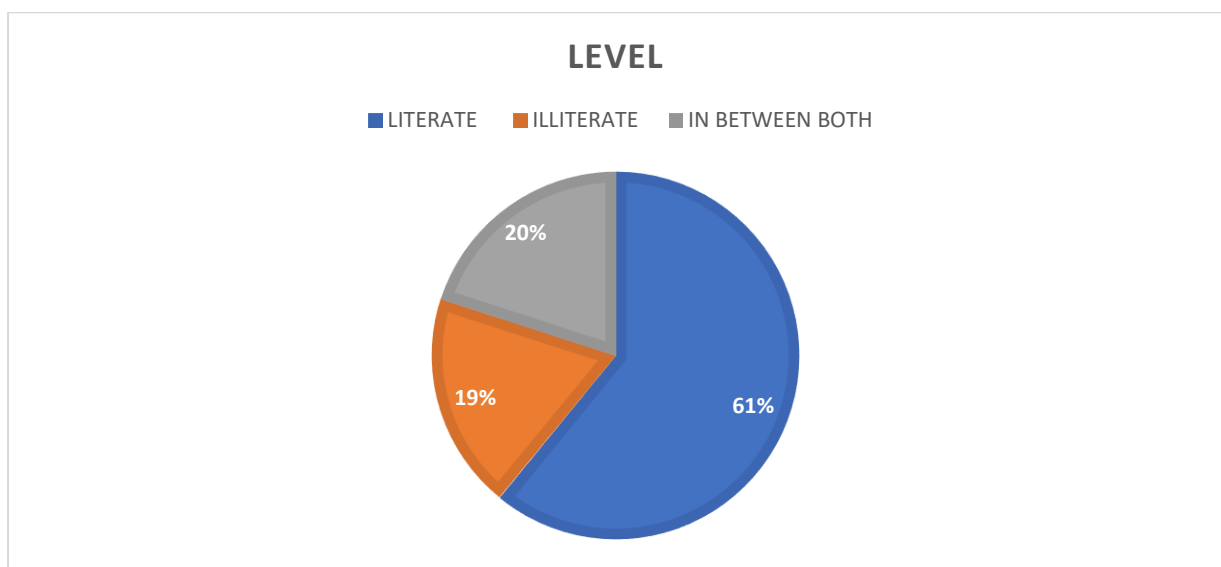
7) Duration of Treatment: -



INFERENCE: -

- Most people undergo dialysis thrice a week that is 60%
- 25% people were undergoing dialysis only twice a week.
- Only 15% were undergoing once a week.

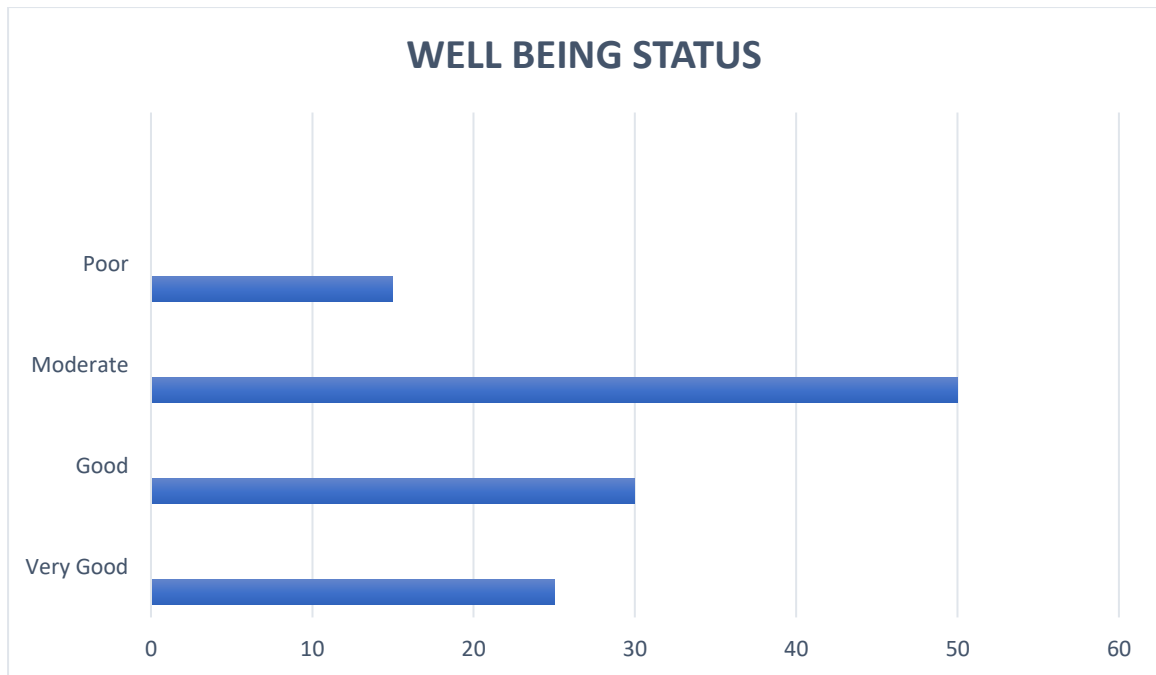
8) Education level/Employment status



INFERENCE: -

- The *literacy level is very good* that is almost 61% people going under the dialysis treatment in Hyderabad are educated.
- Only 19% are not educated and 20% are at intermediate level.

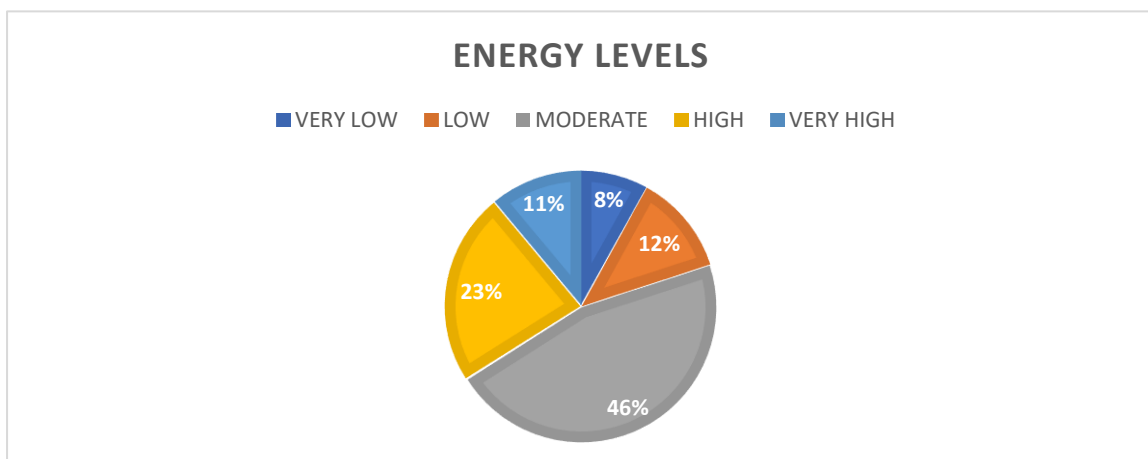
9) Emotional Well-being: -



INFERENCE: -

- *Most of the people in the research feels moderate emotional wellbeing accompanies them, out of 120, 50 feels moderate emotionally stable.*
- *Around 30 people out 120 feels good about their emotional stability.*
- *Minimal amount of people that is 25 out of 120 feels that their emotional stability is up to the mark and they feel very happy after the dialysis treatment.*
- *Only 15 out of 120 thinks that the dialysis gives them very poor results.*

10) How would you rate your energy levels over the past month?

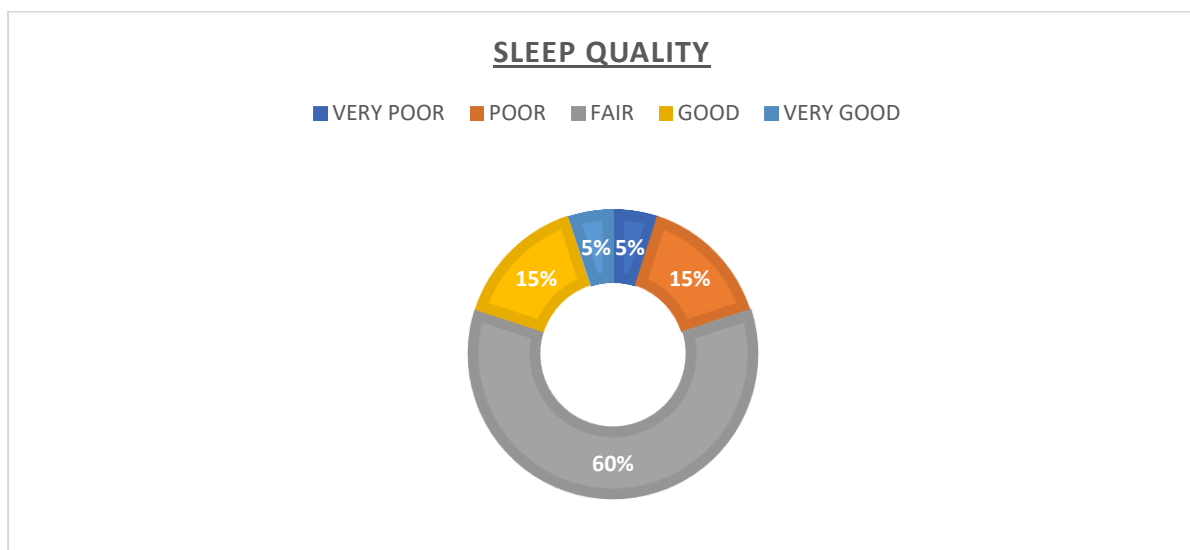


- **Very low-** 8%
- **Low-** 12%
- **Moderate-** 46%
- **High-** 23%
- **Very high-** 11%

INFERENCE: -

- i. Most of the people feels moderate amount of energy levels while doing all the household chores or physical activities that is 46%.

11) How did you rank the quality of your sleep in the last month?

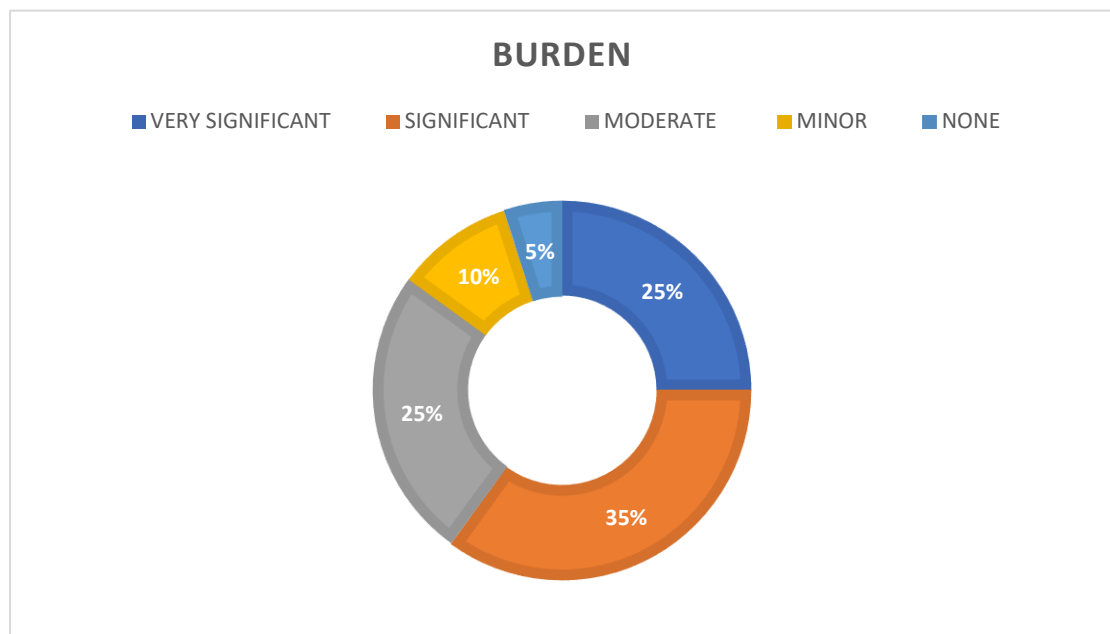


- **Very poor:** - 5%
- **Poor:** - 15%
- **Fair:** - 60%
- **Good:** - 15%
- **Very good:** - 5%

INFERENCE: -

- Most of the people who are having 60% of Chronic kidney disease can sleep well at night.

12) How significant is the financial burden of your treatment?



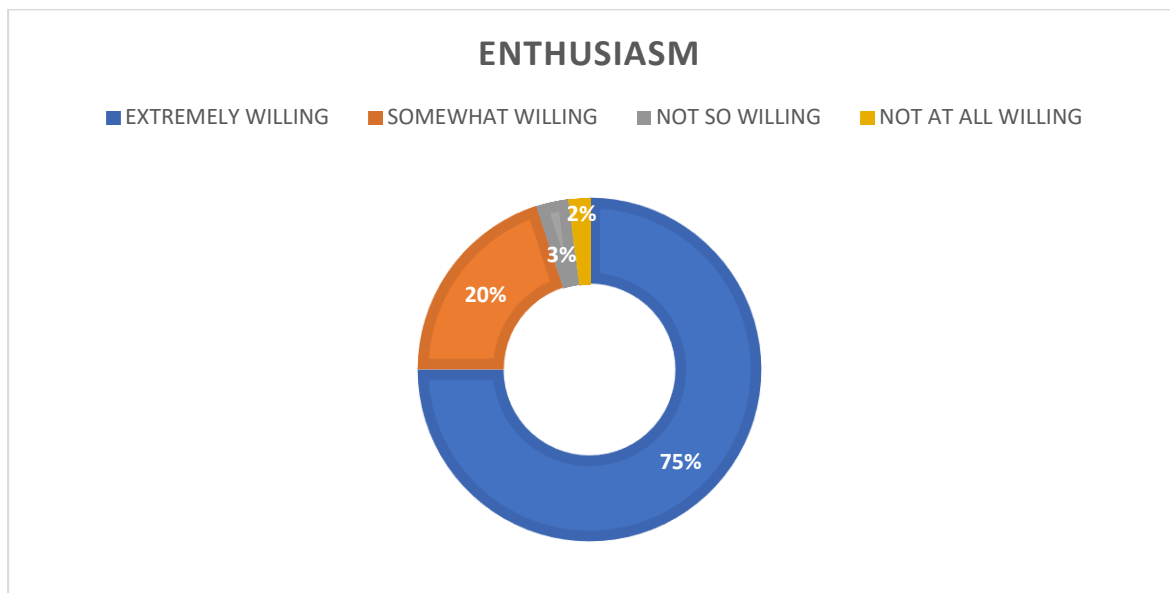
- **Very Significant:** - 25%
- **Significant:** -35%
- **Moderate:** - 25%
- **Minor:** -10%
- **None:** -5%

13) Do you feel you have access to adequate support services (e.g., social worker, therapist) to help you manage your CKD?

- **YES: - 70%**

- **NO: - 30%**

14) How willing are you to change your lifestyle to reduce the further decline of your health if taught better about lifestyle?



- **Extremely willing- 75%**
- **Somewhat willing- 20%**
- **Not so willing- 3%**
- **Not at all willing- 2%**

INFERENCE: -

- ✓ Most people are willing to change their lifestyle for betterment of their health.
- ✓ Only 2% of people were completely reluctant to change their lifestyle.

CHAPTER -5 DISCUSSIONS

✓ Questions

✓ Relevance with the topic

Q-1&2	<i>GENERALS DEMOGRAPHY</i>
Q- 3,4 & 8	<i>GENERAL AWARENESS</i>
Q- 5, 6 &7	<i>AWARENESS ABOUT TREATMENT</i>
Q-9,10 &11	<i>GENERAL HEALTH</i>
Q- 12, 13 &14	<i>PROBLEMS AND SOLUTIONS WANTED</i>

- ❖ In this study, a questionnaire was designed that would include 120 participants and 14 questions. The nature of the study is cross-sectional, meaning it is a slice in time. The participants of the study were interviewed in a very short period, and their responses were recorded. The first two questions were those of demographic nature: age and gender. Knowing these demographics identifies the distribution of age for the patients and finds the commonest age group that goes for

dialysis. By knowing the gender, we could look forward to whether males or females are more likely to acquire any kidney related disease and how many people have identified the same.

- ❖ Questions 3, 4, and 8 were targeted at establishing whether the patients were aware of the procedures they are undergoing. This ranged from knowledge and understanding of the type of procedure being performed on them, which in this case, was haemodialysis, hemodiafiltration, and kidney transplant. The importance of this in setting up the ASQ is to establish perceptions concerning the quality of life and what needs change. Patients who understand their procedures, therefore, need to follow better treatment plans and self-care. This enhances their health outcome and gives them a better quality of life.
- ❖ Further, treatment awareness, the questionnaire also gave insight into the educational and employment status of the patients. It was important to indicate whether the patients were educated or not and if so, whether the educated ones are employed. When patients are educated and employed, this usually implies that they can understand most of the information involving their disease and treatments. Looking through the data on literacy levels tells exactly how much of medical information patients understand and apply in their lives.
- ❖ Question 5, 8 and 9 talked about the duration the patient has the disease and in which stage do they lie. Also, the duration of the treatment was also noted to know more about the patient's history and nature of disease.
- ❖ Question 9, 10 and 11 were about the general health of the patient which is very important to state the quality of life of the patients who are mainly on the dialysis treatment. This included their emotional wellbeing, the amount of

energy levels they are having for doing all the physical activities and day to day chores. Additionally, their sleep cycle record was also asked to know whether they sleep well or not.

- ❖ Question 12,13 and 14 were primarily for the services and willingness towards changing their attitude for better improvement of their health. This included the financial burden on the patient and access to adequate support services to them.

CHAPTER 6- CONCLUSION

- I. For patients with CKD, awareness and comprehension of the treatment procedures are very important in their quality of life.
- II. There was better understanding expressed about the condition and its treatments by the higher educated patients who also exhibited higher rates of employment.
- III. The stage and length of CKD are very determinant in-patient experiences and outcomes.
- IV. This calls for individualized educational programs to improve patient compliance and self-care management.
- V. Better health outcomes and quality of life can be achieved through improved education and support of these patients.
- VI. Identification of demographic patterns aids in targeting interventions better.
- VII. Assessment, and care should be continual to maximize the well-being of CKD patients.
- VIII. Awareness and perception about treatment processes are critical factors in the quality of life in patients with CKD.

- IX. Patients who are more educated and employed tend to have a greater understanding of their disease and treatment.
- X. Duration and stages of CKD are critical factors in patient experiences and outcomes.
- XI. Educational programs need to be tailored to help enhance adherence by the patients and self-management.
- XII. Better outcomes in health and quality of life are the result of improved patient education and support. The demographic trends identification helps in more focused interventions.
- XIII. Continuous assessment with individual care is an essential step to achieve maximum wellness among patients with CKD.
- XIV. Early interventions during disease or its screening, with regular follow-up to prevent progression, are important to improve the outcomes of CKD patients. Emotional and psychic support should be provided for reducing the stress of CKD.
- XV. This is in expectation of the collaboration between healthcare providers and patients for effective disease management and improved quality of life. It has been discovered that the greater a patient's knowledge about the condition and treatment options, the better job employment rate among the educated patients.
- XVI. Duration and stage of CKD interact in influencing patient experience and outcomes.
- XVII. Tailored educational programs have much to do with heightened patient compliance and self-management.
- XVIII. Improved patient education and support could help in achieving better health outcomes and related quality of life.

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