

A Study to Assess the Knowledge and Attitude Regarding Kidney Transplantation among the Patient's Suffering from Chronic Kidney Disease in Selected Hospitals

Jayashree B. Bhalchakra¹, Sr. Tessa Sebastian²

¹M.Sc. Nursing Student, Department of Medical-Surgical Nursing, Smt. Radhikabai Meghe Memorial College of Nursing, Sawangi (Meghe), Wardha, Maharashtra, India

²Director of Nursing and Professor, Department of Mental Health Nursing, Smt. Radhikabai Meghe Memorial College of Nursing, Acharya Vinoba Bhave Rural Hospital, Sawangi (Meghe) Wardha, Maharashtra, India

Abstract: Background: Chronic kidney disease (CKD) is becoming a major public health problem worldwide. The enormous costs of treatment lead to a large burden for the health care systems, particularly in developing countries. Objectives: 1. To assess the knowledge regarding kidney transplantation of the patients suffering from chronic kidney disease. 2. To assess the attitude regarding kidney transplantation of the patients suffering from chronic kidney disease. 3. To associate the knowledge scores of the patients suffering from chronic kidney disease with selected demographic variables. 4. To associate the attitude scores of the patients suffering from chronic kidney disease with selected demographic variables. Hypothesis: 1. H₁- There is significant knowledge regarding kidney transplantation among the patient's suffering from kidney disease. 2. H₂- There is significant attitude regarding kidney transplantation among the patient's suffering from kidney disease. 3. H₀₁- There is no significant knowledge regarding kidney transplantation among the patients suffering from kidney disease. H₀₂- There is no significant attitude regarding kidney transplantation among the patient's suffering from kidney disease. Material and Method: In this study Descriptive Research Design was used. The samples were 30 patient's suffering from chronic kidney disease. Setting of the study was selected hospitals and sampling technique was non probability convenience sampling technique. A structured questionnaire to assess knowledge and Likert scale for assessing the attitude was used to collect the data from CKD patient's from selected hospitals. Results: The result shows that the level of knowledge regarding kidney transplantation were 16.67% of the study subjects had poor level of knowledge score, 56.67% had average, 23.33% had good and 3.33% had excellent level of knowledge score. The level of attitude regarding kidney transplantation were 16.67% of the study subjects were "Agree", 73.33% were uncertain and only 10% were "Disagree" about attitude score. It was statistically interpreted that, the knowledge of study subjects regarding kidney transplantation were average (56.67%) and only good (23.33%) and excellent (3.33%) were very less. The majority of study subjects had uncertain (73.33%) attitude towards kidney transplantation. Hence hypothesis H₁ and H₂ were rejected and null hypothesis H₀₁ and H₀₂ were accepted. There was significant association between age, education, residence, occupation, family income and marital status with post test knowledge score but there was no significant association between type of family and years of suffering from chronic kidney disease. Also there was significant association between education and family income with post test attitude score but there was no significant association between age, residence, occupation, type of family, marital status and years of suffering from chronic kidney disease. Conclusion: The study shows that study subjects had average knowledge about kidney transplantation and they does not have proper attitude towards kidney transplantation. Hence, there is a need to provide more information regarding kidney transplantation to study subjects.

Keywords: Kidney Transplantation, Chronic Kidney Disease Patient's, Knowledge, Attitude

1. Introduction

Kidneys are one of the vital organs in the human body. Kidneys perform vital functions like excretion of waste products, maintenance of water balance, thus maintaining the homeostasis. In addition, kidneys perform many other functions such as role in homeostasis, production of erythrocyte, endocrine function, regulation of blood sugar and regulation of blood calcium level. Because the kidney performs a wide variety of functions, the effects of loss of renal function not only in kidney but also in other organ systems.

In India, a study was conducted on renal transplantation-Indian scenario, PGIMER, Chandigarh, shows that in the absence of data such as dialysis and transplantation registries it is possible to only estimate the incidence of Chronic kidney disease (CKD) and End Stage of Renal

Disease(ESRD), where the prevalence was about 0.79% for CKD. Population based studies are few, numbering only three this tie. In Chennai, the reported prevalence of CKD was 0.86%. A study from Delhi wherein prevalence were 0.79% or 7852 per million patients, the incidence of ESRD based on 572,029 subjects residing in Bhopal, suggested that average crude and age adjusted incidence rates of ESRD ranged from 151 to 232 per million population respectively.

Renal transplantation is extremely successful, with 1 year graft survival rates of about 90% for deceased donor transplants and 95% for live transplants. An advantage of kidney transplantation when compared with dialysis is that it reverses many of the pathologic changes associated with renal failure when normal kidney function is restored. It also eliminates the dependence on dialysis and the accompanying dietary and lifestyle restrictions. Since 1973 many deaths

have been prevented through the use of maintenance dialysis and renal transplantation.

subjects was used for data collection. The analysis was done with the help of inferential and descriptive statistics.

2. Problem Statement

A study to assess the knowledge and attitude regarding kidney transplantation among the patient's suffering from chronic kidney disease in selected hospitals.

3. Objectives

- 1) To assess the knowledge regarding kidney transplantation of the patient's suffering from chronic kidney disease.
- 2) To assess the attitude regarding kidney transplantation of the patient's suffering from chronic kidney disease.
- 3) To associate the knowledge scores of the patient's suffering from chronic kidney disease with selected demographic variables.
- 4) To associate the attitude scores of the patient's suffering from chronic kidney disease with selected demographic variables.

4. Hypothesis

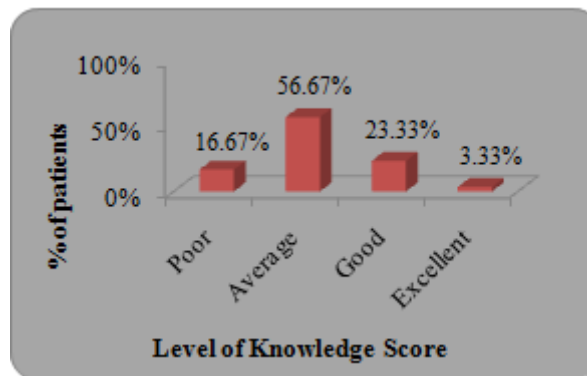
- 1) **H₁**- There is significant knowledge regarding kidney transplantation among the patient's suffering from kidney disease.
- 2) **H₂**- There is significant attitude regarding kidney transplantation among the patient's suffering from kidney disease.
- 3) **H₀₁**- There is no significant knowledge regarding kidney transplantation among the patient's suffering from kidney disease.
- 4) **H₀₂**- There is no significant attitude regarding kidney transplantation among the patient's suffering from kidney disease.

5. Methodology

In this study Descriptive Research Design was used. The samples were 30 patient's suffering from chronic kidney disease. Setting of the study was selected hospitals and sampling technique was non probability convenience sampling technique. An inclusion criterion were patient's who are willing to participate in the study and patient's available at the time of study were taken. An exclusion criteria were patient's who are medical personnel. Structured questionnaire were used to assess the knowledge and likert scale for assessing the attitude regarding kidney transplantation among the patient's suffering from chronic kidney disease.

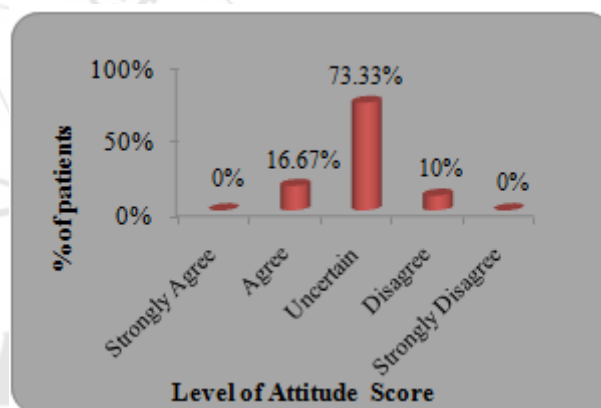
6. Result

The present study has been taken up to assess the knowledge and attitude regarding kidney transplantation among the patient's suffering from chronic kidney disease in selected hospitals. Analysis and interpretation is based on the objectives of the study. A structured questionnaire to assess knowledge and likert scale for assessing the attitude of study



Graph 1: Assessment with knowledge scores

The above graph 1 shows that distribution of study subjects according to level of knowledge regarding kidney transplantation were 16.67% of the study subjects had poor level of knowledge score, 56.67% had average, 23.33% had good and 3.33% had excellent level of knowledge score.



Graph 2: Assessment with attitude scores

The above graph 2 shows that distribution of study subjects according to level of attitude regarding kidney transplantation. The levels of attitude were seen into 5 categories, strongly agree, agree, uncertain, disagree and strongly disagree. 16.67% of the patients were "Agree", 73.33% were uncertain and only 10% were "Disagree" about attitude score.

Association of knowledge and attitude regarding chronic kidney disease among patient's with selected demographic variables

There was significant association between age, education, residence, occupation, family income and marital status with post test knowledge score but there was no significant association between type of family and years of suffering from chronic kidney disease. There was significant association between education and family income with post test attitude score but there was no significant association between age, residence, occupation, type of family, marital status and years of suffering from chronic kidney disease.

7. Discussion

The major findings of the study show that, the study subjects had average (56.67%) knowledge regarding kidney transplantation. The study subjects does not have a proper attitude (73.33%) towards kidney transplantation.

A study has been done by Division of Nephrology and Renal Transplantation, King Fahad Hospital, Riyadh regarding Level of Health awareness among Saudi patients on Renal Replacement Therapy (RRT). Out of 143 adult RRT patients 40 were on Hemodialysis (HD),61 were on Peritoneal Dialysis(PD) and 42 with as Renal Transplant. Three fifth of the patients had only secondary education. The PD group had the higher score (54.4%) followed by HD(44.3%) and finally Transplant(35.1%) about causes, symptoms and treatment options.The study found level of Health awareness among the patients are lower than satisfactory and the study suggests promotion of health education.

A study was conducted to assessed patients knowledge and attitudes regarding Kidney Transplantation (KT). Patients and Methods were a total of 2066 hemodialysis patients were investigated as part of the ARTEMIS (Attitude Towards Renal Transplantation and Eligibility Among Dialysis Patients in a Moroccan Interregional Survey) study. It result that Patients' mean age was 52.9 years, and the mean duration of hemodialysis was 55.3 months. Among these patients, 73.3% would like to undergo transplantation. Among the subjects wishing to be transplanted, 75.7% would accept the graft from a living or a cadaveric donor; 17.8% would refuse transplantation from a related living donor; and 6.5% would reject organs from donors after brain death. Approximately 17% of patients have a potential related living donor. The main motivating factor for KT was fluid restriction and diet constraints (43.3%). One third of patients believe that Islam does not allow organ donation from a related living donor, and almost one half think that it is prohibited from a brain-dead donor. Independent factors affecting patients' attitude toward KT were young age, male gender, persistence of residual diuresis, availability of a related living donor, and better information on the subject of transplantation. It concluded that To improve hemodialysis patient's accessibility to KT, patients, their families, and other support providers need better information. Awareness campaigns are needed to promote organ donation.

A study done by Treviso Transplant centre, Italy on attitude and knowledge regarding Renal Transplantation with an aim to identify the presumed and actual knowledge among 82 patients revealed that a total of 78% had no or incomplete knowledge of transplantation and only 22% were very well informed. A total of 23% knew that the spouse could donate a kidney, 74% stated that only a blood relative could and 3% thought that living donation was impossible. The study concluded stating that there is scarce knowledge about transplantation, especially with regard to the risks and living donation.

8. Implications

The findings of the study have implications in nursing practice, nursing education, nursing administration and research.

- 1) **Nursing Services:** Nurses should enhance their professional knowledge. The most important role of nurse is to provide awareness to the patients suffering from chronic kidney disease. This study will help the nurse for dealing with patient's during kidney transplantation, it will also help the nurse to keep update knowledge regarding kidney transplantation.
- 2) **Nursing Education:** The findings can be utilized to prepare module and health education material to educate patients suffering from chronic kidney disease and their family members. Nurse educator can educate the peripheral health worker and nursing student to improve the awareness and knowledge of people.
- 3) **Nursing Administration:** The findings of the study can be used to the Nursing Administrator in formulating plan for providing education to the patients suffering from chronic kidney disease and their family members. It will help the nursing administrator to be planned and organized and in giving continuing education to nurse and others students regarding kidney transplantation.
- 4) **Nursing Research:** The findings of the study have added to the existing body of the knowledge in the nursing profession. Other researchers may utilize the suggestions and recommendations for conducting further study. The tool and technique used has added to the body of knowledge and can be used for further references.

9. Conclusion

The knowledge of study subjects regarding kidney transplantation was only average and others good and excellent knowledge was very less. The majority of study subjects had uncertain attitude towards kidney transplantation. There was significant association between age, education, residence, occupation, family income and marital status but there was no significant association between type of family and years of suffering from chronic kidney disease with post test knowledge score. Also there was significant association between education and family income but there was no significant association between age, residence, occupation, type of family, marital status and years of suffering from chronic kidney disease with post test attitude score. Hence, there is a need to provide more information regarding kidney transplantation to study subjects.

10. Recommendations

On the basis of findings of the study, it is recommended that the following studies can be conducted -

- A similar study can be undertaken for large sample to generalize the findings.
- A similar study can be conducted to assess the knowledge and attitude regarding kidney transplantation among patient's suffering from chronic kidney disease in view to develop an information booklet.

- A similar study can be conducted to assess the knowledge regarding kidney transplantation among student nurses on a large population.
- A similar study can be conducted to assess the attitude towards kidney transplantation among student nurses on a large population.
- A study can be undertaken to assess the effectiveness of self-instructional module on knowledge regarding kidney transplantation among patient's suffering from chronic kidney disease.

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